Appendix 41

HTp/1107/TN/02/A/Addendum – Peak Period Trip Rates

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Peak Period Trip Rates

(HTp/1107/TN/02/Revision A - Addendum)

March 2016

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Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited to set out the peak period trip rates for the development site for insertion into the AECOM VISSIM model, further to Technical Note TN/02/A that provided AM and PM peak hour trip rates and generation figures for each proposed land use of the development profile. TN/02/A, including TRICS reports, is contained at **Appendix 1** for reference.

1.2 The AM peak period is classed as 0700-0930 hours and the PM peak period is classed as 1600-1830 hours.

1.3 As set out in TN/02/A, we consider that our general approach and assumptions are robust because higher trip rates have been used wherever possible, such as calculating the vehicle trips for residential dwellings, B1(c) land use and food store. It is considered that this gives confidence to the overall figures used in the assessment.

2.0 Peak Period Development Trip Rates

2.1 The peak period trip rates and trip generation figures are set out in **Tables 2.1-2.8**.

2.2 The following **Table 2.1** sets out the Residential trip rates. The TRICS data to support this is contained in **Appendix 2**.

Table 2.1 – Residential (1,200 houses)

Hour	Trip Rates (per unit)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	0.127	0.380	152	456
0800-0900	0.225	0.523	270	628
0900-1000	0.217	0.294	260	353
0900-0930*	*0.109*	*0.147*	*131*	*176*
1600-1700	0.419	0.248	503	298
1700-1800	0.495	0.307	594	368
1800-1900	0.364	0.274	437	329
1800-1830*	*0.182*	*0.137*	*218*	*164*

***The hourly rate has been halved**

2.3 The following **Table 2.2** sets out the Care Home trip rates. The TRICS data to support this is contained in **Appendix 3**.

Table 2.2 – Care Home (100-beds)

Hour	Trip Rates (per bed)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	0.075	0.083	8	8
0800-0900	0.068	0.068	7	7
0900-1000	0.090	0.038	9	4
0900-0930*	*0.045*	*0.019*	*5*	*2*
1600-1700	0.068	0.053	7	5
1700-1800	0.083	0.113	8	11
1800-1900	0.098	0.105	10	10
1800-1830*	*0.049*	*0.053*	*5*	*5*

2.4 The trip rates for the following tables are contained in **Appendix 1** as set out in **paragraph 1.2**.

Table 2.3 – Employment (7,500sqm)

Hour	Trip Rates (per 100sqm)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	0.688	0.164	52	12
0800-0900	0.919	0.514	69	39
0900-0930**	0.354	0.272	27	20
1600-1700	0.473	0.668	36	50
1700-1800	0.262	0.621	20	47
1800-1830**	0.067	0.216	5	16

****The half-hourly rates are provided in TRICS**

Table 2.4 – Food Store (2,000sqm)

Hour	Trip Rates (per 100sqm)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	1.801	1.082	36	22
0800-0900	4.615	3.030	92	61
0900-1000	6.736	5.108	135	102
0900-0930*	*3.368*	*2.554*	*67*	*51*
1600-1700	8.121	7.697	162	154
1700-1800	9.056	9.550	181	191
1800-1900	7.108	8.502	142	170
1800-1830*	*3.554*	*4.251*	*71*	*85*

Table 2.5 – Local Centre (600sqm)

Hour	Trip Rates (per 100sqm)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	4.257	3.792	26	23
0800-0900	5.025	4.780	30	29
0900-1000	5.701	5.211	34	31
0900-0930*	*2.851*	*2.601*	*17*	*16*
1600-1700	5.735	5.828	34	35
1700-1800	6.039	6.495	36	39
1800-1900	5.819	6.098	35	37
1800-1830*	*2.910*	*3.049*	*18*	*18*

Table 2.6 – Family Pub/Restaurant (1,600sqm)

Hour	Trip Rates (per 100sqm)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
1600-1700	1.828	1.195	29	19
1700-1800	2.847	1.845	46	30
1800-1900	3.023	2.513	18	40
1800-1830*	*1.512*	1.257	*24*	*20*

Table 2.7 – Primary School (420 pupils)

Hour	Trip Rates (per 1 pupil)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
0700-0800	0.057	0.023	24	10
0800-0900	0.269	0.189	113	79
0900-1000	0.048	0.056	20	24
0900-0930*	*0.024*	*0.028*	*10*	*12*
1600-1700	0.116	0.165	49	69
1700-1800	0.045	0.063	19	27
1800-1900	0.040	0.030	17	13
1800-1830*	*0.020*	*0.015*	*8*	*6*

Table 2.8 – Sports Pitches and Ancillary Facilities

Hour	TRIPS	
	Arr.	Dep.
0700-0800	0	0
0800-0900	10	5
0900-1000	5	10
0900-0930*	3	5
1600-1700	8	7
1700-1800	7	8
1800-1900	20	10
1800-1830*	10	5

3.0 Next Steps

3.1 The peak period trip rates set out in **Tables 2.1-2.8** will be proportionally discounted based on the process set out in Technical Note 1107/TN/06 on Trip Discounts. These new trip numbers for peak period flows will then allocated to, and distributed from, the respective development access points (TN/08).

Appendix 1

TN0/2/A on Trip Rates, complete with TRICS Data

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Trip Rates

(HTp/1107/TN/02/Revision A)

March 2016

Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited on behalf of Satnam Millennium Limited to set out the strategy for trip generation of the proposed development of land at Peel Hall, Warrington for the following:

i. A residential neighbourhood with up to 1,200 residential dwellings.

ii. A 100-bed care home.

iii. An area of employment land comprising up to 7,500 square metres Gross Floor Area (GFA) of B1(c) light industry.

iv. A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 1,600 square metres GFA.

v. A primary school for up to two-form entry (i.e. up to 420 pupils).

vi. Open space including sports pitches and ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that could be used for local community uses such as a local mother and toddler group.

1.2 The proposed trip rates are provided in **Sections 2.0** to **7.0** respectively for each land use.

1.3 Discussions have taken place between Highgate Transportation and Warrington Borough Council (WBC) and it was agreed that the trip rates proposed by AECOM in their review of the recent Omega application and agreed by WBC as appropriate to be used in this assessment where relevant.

1.4 Those trip rates not set out by AECOM have generally been derived using the TRICS database to provide an indication of the likely number of AM and PM weekday vehicular movements. The expected number of vehicle movements relating to the sports pitches and associated community use off Grasmere Avenue will be based on the approach that was agreed at the 2013 planning appeal (ref: APP/M0655/A/13/2192076).

1.5 Trip distribution and phasing are to be considered in separate Technical Notes. For example, some of the trips set out in this report will be internal and some will be external, and this is set out in HTp Technical Note TN/06. Also vehicle trips associated with the local centre, food store and school will largely be local to the development site and the existing local residential area, and this will also be considered in TN/06.

1.6 It is considered that our general approach is robust due to the assumptions used, as follows:

i. Privately owned houses trip rates have been used to cover all peak period residential trip rates for all 1,200 dwelling units; including retirement flats, social housing and apartments, which are generally considered to result in lower peak period trip rates than privately owned houses.

ii. The TRICS recommended survey data for B1(c) land use classification of Industrial Units was considered to possibly be too low and so a higher trip rate was sought using B1(c) surveys from the Industrial Estate section of the database, to ensure the trip levels are robust and give confidence to the overall figures used in the assessment.

iii. Discount food store trip rates have not been used. Instead higher trip rates from the TRICS database have been used to give confidence to the assessment.

1.7 It is concluded that the trip rates provided in this Technical Note are appropriate to use in the subsequent distribution and modelling elements of the forthcoming Transport Assessment to support the proposals set out above for the development of this site.

2.0 Residential Trip Rate

2.1 The proposed residential element of the development will comprise up to 1,200 dwellings.

2.2 The residential trip rates mirror those agreed by WBC from the AECOM review of the Omega residential trip rates inserted into the Highways England VISSIM model. The AECOM technical note is provided in **Appendix 1** for reference and the resultant TRICS data is provided in the addendum to this Technical Note (TN/02/A/Addendum).

2.3 The peak hour vehicular trip rates and generation are set out in **Table 2.1**.

Table 2.1 – Residential Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
85th Percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

2.4 It can be seen from the above table that there may be up to around 962 vehicular movements associated with the residential element of the proposed development at Peel Hall during the busiest weekday peak hour.

2.5 Within the 1,200 dwellings proposed there will be up to 100 retirement apartments, which have significantly lower weekday peak hour trip rates than those set out in **Table 2.1** above. It should be noted that no allowance has been made for this discount within these trip rate calculations.

2.6 Residential apartments and social housing will also make up a proportion of the 1,200 dwellings proposed on site. No discount has been made to reflect this. It is considered that this approach is robust and gives confidence to the overall figures used in the assessment.

3.0 Care Home Trip Rates

3.1 The proposed scheme includes the development of a 100-bedroomed care home.

3.2 The care home trip rates mirror those agreed by WBC used in the Omega Transport Assessment and inserted into the VISSIM model. The AECOM technical note containing these trip rates is contained in **Appendix 1**.

3.3 The peak hour vehicular trip rate and generation data is summarised in **Table 3.1** below.

Table 3.1 – Care Home Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per bedroom)	0.068	0.068	0.083	0.113
Retirement Flat Trips (100-beds)	7	7	8	8

3.6 It can be seen from **Table 3.1** above that there may be up to around 16 vehicular movements associated with the proposed care home on the Peel Hall site during the busiest weekday peak hour

4.0 Employment Trip Rates

4.1 It is proposed that the development scheme will include an employment zone of up to around 7,500 square metres GFA of B1(c) light industry.

4.2 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by an employment zone of this size.

4.3 An assessment was first made using the TRICS 7.2.4 database for B1(c) Industrial Units; TRICS Land Use Code 02/C highlighted for B1(c) land classifications. The dataset was reviewed based on multi-modal surveys from sites within England, on weekdays for up to 10,000 square metres GFA. Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. Sites within suburban and edge of town locations were available. Four of these sites were then manually removed from the dataset as they did not contain operations classed as B1(C) land uses. This returned two surveys and the trip rates demonstrate that 22 arrivals and 11 departures in the AM peak hour and 4 arrivals and 25 departures in the PM peak hour may result from a development of 7,500sqm GFA. The TRICS data is contained at **Appendix 2**. A sensitivity test of all surveys within TRICS for this category was then carried out, excluding those in Greater London. This returned five surveys but there was negligible difference between the two sets of average trip rates.

4.4 However, it is possible that these trip rates may be too low for the proposed development at Peel Hall if, for example, there were 75 units of 100sqm GFA operating as starter-type units, and so a further sensitivity test was carried out.

4.5 The TRICS 7.2.4 database was then interrogated for surveys of B1(c) units within Industrial Estates; TRICS Land Use Code 02/D. The dataset was reviewed based on multi-modal surveys from sites within England, on weekdays for up to 10,000 square metres GFA. Sites within Greater London were again excluded. An Edge of Town Centre site was manually excluded based on the conflict of location between this and the Edge of Town setting. Further to this, three sites were also manually removed from the dataset as they did not contain operations classed as B1(C) land uses, and another four sites were removed as they only had very low proportions of B1(c) activity on site (i.e. B8 with generally much lower trip rates per square metre GFA). This returned four surveys. Due to the range of sites available within the TRICS database for this land use category, 85th percentile figures were not able to be assessed.

4.6 A sensitivity test of all surveys within TRICS for this category (02/D) was then carried out, excluding those in Greater London, which returned exactly the same survey results.

4.7 The average trip rate data for industrial estates of B1(c) land uses from the search identified in **paragraph 4.5** above is summarised in **Table 4.1** below and the TRICS data is contained at **Appendix 3**.

Table 4.1 – Employment Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm GFA)	69	39	20	47

4.8 It can be seen from **Table 4.1** above that there may be up to around 108 vehicular movements associated with the proposed employment zone on the Peel Hall site during the busiest weekday peak hour. Due to the approach set out in **paragraphs 4.3** to **4.6** it is considered that these figures are robust and give confidence to the overall figures used in the assessment.

4.9 Commercial heavy goods vehicles such as 2-axle with twin rear wheels and 3-axle large vans and lorries and all goods vehicles with 4 or more axles (classified as OGVs within TRICS and OGV1 and OGV2 respectively in DMRB) may account for up to around 8% of total peak hour traffic from the proposed employment zone as set out in **Table 4.2** below.

Table 4.2 – Employment HGV Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.067	0.057	0.025	0.025
Employment Trips (7,500sqm GFA)	5	4	2	2

4.10 Therefore there may be up to 9 large vehicle movements to the proposed employment zone on the Peel Hall site during the peak hour. These vehicle trips are likely to be carried out by 8 metre commercial transporter vans or box-vans, or rigid lorries up to around 12 metres in length. It is considered unlikely that a commercial vehicle as large as an articulated HGV would be regularly attracted to the proposed employment zone to the level set out in **Table 4.2** above.

5.0 Neighbourhood Centre Trip Rates

5.1 The proposed development will include a neighbourhood centre comprising a food store of up to 2,000sqm GFA, plus up to a further 600sqm GFA of local centre type facilities as well as a family pub and restaurant facility of up to 1,600sqm GFA.

Food Store

5.2 A comparison has been carried out between the trip rates from the Discount Food Stores category (01/C) within the TRICS 7.2.4 database and the generic food stores (Food Superstore 01/A) category. It should be noted that the sub land use category of 'Superstore' is misleading as the dataset covers stores from 800sqm to 12,642sqm GFA (for surveys carried out between 01/01/07 and 29/11/14 across the whole of the UK).

5.3 The peak hour trip rates and generation from the Discount Food Stores dataset are set out in **Table 5.1** below, based on all weekday multi-modal surveys of sites within England, excluding Greater London, in Suburban Areas, Edge of Town and Neighbourhood Centre locations. Due to the low number of surveys returned, 85th percentile data was not reliable and so the average dataset has been used. The resultant TRICS report is contained in **Appendix 4**. It should be noted that these trip rates are mirrored in the AECOM technical note as those used within the Omega TA and subsequent VISSIM modelling, which can be found in **Appendix 1** for reference.

Table 5.1 – Discount Food Store Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.660	0.321	2.799	3.280
Discount Food Store Trips (2,000sqm GFA)	14	7	56	66

5.4 It can be seen from the above table that there may be up to around 112 vehicular movements associated with the food store element of the proposed development at Peel Hall during the busiest weekday peak hour, based on the Discount Food Store data in TRICS.

5.5 It is possible that the trip generation set out in **Table 5.1** above may be too low. Therefore the peak hour trip rates and generation from the TRICS Food Superstores dataset are set out in **Table 5.2** below, based on all weekday multi-modal surveys of sites within England, excluding Greater London, in Suburban Areas and Edge of Town locations. Again, due to the low number of surveys returned, 85th percentile data was not reliable and so the average dataset has been used. The TRICS data is also contained in **Appendix 4**.

Table 5.2 – Food Store Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Food Store Trips (2,000sqm GFA)	92	61	181	191

5.6 It can be seen from the above table that there may be up to around 372 vehicular movements associated with the food store element of the proposed development at Peel Hall during the busiest weekday peak hour, based on the Food Superstore data in TRICS.

5.7 As a sensitivity test, TRICS was also interrogated for all multi-modal site surveys within the UK-wide Food Superstore dataset, using the same parameters as set out in paragraph 5.5 above. This returned one additional site in the Isle of Anglesey which slightly reduced the average trip rates shown in **Table 5.2**.

5.8 Therefore, although the lower discount food store trip rate figures have been agreed for use by Omega in their modelling for the same sized store (2,000sqm GFA), we will use the higher trip rate figures set out in **Table 5.2** to be robust and give confidence to the overall figures used in the assessment.

Local Centre

5.9 The proposed development includes a 600 square metre GFA local centre. The local centre may be comprised of, for example, a chemist, dry cleaners, estate agent, take-away, café and/or health care facilities.

5.10 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by a local centre of this size.

5.11 The TRICS 7.2.4 database was reviewed based on the category 'local shops' for all sites within England, with multi-modal weekday surveys, for Suburban Area, Edge of Town and Neighbourhood Centre locations. Average trip rates were used due to the survey sample size available.

5.12 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are contained in **Appendix 5** to this report.

5.13 The peak hour vehicular trip rates and generation for the local centre are set out in **Table 5.3**.

Table 5.3 – Local Centre Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Local Centre Trips (600sqm GFA)	30	29	36	39

5.14 It can be seen from the above table that there may be up to around 75 vehicular movements associated with the local centre element of the proposed development at Peel Hall during the busiest weekday peak hour.

Family Pub/Restaurant

5.15 The proposed development includes a family pub and restaurant facility of up to around 1,600 square metres GFA. TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by a family pub/restaurant of this size.

5.16 The TRICS 7.2.4 database was reviewed based on the category Pub/Restaurant (06/C) and includes, for example, establishments such as Harvester and Beefeater. The data sets were taken from sites within England of up to 2,000 square metres GFA, on weekdays, for Suburban Area and Edge of Town locations.

5.17 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are also contained in **Appendix 6** to this report.

5.18 The peak hour vehicular trip rates and generation for the family pub/restaurant are set out in **Table 5.4**.

Table 5.4 – Family Pub/Restaurant Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	-	-	2.847	1.845
Family Pub/Restaurant Trips (1,600sqm GFA)	-	-	46	30

5.19 It can be seen from the above table that there may be up to around 76 vehicular movements associated with the family pub/restaurant element of the proposed development at Peel Hall during the busiest weekday peak hour.

Summary

5.20 Overall, it can be seen that there may be up to around 523 vehicular movements associated with the neighbourhood centre element of the proposed development at Peel Hall during the busiest weekday peak hour.

6.0 Primary School Trip Rates

6.1 The proposed development scheme includes for up to a two-form entry primary school, which could have up to around 420 pupils.

6.2 From discussions with WBC the indication is that the development of 1,200 houses would result in a demand for around 360 primary school places. The transport assessment will therefore assume that 360 places from the on-site 420 primary school intake would come from within the proposed development, with the remaining 60 pupil places being made-up from those residents living within the area of Poplars and Hulme immediately surrounding the site.

6.3 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular trips that are likely to be attracted by a primary school on this site.

6.4 An assessment has been made from the TRICS 7.2.4 database based on average data, due to the number of surveys available. The data sets were reviewed based on multi-modal surveys from sites within England for primary schools with up to 450 pupils, on weekdays. The actual range of pupil numbers for the schools surveyed was between 147 and 414.

6.5 The location types returned were Suburban Area, Edge of Town and Neighbourhood Centre. The Edge of Town Centre survey location was discounted in accordance with the TRICS Good Practice Guide due to its conflict in location type with Neighbourhood Centre.

6.6 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are contained in **Appendix 7** to this report.

6.7 The peak hour vehicular trip rates and generation for the primary school are set out in **Table 6.1**.

Table 6.1 – Primary School Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Primary School Trips (all 420 pupils)	113	79	19	27
External Primary School Trips (60 pupils)	*16*	*11*	*3*	*4*

6.8 It can be seen from the above table that there may be up to around 192 vehicular movements associated with the primary school proposed on the Peel Hall site during the busiest weekday peak hour, with up to around 27 of these trips being generated from outside the development site, as set out in **paragraph 6.2** above.

7.0 Sports Pitches and Ancillary Facilities Trip Rates

7.1 The proposed development at Peel Hall will include the existing open space and local authority community buildings and sports area on the land off Windermere and Grasmere Avenues to the southeast of the site. This will be linked to the site with new sports pitches, to replace those currently located on the HCA land to the east of the site, off Mill Lane.

7.2 The facilities will likely include full-sized grass pitches, a multi-use games area, junior grass pitches and changing facilities for up to four teams, including WCs. The expectation is that these proposals will also include a clubhouse/function room for community use.

7.3 The sports pitches will predominantly be used at the weekends and it was agreed at the 2013 Public Inquiry (Appeal ref: APP/M0655/A/13/2192076) that this element of the development proposals would not need to be included within the weekday modelling. Furthermore there will be an offset in trip generation from the current on-site uses at the existing location and from the sports pitches on the HCA land, which are to be relocated.

7.4 However, it is likely that the proposed clubhouse facilities will be used by the local community, for example, by a mother and toddler group, and also that the sports pitches may be used during the evening after 1800.

7.5 It was also agreed at the 2013 Inquiry that the clubhouse facilities for local community use may attract up to 15 car movements over two-hour slots during the day between the hours of 0900 and 1800.

8.0 Vehicle Trip impact

8.1 It is considered that this Technical Note sets out the likely vehicle trip generation and attraction of each of the proposed land uses on the Peel Hall site.

8.2 It is clear that a proportion of these trips will be retained within this mixed-use site. The proportion of retained trips will be dealt with under a separate Technical Note.

8.3 An addendum to this Technical Note will be produced that sets out the trips rates for all proposed land uses across the whole AM and PM peak periods of 0700-0930 and 1600-1830 to inform the VISSIM modelling of the network.

9.0 Summary

9.1 This Technical Note has been prepared by Highgate Transportation to set out the strategy for trip generation of the proposed development of land at Peel Hall, Warrington for the following:

i. A residential neighbourhood with up to 1,200 residential dwellings.

ii. A 100-bed care home.

iii. An area of employment land comprising up to 7,500 square metres Gross Floor Area (GFA) of B1(c) light industry.

iv. A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities, and a family pub and restaurant facility of up to 1,600 square metres GFA.

v. A primary school for up to two-form entry (i.e. up to 420 pupils).

vi. Open space including sports pitches and ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that could be used for local community uses such as a local mother and toddler group.

9.2 The trip rates provided are a combination of those agreed for use by Omega and supplied by AECOM, which cover the residential and care home land uses and those that have been derived from using the TRICS database. The approach agreed during the 2013 Public Inquiry was used in respect of the anticipated level of peak hour vehicle movements associated with the proposed sports pitches and community facilities.

9.3 The likely number of AM and PM weekday peak hour vehicular generation for all land uses proposed on site are set out in **Table 9.1** for reference.

Table 9.1 – Peel Hall Vehicular Trip Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Family Pub/Restaurant Trips	-	-	46	30
Primary School Trips	113	79	19	27
Community Uses	10	5	8	7
Total Trips	**591**	**848**	**912**	**717**

9.4 It can be seen from the above table that there may be up to around 1,629 vehicular movements associated with the proposed land used on the Peel Hall development during the busiest weekday peak hour.

9.5 It is concluded that the trip rates provided are a fair and robust assessment of the likely base level trip generation and attraction profile of the Peel Hall site, and that the rates used give confidence to the overall trip generation and attraction figures to be used in the assessment.

9.6 It is therefore considered that these trip rates are appropriate to use in the subsequent distribution and modelling elements of the forthcoming Transport Assessment to support the proposals set out above for the development of this site.

Appendix 1

AECOM Technical Note on Omega Trip Rates

Trip Generation and Distribution Extract.

(From note produced on 26th October 2015 on behalf of Highways England)

The Technical Note (TN) was prepared to summarise the work undertaken by AECOM to update an existing VISSIM model of the M62 to include the proposed Omega Zones 3-6 development proposals and a parallel Section 73 application for variation of prior planning permission at Omega Zones 1 and 2.

Trip Generation and Distribution

This section presents the trip rates which were used to derive the trip generation of the OMEGA Zones 3-6 and Section 73 development proposals; describes how the development traffic was distributed on the highway network along with all the necessary assumptions; and defines which VISSIM zones were utilised to assign the traffic in the VISSIM model.

AECOM has undertaken a review of the trip generation and distribution assumptions proposed in WSP's documentation for the development proposals, which is described in detail in a parallel TN produced by AECOM. For consistency, those assumptions which were accepted by AECOM have also been utilised in the VISSIM model. The trip generation and distribution assumptions utilised within the VISSIM model are summarised below.

OMEGA Zones 3-6 Development Trip Generation and Distribution

Residential Development

The trip rates and resulting trip generation for the proposed residential units used in the model, are presented in **Table 1**.

Table 1: Residential Trip Rates and Generation, utilised by AECOM in the VISSIM model

Development Traffic	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
85th Percentile Trip Rates	0.225	0.523	0.495	0.307
Residential Trips (1100 units)	248	575	545	338

The trip distribution of the residential units has been based upon WSP's gravity model, described within WSP'S TA Scope. The external links of WSP's gravity model were represented by a series of VISSIM zones, as summarised in **Table 2**.

Table 2: Zones in VISSIM utilised for the residential trip distribution

Ref	Road	Zones in VISSIM
1	Lingley Green Ave	21
2	Barrow Hall Lane	20
3	Kingsdale Road	19
4	Whittle Ave	18
5	Malvern Cl	17

6	Burtonwood Rd	16
7	Westbrook Way	15
8	Kingswood Rd	14
9	Charon Way	13
10	A57 (S)	1
11	A557	1
12	M62 (W)	1
13	A57 (N)	1
14	St. Helens Linkway	1
15	Lockheed Rd	2
16	Burtonwood Rd	3
17	Service Area Access	5
18	Delph Ln	6
19	Winwick Park Ave	6
20	A48 (N)	7
21	Winwick Link Rd	7
22	M6 (N)	8
23	M62 (E)	9
24	M6 (S)	10
25	Winwick Rd (S)	11

Food Store

The trip rates used to derive the discount food store development traffic, are summarised alongside the resulting trip generation in **Table 3**.

Table 3: Discount Food Store Trip Rates and Generation, utilised by AECOM in the VISSIM model

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	Arrivals	Departures	Arrivals	Departures
Discount Food Store (per 100 sq.m)	0.660	0.321	2.799	3.280
Trip Generation (2,000 sq.m)	14	7	56	66

The WSP TA Scope Addendum proposed that 70% of vehicle trips would be "internal" and generated from within the Omega site, and the other 30% would be "external" and generated elsewhere in the wider area. Considering the proportion of trips for this land use type likely to use the SRN from this land would be low, AECOM applied the same assumptions to derive the food store trip distribution.

The 70% "internal" foodstore trips were distributed equally on all available internal zones, resulting in 14.2% of such trips being assumed to arrive/depart at each 7 no. zones within the modelled Omega development area.

The 30% "external" trips for the foodstore were assumed to arrive depart via the Burtonwood Road roundabout, and therefore zones representing each of the four existing arms of the roundabout were selected and the 25% of the external trips assigned to each of these zones.

The discount food store distribution percentages and the corresponding VISSIM zones are shown in **Table 4** and **Table 5**.

Table 4: Zones in VISSIM utilised to distribute 70% of the Discount Food Store Traffic

70% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	14%	601
	14%	602
	14%	603
	14%	605
	14%	606
	14%	607
	14%	610

Table 5: Zones in VISSIM utilised to distribute 30% of the Discount Food Store Development Traffic

30% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	25%	13
	25%	14
	25%	15
	25%	16

Hotel and Pub/Restaurant

Table 6 shows the trip rates/trip generation for the proposed Hotel and Pub/Restaurant development.

Table 6: Hotel and Pub/Restaurant Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Hotel Pub/Res (per 100 sq.m)	0.302	0.631	1.033	0.474
Trip Generation (2,850 sq.m)	9	18	30	14

The hotel and pub/restaurant trip distribution percentages and the relevant VISSIM zones are shown in **Table 7**.

Table 7: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
M62 East	40%	9
M62 West	20%	1
Westbrook Way (Warrington N)	20%	15
Whittle Avenue (Warrington W)	20%	18

Care Home

Table 8 shows the trip rates/trip generation for the proposed Care Home development.

Table 8: Care Home Trip Rates Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Care Home (per bed)	0.068	0.068	0.083	0.113
Trip Generation (80 beds)	6	6	7	10

Table 9 indicates the VISSIM zones and the trip distribution percentages which were used to distribute the Care Home development trips.

Table 9: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
Westbrook Way (Warrington N)	50%	15
Whittle Avenue (Warrington W)	50%	18

Omega B1 Trip Off-Setting Trip Generation and Distribution

In addition to reviewing the trip rates and trip distribution proposed by WSP, AECOM has also undertaken a review of a proposed off-setting analysis proposed by WSP. This review is detailed in a parallel TN produced by AECOM, while the net trip generation "offset" resulting from the replacement

of 55,740sq.m of consented B1 development with 30% B2 and 70% B8 uses is summarised in **Table 10** for reference.

Table 10: Net Trip Reduction from B1 to B2/B8 Land Use Offsetting

B1 – B2/B8 Offset	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two - Way
Net Trips	924	41	965	43	684	727

Table 11 indicates the trip reduction percentages from B1 to B2/B8 land use offsetting.

Table 11: Trip Reduction percentages from B1 to B2/B8 Land Use Offsetting

Trips	AM Peak		PM Peak		AM Peak	PM Peak
	Arrivals	Departures	Arrivals	Departures	Two-Way	Two Way
Vehicles	12%	56%	48%	14%	15%	17%

In order to apply the above net trip reduction on the existing VISSIM model, AECOM requested from Atkins detailed information regarding the distribution of traffic of the OMEGA Phase 2 Office development. Atkins provided a TN (dated 27th August 2015) and an additional spreadsheet which together describe how the trip distribution for the B1 Office development was derived and which zones were utilised in their VISSIM models. These zones are shown in **Table 12**.

Table 12: Zones in VISSIM on which Atkins has applied OMEGA B1 Development Traffic

Origin Zone in VISSIM	Destination Zones in VISSIM
500	1,3,7,8,9,10,11,13,15,17,18,19,20,21

AECOM derived a formula which (was applied) to the original traffic matrices provided by Atkins, to represent the development trip reduction due to the B1 to B2/B8 land use offsetting.

This formula is as follows:

((57.1%* Original Traffic O/D Value) +

(42.9%*Original Traffic O/D Value*Net Trip Reduction Percentage))

In addition to updating the traffic matrices to include the above assumptions, AECOM has also applied a traffic profile adjustment to the hourly traffic matrices, based on information provided by Atkins. Atkins' traffic profile is shown in **Table 13**.

Table 13: Peak Hour Traffic Profile

Start time	AM profile	Start time	PM profile
07:00:00	17.50%	16:00:00	20.99%
07:15:00	20.97%	16:15:00	21.47%
07:30:00	23.99%	16:30:00	23.57%
07:45:00	28.78%	16:45:00	24.19%
08:00:00	26.98%	17:00:00	25.63%
08:15:00	26.71%	17:15:00	25.56%
08:30:00	24.73%	17:30:00	26.13%
08:45:00	21.58%	17:45:00	22.67%
09:00:00	19.41%	18:00:00	22.46%
09:15:00	15.17%	18:15:00	19.12%
09:30:00	13.93%	18:30:00	17.70%
09:45:00	12.95%	18:45:00	14.60%

Appendix 2

TRICS Data for Employment Trip Rates – Industrial Units

Calculation Reference: AUDIT-355901-160310-0315

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1800 to 5070 (units: sqm)
Range Selected by User:	1100 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 22/10/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 HF-02-C-01 INDUSTRIAL UNIT HERTFORDSHIRE
BRIDGE ROAD EAST

WELWYN GARDEN CITY
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1800 sqm
Survey date: THURSDAY 17/07/08 Survey Type: MANUAL

2 WM-02-C-03 INDUSTRIAL GLASS WEST MIDLANDS
DOWNING STREET

SMETHWICK
Edge of Town
Industrial Zone
Total Gross floor area: 5070 sqm
Survey date: TUESDAY 06/11/12 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BR-02-C-01	No B1c
DC-02-C-07	Not B1c
HE-02-C-01	No B1c
HE-02-C-02	No B1c

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.073	2	3435	0.000	2	3435	0.073
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
08:30 - 09:00	2	3435	0.233	2	3435	0.087	2	3435	0.320
09:00 - 09:30	2	3435	0.335	2	3435	0.073	2	3435	0.408
09:30 - 10:00	2	3435	0.116	2	3435	0.044	2	3435	0.160
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.087	2	3435	0.058	2	3435	0.145
11:00 - 11:30	2	3435	0.073	2	3435	0.073	2	3435	0.146
11:30 - 12:00	2	3435	0.073	2	3435	0.073	2	3435	0.146
12:00 - 12:30	2	3435	0.073	2	3435	0.087	2	3435	0.160
12:30 - 13:00	2	3435	0.044	2	3435	0.044	2	3435	0.088
13:00 - 13:30	2	3435	0.044	2	3435	0.102	2	3435	0.146
13:30 - 14:00	2	3435	0.087	2	3435	0.029	2	3435	0.116
14:00 - 14:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
14:30 - 15:00	2	3435	0.015	2	3435	0.044	2	3435	0.059
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.116	2	3435	0.044	2	3435	0.160
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.335	2	3435	0.364
17:00 - 17:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
17:30 - 18:00	2	3435	0.029	2	3435	0.247	2	3435	0.276
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.732			1.805			3.537

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1800 - 5070 (units: sqm)
Survey date date range:	01/01/07 - 22/10/13
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.029	2	3435	0.029	2	3435	0.058
08:30 - 09:00	2	3435	0.044	2	3435	0.044	2	3435	0.088
09:00 - 09:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
09:30 - 10:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
10:00 - 10:30	2	3435	0.015	2	3435	0.044	2	3435	0.059
10:30 - 11:00	2	3435	0.015	2	3435	0.015	2	3435	0.030
11:00 - 11:30	2	3435	0.015	2	3435	0.015	2	3435	0.030
11:30 - 12:00	2	3435	0.029	2	3435	0.015	2	3435	0.044
12:00 - 12:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
12:30 - 13:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
13:00 - 13:30	2	3435	0.015	2	3435	0.029	2	3435	0.044
13:30 - 14:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
14:00 - 14:30	2	3435	0.015	2	3435	0.000	2	3435	0.015
14:30 - 15:00	2	3435	0.015	2	3435	0.015	2	3435	0.030
15:00 - 15:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
15:30 - 16:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.251			0.280			0.531

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:30 - 09:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:00 - 09:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
09:30 - 10:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:00 - 10:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:30 - 11:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:00 - 11:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:30 - 12:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:00 - 12:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:30 - 13:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
13:00 - 13:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
13:30 - 14:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
14:00 - 14:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
14:30 - 15:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:00 - 15:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:30 - 16:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.044			0.044			0.088

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.102	2	3435	0.000	2	3435	0.102
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
08:30 - 09:00	2	3435	0.262	2	3435	0.102	2	3435	0.364
09:00 - 09:30	2	3435	0.364	2	3435	0.073	2	3435	0.437
09:30 - 10:00	2	3435	0.131	2	3435	0.044	2	3435	0.175
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.116	2	3435	0.073	2	3435	0.189
11:00 - 11:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
11:30 - 12:00	2	3435	0.102	2	3435	0.073	2	3435	0.175
12:00 - 12:30	2	3435	0.073	2	3435	0.087	2	3435	0.160
12:30 - 13:00	2	3435	0.058	2	3435	0.058	2	3435	0.116
13:00 - 13:30	2	3435	0.058	2	3435	0.102	2	3435	0.160
13:30 - 14:00	2	3435	0.087	2	3435	0.029	2	3435	0.116
14:00 - 14:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
14:30 - 15:00	2	3435	0.015	2	3435	0.044	2	3435	0.059
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.131	2	3435	0.058	2	3435	0.189
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.408	2	3435	0.437
17:00 - 17:30	2	3435	0.029	2	3435	0.102	2	3435	0.131
17:30 - 18:00	2	3435	0.029	2	3435	0.262	2	3435	0.291
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.949			1.980			3.929

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
08:00 - 08:30	2	3435	0.029	2	3435	0.000	2	3435	0.029
08:30 - 09:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:00 - 09:30	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:30 - 10:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:00 - 10:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:30 - 11:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:00 - 11:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:30 - 12:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:00 - 12:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
12:30 - 13:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
13:00 - 13:30	2	3435	0.029	2	3435	0.044	2	3435	0.073
13:30 - 14:00	2	3435	0.015	2	3435	0.029	2	3435	0.044
14:00 - 14:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
14:30 - 15:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
15:00 - 15:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:30 - 16:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.131			0.147			0.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.102	2	3435	0.000	2	3435	0.102
07:30 - 08:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
08:00 - 08:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
08:30 - 09:00	2	3435	0.320	2	3435	0.102	2	3435	0.422
09:00 - 09:30	2	3435	0.393	2	3435	0.073	2	3435	0.466
09:30 - 10:00	2	3435	0.131	2	3435	0.044	2	3435	0.175
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.116	2	3435	0.073	2	3435	0.189
11:00 - 11:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
11:30 - 12:00	2	3435	0.102	2	3435	0.073	2	3435	0.175
12:00 - 12:30	2	3435	0.073	2	3435	0.102	2	3435	0.175
12:30 - 13:00	2	3435	0.058	2	3435	0.058	2	3435	0.116
13:00 - 13:30	2	3435	0.087	2	3435	0.160	2	3435	0.247
13:30 - 14:00	2	3435	0.116	2	3435	0.058	2	3435	0.174
14:00 - 14:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
14:30 - 15:00	2	3435	0.015	2	3435	0.058	2	3435	0.073
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.131	2	3435	0.058	2	3435	0.189
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.408	2	3435	0.437
17:00 - 17:30	2	3435	0.029	2	3435	0.116	2	3435	0.145
17:30 - 18:00	2	3435	0.029	2	3435	0.291	2	3435	0.320
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.123			2.183			4.306

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix 3

TRICS Data for Employment Trip Rates – Industrial Estates

Calculation Reference: AUDIT-355901-160310-0318

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	4133 to 6625 (units: sqm)
Range Selected by User:	1758 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 02/12/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

20,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	3 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CA-02-D-01 IND. ESTATE CAMBRIDGESHIRE
STURROCK WAY
BRETTON
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 4300 sqm
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

2 CA-02-D-03 IND. ESTATE CAMBRIDGESHIRE
SAVILLE ROAD
WESTWOOD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4425 sqm
Survey date: THURSDAY 22/10/09 Survey Type: MANUAL

3 CA-02-D-04 INDUSTRIAL ESTATE CAMBRIDGESHIRE
LINCOLN ROAD

PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4133 sqm
Survey date: TUESDAY 02/12/14 Survey Type: MANUAL

4 ES-02-D-07 INDUSTRIAL ESTATE EAST SUSSEX
HUGHES ROAD

BRIGHTON
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6625 sqm
Survey date: THURSDAY 16/10/14 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BR-02-D-02	Not B1c
BR-02-D-03	Not B1c
CA-02-D-02	Low on B1c
CW-02-D-02	Low on B1c
ES-02-D-06	Low on B1c
HE-02-D-02	Low on B1c
MS-02-D-06	Not B1c

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.175	4	4871	0.041	4	4871	0.216
07:30 - 08:00	4	4871	0.513	4	4871	0.123	4	4871	0.636
08:00 - 08:30	4	4871	0.488	4	4871	0.252	4	4871	0.740
08:30 - 09:00	4	4871	0.431	4	4871	0.262	4	4871	0.693
09:00 - 09:30	4	4871	0.354	4	4871	0.272	4	4871	0.626
09:30 - 10:00	4	4871	0.395	4	4871	0.293	4	4871	0.688
10:00 - 10:30	4	4871	0.359	4	4871	0.334	4	4871	0.693
10:30 - 11:00	4	4871	0.318	4	4871	0.359	4	4871	0.677
11:00 - 11:30	4	4871	0.364	4	4871	0.323	4	4871	0.687
11:30 - 12:00	4	4871	0.293	4	4871	0.349	4	4871	0.642
12:00 - 12:30	4	4871	0.318	4	4871	0.364	4	4871	0.682
12:30 - 13:00	4	4871	0.380	4	4871	0.328	4	4871	0.708
13:00 - 13:30	4	4871	0.298	4	4871	0.328	4	4871	0.626
13:30 - 14:00	4	4871	0.246	4	4871	0.221	4	4871	0.467
14:00 - 14:30	4	4871	0.267	4	4871	0.216	4	4871	0.483
14:30 - 15:00	4	4871	0.287	4	4871	0.308	4	4871	0.595
15:00 - 15:30	4	4871	0.282	4	4871	0.462	4	4871	0.744
15:30 - 16:00	4	4871	0.267	4	4871	0.298	4	4871	0.565
16:00 - 16:30	4	4871	0.221	4	4871	0.298	4	4871	0.519
16:30 - 17:00	4	4871	0.252	4	4871	0.370	4	4871	0.622
17:00 - 17:30	4	4871	0.185	4	4871	0.364	4	4871	0.549
17:30 - 18:00	4	4871	0.077	4	4871	0.257	4	4871	0.334
18:00 - 18:30	4	4871	0.067	4	4871	0.216	4	4871	0.283
18:30 - 19:00	4	4871	0.031	4	4871	0.056	4	4871	0.087
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.868			6.694			13.562

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	4133 - 6625 (units: sqm)
Survey date date range:	01/01/07 - 02/12/14
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	9

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.010	4	4871	0.000	4	4871	0.010
08:00 - 08:30	4	4871	0.015	4	4871	0.010	4	4871	0.025
08:30 - 09:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
11:30 - 12:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
12:00 - 12:30	4	4871	0.021	4	4871	0.000	4	4871	0.021
12:30 - 13:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
13:00 - 13:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.015	4	4871	0.005	4	4871	0.020
15:30 - 16:00	4	4871	0.005	4	4871	0.015	4	4871	0.020
16:00 - 16:30	4	4871	0.010	4	4871	0.005	4	4871	0.015
16:30 - 17:00	4	4871	0.005	4	4871	0.010	4	4871	0.015
17:00 - 17:30	4	4871	0.015	4	4871	0.010	4	4871	0.025
17:30 - 18:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.010	4	4871	0.010	4	4871	0.020
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.121			0.120			0.241

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
07:30 - 08:00	4	4871	0.021	4	4871	0.005	4	4871	0.026
08:00 - 08:30	4	4871	0.031	4	4871	0.026	4	4871	0.057
08:30 - 09:00	4	4871	0.036	4	4871	0.031	4	4871	0.067
09:00 - 09:30	4	4871	0.036	4	4871	0.041	4	4871	0.077
09:30 - 10:00	4	4871	0.046	4	4871	0.036	4	4871	0.082
10:00 - 10:30	4	4871	0.046	4	4871	0.031	4	4871	0.077
10:30 - 11:00	4	4871	0.026	4	4871	0.062	4	4871	0.088
11:00 - 11:30	4	4871	0.036	4	4871	0.026	4	4871	0.062
11:30 - 12:00	4	4871	0.015	4	4871	0.021	4	4871	0.036
12:00 - 12:30	4	4871	0.015	4	4871	0.021	4	4871	0.036
12:30 - 13:00	4	4871	0.026	4	4871	0.015	4	4871	0.041
13:00 - 13:30	4	4871	0.015	4	4871	0.015	4	4871	0.030
13:30 - 14:00	4	4871	0.015	4	4871	0.010	4	4871	0.025
14:00 - 14:30	4	4871	0.026	4	4871	0.010	4	4871	0.036
14:30 - 15:00	4	4871	0.010	4	4871	0.026	4	4871	0.036
15:00 - 15:30	4	4871	0.026	4	4871	0.036	4	4871	0.062
15:30 - 16:00	4	4871	0.015	4	4871	0.026	4	4871	0.041
16:00 - 16:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:30 - 17:00	4	4871	0.026	4	4871	0.021	4	4871	0.047
17:00 - 17:30	4	4871	0.015	4	4871	0.015	4	4871	0.030
17:30 - 18:00	4	4871	0.010	4	4871	0.010	4	4871	0.020
18:00 - 18:30	4	4871	0.005	4	4871	0.015	4	4871	0.020
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.502			0.519			1.021

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:00 - 08:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:30 - 09:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:30 - 14:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:30 - 16:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:00 - 16:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:30 - 17:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
17:00 - 17:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
17:30 - 18:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
08:00 - 08:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:30 - 09:00	4	4871	0.010	4	4871	0.005	4	4871	0.015
09:00 - 09:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
13:30 - 14:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.010	4	4871	0.010	4	4871	0.020
15:30 - 16:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:00 - 16:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:30 - 17:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
17:00 - 17:30	4	4871	0.010	4	4871	0.015	4	4871	0.025
17:30 - 18:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.050			0.060			0.110

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.205	4	4871	0.051	4	4871	0.256
07:30 - 08:00	4	4871	0.606	4	4871	0.159	4	4871	0.765
08:00 - 08:30	4	4871	0.595	4	4871	0.293	4	4871	0.888
08:30 - 09:00	4	4871	0.503	4	4871	0.328	4	4871	0.831
09:00 - 09:30	4	4871	0.416	4	4871	0.359	4	4871	0.775
09:30 - 10:00	4	4871	0.482	4	4871	0.334	4	4871	0.816
10:00 - 10:30	4	4871	0.411	4	4871	0.411	4	4871	0.822
10:30 - 11:00	4	4871	0.400	4	4871	0.436	4	4871	0.836
11:00 - 11:30	4	4871	0.452	4	4871	0.441	4	4871	0.893
11:30 - 12:00	4	4871	0.354	4	4871	0.411	4	4871	0.765
12:00 - 12:30	4	4871	0.359	4	4871	0.416	4	4871	0.775
12:30 - 13:00	4	4871	0.462	4	4871	0.359	4	4871	0.821
13:00 - 13:30	4	4871	0.375	4	4871	0.380	4	4871	0.755
13:30 - 14:00	4	4871	0.303	4	4871	0.272	4	4871	0.575
14:00 - 14:30	4	4871	0.313	4	4871	0.252	4	4871	0.565
14:30 - 15:00	4	4871	0.334	4	4871	0.385	4	4871	0.719
15:00 - 15:30	4	4871	0.318	4	4871	0.616	4	4871	0.934
15:30 - 16:00	4	4871	0.328	4	4871	0.390	4	4871	0.718
16:00 - 16:30	4	4871	0.277	4	4871	0.359	4	4871	0.636
16:30 - 17:00	4	4871	0.293	4	4871	0.441	4	4871	0.734
17:00 - 17:30	4	4871	0.282	4	4871	0.488	4	4871	0.770
17:30 - 18:00	4	4871	0.139	4	4871	0.334	4	4871	0.473
18:00 - 18:30	4	4871	0.092	4	4871	0.257	4	4871	0.349
18:30 - 19:00	4	4871	0.031	4	4871	0.062	4	4871	0.093
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.330			8.234			16.564

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.031	4	4871	0.026	4	4871	0.057
08:00 - 08:30	4	4871	0.082	4	4871	0.010	4	4871	0.092
08:30 - 09:00	4	4871	0.021	4	4871	0.010	4	4871	0.031
09:00 - 09:30	4	4871	0.010	4	4871	0.026	4	4871	0.036
09:30 - 10:00	4	4871	0.015	4	4871	0.015	4	4871	0.030
10:00 - 10:30	4	4871	0.005	4	4871	0.015	4	4871	0.020
10:30 - 11:00	4	4871	0.010	4	4871	0.000	4	4871	0.010
11:00 - 11:30	4	4871	0.010	4	4871	0.010	4	4871	0.020
11:30 - 12:00	4	4871	0.010	4	4871	0.005	4	4871	0.015
12:00 - 12:30	4	4871	0.031	4	4871	0.031	4	4871	0.062
12:30 - 13:00	4	4871	0.036	4	4871	0.026	4	4871	0.062
13:00 - 13:30	4	4871	0.026	4	4871	0.015	4	4871	0.041
13:30 - 14:00	4	4871	0.015	4	4871	0.026	4	4871	0.041
14:00 - 14:30	4	4871	0.010	4	4871	0.005	4	4871	0.015
14:30 - 15:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:00 - 15:30	4	4871	0.021	4	4871	0.000	4	4871	0.021
15:30 - 16:00	4	4871	0.005	4	4871	0.021	4	4871	0.026
16:00 - 16:30	4	4871	0.026	4	4871	0.021	4	4871	0.047
16:30 - 17:00	4	4871	0.021	4	4871	0.015	4	4871	0.036
17:00 - 17:30	4	4871	0.005	4	4871	0.077	4	4871	0.082
17:30 - 18:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:00 - 18:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
18:30 - 19:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.405			0.369			0.774

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
07:30 - 08:00	4	4871	0.021	4	4871	0.000	4	4871	0.021
08:00 - 08:30	4	4871	0.036	4	4871	0.000	4	4871	0.036
08:30 - 09:00	4	4871	0.021	4	4871	0.000	4	4871	0.021
09:00 - 09:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
09:30 - 10:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:00 - 11:30	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:30 - 12:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
12:00 - 12:30	4	4871	0.010	4	4871	0.000	4	4871	0.010
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.005	4	4871	0.010	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
14:30 - 15:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
15:00 - 15:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:30 - 16:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:00 - 16:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
16:30 - 17:00	4	4871	0.000	4	4871	0.015	4	4871	0.015
17:00 - 17:30	4	4871	0.000	4	4871	0.041	4	4871	0.041
17:30 - 18:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
18:00 - 18:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.158			0.157			0.315

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
08:00 - 08:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
08:30 - 09:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:30 - 14:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:30 - 16:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
16:00 - 16:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:30 - 17:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
17:00 - 17:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
17:30 - 18:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:00 - 18:30	4	4871	0.000	4	4871	0.005	4	4871	0.005
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.035			0.040			0.075

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
07:30 - 08:00	4	4871	0.026	4	4871	0.000	4	4871	0.026
08:00 - 08:30	4	4871	0.041	4	4871	0.000	4	4871	0.041
08:30 - 09:00	4	4871	0.026	4	4871	0.000	4	4871	0.026
09:00 - 09:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
09:30 - 10:00	4	4871	0.031	4	4871	0.000	4	4871	0.031
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:00 - 11:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
11:30 - 12:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
12:00 - 12:30	4	4871	0.010	4	4871	0.000	4	4871	0.010
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.005	4	4871	0.010	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
14:00 - 14:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
14:30 - 15:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
15:00 - 15:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:30 - 16:00	4	4871	0.000	4	4871	0.015	4	4871	0.015
16:00 - 16:30	4	4871	0.000	4	4871	0.026	4	4871	0.026
16:30 - 17:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
17:00 - 17:30	4	4871	0.000	4	4871	0.051	4	4871	0.051
17:30 - 18:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
18:00 - 18:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.194			0.199			0.393

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.221	4	4871	0.051	4	4871	0.272
07:30 - 08:00	4	4871	0.678	4	4871	0.185	4	4871	0.863
08:00 - 08:30	4	4871	0.719	4	4871	0.303	4	4871	1.022
08:30 - 09:00	4	4871	0.559	4	4871	0.344	4	4871	0.903
09:00 - 09:30	4	4871	0.447	4	4871	0.385	4	4871	0.832
09:30 - 10:00	4	4871	0.529	4	4871	0.349	4	4871	0.878
10:00 - 10:30	4	4871	0.421	4	4871	0.426	4	4871	0.847
10:30 - 11:00	4	4871	0.411	4	4871	0.441	4	4871	0.852
11:00 - 11:30	4	4871	0.467	4	4871	0.457	4	4871	0.924
11:30 - 12:00	4	4871	0.370	4	4871	0.416	4	4871	0.786
12:00 - 12:30	4	4871	0.400	4	4871	0.447	4	4871	0.847
12:30 - 13:00	4	4871	0.498	4	4871	0.385	4	4871	0.883
13:00 - 13:30	4	4871	0.405	4	4871	0.416	4	4871	0.821
13:30 - 14:00	4	4871	0.323	4	4871	0.303	4	4871	0.626
14:00 - 14:30	4	4871	0.323	4	4871	0.267	4	4871	0.590
14:30 - 15:00	4	4871	0.339	4	4871	0.395	4	4871	0.734
15:00 - 15:30	4	4871	0.354	4	4871	0.631	4	4871	0.985
15:30 - 16:00	4	4871	0.334	4	4871	0.436	4	4871	0.770
16:00 - 16:30	4	4871	0.303	4	4871	0.405	4	4871	0.708
16:30 - 17:00	4	4871	0.313	4	4871	0.482	4	4871	0.795
17:00 - 17:30	4	4871	0.298	4	4871	0.631	4	4871	0.929
17:30 - 18:00	4	4871	0.139	4	4871	0.370	4	4871	0.509
18:00 - 18:30	4	4871	0.098	4	4871	0.272	4	4871	0.370
18:30 - 19:00	4	4871	0.036	4	4871	0.067	4	4871	0.103
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.985			8.864			17.849

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix 4

TRICS Data for Neighbourhood Centre Trip Rates – Food Store

Calculation Reference: AUDIT-355901-160311-0301

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS		
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 1165 to 1900 (units: sqm)
Range Selected by User: 1165 to 1900 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 27/11/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	2
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	1 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	4 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	MS-01-C-02	ALDI		MERSEYSIDE
	SMITHDOWN ROAD			
	WAVERTREE			
	LIVERPOOL			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:		1200 sqm	
	Survey date: MONDAY		18/06/07	Survey Type: MANUAL
2	MS-01-C-03	ALDI		MERSEYSIDE
	LAUREL ROAD			
	ELM PARK			
	LIVERPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1165 sqm	
	Survey date: WEDNESDAY		20/06/07	Survey Type: MANUAL
3	NR-01-C-01	ALDI		NORTHAMPTONSHIRE
	DALTON ROAD			
	CORBY			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:		1345 sqm	
	Survey date: WEDNESDAY		19/11/08	Survey Type: MANUAL
4	SH-01-C-01	LIDL		SHROPSHIRE
	CASTLE STREET			
	HADLEY			
	TELFORD			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		1900 sqm	
	Survey date: TUESDAY		16/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.161	2	1550	0.097	2	1550	0.258
08:00 - 09:00	4	1403	0.660	4	1403	0.321	4	1403	0.981
09:00 - 10:00	4	1403	2.175	4	1403	1.533	4	1403	3.708
10:00 - 11:00	4	1403	3.369	4	1403	3.298	4	1403	6.667
11:00 - 12:00	4	1403	3.280	4	1403	3.173	4	1403	6.453
12:00 - 13:00	4	1403	3.547	4	1403	3.529	4	1403	7.076
13:00 - 14:00	4	1403	3.725	4	1403	3.369	4	1403	7.094
14:00 - 15:00	4	1403	3.690	4	1403	3.512	4	1403	7.202
15:00 - 16:00	4	1403	3.547	4	1403	3.815	4	1403	7.362
16:00 - 17:00	4	1403	3.226	4	1403	3.476	4	1403	6.702
17:00 - 18:00	4	1403	2.799	4	1403	3.280	4	1403	6.079
18:00 - 19:00	4	1403	2.389	4	1403	2.745	4	1403	5.134
19:00 - 20:00	4	1403	0.891	4	1403	1.301	4	1403	2.192
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			33.459			33.449			66.908

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.036	4	1403	0.036	4	1403	0.072
11:00 - 12:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
12:00 - 13:00	4	1403	0.089	4	1403	0.071	4	1403	0.160
13:00 - 14:00	4	1403	0.071	4	1403	0.089	4	1403	0.160
14:00 - 15:00	4	1403	0.089	4	1403	0.053	4	1403	0.142
15:00 - 16:00	4	1403	0.071	4	1403	0.089	4	1403	0.160
16:00 - 17:00	4	1403	0.089	4	1403	0.071	4	1403	0.160
17:00 - 18:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
18:00 - 19:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.552			0.552			1.104

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
09:00 - 10:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
10:00 - 11:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
11:00 - 12:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.143			0.143			0.286

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.107	4	1403	0.053	4	1403	0.160
12:00 - 13:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
13:00 - 14:00	4	1403	0.036	4	1403	0.053	4	1403	0.089
14:00 - 15:00	4	1403	0.089	4	1403	0.089	4	1403	0.178
15:00 - 16:00	4	1403	0.053	4	1403	0.018	4	1403	0.071
16:00 - 17:00	4	1403	0.089	4	1403	0.089	4	1403	0.178
17:00 - 18:00	4	1403	0.125	4	1403	0.160	4	1403	0.285
18:00 - 19:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.517			0.516			1.033

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.226	2	1550	0.097	2	1550	0.323
08:00 - 09:00	4	1403	0.820	4	1403	0.357	4	1403	1.177
09:00 - 10:00	4	1403	2.870	4	1403	1.800	4	1403	4.670
10:00 - 11:00	4	1403	4.795	4	1403	4.474	4	1403	9.269
11:00 - 12:00	4	1403	4.670	4	1403	4.599	4	1403	9.269
12:00 - 13:00	4	1403	5.330	4	1403	5.223	4	1403	10.553
13:00 - 14:00	4	1403	5.187	4	1403	4.813	4	1403	10.000
14:00 - 15:00	4	1403	5.365	4	1403	5.152	4	1403	10.517
15:00 - 16:00	4	1403	5.561	4	1403	5.936	4	1403	11.497
16:00 - 17:00	4	1403	4.545	4	1403	4.955	4	1403	9.500
17:00 - 18:00	4	1403	4.207	4	1403	4.848	4	1403	9.055
18:00 - 19:00	4	1403	3.743	4	1403	4.367	4	1403	8.110
19:00 - 20:00	4	1403	1.462	4	1403	2.121	4	1403	3.583
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			48.781			48.742			97.523

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.161	2	1550	0.065	2	1550	0.226
08:00 - 09:00	4	1403	0.232	4	1403	0.143	4	1403	0.375
09:00 - 10:00	4	1403	1.070	4	1403	0.980	4	1403	2.050
10:00 - 11:00	4	1403	1.854	4	1403	1.676	4	1403	3.530
11:00 - 12:00	4	1403	1.515	4	1403	1.319	4	1403	2.834
12:00 - 13:00	4	1403	1.889	4	1403	1.943	4	1403	3.832
13:00 - 14:00	4	1403	1.658	4	1403	1.551	4	1403	3.209
14:00 - 15:00	4	1403	1.266	4	1403	1.693	4	1403	2.959
15:00 - 16:00	4	1403	2.139	4	1403	1.907	4	1403	4.046
16:00 - 17:00	4	1403	2.513	4	1403	1.889	4	1403	4.402
17:00 - 18:00	4	1403	1.729	4	1403	1.961	4	1403	3.690
18:00 - 19:00	4	1403	1.176	4	1403	1.836	4	1403	3.012
19:00 - 20:00	4	1403	0.374	4	1403	0.446	4	1403	0.820
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.576			17.409			34.985

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.053	4	1403	0.000	4	1403	0.053
09:00 - 10:00	4	1403	0.143	4	1403	0.143	4	1403	0.286
10:00 - 11:00	4	1403	0.321	4	1403	0.339	4	1403	0.660
11:00 - 12:00	4	1403	0.160	4	1403	0.143	4	1403	0.303
12:00 - 13:00	4	1403	0.232	4	1403	0.196	4	1403	0.428
13:00 - 14:00	4	1403	0.160	4	1403	0.089	4	1403	0.249
14:00 - 15:00	4	1403	0.089	4	1403	0.267	4	1403	0.356
15:00 - 16:00	4	1403	0.214	4	1403	0.125	4	1403	0.339
16:00 - 17:00	4	1403	0.160	4	1403	0.178	4	1403	0.338
17:00 - 18:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
18:00 - 19:00	4	1403	0.053	4	1403	0.089	4	1403	0.142
19:00 - 20:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.638			1.640			3.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.053	4	1403	0.000	4	1403	0.053
09:00 - 10:00	4	1403	0.143	4	1403	0.143	4	1403	0.286
10:00 - 11:00	4	1403	0.321	4	1403	0.339	4	1403	0.660
11:00 - 12:00	4	1403	0.160	4	1403	0.143	4	1403	0.303
12:00 - 13:00	4	1403	0.232	4	1403	0.196	4	1403	0.428
13:00 - 14:00	4	1403	0.160	4	1403	0.089	4	1403	0.249
14:00 - 15:00	4	1403	0.089	4	1403	0.267	4	1403	0.356
15:00 - 16:00	4	1403	0.214	4	1403	0.125	4	1403	0.339
16:00 - 17:00	4	1403	0.160	4	1403	0.178	4	1403	0.338
17:00 - 18:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
18:00 - 19:00	4	1403	0.053	4	1403	0.089	4	1403	0.142
19:00 - 20:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.638			1.640			3.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.387	2	1550	0.161	2	1550	0.548
08:00 - 09:00	4	1403	1.105	4	1403	0.499	4	1403	1.604
09:00 - 10:00	4	1403	4.082	4	1403	2.923	4	1403	7.005
10:00 - 11:00	4	1403	6.970	4	1403	6.488	4	1403	13.458
11:00 - 12:00	4	1403	6.453	4	1403	6.114	4	1403	12.567
12:00 - 13:00	4	1403	7.469	4	1403	7.398	4	1403	14.867
13:00 - 14:00	4	1403	7.041	4	1403	6.506	4	1403	13.547
14:00 - 15:00	4	1403	6.809	4	1403	7.201	4	1403	14.010
15:00 - 16:00	4	1403	7.968	4	1403	7.986	4	1403	15.954
16:00 - 17:00	4	1403	7.308	4	1403	7.112	4	1403	14.420
17:00 - 18:00	4	1403	6.114	4	1403	7.023	4	1403	13.137
18:00 - 19:00	4	1403	4.973	4	1403	6.310	4	1403	11.283
19:00 - 20:00	4	1403	1.836	4	1403	2.585	4	1403	4.421
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			68.515			68.306			136.821

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-355901-160311-0313

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DV	DEVON	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1700 to 5000 (units: sqm)
Range Selected by User:	800 to 5000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 19/07/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

15,001 to 20,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

PFS is present at the site and is included in the count	1 days
PFS is present at the site but is excluded from the count	0 days
There is no PFS at the site	2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CB-01-A-07	SOMERFIELD		CUMBRIA
	WIGTON ROAD			
	NEWTOWN			
	CARLISLE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1700 sqm	
	Survey date: FRIDAY		05/02/10	Survey Type: MANUAL
2	DV-01-A-21	MORRISONS		DEVON
	TORR LANE			
	PENNYCROSS			
	PLYMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		5000 sqm	
	Survey date: FRIDAY		23/10/09	Survey Type: MANUAL
3	LE-01-A-01	SAINSBURYS		LEICESTERSHIRE
	GLEN ROAD			
	OADBY			
	LEICESTER			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		4850 sqm	
	Survey date: FRIDAY		19/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	1.801	3	3850	1.082	3	3850	2.883
08:00 - 09:00	3	3850	4.615	3	3850	3.030	3	3850	7.645
09:00 - 10:00	3	3850	6.736	3	3850	5.108	3	3850	11.844
10:00 - 11:00	3	3850	7.835	3	3850	6.727	3	3850	14.562
11:00 - 12:00	3	3850	7.965	3	3850	8.026	3	3850	15.991
12:00 - 13:00	3	3850	7.784	3	3850	7.931	3	3850	15.715
13:00 - 14:00	3	3850	7.723	3	3850	7.342	3	3850	15.065
14:00 - 15:00	3	3850	7.818	3	3850	8.407	3	3850	16.225
15:00 - 16:00	3	3850	7.342	3	3850	7.784	3	3850	15.126
16:00 - 17:00	3	3850	8.121	3	3850	7.697	3	3850	15.818
17:00 - 18:00	3	3850	9.056	3	3850	9.550	3	3850	18.606
18:00 - 19:00	3	3850	7.108	3	3850	8.502	3	3850	15.610
19:00 - 20:00	3	3850	6.113	3	3850	6.632	3	3850	12.745
20:00 - 21:00	3	3850	2.944	3	3850	4.225	3	3850	7.169
21:00 - 22:00	3	3850	1.126	3	3850	2.190	3	3850	3.316
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			94.087			94.233			188.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.043	3	3850	0.035	3	3850	0.078
08:00 - 09:00	3	3850	0.009	3	3850	0.009	3	3850	0.018
09:00 - 10:00	3	3850	0.061	3	3850	0.052	3	3850	0.113
10:00 - 11:00	3	3850	0.113	3	3850	0.104	3	3850	0.217
11:00 - 12:00	3	3850	0.199	3	3850	0.182	3	3850	0.381
12:00 - 13:00	3	3850	0.113	3	3850	0.078	3	3850	0.191
13:00 - 14:00	3	3850	0.139	3	3850	0.147	3	3850	0.286
14:00 - 15:00	3	3850	0.121	3	3850	0.130	3	3850	0.251
15:00 - 16:00	3	3850	0.139	3	3850	0.121	3	3850	0.260
16:00 - 17:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
17:00 - 18:00	3	3850	0.139	3	3850	0.113	3	3850	0.252
18:00 - 19:00	3	3850	0.078	3	3850	0.147	3	3850	0.225
19:00 - 20:00	3	3850	0.061	3	3850	0.069	3	3850	0.130
20:00 - 21:00	3	3850	0.061	3	3850	0.061	3	3850	0.122
21:00 - 22:00	3	3850	0.035	3	3850	0.052	3	3850	0.087
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.389			1.387			2.776

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.026	3	3850	0.043
08:00 - 09:00	3	3850	0.043	3	3850	0.035	3	3850	0.078
09:00 - 10:00	3	3850	0.061	3	3850	0.052	3	3850	0.113
10:00 - 11:00	3	3850	0.009	3	3850	0.043	3	3850	0.052
11:00 - 12:00	3	3850	0.017	3	3850	0.026	3	3850	0.043
12:00 - 13:00	3	3850	0.017	3	3850	0.017	3	3850	0.034
13:00 - 14:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.009	3	3850	0.017	3	3850	0.026
16:00 - 17:00	3	3850	0.017	3	3850	0.000	3	3850	0.017
17:00 - 18:00	3	3850	0.026	3	3850	0.035	3	3850	0.061
18:00 - 19:00	3	3850	0.009	3	3850	0.009	3	3850	0.018
19:00 - 20:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
20:00 - 21:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.242			0.287			0.529

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.000	3	3850	0.017
08:00 - 09:00	3	3850	0.035	3	3850	0.017	3	3850	0.052
09:00 - 10:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
10:00 - 11:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
11:00 - 12:00	3	3850	0.069	3	3850	0.043	3	3850	0.112
12:00 - 13:00	3	3850	0.026	3	3850	0.069	3	3850	0.095
13:00 - 14:00	3	3850	0.052	3	3850	0.035	3	3850	0.087
14:00 - 15:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
15:00 - 16:00	3	3850	0.061	3	3850	0.078	3	3850	0.139
16:00 - 17:00	3	3850	0.069	3	3850	0.035	3	3850	0.104
17:00 - 18:00	3	3850	0.035	3	3850	0.052	3	3850	0.087
18:00 - 19:00	3	3850	0.009	3	3850	0.035	3	3850	0.044
19:00 - 20:00	3	3850	0.026	3	3850	0.017	3	3850	0.043
20:00 - 21:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
21:00 - 22:00	3	3850	0.009	3	3850	0.026	3	3850	0.035
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.459			0.443			0.902

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	2.095	3	3850	1.169	3	3850	3.264
08:00 - 09:00	3	3850	5.645	3	3850	3.610	3	3850	9.255
09:00 - 10:00	3	3850	8.667	3	3850	6.268	3	3850	14.935
10:00 - 11:00	3	3850	10.970	3	3850	8.468	3	3850	19.438
11:00 - 12:00	3	3850	11.091	3	3850	11.117	3	3850	22.208
12:00 - 13:00	3	3850	10.823	3	3850	10.615	3	3850	21.438
13:00 - 14:00	3	3850	11.056	3	3850	9.974	3	3850	21.030
14:00 - 15:00	3	3850	10.779	3	3850	12.017	3	3850	22.796
15:00 - 16:00	3	3850	10.494	3	3850	11.411	3	3850	21.905
16:00 - 17:00	3	3850	11.351	3	3850	10.580	3	3850	21.931
17:00 - 18:00	3	3850	12.416	3	3850	13.437	3	3850	25.853
18:00 - 19:00	3	3850	10.173	3	3850	12.346	3	3850	22.519
19:00 - 20:00	3	3850	8.900	3	3850	9.463	3	3850	18.363
20:00 - 21:00	3	3850	4.242	3	3850	6.199	3	3850	10.441
21:00 - 22:00	3	3850	1.524	3	3850	3.169	3	3850	4.693
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			130.226			129.843			260.069

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.190	3	3850	0.087	3	3850	0.277
08:00 - 09:00	3	3850	0.952	3	3850	0.918	3	3850	1.870
09:00 - 10:00	3	3850	1.203	3	3850	0.952	3	3850	2.155
10:00 - 11:00	3	3850	1.913	3	3850	1.602	3	3850	3.515
11:00 - 12:00	3	3850	1.481	3	3850	1.342	3	3850	2.823
12:00 - 13:00	3	3850	2.528	3	3850	2.753	3	3850	5.281
13:00 - 14:00	3	3850	1.714	3	3850	1.879	3	3850	3.593
14:00 - 15:00	3	3850	1.022	3	3850	1.013	3	3850	2.035
15:00 - 16:00	3	3850	1.758	3	3850	1.636	3	3850	3.394
16:00 - 17:00	3	3850	1.602	3	3850	1.593	3	3850	3.195
17:00 - 18:00	3	3850	1.273	3	3850	1.212	3	3850	2.485
18:00 - 19:00	3	3850	0.900	3	3850	1.022	3	3850	1.922
19:00 - 20:00	3	3850	0.623	3	3850	0.918	3	3850	1.541
20:00 - 21:00	3	3850	0.372	3	3850	0.528	3	3850	0.900
21:00 - 22:00	3	3850	0.173	3	3850	0.199	3	3850	0.372
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.704			17.654			35.358

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
08:00 - 09:00	3	3850	0.035	3	3850	0.035	3	3850	0.070
09:00 - 10:00	3	3850	0.069	3	3850	0.017	3	3850	0.086
10:00 - 11:00	3	3850	0.078	3	3850	0.035	3	3850	0.113
11:00 - 12:00	3	3850	0.087	3	3850	0.052	3	3850	0.139
12:00 - 13:00	3	3850	0.156	3	3850	0.026	3	3850	0.182
13:00 - 14:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
14:00 - 15:00	3	3850	0.043	3	3850	0.078	3	3850	0.121
15:00 - 16:00	3	3850	0.113	3	3850	0.052	3	3850	0.165
16:00 - 17:00	3	3850	0.035	3	3850	0.069	3	3850	0.104
17:00 - 18:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
18:00 - 19:00	3	3850	0.113	3	3850	0.139	3	3850	0.252
19:00 - 20:00	3	3850	0.087	3	3850	0.147	3	3850	0.234
20:00 - 21:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
21:00 - 22:00	3	3850	0.009	3	3850	0.061	3	3850	0.070
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.024			0.981			2.005

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
08:00 - 09:00	3	3850	0.035	3	3850	0.035	3	3850	0.070
09:00 - 10:00	3	3850	0.069	3	3850	0.017	3	3850	0.086
10:00 - 11:00	3	3850	0.078	3	3850	0.035	3	3850	0.113
11:00 - 12:00	3	3850	0.087	3	3850	0.052	3	3850	0.139
12:00 - 13:00	3	3850	0.156	3	3850	0.026	3	3850	0.182
13:00 - 14:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
14:00 - 15:00	3	3850	0.043	3	3850	0.078	3	3850	0.121
15:00 - 16:00	3	3850	0.113	3	3850	0.052	3	3850	0.165
16:00 - 17:00	3	3850	0.035	3	3850	0.069	3	3850	0.104
17:00 - 18:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
18:00 - 19:00	3	3850	0.113	3	3850	0.139	3	3850	0.252
19:00 - 20:00	3	3850	0.087	3	3850	0.147	3	3850	0.234
20:00 - 21:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
21:00 - 22:00	3	3850	0.009	3	3850	0.061	3	3850	0.070
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.024			0.981			2.005

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	2.320	3	3850	1.264	3	3850	3.584
08:00 - 09:00	3	3850	6.667	3	3850	4.580	3	3850	11.247
09:00 - 10:00	3	3850	9.957	3	3850	7.247	3	3850	17.204
10:00 - 11:00	3	3850	12.978	3	3850	10.113	3	3850	23.091
11:00 - 12:00	3	3850	12.727	3	3850	12.554	3	3850	25.281
12:00 - 13:00	3	3850	13.532	3	3850	13.463	3	3850	26.995
13:00 - 14:00	3	3850	12.874	3	3850	11.974	3	3850	24.848
14:00 - 15:00	3	3850	11.861	3	3850	13.117	3	3850	24.978
15:00 - 16:00	3	3850	12.424	3	3850	13.177	3	3850	25.601
16:00 - 17:00	3	3850	13.056	3	3850	12.277	3	3850	25.333
17:00 - 18:00	3	3850	13.775	3	3850	14.788	3	3850	28.563
18:00 - 19:00	3	3850	11.195	3	3850	13.541	3	3850	24.736
19:00 - 20:00	3	3850	9.636	3	3850	10.545	3	3850	20.181
20:00 - 21:00	3	3850	4.693	3	3850	6.823	3	3850	11.516
21:00 - 22:00	3	3850	1.714	3	3850	3.455	3	3850	5.169
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			149.409			148.918			298.327

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 5

TRICS Data for Neighbourhood Centre Trip Rates – Local Shops

Calculation Reference: AUDIT-355901-160311-0339

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	WM	WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
09	NORTH		
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 260 to 1840 (units: sqm)
Range Selected by User: 240 to 1890 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 28/10/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	4 days
Wednesday	2 days
Thursday	4 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	5 days
20,001 to 25,000	2 days
25,001 to 50,000	4 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	2 days
75,001 to 100,000	1 days
100,001 to 125,000	3 days
125,001 to 250,000	3 days
250,001 to 500,000	5 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	9 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	14 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	14 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CH-01-I-02 LOCAL SHOPS CHESHIRE
CHRISTLETON ROAD
BOUGHTON HEATH
CHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 260 sqm
Survey date: TUESDAY 15/05/12 Survey Type: MANUAL

2 CH-01-I-03 LOCAL SHOPS CHESHIRE
MILL LANE
BACHE
CHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 365 sqm
Survey date: THURSDAY 17/05/12 Survey Type: MANUAL

3 EX-01-I-01 LOCAL SHOPS ESSEX
PYRLES LANE

LOUGHTON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 650 sqm
Survey date: THURSDAY 22/11/07 Survey Type: MANUAL

4 GS-01-I-01 LOCAL SHOPS GLOUCESTERSHIRE
SALISBURY AVENUE
WARDEN HILL
CHELTENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 525 sqm
Survey date: MONDAY 26/04/10 Survey Type: MANUAL

5 HC-01-I-02 LOCAL SHOPS HAMPSHIRE
OLIVER'S BATTERY ROAD S.
OLIVERS BATTERY
WINCHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1605 sqm
Survey date: TUESDAY 20/11/07 Survey Type: MANUAL

6 LE-01-I-02 LOCAL SHOPS LEICESTERSHIRE
RYDER ROAD

LEICESTER
Edge of Town
Residential Zone
Total Gross floor area: 550 sqm
Survey date: TUESDAY 28/10/14 Survey Type: MANUAL

7 NR-01-I-01 LOCAL SHOPS NORTHAMPTONSHIRE
OCCUPATION ROAD

CORBY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 755 sqm
Survey date: WEDNESDAY 19/11/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	NY-01-I-01	LOCAL SHOPS		NORTH YORKSHIRE
	NEWLANDS PARK DRIVE			
	SCARBOROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	1200 sqm		
	Survey date: FRIDAY	28/09/07		Survey Type: MANUAL
9	SH-01-I-02	LOCAL SHOPS		SHROPSHIRE
	WREKIN DRIVE			
	DONNINGTON			
	TELFORD			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	900 sqm		
	Survey date: THURSDAY	24/10/13		Survey Type: MANUAL
10	TV-01-I-03	LOCAL SHOPS		TEES VALLEY
	ACKLAM ROAD			
	ACKLAM			
	MIDDLESBROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	1840 sqm		
	Survey date: FRIDAY	04/10/13		Survey Type: MANUAL
11	TV-01-I-04	LOCAL SHOPS		TEES VALLEY
	CARGO FLEET LANE			
	ORMESBY			
	MIDDLESBROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	585 sqm		
	Survey date: MONDAY	07/10/13		Survey Type: MANUAL
12	TW-01-I-02	LOCAL SHOPS		TYNE & WEAR
	DURHAM ROAD			
	BARNES PARK			
	SUNDERLAND			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	540 sqm		
	Survey date: WEDNESDAY	21/11/12		Survey Type: MANUAL
13	WM-01-I-01	LOCAL SHOPS		WEST MIDLANDS
	HOLYHEAD ROAD			
	COVENTRY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	1550 sqm		
	Survey date: THURSDAY	27/09/07		Survey Type: MANUAL
14	WM-01-I-02	LOCAL SHOPS		WEST MIDLANDS
	MARSHALL LAKE ROAD			
	SHIRLEY			
	SOLIHULL			
	Edge of Town			
	Commercial Zone			
	Total Gross floor area:	515 sqm		
	Survey date: TUESDAY	18/09/07		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	1.296	1	540	1.296	1	540	2.592
07:00 - 08:00	14	846	4.257	14	846	3.792	14	846	8.049
08:00 - 09:00	14	846	5.025	14	846	4.780	14	846	9.805
09:00 - 10:00	14	846	5.701	14	846	5.211	14	846	10.912
10:00 - 11:00	14	846	5.811	14	846	5.405	14	846	11.216
11:00 - 12:00	14	846	5.929	14	846	5.845	14	846	11.774
12:00 - 13:00	14	846	7.382	14	846	7.061	14	846	14.443
13:00 - 14:00	14	846	6.639	14	846	6.596	14	846	13.235
14:00 - 15:00	14	846	5.718	14	846	5.904	14	846	11.622
15:00 - 16:00	14	846	5.473	14	846	5.887	14	846	11.360
16:00 - 17:00	14	846	5.735	14	846	5.828	14	846	11.563
17:00 - 18:00	14	846	6.039	14	846	6.495	14	846	12.534
18:00 - 19:00	14	846	5.819	14	846	6.098	14	846	11.917
19:00 - 20:00	12	935	4.806	12	935	4.833	12	935	9.639
20:00 - 21:00	11	874	3.548	11	874	3.892	11	874	7.440
21:00 - 22:00	6	823	3.846	6	823	4.433	6	823	8.279
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			83.024			83.356			166.380

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.000	14	846	0.000	14	846	0.000
08:00 - 09:00	14	846	0.068	14	846	0.059	14	846	0.127
09:00 - 10:00	14	846	0.101	14	846	0.101	14	846	0.202
10:00 - 11:00	14	846	0.059	14	846	0.068	14	846	0.127
11:00 - 12:00	14	846	0.101	14	846	0.101	14	846	0.202
12:00 - 13:00	14	846	0.101	14	846	0.093	14	846	0.194
13:00 - 14:00	14	846	0.059	14	846	0.068	14	846	0.127
14:00 - 15:00	14	846	0.051	14	846	0.051	14	846	0.102
15:00 - 16:00	14	846	0.084	14	846	0.068	14	846	0.152
16:00 - 17:00	14	846	0.068	14	846	0.068	14	846	0.136
17:00 - 18:00	14	846	0.034	14	846	0.042	14	846	0.076
18:00 - 19:00	14	846	0.101	14	846	0.068	14	846	0.169
19:00 - 20:00	12	935	0.036	12	935	0.089	12	935	0.125
20:00 - 21:00	11	874	0.021	11	874	0.021	11	874	0.042
21:00 - 22:00	6	823	0.020	6	823	0.000	6	823	0.020
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.904			0.897			1.801

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.118	14	846	0.084	14	846	0.202
08:00 - 09:00	14	846	0.118	14	846	0.093	14	846	0.211
09:00 - 10:00	14	846	0.177	14	846	0.194	14	846	0.371
10:00 - 11:00	14	846	0.118	14	846	0.101	14	846	0.219
11:00 - 12:00	14	846	0.093	14	846	0.110	14	846	0.203
12:00 - 13:00	14	846	0.127	14	846	0.144	14	846	0.271
13:00 - 14:00	14	846	0.101	14	846	0.127	14	846	0.228
14:00 - 15:00	14	846	0.084	14	846	0.059	14	846	0.143
15:00 - 16:00	14	846	0.059	14	846	0.051	14	846	0.110
16:00 - 17:00	14	846	0.093	14	846	0.076	14	846	0.169
17:00 - 18:00	14	846	0.034	14	846	0.042	14	846	0.076
18:00 - 19:00	14	846	0.017	14	846	0.051	14	846	0.068
19:00 - 20:00	12	935	0.009	12	935	0.009	12	935	0.018
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.020	6	823	0.020	6	823	0.040
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.168			1.161			2.329

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.034	14	846	0.034	14	846	0.068
08:00 - 09:00	14	846	0.000	14	846	0.000	14	846	0.000
09:00 - 10:00	14	846	0.000	14	846	0.000	14	846	0.000
10:00 - 11:00	14	846	0.017	14	846	0.017	14	846	0.034
11:00 - 12:00	14	846	0.008	14	846	0.008	14	846	0.016
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.008	14	846	0.008	14	846	0.016
14:00 - 15:00	14	846	0.008	14	846	0.000	14	846	0.008
15:00 - 16:00	14	846	0.000	14	846	0.008	14	846	0.008
16:00 - 17:00	14	846	0.017	14	846	0.017	14	846	0.034
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.000	14	846	0.000	14	846	0.000
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.040	6	823	0.040	6	823	0.080
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.140			0.140			0.280

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.185	1	540	0.000	1	540	0.185
07:00 - 08:00	14	846	0.228	14	846	0.186	14	846	0.414
08:00 - 09:00	14	846	0.177	14	846	0.169	14	846	0.346
09:00 - 10:00	14	846	0.144	14	846	0.144	14	846	0.288
10:00 - 11:00	14	846	0.135	14	846	0.110	14	846	0.245
11:00 - 12:00	14	846	0.118	14	846	0.135	14	846	0.253
12:00 - 13:00	14	846	0.076	14	846	0.076	14	846	0.152
13:00 - 14:00	14	846	0.127	14	846	0.135	14	846	0.262
14:00 - 15:00	14	846	0.144	14	846	0.177	14	846	0.321
15:00 - 16:00	14	846	0.279	14	846	0.220	14	846	0.499
16:00 - 17:00	14	846	0.304	14	846	0.262	14	846	0.566
17:00 - 18:00	14	846	0.127	14	846	0.169	14	846	0.296
18:00 - 19:00	14	846	0.279	14	846	0.296	14	846	0.575
19:00 - 20:00	12	935	0.098	12	935	0.116	12	935	0.214
20:00 - 21:00	11	874	0.010	11	874	0.042	11	874	0.052
21:00 - 22:00	6	823	0.202	6	823	0.162	6	823	0.364
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.633			2.399			5.032

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	1.481	1	540	1.481	1	540	2.962
07:00 - 08:00	14	846	4.992	14	846	4.299	14	846	9.291
08:00 - 09:00	14	846	6.419	14	846	5.963	14	846	12.382
09:00 - 10:00	14	846	6.833	14	846	6.258	14	846	13.091
10:00 - 11:00	14	846	7.196	14	846	6.579	14	846	13.775
11:00 - 12:00	14	846	7.264	14	846	7.323	14	846	14.587
12:00 - 13:00	14	846	9.181	14	846	8.843	14	846	18.024
13:00 - 14:00	14	846	8.083	14	846	8.193	14	846	16.276
14:00 - 15:00	14	846	7.204	14	846	7.424	14	846	14.628
15:00 - 16:00	14	846	7.323	14	846	7.914	14	846	15.237
16:00 - 17:00	14	846	7.407	14	846	7.686	14	846	15.093
17:00 - 18:00	14	846	7.965	14	846	8.598	14	846	16.563
18:00 - 19:00	14	846	7.813	14	846	8.133	14	846	15.945
19:00 - 20:00	12	935	6.491	12	935	6.607	12	935	13.098
20:00 - 21:00	11	874	4.745	11	874	5.005	11	874	9.750
21:00 - 22:00	6	823	5.040	6	823	5.304	6	823	10.344
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			105.436			105.610			211.046

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	4.259	1	540	3.333	1	540	7.592
07:00 - 08:00	14	846	3.201	14	846	2.644	14	846	5.845
08:00 - 09:00	14	846	6.943	14	846	7.171	14	846	14.114
09:00 - 10:00	14	846	5.160	14	846	4.772	14	846	9.932
10:00 - 11:00	14	846	4.814	14	846	4.730	14	846	9.544
11:00 - 12:00	14	846	4.535	14	846	4.248	14	846	8.783
12:00 - 13:00	14	846	6.233	14	846	6.090	14	846	12.323
13:00 - 14:00	14	846	5.076	14	846	5.135	14	846	10.211
14:00 - 15:00	14	846	4.721	14	846	4.916	14	846	9.637
15:00 - 16:00	14	846	6.959	14	846	7.095	14	846	14.054
16:00 - 17:00	14	846	4.949	14	846	5.456	14	846	10.405
17:00 - 18:00	14	846	4.476	14	846	4.899	14	846	9.375
18:00 - 19:00	14	846	3.302	14	846	3.784	14	846	7.086
19:00 - 20:00	12	935	3.308	12	935	3.593	12	935	6.901
20:00 - 21:00	11	874	2.060	11	874	2.373	11	874	4.433
21:00 - 22:00	6	823	2.611	6	823	2.996	6	823	5.607
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			72.607			73.235			145.842

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.741	1	540	1.111	1	540	1.852
07:00 - 08:00	14	846	0.068	14	846	0.084	14	846	0.152
08:00 - 09:00	14	846	0.093	14	846	0.169	14	846	0.262
09:00 - 10:00	14	846	0.059	14	846	0.025	14	846	0.084
10:00 - 11:00	14	846	0.144	14	846	0.127	14	846	0.271
11:00 - 12:00	14	846	0.253	14	846	0.313	14	846	0.565
12:00 - 13:00	14	846	0.211	14	846	0.169	14	846	0.380
13:00 - 14:00	14	846	0.253	14	846	0.144	14	846	0.397
14:00 - 15:00	14	846	0.253	14	846	0.144	14	846	0.397
15:00 - 16:00	14	846	0.287	14	846	0.093	14	846	0.380
16:00 - 17:00	14	846	0.135	14	846	0.118	14	846	0.253
17:00 - 18:00	14	846	0.144	14	846	0.101	14	846	0.245
18:00 - 19:00	14	846	0.076	14	846	0.118	14	846	0.194
19:00 - 20:00	12	935	0.125	12	935	0.080	12	935	0.205
20:00 - 21:00	11	874	0.062	11	874	0.073	11	874	0.135
21:00 - 22:00	6	823	0.223	6	823	0.162	6	823	0.385
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.127			3.030			6.157

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.017	14	846	0.008	14	846	0.025
08:00 - 09:00	14	846	0.008	14	846	0.008	14	846	0.016
09:00 - 10:00	14	846	0.008	14	846	0.008	14	846	0.016
10:00 - 11:00	14	846	0.000	14	846	0.000	14	846	0.000
11:00 - 12:00	14	846	0.000	14	846	0.000	14	846	0.000
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.034	14	846	0.025	14	846	0.059
14:00 - 15:00	14	846	0.000	14	846	0.000	14	846	0.000
15:00 - 16:00	14	846	0.000	14	846	0.017	14	846	0.017
16:00 - 17:00	14	846	0.000	14	846	0.000	14	846	0.000
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.017	14	846	0.017	14	846	0.034
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.000	6	823	0.000	6	823	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.092			0.091			0.183

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL COACH PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.034	14	846	0.034	14	846	0.068
08:00 - 09:00	14	846	0.000	14	846	0.000	14	846	0.000
09:00 - 10:00	14	846	0.000	14	846	0.000	14	846	0.000
10:00 - 11:00	14	846	0.017	14	846	0.017	14	846	0.034
11:00 - 12:00	14	846	0.008	14	846	0.008	14	846	0.016
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.008	14	846	0.008	14	846	0.016
14:00 - 15:00	14	846	0.000	14	846	0.000	14	846	0.000
15:00 - 16:00	14	846	0.000	14	846	0.000	14	846	0.000
16:00 - 17:00	14	846	0.008	14	846	0.008	14	846	0.016
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.000	14	846	0.000	14	846	0.000
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.040	6	823	0.121	6	823	0.161
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.123			0.204			0.327

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.741	1	540	1.111	1	540	1.852
07:00 - 08:00	14	846	0.118	14	846	0.127	14	846	0.245
08:00 - 09:00	14	846	0.101	14	846	0.177	14	846	0.278
09:00 - 10:00	14	846	0.068	14	846	0.034	14	846	0.102
10:00 - 11:00	14	846	0.160	14	846	0.144	14	846	0.304
11:00 - 12:00	14	846	0.262	14	846	0.321	14	846	0.583
12:00 - 13:00	14	846	0.228	14	846	0.186	14	846	0.414
13:00 - 14:00	14	846	0.296	14	846	0.177	14	846	0.473
14:00 - 15:00	14	846	0.253	14	846	0.144	14	846	0.397
15:00 - 16:00	14	846	0.287	14	846	0.110	14	846	0.397
16:00 - 17:00	14	846	0.144	14	846	0.127	14	846	0.271
17:00 - 18:00	14	846	0.144	14	846	0.101	14	846	0.245
18:00 - 19:00	14	846	0.093	14	846	0.135	14	846	0.228
19:00 - 20:00	12	935	0.125	12	935	0.080	12	935	0.205
20:00 - 21:00	11	874	0.062	11	874	0.073	11	874	0.135
21:00 - 22:00	6	823	0.263	6	823	0.283	6	823	0.546
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.345			3.330			6.675

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	6.667	1	540	5.926	1	540	12.593
07:00 - 08:00	14	846	8.539	14	846	7.255	14	846	15.794
08:00 - 09:00	14	846	13.640	14	846	13.480	14	846	27.120
09:00 - 10:00	14	846	12.204	14	846	11.208	14	846	23.412
10:00 - 11:00	14	846	12.306	14	846	11.563	14	846	23.868
11:00 - 12:00	14	846	12.179	14	846	12.027	14	846	24.206
12:00 - 13:00	14	846	15.718	14	846	15.194	14	846	30.912
13:00 - 14:00	14	846	13.581	14	846	13.640	14	846	27.221
14:00 - 15:00	14	846	12.323	14	846	12.660	14	846	24.983
15:00 - 16:00	14	846	14.848	14	846	15.338	14	846	30.186
16:00 - 17:00	14	846	12.804	14	846	13.530	14	846	26.334
17:00 - 18:00	14	846	12.711	14	846	13.767	14	846	26.478
18:00 - 19:00	14	846	11.486	14	846	12.348	14	846	23.834
19:00 - 20:00	12	935	10.022	12	935	10.397	12	935	20.419
20:00 - 21:00	11	874	6.878	11	874	7.492	11	874	14.370
21:00 - 22:00	6	823	8.117	6	823	8.745	6	823	16.862
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			184.023			184.569			368.592

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 6

TRICS Data for Neighbourhood Centre Trip Rates – Pub/Restaurant

Calculation Reference: AUDIT-355901-160129-0114

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : C - PUB/RESTAURANT
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 285 to 1400 (units: sqm)
Range Selected by User: 270 to 2000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 25/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday	1 days
Friday	6 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	5

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A3	1 days
A4	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	4 days
2.1 to 2.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CW-06-C-01	PUB/RESTAURANT		CORNWALL
	FORE STREET			
	POOL			
	CAMBORNE			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		285 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL
2	EX-06-C-02	HARVESTER		ESSEX
	LONDON ROAD			
	STANWAY			
	COLCHESTER			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		08/11/13	Survey Type: MANUAL
3	HC-06-C-02	BEEFEATER		HAMPSHIRE
	BOURNEMOUTH ROAD			
	AMPFIELD			
	EASTLEIGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		16/11/07	Survey Type: MANUAL
4	NT-06-C-02	PUB/RESTAURANT		NOTTINGHAMSHIRE
	MANSFIELD ROAD			
	DAYBROOK			
	NOTTINGHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1185 sqm	
	Survey date: FRIDAY		18/05/07	Survey Type: MANUAL
5	SH-06-C-02	HUNGRY HORSE		SHROPSHIRE
	WELSHPOOL ROAD			
	SHELTON			
	SHREWSBURY			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		1400 sqm	
	Survey date: FRIDAY		26/06/09	Survey Type: MANUAL
6	ST-06-C-01	HARVESTER		STAFFORDSHIRE
	STONE ROAD			
	TRENTHAM			
	STOKE-ON-TRENT			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		720 sqm	
	Survey date: WEDNESDAY		23/10/13	Survey Type: MANUAL
7	TV-06-C-01	PUB/RES.		TEES VALLEY
	MARTON ROAD			
	MIDDLESBROUGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		1200 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.316	7	813	0.228	7	813	0.544
11:00 - 12:00	7	813	1.248	7	813	0.527	7	813	1.775
12:00 - 13:00	7	813	2.917	7	813	1.248	7	813	4.165
13:00 - 14:00	7	813	2.355	7	813	2.056	7	813	4.411
14:00 - 15:00	7	813	1.195	7	813	2.724	7	813	3.919
15:00 - 16:00	7	813	1.142	7	813	1.336	7	813	2.478
16:00 - 17:00	7	813	1.828	7	813	1.195	7	813	3.023
17:00 - 18:00	7	813	2.847	7	813	1.845	7	813	4.692
18:00 - 19:00	7	813	3.023	7	813	2.513	7	813	5.536
19:00 - 20:00	7	813	3.023	7	813	2.724	7	813	5.747
20:00 - 21:00	7	813	1.880	7	813	2.408	7	813	4.288
21:00 - 22:00	7	813	1.037	7	813	2.056	7	813	3.093
22:00 - 23:00	7	813	0.492	7	813	1.670	7	813	2.162
23:00 - 24:00	7	813	0.211	7	813	1.160	7	813	1.371
Total Rates:			23.514			23.690			47.204

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.053	7	813	0.035	7	813	0.088
13:00 - 14:00	7	813	0.018	7	813	0.018	7	813	0.036
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.018	7	813	0.036
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.088	7	813	0.070	7	813	0.158
18:00 - 19:00	7	813	0.035	7	813	0.053	7	813	0.088
19:00 - 20:00	7	813	0.141	7	813	0.141	7	813	0.282
20:00 - 21:00	7	813	0.070	7	813	0.070	7	813	0.140
21:00 - 22:00	7	813	0.105	7	813	0.088	7	813	0.193
22:00 - 23:00	7	813	0.176	7	813	0.193	7	813	0.369
23:00 - 24:00	7	813	0.105	7	813	0.105	7	813	0.210
Total Rates:			0.845			0.827			1.672

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.018	7	813	0.036
11:00 - 12:00	7	813	0.088	7	813	0.053	7	813	0.141
12:00 - 13:00	7	813	0.000	7	813	0.018	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.018	7	813	0.018
15:00 - 16:00	7	813	0.035	7	813	0.035	7	813	0.070
16:00 - 17:00	7	813	0.018	7	813	0.018	7	813	0.036
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.018	7	813	0.018	7	813	0.036
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.177			0.178			0.355

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.035	7	813	0.000	7	813	0.035
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.018	7	813	0.035	7	813	0.053
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.018	7	813	0.018
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.053			0.053			0.106

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.018	7	813	0.000	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.000	7	813	0.018
16:00 - 17:00	7	813	0.018	7	813	0.035	7	813	0.053
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.035	7	813	0.000	7	813	0.035
20:00 - 21:00	7	813	0.018	7	813	0.053	7	813	0.071
21:00 - 22:00	7	813	0.018	7	813	0.035	7	813	0.053
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.161			0.159			0.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.439	7	813	0.334	7	813	0.773
11:00 - 12:00	7	813	1.845	7	813	0.650	7	813	2.495
12:00 - 13:00	7	813	5.677	7	813	2.021	7	813	7.698
13:00 - 14:00	7	813	4.359	7	813	3.743	7	813	8.102
14:00 - 15:00	7	813	2.144	7	813	5.220	7	813	7.364
15:00 - 16:00	7	813	2.144	7	813	2.355	7	813	4.499
16:00 - 17:00	7	813	3.322	7	813	2.091	7	813	5.413
17:00 - 18:00	7	813	4.938	7	813	3.199	7	813	8.137
18:00 - 19:00	7	813	6.520	7	813	4.534	7	813	11.054
19:00 - 20:00	7	813	5.747	7	813	5.712	7	813	11.459
20:00 - 21:00	7	813	3.902	7	813	4.728	7	813	8.630
21:00 - 22:00	7	813	1.828	7	813	3.884	7	813	5.712
22:00 - 23:00	7	813	0.721	7	813	3.163	7	813	3.884
23:00 - 24:00	7	813	0.211	7	813	2.355	7	813	2.566
Total Rates:			43.797			43.989			87.786

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.070	7	813	0.000	7	813	0.070
11:00 - 12:00	7	813	0.510	7	813	0.123	7	813	0.633
12:00 - 13:00	7	813	0.984	7	813	0.422	7	813	1.406
13:00 - 14:00	7	813	0.896	7	813	1.336	7	813	2.232
14:00 - 15:00	7	813	0.492	7	813	0.879	7	813	1.371
15:00 - 16:00	7	813	0.439	7	813	0.264	7	813	0.703
16:00 - 17:00	7	813	0.422	7	813	0.193	7	813	0.615
17:00 - 18:00	7	813	0.685	7	813	0.492	7	813	1.177
18:00 - 19:00	7	813	0.967	7	813	0.615	7	813	1.582
19:00 - 20:00	7	813	0.967	7	813	0.510	7	813	1.477
20:00 - 21:00	7	813	0.967	7	813	0.475	7	813	1.442
21:00 - 22:00	7	813	0.422	7	813	0.967	7	813	1.389
22:00 - 23:00	7	813	0.105	7	813	0.668	7	813	0.773
23:00 - 24:00	7	813	0.018	7	813	0.721	7	813	0.739
Total Rates:			7.944			7.665			15.609

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.527	7	813	0.334	7	813	0.861
11:00 - 12:00	7	813	2.496	7	813	0.808	7	813	3.304
12:00 - 13:00	7	813	6.854	7	813	2.443	7	813	9.297
13:00 - 14:00	7	813	5.325	7	813	5.149	7	813	10.474
14:00 - 15:00	7	813	2.707	7	813	6.169	7	813	8.876
15:00 - 16:00	7	813	2.601	7	813	2.742	7	813	5.343
16:00 - 17:00	7	813	3.761	7	813	2.320	7	813	6.081
17:00 - 18:00	7	813	5.641	7	813	3.761	7	813	9.402
18:00 - 19:00	7	813	7.487	7	813	5.167	7	813	12.654
19:00 - 20:00	7	813	6.749	7	813	6.221	7	813	12.970
20:00 - 21:00	7	813	4.886	7	813	5.308	7	813	10.194
21:00 - 22:00	7	813	2.267	7	813	4.886	7	813	7.153
22:00 - 23:00	7	813	0.826	7	813	3.831	7	813	4.657
23:00 - 24:00	7	813	0.228	7	813	3.076	7	813	3.304
Total Rates:			52.355			52.215			104.570

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 7

TRICS Data for Primary School Trip Rates

Calculation Reference: AUDIT-355901-160303-0325

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : A - PRIMARY
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	SC	SURREY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of pupils
Actual Range: 147 to 414 (units:)
Range Selected by User: 92 to 450 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 20/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
Village	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

D1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	MS-04-A-02	PRIMARY SCHOOL		MERSEYSIDE
	BOOKER AVENUE			
	ALVERTON			
	LIVERPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of pupils:		264	
	Survey date: THURSDAY		13/06/13	Survey Type: MANUAL
2	NE-04-A-01	PRIMARY SCHOOL		NORTH EAST LINCOLNSHIRE
	SUNNINGDALE ROAD			
	SCUNTHORPE			
	Edge of Town			
	Residential Zone			
	Total Number of pupils:		147	
	Survey date: TUESDAY		20/05/14	Survey Type: MANUAL
3	SC-04-A-01	PRIMARY SCHOOL		SURREY
	SCHOOL LANE			
	PIRBRIGHT			
	NEAR WOKING			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Number of pupils:		414	
	Survey date: THURSDAY		22/11/12	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL VEHICLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.057	3	275	0.023	3	275	0.080
08:00 - 09:00	3	275	0.269	3	275	0.189	3	275	0.458
09:00 - 10:00	3	275	0.048	3	275	0.056	3	275	0.104
10:00 - 11:00	3	275	0.015	3	275	0.010	3	275	0.025
11:00 - 12:00	3	275	0.027	3	275	0.013	3	275	0.040
12:00 - 13:00	3	275	0.018	3	275	0.025	3	275	0.043
13:00 - 14:00	3	275	0.025	3	275	0.041	3	275	0.066
14:00 - 15:00	3	275	0.050	3	275	0.024	3	275	0.074
15:00 - 16:00	3	275	0.120	3	275	0.148	3	275	0.268
16:00 - 17:00	3	275	0.116	3	275	0.165	3	275	0.281
17:00 - 18:00	3	275	0.045	3	275	0.063	3	275	0.108
18:00 - 19:00	3	275	0.040	3	275	0.030	3	275	0.070
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.830			0.787			1.617

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TAXIS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.002	3	275	0.002	3	275	0.004
09:00 - 10:00	3	275	0.002	3	275	0.001	3	275	0.003
10:00 - 11:00	3	275	0.000	3	275	0.001	3	275	0.001
11:00 - 12:00	3	275	0.001	3	275	0.000	3	275	0.001
12:00 - 13:00	3	275	0.000	3	275	0.001	3	275	0.001
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.001	3	275	0.001	3	275	0.002
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL OGVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.001	3	275	0.001	3	275	0.002
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.001	3	275	0.001	3	275	0.002
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PSVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL CYCLISTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.007	3	275	0.000	3	275	0.007
08:00 - 09:00	3	275	0.015	3	275	0.004	3	275	0.019
09:00 - 10:00	3	275	0.002	3	275	0.004	3	275	0.006
10:00 - 11:00	3	275	0.000	3	275	0.001	3	275	0.001
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.001	3	275	0.001
15:00 - 16:00	3	275	0.007	3	275	0.005	3	275	0.012
16:00 - 17:00	3	275	0.001	3	275	0.016	3	275	0.017
17:00 - 18:00	3	275	0.000	3	275	0.002	3	275	0.002
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.079	3	275	0.036	3	275	0.115
08:00 - 09:00	3	275	0.469	3	275	0.210	3	275	0.679
09:00 - 10:00	3	275	0.074	3	275	0.038	3	275	0.112
10:00 - 11:00	3	275	0.018	3	275	0.012	3	275	0.030
11:00 - 12:00	3	275	0.029	3	275	0.016	3	275	0.045
12:00 - 13:00	3	275	0.019	3	275	0.027	3	275	0.046
13:00 - 14:00	3	275	0.029	3	275	0.051	3	275	0.080
14:00 - 15:00	3	275	0.029	3	275	0.028	3	275	0.057
15:00 - 16:00	3	275	0.132	3	275	0.240	3	275	0.372
16:00 - 17:00	3	275	0.093	3	275	0.287	3	275	0.380
17:00 - 18:00	3	275	0.045	3	275	0.092	3	275	0.137
18:00 - 19:00	3	275	0.081	3	275	0.032	3	275	0.113
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.097			1.069			2.166

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.025	3	275	0.002	3	275	0.027
08:00 - 09:00	3	275	0.778	3	275	0.280	3	275	1.058
09:00 - 10:00	3	275	0.058	3	275	0.073	3	275	0.131
10:00 - 11:00	3	275	0.006	3	275	0.001	3	275	0.007
11:00 - 12:00	3	275	0.025	3	275	0.035	3	275	0.060
12:00 - 13:00	3	275	0.018	3	275	0.024	3	275	0.042
13:00 - 14:00	3	275	0.006	3	275	0.011	3	275	0.017
14:00 - 15:00	3	275	0.025	3	275	0.016	3	275	0.041
15:00 - 16:00	3	275	0.288	3	275	0.647	3	275	0.935
16:00 - 17:00	3	275	0.042	3	275	0.144	3	275	0.186
17:00 - 18:00	3	275	0.008	3	275	0.012	3	275	0.020
18:00 - 19:00	3	275	0.008	3	275	0.007	3	275	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.287			1.252			2.539

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.018	3	275	0.000	3	275	0.018
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.013	3	275	0.013
16:00 - 17:00	3	275	0.000	3	275	0.001	3	275	0.001
17:00 - 18:00	3	275	0.000	3	275	0.001	3	275	0.001
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.015			0.033

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.001	3	275	0.000	3	275	0.001
08:00 - 09:00	3	275	0.001	3	275	0.000	3	275	0.001
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.002	3	275	0.002
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.001	3	275	0.000	3	275	0.001
08:00 - 09:00	3	275	0.019	3	275	0.000	3	275	0.019
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.016	3	275	0.016
16:00 - 17:00	3	275	0.000	3	275	0.001	3	275	0.001
17:00 - 18:00	3	275	0.000	3	275	0.001	3	275	0.001
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.018			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.113	3	275	0.039	3	275	0.152
08:00 - 09:00	3	275	1.281	3	275	0.493	3	275	1.774
09:00 - 10:00	3	275	0.135	3	275	0.114	3	275	0.249
10:00 - 11:00	3	275	0.024	3	275	0.015	3	275	0.039
11:00 - 12:00	3	275	0.055	3	275	0.051	3	275	0.106
12:00 - 13:00	3	275	0.038	3	275	0.051	3	275	0.089
13:00 - 14:00	3	275	0.035	3	275	0.062	3	275	0.097
14:00 - 15:00	3	275	0.055	3	275	0.045	3	275	0.100
15:00 - 16:00	3	275	0.428	3	275	0.908	3	275	1.336
16:00 - 17:00	3	275	0.137	3	275	0.448	3	275	0.585
17:00 - 18:00	3	275	0.053	3	275	0.108	3	275	0.161
18:00 - 19:00	3	275	0.090	3	275	0.039	3	275	0.129
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.444			2.373			4.817

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 2

Residential Trip Rates

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
	SC	SURREY	1 days
03	**SOUTH WEST**		
	CW	CORNWALL	1 days
	DC	DORSET	1 days
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	4 days
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	3 days
	NT	NOTTINGHAMSHIRE	1 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	3 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	2 days
	WM	WEST MIDLANDS	3 days
	WO	WORCESTERSHIRE	2 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	7 days
	SY	SOUTH YORKSHIRE	1 days
08	**NORTH WEST**		
	CH	CHESHIRE	4 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	**NORTH**		
	CB	CUMBRIA	2 days
	TW	TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of dwellings
Actual Range:	6 to 237 (units:)
Range Selected by User:	6 to 4334 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 23/01/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	9 days
Tuesday	14 days
Wednesday	8 days
Thursday	6 days
Friday	9 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	46 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	23
Edge of Town	21

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	38
Out of Town	1
No Sub Category	7

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	45 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

1,001 to 5,000	7 days
5,001 to 10,000	14 days
10,001 to 15,000	4 days
15,001 to 20,000	11 days
20,001 to 25,000	5 days
25,001 to 50,000	5 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	4 days
50,001 to 75,000	2 days
75,001 to 100,000	9 days
100,001 to 125,000	9 days
125,001 to 250,000	8 days
250,001 to 500,000	9 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	14 days
1.1 to 1.5	30 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	45 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

2 CB-03-A-03 SEMI DETACHED CUMBRIA

HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY *20/11/08* *Survey Type: MANUAL*

3 CB-03-A-04 SEMI DETACHED CUMBRIA

MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY *24/04/09* *Survey Type: MANUAL*

4 CH-03-A-02 HOUSES/FLATS CHESHIRE

SYDNEY ROAD

CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 174
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

5 CH-03-A-05 DETACHED CHESHIRE

SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

6 CH-03-A-06 SEMI-DET./BUNGALOWS CHESHIRE

CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

7 CH-03-A-08 DETACHED CHESHIRE

WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 **CW-03-A-02** **SEMI D./DETATCHED** **CORNWALL**
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY *18/09/07* *Survey Type: MANUAL*

9 **DC-03-A-01** **DETACHED** **DORSET**
ISAACS CLOSE

POOLE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 51
Survey date: WEDNESDAY *16/07/08* *Survey Type: MANUAL*

10 **ES-03-A-02** **PRIVATE HOUSING** **EAST SUSSEX**
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

11 **EX-03-A-01** **SEMI-DET.** **ESSEX**
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY *13/05/08* *Survey Type: MANUAL*

12 **GM-03-A-10** **DETACHED/SEMI** **GREATER MANCHESTER**
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

13 **LC-03-A-30** **SEMI-DETACHED** **LANCASHIRE**
WATSON ROAD

BLACKPOOL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 24
Survey date: FRIDAY *14/06/13* *Survey Type: MANUAL*

14 **LN-03-A-01** **MIXED HOUSES** **LINCOLNSHIRE**
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY *15/05/07* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 **LN-03-A-02** **MIXED HOUSES** **LINCOLNSHIRE**
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY *14/05/07* *Survey Type: MANUAL*

16 **LN-03-A-03** **SEMI DETACHED** **LINCOLNSHIRE**
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY *18/09/12* *Survey Type: MANUAL*

17 **MS-03-A-03** **DETACHED** **MERSEYSIDE**
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

18 **NF-03-A-01** **SEMI DET. & BUNGALOWS** **NORFOLK**
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY *16/10/12* *Survey Type: MANUAL*

19 **NF-03-A-02** **HOUSES & FLATS** **NORFOLK**
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

20 **NT-03-A-03** **SEMI DETACHED** **NOTTINGHAMSHIRE**
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY *28/06/06* *Survey Type: MANUAL*

21 **NY-03-A-03** **PRIVATE HOUSING** **NORTH YORKSHIRE**
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY *15/09/08* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

22 **NY-03-A-06** **BUNGALOWS & SEMI DET.** **NORTH YORKSHIRE**
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

23 **NY-03-A-07** **DETACHED & SEMI DET.** **NORTH YORKSHIRE**
CRAVEN WAY

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

24 **NY-03-A-08** **TERRACED HOUSES** **NORTH YORKSHIRE**
NICHOLAS STREET

YORK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

25 **NY-03-A-09** **MIXED HOUSING** **NORTH YORKSHIRE**
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

26 **NY-03-A-10** **HOUSES AND FLATS** **NORTH YORKSHIRE**
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

27 **NY-03-A-11** **PRIVATE HOUSING** **NORTH YORKSHIRE**
HORSEFAIR

BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

28 **SC-03-A-04** **DETACHED & TERRACED** **SURREY**
HIGH ROAD

BYFLEET
Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

29 **SF-03-A-01** **SEMI DETACHED** **SUFFOLK**
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY *23/05/07* *Survey Type: MANUAL*

30 **SF-03-A-02** **SEMI DET./TERRACED** **SUFFOLK**
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY *24/05/07* *Survey Type: MANUAL*

31 **SF-03-A-03** **MIXED HOUSES** **SUFFOLK**
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY *15/05/06* *Survey Type: MANUAL*

32 **SF-03-A-04** **DETACHED & BUNGALOWS** **SUFFOLK**
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY *23/10/12* *Survey Type: MANUAL*

33 **SH-03-A-03** **DETATCHED** **SHROPSHIRE**
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY *26/06/09* *Survey Type: MANUAL*

34 **SH-03-A-04** **TERRACED** **SHROPSHIRE**
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY *11/06/09* *Survey Type: MANUAL*

35 **SH-03-A-05** **SEMI-DETACHED/TERRACED** **SHROPSHIRE**
SANDCROFT
SUTTON HILL
TELFORD
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

36 **ST-03-A-05** **TERRACED & DETACHED** **STAFFORDSHIRE**
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY *26/11/08* *Survey Type: MANUAL*

37 **SY-03-A-01** **SEMI DETACHED HOUSES** **SOUTH YORKSHIRE**
A19 BENTLEY ROAD
BENTLEY RISE
DONCASTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

38 **TW-03-A-02** **SEMI-DETACHED** **TYNE & WEAR**
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY *07/10/13* *Survey Type: MANUAL*

39 **WK-03-A-01** **TERRACED/SEMI/DET.** **WARWICKSHIRE**
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY *21/10/11* *Survey Type: MANUAL*

40 **WK-03-A-02** **BUNGALOWS** **WARWICKSHIRE**
NARBERTH WAY
POTTERS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

41 **WL-03-A-01** **SEMI D./TERRACED W. BASSETT** **WILTSHIRE**
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY *02/10/06* *Survey Type: MANUAL*

42 **WM-03-A-01** **TERRACED** **WEST MIDLANDS**
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY *03/02/06* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

43	**WM-03-A-02**	**DETACHED & SEMI DET.**		**WEST MIDLANDS**
	HEATH STREET			
	STOURBRIDGE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		12	
	Survey date: WEDNESDAY		*26/04/06*	*Survey Type: MANUAL*
44	**WM-03-A-03**	**MIXED HOUSING**		**WEST MIDLANDS**
	BASELEY WAY			
	ROWLEYS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		84	
	Survey date: MONDAY		*24/09/07*	*Survey Type: MANUAL*
45	**WO-03-A-02**	**SEMI DETACHED**		**WORCESTERSHIRE**
	MEADOWHILL ROAD			
	REDDITCH			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:		48	
	Survey date: TUESDAY		*02/05/06*	*Survey Type: MANUAL*
46	**WO-03-A-03**	**DETACHED**		**WORCESTERSHIRE**
	BLAKEBROOK			
	BLAKEBROOK			
	KIDDERMINSTER			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		138	
	Survey date: FRIDAY		*05/05/06*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **ARRIVALS** Time Range: 07:00-08:00
15th Percentile = No. **39** SF-03-A-04 Arr: 0.000
85th Percentile = No. **8** EX-03-A-01 Arr: 0.127

Median Values		Mean Values	
Arrivals:	0.060	Arrivals:	0.076
Departures:	0.300	Departures:	0.297
Totals:	0.360	Totals:	0.374

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.500	0.200	0.700	3.00
2	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.204	0.241	0.445	1.17
3	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.174	0.391	0.565	6.26
4	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.333	0.500	2.67
5	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.151	0.237	0.388	4.13
6	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.143	0.286	2.86
7	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.130	0.304	0.434	2.48
8	**EX-03-A-01**	**SEMI-DET.**	**STANFORD-LE-HOPE**	**ESSEX**	**237**	**Tue**	**13/05/08**	**0.127**	**0.333**	**0.460**	**2.53**
9	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.125	0.500	0.625	2.38
10	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.125	0.375	0.500	1.67
11	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.125	0.375	0.500	3.10
12	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.101	0.418	0.519	0.96
13	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.098	0.451	0.549	3.00
14	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.096	0.173	0.269	2.60
15	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.087	0.353	0.440	4.91
16	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.085	0.268	0.353	1.74
17	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.084	0.325	0.409	1.61
18	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.081	0.283	0.364	2.12
19	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.070	0.352	0.422	2.49
20	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.070	0.178	0.248	2.59
21	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.069	0.138	0.207	2.79
22	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.067	0.133	0.200	3.00
23	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.061	0.245	0.306	2.24
24	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.059	0.356	0.415	4.34
25	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.059	0.294	0.353	3.71
26	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.058	0.355	0.413	3.14
27	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.057	0.287	0.344	2.81
28	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.056	0.296	0.352	0.83
29	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.056	0.380	0.436	1.86
30	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.052	0.351	0.403	2.22
31	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.043	0.157	0.200	3.50
32	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.037	0.259	0.296	2.37

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.036	0.310	0.346	2.60
34	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.027	0.274	0.301	3.73
35	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.027	0.595	0.622	1.59
36	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.000	0.727	0.727	4.73
37	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.500	0.500	2.00
38	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.000	0.364	0.364	1.09
39	**SF-03-A-04**	**DETACHED & BUN**	**LOWESTOFT**	**SUFFOLK**	**7**	**Tue**	**23/10/12**	**0.000**	**0.286**	**0.286**	**4.43**
40	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.000	0.286	0.286	3.14
41	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.000	0.241	0.241	1.13
42	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.000	0.222	0.222	2.44
43	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.000	0.143	0.143	1.14
44	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.118	0.118	2.06
45	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.000	0.087	0.087	1.96
46	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.000	0.042	0.042	3.35

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **DEPARTURES** Time Range: 07:00-08:00
15th Percentile = No. **39** NY-03-A-06 Dep: 0.157
85th Percentile = No. **8** SH-03-A-04 Dep: 0.380

Median Values		Mean Values	
Arrivals:	0.058	Arrivals:	0.076
Departures:	0.290	Departures:	0.297
Totals:	0.348	Totals:	0.374

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.000	0.727	0.727	4.73
2	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.027	0.595	0.622	1.59
3	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.125	0.500	0.625	2.38
4	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.500	0.500	2.00
5	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.098	0.451	0.549	3.00
6	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.101	0.418	0.519	0.96
7	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.174	0.391	0.565	6.26
8	**SH-03-A-04**	**TERRACED**	**SHREWSBURY**	**SHROPSHIRE**	**108**	**Thu**	**11/06/09**	**0.056**	**0.380**	**0.436**	**1.86**
9	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.125	0.375	0.500	1.67
10	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.125	0.375	0.500	3.10
11	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.000	0.364	0.364	1.09
12	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.059	0.356	0.415	4.34
13	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.058	0.355	0.413	3.14
14	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.087	0.353	0.440	4.91
15	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.070	0.352	0.422	2.49
16	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.052	0.351	0.403	2.22
17	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.333	0.500	2.67
18	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.127	0.333	0.460	2.53
19	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.084	0.325	0.409	1.61
20	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.036	0.310	0.346	2.60
21	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.130	0.304	0.434	2.48
22	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.056	0.296	0.352	0.83
23	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.059	0.294	0.353	3.71
24	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.057	0.287	0.344	2.81
25	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.000	0.286	0.286	4.43
26	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.000	0.286	0.286	3.14
27	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.081	0.283	0.364	2.12
28	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.027	0.274	0.301	3.73
29	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.085	0.268	0.353	1.74
30	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.037	0.259	0.296	2.37
31	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.061	0.245	0.306	2.24
32	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.204	0.241	0.445	1.17

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces
								Arrivals	Departures	Totals	Per Dwelling
33	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.000	0.241	0.241	1.13
34	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.151	0.237	0.388	4.13
35	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.000	0.222	0.222	2.44
36	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.500	0.200	0.700	3.00
37	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.070	0.178	0.248	2.59
38	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.096	0.173	0.269	2.60
39	**NY-03-A-06**	**BUNGALOWS & SE**	**BOROUGHBRIDGE**	**NORTH YORKSHIRE**	**115**	**Fri**	**14/10/11**	**0.043**	**0.157**	**0.200**	**3.50**
40	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.143	0.286	2.86
41	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.000	0.143	0.143	1.14
42	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.069	0.138	0.207	2.79
43	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.067	0.133	0.200	3.00
44	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.118	0.118	2.06
45	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.000	0.087	0.087	1.96
46	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.000	0.042	0.042	3.35

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: ARRIVALS Time Range: 08:00-09:00
15th Percentile = No. 39 ES-03-A-02 Arr: 0.081
85th Percentile = No. 8 CB-03-A-03 Arr: 0.225

Median Values		Mean Values	
Arrivals:	0.143	Arrivals:	0.159
Departures:	0.322	Departures:	0.416
Totals:	0.465	Totals:	0.575

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
1	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.588	0.353	0.941	
2	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.571	1.000	
3	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.400	0.933	1.333	
4	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.405	0.726	
5	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.287	0.454	0.741	
6	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.243	0.491	0.734	
7	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.235	0.588	0.823	
8	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.225	0.450	0.675	
9	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.203	0.543	0.746	
10	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.200	0.500	0.700	
11	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.188	0.438	0.626	
12	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.187	0.440	0.627	
13	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.183	0.521	0.704	
14	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.183	0.366	0.549	
15	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.183	0.425	0.608	
16	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	0.455	0.637	
17	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.177	0.523	0.700	
18	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.212	0.385	
19	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.167	0.458	0.625	
20	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.163	0.240	0.403	
21	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.152	0.418	0.570	
22	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.148	0.296	0.444	
23	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.500	0.643	
24	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.143	0.143	0.286	
25	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.141	0.352	0.493	
26	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.759	0.897	
27	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.130	0.370	0.500	
28	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	
29	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.109	0.554	0.663	
30	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.108	0.313	0.421	
31	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.104	0.333	0.437	
32	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.104	0.416	0.520	

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
33	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.103	0.374	0.477	
34	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.098	0.373	0.471	
35	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.096	0.329	0.425	
36	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	
37	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.087	0.391	0.478	
38	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.250	0.333	
39	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.081	0.405	0.486	Yes
40	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.071	0.333	0.404	
41	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.056	0.389	0.445	
42	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.048	0.286	0.334	
43	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.045	0.364	0.409	
44	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.000	0.565	0.565	
45	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.000	0.333	0.333	
46	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.167	0.167	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

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RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: DEPARTURES Time Range: 08:00-09:00
15th Percentile = No. 39 NT-03-A-03 Dep: 0.313
85th Percentile = No. 8 EX-03-A-01 Dep: 0.523

Median Values		Mean Values	
Arrivals:	0.209	Arrivals:	0.159
Departures:	0.403	Departures:	0.416
Totals:	0.611	Totals:	0.575

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
1	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.400	0.933	1.333	
2	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.759	0.897	
3	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.235	0.588	0.823	
4	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.571	1.000	
5	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.000	0.565	0.565	
6	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.109	0.554	0.663	
7	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.203	0.543	0.746	
8	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.177	0.523	0.700	
9	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.183	0.521	0.704	
10	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.200	0.500	0.700	
11	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.500	0.643	
12	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.243	0.491	0.734	
13	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.167	0.458	0.625	
14	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	0.455	0.637	
15	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.287	0.454	0.741	
16	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.225	0.450	0.675	
17	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.187	0.440	0.627	
18	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.188	0.438	0.626	
19	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.183	0.425	0.608	
20	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.152	0.418	0.570	
21	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.104	0.416	0.520	
22	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.081	0.405	0.486	Yes
23	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.405	0.726	
24	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	
25	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.087	0.391	0.478	
26	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.056	0.389	0.445	
27	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.103	0.374	0.477	
28	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.098	0.373	0.471	
29	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.130	0.370	0.500	
30	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.183	0.366	0.549	
31	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.045	0.364	0.409	
32	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.588	0.353	0.941	

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
33	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.141	0.352	0.493	
34	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	
35	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.104	0.333	0.437	
36	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.071	0.333	0.404	
37	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.000	0.333	0.333	
38	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.096	0.329	0.425	
39	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.108	0.313	0.421	
40	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.148	0.296	0.444	
41	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.048	0.286	0.334	
42	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.250	0.333	
43	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.163	0.240	0.403	
44	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.212	0.385	
45	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.167	0.167	
46	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.143	0.143	0.286	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **ARRIVALS** Time Range: 09:00-10:00
15th Percentile = No. **39** CH-03-A-02 Arr: 0.075
85th Percentile = No. **8** NY-03-A-11 Arr: 0.217

Median Values		Mean Values	
Arrivals:	0.153	Arrivals:	0.156
Departures:	0.199	Departures:	0.214
Totals:	0.352	Totals:	0.370

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.333	0.354	0.687	3.35
2	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.292	0.208	0.500	1.67
3	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.286	0.714	1.000	4.43
4	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.257	0.317	0.574	4.34
5	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.248	0.248	0.496	2.48
6	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.239	0.319	0.558	3.14
7	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.228	0.190	0.418	0.96
8	**NY-03-A-11**	**PRIVATE HOUSIN**	**BOROUGHBRIDGE**	**NORTH YORKSHIRE**	**23**	**Wed**	**18/09/13**	**0.217**	**0.217**	**0.434**	**6.26**
9	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.214	0.357	0.571	2.60
10	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.207	0.220	0.427	4.91
11	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.200	0.174	0.374	3.50
12	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.192	0.329	0.521	3.73
13	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.190	0.048	0.238	1.14
14	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.185	0.222	0.407	2.37
15	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	0.273	0.455	4.73
16	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.176	0.294	0.470	3.71
17	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.176	0.196	0.372	3.00
18	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.174	0.000	0.174	1.96
19	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.171	0.233	0.404	2.59
20	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.169	0.254	0.423	2.49
21	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.167	0.263	0.430	4.13
22	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.167	0.176	0.343	1.86
23	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.156	0.198	0.354	2.53
24	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.150	0.200	0.350	3.10
25	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.148	0.148	0.296	1.17
26	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.146	0.183	0.329	1.74
27	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.143	0.071	0.214	3.14
28	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.141	0.169	0.310	0.83
29	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.136	0.091	0.227	1.09
30	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.135	0.108	0.243	1.59
31	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.135	0.250	0.385	2.60
32	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.133	0.200	0.333	3.00

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.121	0.222	0.343	2.12
34	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.120	0.283	0.403	1.61
35	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.117	0.221	0.338	2.22
36	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.111	0.111	0.222	2.44
37	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.111	0.074	0.185	1.13
38	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.333	0.416	2.67
39	**CH-03-A-02**	**HOUSES/FLATS**	**CREWE**	**CHESHIRE**	**174**	**Tue**	**14/10/08**	**0.075**	**0.115**	**0.190**	**2.81**
40	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.071	0.214	0.285	2.86
41	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.069	0.241	0.310	2.79
42	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.063	0.063	0.124	2.38
43	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.061	0.153	0.214	2.24
44	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.059	0.235	0.294	2.06
45	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.000	0.200	0.200	3.00
46	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.167	0.167	2.00

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **DEPARTURES** Time Range: 09:00-10:00
15th Percentile = No. **39** CA-03-A-04 Dep: 0.111
85th Percentile = No. **8** CH-03-A-05 Dep: 0.294

Median Values		Mean Values	
Arrivals:	0.181	Arrivals:	0.156
Departures:	0.211	Departures:	0.214
Totals:	0.392	Totals:	0.370

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.286	0.714	1.000	4.43
2	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.214	0.357	0.571	2.60
3	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.333	0.354	0.687	3.35
4	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.333	0.416	2.67
5	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.192	0.329	0.521	3.73
6	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.239	0.319	0.558	3.14
7	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.257	0.317	0.574	4.34
8	**CH-03-A-05**	**DETACHED**	**CREWE**	**CHESHIRE**	**17**	**Tue**	**14/10/08**	**0.176**	**0.294**	**0.470**	**3.71**
9	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.120	0.283	0.403	1.61
10	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	0.273	0.455	4.73
11	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.167	0.263	0.430	4.13
12	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.169	0.254	0.423	2.49
13	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.135	0.250	0.385	2.60
14	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.248	0.248	0.496	2.48
15	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.069	0.241	0.310	2.79
16	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.059	0.235	0.294	2.06
17	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.171	0.233	0.404	2.59
18	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.185	0.222	0.407	2.37
19	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.121	0.222	0.343	2.12
20	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.117	0.221	0.338	2.22
21	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.207	0.220	0.427	4.91
22	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.217	0.217	0.434	6.26
23	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.071	0.214	0.285	2.86
24	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.292	0.208	0.500	1.67
25	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.150	0.200	0.350	3.10
26	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.133	0.200	0.333	3.00
27	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.000	0.200	0.200	3.00
28	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.156	0.198	0.354	2.53
29	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.176	0.196	0.372	3.00
30	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.228	0.190	0.418	0.96
31	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.146	0.183	0.329	1.74
32	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.167	0.176	0.343	1.86

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.200	0.174	0.374	3.50
34	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.141	0.169	0.310	0.83
35	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.167	0.167	2.00
36	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.061	0.153	0.214	2.24
37	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.148	0.148	0.296	1.17
38	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.075	0.115	0.190	2.81
39	**CA-03-A-04**	**DETACHED**	**PETERBOROUGH**	**CAMBRIDGESHIRE**	**9**	**Tue**	**18/10/11**	**0.111**	**0.111**	**0.222**	**2.44**
40	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.135	0.108	0.243	1.59
41	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.136	0.091	0.227	1.09
42	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.111	0.074	0.185	1.13
43	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.143	0.071	0.214	3.14
44	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.063	0.063	0.124	2.38
45	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.190	0.048	0.238	1.14
46	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.174	0.000	0.174	1.96

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **ARRIVALS** Time Range: 16:00-17:00
15th Percentile = No. **39** DC-03-A-01 Arr: 0.196
85th Percentile = No. **8** LN-03-A-02 Arr: 0.419

Median Values		Mean Values	
Arrivals:	0.289	Arrivals:	0.301
Departures:	0.222	Departures:	0.186
Totals:	0.510	Totals:	0.487

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.565	0.348	0.913	1.96
2	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.525	0.248	0.773	4.34
3	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.500	0.250	0.750	3.10
4	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.455	0.182	0.637	4.73
5	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.138	0.586	2.79
6	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.429	0.858	4.43
7	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.420	0.225	0.645	3.14
8	**LN-03-A-02**	**MIXED HOUSES**	**LINCOLN**	**LINCOLNSHIRE**	**186**	**Mon**	**14/05/07**	**0.419**	**0.231**	**0.650**	**4.13**
9	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.412	0.176	0.588	3.71
10	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.444	0.851	2.37
11	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.405	0.232	0.637	2.53
12	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.380	0.203	0.583	0.96
13	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.370	0.192	0.562	3.73
14	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	1.74
15	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.333	0.250	0.583	2.67
16	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.333	0.148	0.481	1.17
17	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.155	0.476	2.60
18	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.310	0.169	0.479	0.83
19	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.300	0.200	0.500	3.00
20	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.297	0.000	0.297	1.59
21	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.296	0.213	0.509	2.48
22	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.293	0.195	0.488	2.81
23	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.292	0.229	0.521	3.35
24	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.286	0.214	0.500	2.86
25	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.286	0.117	0.403	2.22
26	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.267	0.193	0.460	4.91
27	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.267	0.133	0.400	3.00
28	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.265	0.187	0.452	1.61
29	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.261	0.087	0.348	6.26
30	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.259	0.130	0.389	1.86
31	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.254	0.197	0.451	2.49
32	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.252	0.122	0.374	3.50

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.250	0.333	0.583	1.67
34	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.242	0.172	0.414	2.12
35	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.240	0.124	0.364	2.59
36	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.224	0.459	2.24
37	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.222	0.000	0.222	2.44
38	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.214	0.143	0.357	3.14
39	**DC-03-A-01**	**DETACHED**	**POOLE**	**DORSET**	**51**	**Wed**	**16/07/08**	**0.196**	**0.275**	**0.471**	**3.00**
40	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.190	0.095	0.285	1.14
41	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.182	0.136	0.318	1.09
42	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.154	0.327	2.60
43	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.167	0.334	2.00
44	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.130	0.056	0.186	1.13
45	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.125	0.188	0.313	2.38
46	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.059	0.059	2.06

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **DEPARTURES** Time Range: 16:00-17:00
15th Percentile = No. **39** NY-03-A-06 Dep: 0.122
85th Percentile = No. **8** SF-03-A-03 Dep: 0.248

Median Values		Mean Values	
Arrivals:	0.195	Arrivals:	0.301
Departures:	0.188	Departures:	0.186
Totals:	0.383	Totals:	0.487

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.444	0.851	2.37
2	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.429	0.858	4.43
3	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.565	0.348	0.913	1.96
4	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.250	0.333	0.583	1.67
5	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.196	0.275	0.471	3.00
6	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.500	0.250	0.750	3.10
7	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.333	0.250	0.583	2.67
8	**SF-03-A-03**	**MIXED HOUSES**	**BURY ST EDMUNDS**	**SUFFOLK**	**101**	**Mon**	**15/05/06**	**0.525**	**0.248**	**0.773**	**4.34**
9	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.405	0.232	0.637	2.53
10	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.419	0.231	0.650	4.13
11	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.292	0.229	0.521	3.35
12	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.420	0.225	0.645	3.14
13	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.224	0.459	2.24
14	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.286	0.214	0.500	2.86
15	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.296	0.213	0.509	2.48
16	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	1.74
17	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.380	0.203	0.583	0.96
18	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.300	0.200	0.500	3.00
19	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.254	0.197	0.451	2.49
20	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.293	0.195	0.488	2.81
21	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.267	0.193	0.460	4.91
22	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.370	0.192	0.562	3.73
23	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.125	0.188	0.313	2.38
24	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.265	0.187	0.452	1.61
25	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.455	0.182	0.637	4.73
26	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.412	0.176	0.588	3.71
27	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.242	0.172	0.414	2.12
28	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.310	0.169	0.479	0.83
29	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.167	0.334	2.00
30	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.155	0.476	2.60
31	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.173	0.154	0.327	2.60
32	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.333	0.148	0.481	1.17

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.214	0.143	0.357	3.14
34	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.138	0.586	2.79
35	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.182	0.136	0.318	1.09
36	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.267	0.133	0.400	3.00
37	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.259	0.130	0.389	1.86
38	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.240	0.124	0.364	2.59
39	**NY-03-A-06**	**BUNGALOWS & SE**	**BOROUGHBRIDGE**	**NORTH YORKSHIRE**	**115**	**Fri**	**14/10/11**	**0.252**	**0.122**	**0.374**	**3.50**
40	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.286	0.117	0.403	2.22
41	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.190	0.095	0.285	1.14
42	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.261	0.087	0.348	6.26
43	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.059	0.059	2.06
44	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.130	0.056	0.186	1.13
45	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.297	0.000	0.297	1.59
46	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.222	0.000	0.222	2.44

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

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RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: ARRIVALS Time Range: 17:00-18:00
15th Percentile = No. 39 SH-03-A-05 Arr: 0.241
85th Percentile = No. 8 LN-03-A-02 Arr: 0.495

Median Values		Mean Values	
Arrivals:	0.402	Arrivals:	0.374
Departures:	0.338	Departures:	0.199
Totals:	0.740	Totals:	0.574

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
1	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.700	0.600	1.300	
2	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.609	0.130	0.739	
3	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.558	0.319	0.877	
4	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.556	0.222	0.778	
5	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.545	0.273	0.818	
6	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.525	0.228	0.753	
7	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.510	0.333	0.843	
8	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.495	0.355	0.850	
9	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.479	0.099	0.578	
10	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.478	0.261	0.739	
11	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.478	0.248	0.726	
12	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.475	0.250	0.725	
13	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.463	0.296	0.759	
14	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.458	0.229	0.687	
15	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.103	0.551	
16	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.439	0.274	0.713	
17	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.063	0.500	
18	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.143	0.572	
19	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.425	0.219	0.644	
20	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.417	0.208	0.625	
21	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.413	0.213	0.626	
22	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.148	0.555	
23	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.405	0.369	0.774	
24	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.398	0.307	0.705	
25	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.374	0.141	0.515	
26	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.366	0.099	0.465	
27	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	
28	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.353	0.412	0.765	
29	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.351	0.000	0.351	Yes
30	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.342	0.203	0.545	
31	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.322	0.236	0.558	
32	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
33	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.286	0.214	0.500	
34	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.286	0.048	0.334	
35	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.278	0.056	0.334	
36	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.273	0.045	0.318	
37	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.269	0.192	0.461	
38	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.247	0.169	0.416	
39	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.241	0.130	0.371	
40	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	
41	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.214	0.143	0.357	
42	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.200	0.200	0.400	
43	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.000	0.167	
44	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.132	0.140	0.272	
45	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.333	0.416	
46	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	

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RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: DEPARTURES Time Range: 17:00-18:00
15th Percentile = No. 39 SC-03-A-04 Dep: 0.099
85th Percentile = No. 8 NT-03-A-03 Dep: 0.307

Median Values		Mean Values	
Arrivals:	0.348	Arrivals:	0.374
Departures:	0.205	Departures:	0.199
Totals:	0.553	Totals:	0.574

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
1	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.700	0.600	1.300	
2	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.353	0.412	0.765	
3	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.405	0.369	0.774	
4	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.495	0.355	0.850	
5	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.510	0.333	0.843	
6	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.333	0.416	
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9	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.463	0.296	0.759	
10	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.439	0.274	0.713	
11	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.545	0.273	0.818	
12	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.478	0.261	0.739	
13	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.475	0.250	0.725	
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16	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.458	0.229	0.687	
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18	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.556	0.222	0.778	
19	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.425	0.219	0.644	
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21	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.413	0.213	0.626	
22	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.417	0.208	0.625	
23	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	
24	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.342	0.203	0.545	
25	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.200	0.200	0.400	
26	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.269	0.192	0.461	
27	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	
28	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.247	0.169	0.416	
29	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.148	0.555	
30	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.429	0.143	0.572	
31	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	
32	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.214	0.143	0.357	

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
33	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.374	0.141	0.515	
34	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.132	0.140	0.272	
35	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.609	0.130	0.739	
36	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.241	0.130	0.371	
37	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.103	0.551	
38	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.479	0.099	0.578	
39	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.366	0.099	0.465	
40	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.063	0.500	
41	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.278	0.056	0.334	
42	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.286	0.048	0.334	
43	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.273	0.045	0.318	
44	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.351	0.000	0.351	Yes
45	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.000	0.167	
46	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **ARRIVALS** Time Range: 18:00-19:00

15th Percentile = No. **39** NY-03-A-06 Arr: 0.130

85th Percentile = No. **8** CH-03-A-08 Arr: 0.364

Median Values		Mean Values	
Arrivals:	0.274	Arrivals:	0.250
Departures:	0.238	Departures:	0.177
Totals:	0.512	Totals:	0.427

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.533	0.267	0.800	3.00
2	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.471	0.255	0.726	3.00
3	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.500	0.938	2.38
4	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.435	0.174	0.609	6.26
5	WM-03-A-03	MIXED HOUSING	COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.417	0.274	0.691	2.60
6	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.406	0.362	0.768	3.14
7	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.367	0.177	0.544	0.96
8	**CH-03-A-08**	**DETACHED**	**CHESTER**	**CHESHIRE**	**11**	**Tue**	**22/05/12**	**0.364**	**0.182**	**0.546**	**4.73**
9	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.361	0.300	0.661	2.48
10	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.348	0.130	0.478	1.96
11	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.333	0.167	0.500	2.00
12	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.317	0.232	0.549	1.74
13	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.312	0.234	0.546	2.22
14	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.300	0.150	0.450	3.10
15	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.296	0.333	0.629	2.37
16	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.296	0.111	0.407	1.17
17	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.294	0.294	0.588	3.71
18	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.293	0.184	0.477	2.81
19	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.292	0.208	0.500	1.67
20	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.288	0.192	0.480	3.73
21	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.287	0.194	0.481	2.53
22	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.280	0.317	0.597	4.13
23	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.277	0.289	0.566	1.61
24	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.271	0.188	0.459	3.35
25	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.254	0.183	0.437	0.83
26	LN-03-A-01	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.220	0.180	0.400	4.91
27	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.211	0.085	0.296	2.49
28	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.204	0.163	0.367	2.24
29	WL-03-A-01	SEMI D./TERRAC	WOOTTON BASSETT	WILTSHIRE	99	Mon	02/10/06	0.202	0.182	0.384	2.12
30	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.194	0.167	0.361	1.86
31	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.188	0.208	0.396	4.34
32	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.182	0.045	0.227	1.09

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.250	0.417	2.67
34	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.167	0.074	0.241	1.13
35	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.143	0.143	0.286	4.43
36	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.143	0.143	0.286	1.14
37	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.000	0.138	2.79
38	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.132	0.101	0.233	2.59
39	**NY-03-A-06**	**BUNGALOWS & SE**	**BOROUGHBRIDGE**	**NORTH YORKSHIRE**	**115**	**Fri**	**14/10/11**	**0.130**	**0.113**	**0.243**	**3.50**
40	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.111	0.000	0.111	2.44
41	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.108	0.054	0.162	1.59
42	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.100	0.200	0.300	3.00
43	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.096	0.058	0.154	2.60
44	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.071	0.071	0.142	2.86
45	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.071	0.000	0.071	3.14
46	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	2.06

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Ranking Type: **DEPARTURES** Time Range: 18:00-19:00
15th Percentile = No. **39** ST-03-A-05 Dep: 0.071
85th Percentile = No. **8** WM-03-A-03 Dep: 0.274

Median Values		Mean Values	
Arrivals:	0.211	Arrivals:	0.250
Departures:	0.181	Departures:	0.177
Totals:	0.392	Totals:	0.427

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.500	0.938	2.38
2	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.406	0.362	0.768	3.14
3	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.296	0.333	0.629	2.37
4	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.280	0.317	0.597	4.13
5	SF-03-A-02	SEMI DET./TERR	IPSWICH	SUFFOLK	230	Thu	24/05/07	0.361	0.300	0.661	2.48
6	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.294	0.294	0.588	3.71
7	NT-03-A-03	SEMI DETACHED	KIRKBY-IN-ASHFIELD	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.277	0.289	0.566	1.61
8	**WM-03-A-03**	**MIXED HOUSING**	**COVENTRY**	**WEST MIDLANDS**	**84**	**Mon**	**24/09/07**	**0.417**	**0.274**	**0.691**	**2.60**
9	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.533	0.267	0.800	3.00
10	DC-03-A-01	DETACHED	POOLE	DORSET	51	Wed	16/07/08	0.471	0.255	0.726	3.00
11	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.250	0.417	2.67
12	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.312	0.234	0.546	2.22
13	CB-03-A-04	SEMI DETACHED	WORKINGTON	CUMBRIA	82	Fri	24/04/09	0.317	0.232	0.549	1.74
14	LC-03-A-30	SEMI-DETACHED	BLACKPOOL	LANCASHIRE	24	Fri	14/06/13	0.292	0.208	0.500	1.67
15	SF-03-A-03	MIXED HOUSES	BURY ST EDMUNDS	SUFFOLK	101	Mon	15/05/06	0.188	0.208	0.396	4.34
16	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.100	0.200	0.300	3.00
17	EX-03-A-01	SEMI-DET.	STANFORD-LE-HOPE	ESSEX	237	Tue	13/05/08	0.287	0.194	0.481	2.53
18	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.288	0.192	0.480	3.73
19	WO-03-A-02	SEMI DETACHED	REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.271	0.188	0.459	3.35
20	CH-03-A-02	HOUSES/FLATS	CREWE	CHESHIRE	174	Tue	14/10/08	0.293	0.184	0.477	2.81
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25	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.367	0.177	0.544	0.96
26	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.435	0.174	0.609	6.26
27	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.333	0.167	0.500	2.00
28	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.194	0.167	0.361	1.86
29	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.204	0.163	0.367	2.24
30	CB-03-A-03	SEMI DETACHED	WORKINGTON	CUMBRIA	40	Thu	20/11/08	0.300	0.150	0.450	3.10
31	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.143	0.143	0.286	4.43
32	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.143	0.143	0.286	1.14

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
33	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.348	0.130	0.478	1.96
34	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.130	0.113	0.243	3.50
35	SH-03-A-05	SEMI-DETACHED/	TELFORD	SHROPSHIRE	54	Thu	24/10/13	0.296	0.111	0.407	1.17
36	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.132	0.101	0.233	2.59
37	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.211	0.085	0.296	2.49
38	SY-03-A-01	SEMI DETACHED	DONCASTER	SOUTH YORKSHIRE	54	Wed	18/09/13	0.167	0.074	0.241	1.13
39	**ST-03-A-05**	**TERRACED & DET**	**STOKE-ON-TRENT**	**STAFFORDSHIRE**	**14**	**Wed**	**26/11/08**	**0.071**	**0.071**	**0.142**	**2.86**
40	NY-03-A-09	MIXED HOUSING	NORTHALLERTON	NORTH YORKSHIRE	52	Mon	16/09/13	0.096	0.058	0.154	2.60
41	ES-03-A-02	PRIVATE HOUSIN	PEACEHAVEN	EAST SUSSEX	37	Fri	18/11/11	0.108	0.054	0.162	1.59
42	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.182	0.045	0.227	1.09
43	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.000	0.138	2.79
44	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.111	0.000	0.111	2.44
45	NY-03-A-03	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	14	Mon	15/09/08	0.071	0.000	0.071	3.14
46	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	2.06

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

Appendix 3

Care Home Trip Rates

Calculation Reference: AUDIT-355901-160321-0351

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : F - CARE HOME (ELDERLY RESIDENTIAL)
MULTI-MODAL VEHICLES

Selected regions and areas:

03	**SOUTH WEST**		
	DC	DORSET	1 days
06	**WEST MIDLANDS**		
	WK	WARWICKSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	WY	WEST YORKSHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of residents
Actual Range: 32 to 58 (units:)
Range Selected by User: 17 to 180 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 24/10/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C2	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	**DC-05-F-02**	**NURSING HOME**		**DORSET**
	WHARNCLIFFE ROAD			
	BOSCOMBE			
	BOURNEMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of residents:		43	
	Survey date: WEDNESDAY		*16/07/08*	*Survey Type: MANUAL*
2	**WK-05-F-01**	**NURSING HOME**		**WARWICKSHIRE**
	CLARENDON SQUARE			
	LEAMINGTON SPA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of residents:		32	
	Survey date: THURSDAY		*25/10/12*	*Survey Type: MANUAL*
3	**WY-05-F-01**	**NURSING HOME**		**WEST YORKSHIRE**
	CLIFF ROAD			
	HYDE PARK			
	LEEDS			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of residents:		58	
	Survey date: TUESDAY		*15/06/10*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL VEHICLES

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.075	3	44	0.083	3	44	0.158
08:00 - 09:00	3	44	0.068	3	44	0.068	3	44	0.136
09:00 - 10:00	3	44	0.090	3	44	0.038	3	44	0.128
10:00 - 11:00	3	44	0.083	3	44	0.090	3	44	0.173
11:00 - 12:00	3	44	0.098	**3**	**44**	**0.113**	**3**	**44**	**0.211**
12:00 - 13:00	3	44	0.060	3	44	0.060	3	44	0.120
13:00 - 14:00	**3**	**44**	**0.105**	3	44	0.068	3	44	0.173
14:00 - 15:00	3	44	0.068	3	44	0.075	3	44	0.143
15:00 - 16:00	3	44	0.053	3	44	0.075	3	44	0.128
16:00 - 17:00	3	44	0.068	3	44	0.053	3	44	0.121
17:00 - 18:00	3	44	0.083	3	44	0.113	3	44	0.196
18:00 - 19:00	3	44	0.098	3	44	0.105	3	44	0.203
19:00 - 20:00	3	44	0.053	3	44	0.068	3	44	0.121
20:00 - 21:00	2	45	0.011	2	45	0.044	2	45	0.055
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.013			1.053			2.066

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TAXIS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.008	3	44	0.008	3	44	0.016
12:00 - 13:00	3	44	0.008	3	44	0.008	3	44	0.016
13:00 - 14:00	**3**	**44**	**0.015**	**3**	**44**	**0.015**	**3**	**44**	**0.030**
14:00 - 15:00	3	44	0.008	3	44	0.008	3	44	0.016
15:00 - 16:00	3	44	0.008	3	44	0.008	3	44	0.016
16:00 - 17:00	3	44	0.008	3	44	0.008	3	44	0.016
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.008	3	44	0.008	3	44	0.016
19:00 - 20:00	3	44	0.008	3	44	0.008	3	44	0.016
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.071			0.071			0.142

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL OGVS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.015	3	44	0.015	3	44	0.030
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	**3**	**44**	**0.023**	3	44	0.008	3	44	0.031
11:00 - 12:00	3	44	0.015	**3**	**44**	**0.023**	**3**	**44**	**0.038**
12:00 - 13:00	3	44	0.000	3	44	0.008	3	44	0.008
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.000	3	44	0.000	3	44	0.000
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.054			0.107

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PSVS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	**3**	**44**	**0.008**	**3**	**44**	**0.008**
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	**3**	**44**	**0.008**	3	44	0.000	3	44	0.008
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.000	3	44	0.000	3	44	0.000
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.016			0.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL CYCLISTS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.008	3	44	0.008	3	44	0.016
09:00 - 10:00	3	44	0.008	3	44	0.008	3	44	0.016
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.023	**3**	**44**	**0.023**	3	44	0.046
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	**3**	**44**	**0.030**	3	44	0.023	**3**	**44**	**0.053**
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.000	3	44	0.000	3	44	0.000
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.069			0.062			0.131

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.090	3	44	0.083	3	44	0.173
08:00 - 09:00	3	44	0.098	3	44	0.083	3	44	0.181
09:00 - 10:00	3	44	0.090	3	44	0.045	3	44	0.135
10:00 - 11:00	3	44	0.113	3	44	0.128	3	44	0.241
11:00 - 12:00	3	44	0.120	3	44	0.143	3	44	0.263
12:00 - 13:00	3	44	0.053	3	44	0.045	3	44	0.098
13:00 - 14:00	**3**	**44**	**0.135**	3	44	0.068	3	44	0.203
14:00 - 15:00	3	44	0.083	3	44	0.090	3	44	0.173
15:00 - 16:00	3	44	0.060	3	44	0.098	3	44	0.158
16:00 - 17:00	3	44	0.068	3	44	0.083	3	44	0.151
17:00 - 18:00	3	44	0.083	**3**	**44**	**0.150**	3	44	0.233
18:00 - 19:00	3	44	0.135	3	44	0.135	**3**	**44**	**0.270**
19:00 - 20:00	3	44	0.060	3	44	0.083	3	44	0.143
20:00 - 21:00	2	45	0.022	2	45	0.056	2	45	0.078
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.210			1.290			2.500

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**44**	**0.060**	3	44	0.023	3	44	0.083
08:00 - 09:00	3	44	0.030	3	44	0.023	3	44	0.053
09:00 - 10:00	3	44	0.038	3	44	0.015	3	44	0.053
10:00 - 11:00	3	44	0.053	3	44	0.030	3	44	0.083
11:00 - 12:00	3	44	0.030	3	44	0.045	3	44	0.075
12:00 - 13:00	3	44	0.038	**3**	**44**	**0.068**	**3**	**44**	**0.106**
13:00 - 14:00	3	44	0.023	3	44	0.023	3	44	0.046
14:00 - 15:00	3	44	0.023	3	44	0.023	3	44	0.046
15:00 - 16:00	3	44	0.015	3	44	0.045	3	44	0.060
16:00 - 17:00	3	44	0.015	3	44	0.038	3	44	0.053
17:00 - 18:00	3	44	0.000	3	44	0.015	3	44	0.015
18:00 - 19:00	3	44	0.023	3	44	0.000	3	44	0.023
19:00 - 20:00	3	44	0.023	3	44	0.045	3	44	0.068
20:00 - 21:00	2	45	0.000	2	45	0.022	2	45	0.022
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.371			0.415			0.786

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**44**	**0.038**	3	44	0.000	3	44	0.038
08:00 - 09:00	3	44	0.015	**3**	**44**	**0.030**	**3**	**44**	**0.045**
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.008	3	44	0.000	3	44	0.008
11:00 - 12:00	3	44	0.015	3	44	0.000	3	44	0.015
12:00 - 13:00	3	44	0.000	3	44	0.008	3	44	0.008
13:00 - 14:00	3	44	0.008	3	44	0.000	3	44	0.008
14:00 - 15:00	3	44	0.015	3	44	0.030	3	44	0.045
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.008	3	44	0.008
17:00 - 18:00	3	44	0.008	3	44	0.000	3	44	0.008
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.030	3	44	0.000	3	44	0.030
20:00 - 21:00	2	45	0.011	2	45	0.022	2	45	0.033
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.148			0.106			0.254

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.000	3	44	0.000	3	44	0.000
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.000	3	44	0.000	3	44	0.000
20:00 - 21:00	2	45	0.000	2	45	0.000	2	45	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**44**	**0.038**	3	44	0.000	3	44	0.038
08:00 - 09:00	3	44	0.015	**3**	**44**	**0.030**	**3**	**44**	**0.045**
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.008	3	44	0.000	3	44	0.008
11:00 - 12:00	3	44	0.015	3	44	0.000	3	44	0.015
12:00 - 13:00	3	44	0.000	3	44	0.008	3	44	0.008
13:00 - 14:00	3	44	0.008	3	44	0.000	3	44	0.008
14:00 - 15:00	3	44	0.015	3	44	0.030	3	44	0.045
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.008	3	44	0.008
17:00 - 18:00	3	44	0.008	3	44	0.000	3	44	0.008
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	3	44	0.030	3	44	0.000	3	44	0.030
20:00 - 21:00	2	45	0.011	2	45	0.022	2	45	0.033
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.148			0.106			0.254

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**44**	**0.188**	3	44	0.105	3	44	0.293
08:00 - 09:00	3	44	0.150	3	44	0.143	3	44	0.293
09:00 - 10:00	3	44	0.135	3	44	0.068	3	44	0.203
10:00 - 11:00	3	44	0.173	3	44	0.158	3	44	0.331
11:00 - 12:00	3	44	0.165	**3**	**44**	**0.188**	**3**	**44**	**0.353**
12:00 - 13:00	3	44	0.090	3	44	0.120	3	44	0.210
13:00 - 14:00	3	44	0.165	3	44	0.090	3	44	0.255
14:00 - 15:00	3	44	0.120	3	44	0.143	3	44	0.263
15:00 - 16:00	3	44	0.098	3	44	0.173	3	44	0.271
16:00 - 17:00	3	44	0.083	3	44	0.128	3	44	0.211
17:00 - 18:00	3	44	0.120	3	44	0.188	3	44	0.308
18:00 - 19:00	3	44	0.158	3	44	0.135	3	44	0.293
19:00 - 20:00	3	44	0.113	3	44	0.128	3	44	0.241
20:00 - 21:00	2	45	0.033	2	45	0.100	2	45	0.133
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.791			1.867			3.658

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

Trip rate parameter range selected:	32 - 58 (units:)
Survey date date range:	01/01/07 - 24/10/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 42

HTp/1107/TN/12 – Pub/Restaurant Vehicle Trip Rates Update

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Pub/Restaurant Vehicular Trips Update

(HTp/1107/TN/12)

April 2016

Contents

Appendices

1.0 Introduction

1.1 The Applicant has submitted an application for planning permission to the Council for the development described in Section 2.0 of this Statement. This Statement has been prepared by Highgate Transportation on behalf of the Applicant and should be read in conjunction with the following documents:

(a) the Site Plan;

(b) the Site Survey;

(c) the Floor Plans and Elevations; and

(d) the Design and Access Statement.

1.2 This Statement has been prepared in accordance with the guidance contained in the Department for Transport's Guidance on Transport Assessment (March 2007) and the Council's Supplementary Planning Guidance Note 4 – Transport Assessment Guidelines (2006). In particular, it:

(a) sets out the "fall back" position in relation to the existing use of the Site;

(b) sets out the "fall back" position in relation to the extant planning permission for the Site;

(c) describes the development proposals;

(d) considers the policy framework relevant to the development proposals and the Site;

(e) considers the accessibility of the Site by all modes of transport and the likely modal split of journeys to and from the Site;

(f) considers the likely effects of the development proposals upon the surrounding highway network, including the likely level of trip generation and the assignment of development traffic to the highway network;

(g) considers the proposed vehicular access arrangements to the Site;

(h) considers the proposed parking provision for the development proposals; and

(i) considers the proposed servicing arrangements for the development proposals.

1.3 The remainder of this Statement is structured as follows: **Paragraph 1.1** sets out the "fall back" position in relation to the existing use of the Site; **Sections 2.0** to **4.0** set out the "fall back" position in relation to the extant planning permission for the Site, describe the development proposals and consider the policy framework relevant to the development proposals and the Site; **Appendix 1** considers the accessibility of the Site by all modes of transport.

1.4 **Section 5.0** considers the likely effects of the development proposals upon the surrounding highway network, including the likely level of trip generation and the assignment of development traffic to the highway network; **Appendix 2** considers the proposed vehicular access arrangements to the Site; **Section 6.0** considers the proposed parking provision for the development proposals; and **Section 7.0** considers the proposed servicing arrangements for the development proposals.

2.0 Trip Rates – TN/02/A Updated Peak Hour Tables

" [illegible] **Table 2.1** [illegible]

Table 2.1 – Family Pub/Restaurant Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

" [illegible]

" [illegible] **Table 2.2** [illegible]

Table 2.2 – Peel Hall Vehicular Trip Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Trips	**591**	**848**	**889**	**702**

3.0 Peak Period Trip Rates – TN/02/Addendum Updated Table

Table 3.1 – Family Pub/Restaurant (800sqm)

Hour	Trip Rates (per 100sqm)		TRIPS	
	Arr.	Dep.	Arr.	Dep.
1600-1700				
1700-1800				
1800-1900				
1800-1830*	*1.512*		*12*	*10*

4.0 Trip Discounts – TN/06 Updated Tables

Table 4.1 Table 2.1

Table 4.1 - PM Peak Hour Trips, with Discount Applied

Land Use	Trip Numbers PM Peak Hour 1700-1800					
	Internal (Arrival)	Internal (Departure)	Pass-By (Arrival)	Pass-by (Departure)	External New (Arrival)	External New (Departure)
To be used in modelling			**18**	**19**	**603**	**450**

Table 4.2

Table 4.2 – Summary of Vehicle Trip Numbers

	AM Arrival	AM Departure	PM Arrival	PM Departure
a) Total Identified Trips TN02/A				
b) Figures to be Used in Modelling				
Overall Discount (a-b)				

Table 4.3 – Family Pub/Restaurant (800sqm)

Peak Period	EXTERNAL TRIPS (75%)	
	Arr.	Dep.
1600-1700		
1700-1800		
1800-1830		

5.0 Vehicle Trips at Site Access – TN/08 Updated Table

Appendix 2

Table 5.1

Table 5.1 – Summary of Peak Hour Vehicle Trip Numbers at Each Access Location

Access	AM Arrival	AM Departure	PM Arrival	PM Departure
Total				

***Includes food store pass-by trips**

Paragraph 4.4

6.0 Summary

[illegible]

Table 5.1 [illegible]

[illegible]

Appendix 1

TRICS Data for Family Pub/Restaurant

Calculation Reference: AUDIT-355901-160129-0114

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : C - PUB/RESTAURANT
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 285 to 1400 (units: sqm)
Range Selected by User: 270 to 2000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 25/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday	1 days
Friday	6 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	5

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A3	1 days
A4	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	4 days
2.1 to 2.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CW-06-C-01	PUB/RESTAURANT		CORNWALL
	FORE STREET			
	POOL			
	CAMBORNE			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		285 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL
2	EX-06-C-02	HARVESTER		ESSEX
	LONDON ROAD			
	STANWAY			
	COLCHESTER			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		08/11/13	Survey Type: MANUAL
3	HC-06-C-02	BEEFEATER		HAMPSHIRE
	BOURNEMOUTH ROAD			
	AMPFIELD			
	EASTLEIGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		16/11/07	Survey Type: MANUAL
4	NT-06-C-02	PUB/RESTAURANT		NOTTINGHAMSHIRE
	MANSFIELD ROAD			
	DAYBROOK			
	NOTTINGHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1185 sqm	
	Survey date: FRIDAY		18/05/07	Survey Type: MANUAL
5	SH-06-C-02	HUNGRY HORSE		SHROPSHIRE
	WELSHPOOL ROAD			
	SHELTON			
	SHREWSBURY			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		1400 sqm	
	Survey date: FRIDAY		26/06/09	Survey Type: MANUAL
6	ST-06-C-01	HARVESTER		STAFFORDSHIRE
	STONE ROAD			
	TRENTHAM			
	STOKE-ON-TRENT			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		720 sqm	
	Survey date: WEDNESDAY		23/10/13	Survey Type: MANUAL
7	TV-06-C-01	PUB/RES.		TEES VALLEY
	MARTON ROAD			
	MIDDLESBROUGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		1200 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.316	7	813	0.228	7	813	0.544
11:00 - 12:00	7	813	1.248	7	813	0.527	7	813	1.775
12:00 - 13:00	7	813	2.917	7	813	1.248	7	813	4.165
13:00 - 14:00	7	813	2.355	7	813	2.056	7	813	4.411
14:00 - 15:00	7	813	1.195	7	813	2.724	7	813	3.919
15:00 - 16:00	7	813	1.142	7	813	1.336	7	813	2.478
16:00 - 17:00	7	813	1.828	7	813	1.195	7	813	3.023
17:00 - 18:00	7	813	2.847	7	813	1.845	7	813	4.692
18:00 - 19:00	7	813	3.023	7	813	2.513	7	813	5.536
19:00 - 20:00	7	813	3.023	7	813	2.724	7	813	5.747
20:00 - 21:00	7	813	1.880	7	813	2.408	7	813	4.288
21:00 - 22:00	7	813	1.037	7	813	2.056	7	813	3.093
22:00 - 23:00	7	813	0.492	7	813	1.670	7	813	2.162
23:00 - 24:00	7	813	0.211	7	813	1.160	7	813	1.371
Total Rates:			23.514			23.690			47.204

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.053	7	813	0.035	7	813	0.088
13:00 - 14:00	7	813	0.018	7	813	0.018	7	813	0.036
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.018	7	813	0.036
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.088	7	813	0.070	7	813	0.158
18:00 - 19:00	7	813	0.035	7	813	0.053	7	813	0.088
19:00 - 20:00	7	813	0.141	7	813	0.141	7	813	0.282
20:00 - 21:00	7	813	0.070	7	813	0.070	7	813	0.140
21:00 - 22:00	7	813	0.105	7	813	0.088	7	813	0.193
22:00 - 23:00	7	813	0.176	7	813	0.193	7	813	0.369
23:00 - 24:00	7	813	0.105	7	813	0.105	7	813	0.210
Total Rates:			0.845			0.827			1.672

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.018	7	813	0.036
11:00 - 12:00	7	813	0.088	7	813	0.053	7	813	0.141
12:00 - 13:00	7	813	0.000	7	813	0.018	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.018	7	813	0.018
15:00 - 16:00	7	813	0.035	7	813	0.035	7	813	0.070
16:00 - 17:00	7	813	0.018	7	813	0.018	7	813	0.036
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.018	7	813	0.018	7	813	0.036
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.177			0.178			0.355

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.035	7	813	0.000	7	813	0.035
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.018	7	813	0.035	7	813	0.053
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.018	7	813	0.018
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.053			0.053			0.106

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.018	7	813	0.000	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.000	7	813	0.018
16:00 - 17:00	7	813	0.018	7	813	0.035	7	813	0.053
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.035	7	813	0.000	7	813	0.035
20:00 - 21:00	7	813	0.018	7	813	0.053	7	813	0.071
21:00 - 22:00	7	813	0.018	7	813	0.035	7	813	0.053
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.161			0.159			0.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.439	7	813	0.334	7	813	0.773
11:00 - 12:00	7	813	1.845	7	813	0.650	7	813	2.495
12:00 - 13:00	7	813	5.677	7	813	2.021	7	813	7.698
13:00 - 14:00	7	813	4.359	7	813	3.743	7	813	8.102
14:00 - 15:00	7	813	2.144	7	813	5.220	7	813	7.364
15:00 - 16:00	7	813	2.144	7	813	2.355	7	813	4.499
16:00 - 17:00	7	813	3.322	7	813	2.091	7	813	5.413
17:00 - 18:00	7	813	4.938	7	813	3.199	7	813	8.137
18:00 - 19:00	7	813	6.520	7	813	4.534	7	813	11.054
19:00 - 20:00	7	813	5.747	7	813	5.712	7	813	11.459
20:00 - 21:00	7	813	3.902	7	813	4.728	7	813	8.630
21:00 - 22:00	7	813	1.828	7	813	3.884	7	813	5.712
22:00 - 23:00	7	813	0.721	7	813	3.163	7	813	3.884
23:00 - 24:00	7	813	0.211	7	813	2.355	7	813	2.566
Total Rates:			43.797			43.989			87.786

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.070	7	813	0.000	7	813	0.070
11:00 - 12:00	7	813	0.510	7	813	0.123	7	813	0.633
12:00 - 13:00	7	813	0.984	7	813	0.422	7	813	1.406
13:00 - 14:00	7	813	0.896	7	813	1.336	7	813	2.232
14:00 - 15:00	7	813	0.492	7	813	0.879	7	813	1.371
15:00 - 16:00	7	813	0.439	7	813	0.264	7	813	0.703
16:00 - 17:00	7	813	0.422	7	813	0.193	7	813	0.615
17:00 - 18:00	7	813	0.685	7	813	0.492	7	813	1.177
18:00 - 19:00	7	813	0.967	7	813	0.615	7	813	1.582
19:00 - 20:00	7	813	0.967	7	813	0.510	7	813	1.477
20:00 - 21:00	7	813	0.967	7	813	0.475	7	813	1.442
21:00 - 22:00	7	813	0.422	7	813	0.967	7	813	1.389
22:00 - 23:00	7	813	0.105	7	813	0.668	7	813	0.773
23:00 - 24:00	7	813	0.018	7	813	0.721	7	813	0.739
Total Rates:			7.944			7.665			15.609

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.527	7	813	0.334	7	813	0.861
11:00 - 12:00	7	813	2.496	7	813	0.808	7	813	3.304
12:00 - 13:00	7	813	6.854	7	813	2.443	7	813	9.297
13:00 - 14:00	7	813	5.325	7	813	5.149	7	813	10.474
14:00 - 15:00	7	813	2.707	7	813	6.169	7	813	8.876
15:00 - 16:00	7	813	2.601	7	813	2.742	7	813	5.343
16:00 - 17:00	7	813	3.761	7	813	2.320	7	813	6.081
17:00 - 18:00	7	813	5.641	7	813	3.761	7	813	9.402
18:00 - 19:00	7	813	7.487	7	813	5.167	7	813	12.654
19:00 - 20:00	7	813	6.749	7	813	6.221	7	813	12.970
20:00 - 21:00	7	813	4.886	7	813	5.308	7	813	10.194
21:00 - 22:00	7	813	2.267	7	813	4.886	7	813	7.153
22:00 - 23:00	7	813	0.826	7	813	3.831	7	813	4.657
23:00 - 24:00	7	813	0.228	7	813	3.076	7	813	3.304
Total Rates:			52.355			52.215			104.570

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 2

Full Set of Tables for Peak Period Vehicle Trips at Each Site Access Location

Updated TN/08 Table 2.1 – Number of Vehicular Trips at Site Accesses 0700-0800

AM Peak 0700-0800								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.127	0.380	19	57	0%	19	57
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.127	0.380	89	266	5%	85	253
	Primary School (up to 420 pupils)	0.057	0.023	24	10	0%	24	10
Poplars Ave. *(Central)*	330 Dwellings	0.127	0.380	42	125	5%	40	119
	Food Store (2,000sqm)	1.801	1.082	36	22	60%	14*	9*
	Local Centre (600sqm)	4.257	3.792	26	23	70%	8	7
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.075	0.083	8	8	0%	8	8
Poplars Ave. *(West)*	Employment (7,500sqm)	0.688	0.164	52	12	0%	52	12
Birch Avenue	20 Dwellings	0.127	0.380	3	8	0%	3	8
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	0	0	0%	0	0
			Total	299	531	-	**253**	**483**
							736	

***Pass-by trips account for 10%**

Updated TN/08 Table 2.2 – Number of Vehicular Trips at Site Accesses 0800-0900

AM Peak 0800-0900								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.225	0.523	34	79	0%	34	79
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.225	0.523	158	366	20%	126	293
	Primary School (up to 420 pupils)	0.269	0.189	113	79	75%	28	20
Poplars Ave. *(Central)*	330 Dwellings	0.225	0.523	74	173	20%	59	138
	Food Store (2,000sqm)	4.615	3.030	92	61	60%	37*	24*
	Local Centre (600sqm)	5.025	4.780	30	29	70%	9	9
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.068	0.068	7	7	0%	7	7
Poplars Ave. *(West)*	Employment (7,500sqm)	0.919	0.514	69	39	0%	69	39
Birch Avenue	20 Dwellings	0.225	0.523	5	11	0%	5	11
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
			Total	592	849	-	**384**	**625**
							1,009	

***Pass-by trips account for 10%**

Updated TN/08 Table 2.3 - Number of Vehicular Trips at Site Accesses 0900-0930

AM Peak 0900-0930								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.109	0.147	16	22	0%	16	22
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.109	0.147	76	103	30%	53	72
	Primary School (up to 420 pupils)	0.024	0.028	10	12	75%	3	3
Poplars Ave. *(Central)*	330 Dwellings	0.109	0.147	36	49	30%	25	34
	Food Store (2,000sqm)	3.368	2.554	67	51	60%	27*	20*
	Local Centre (600sqm)	2.851	2.601	17	16	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.045	0.019	5	2	0%	5	2
Poplars Ave. *(West)*	Employment (7,500sqm)	0.354	0.272	27	20	0%	27	20
Birch Avenue	20 Dwellings	0.109	0.147	2	3	0%	2	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	3	5	0%	3	5
			Total	259	283	-	**166**	**186**
							352	

***Pass-by trips account for 10%**

Updated TN/08 Table 2.4 - Number of Vehicular Trips at Site Accesses 1600-1700

PM Peak 1600-1700								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.419	0.248	63	37	0%	63	37
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.419	0.248	293	174	20%	234	139
	Primary School (up to 420 pupils)	0.116	0.165	49	69	50%	25	35
Poplars Ave. *(Central)*	330 Dwellings	0.419	0.248	138	82	20%	110	66
	Food Store (2,000sqm)	8.121	7.697	162	154	60%	65*	62*
	Local Centre (600sqm)	5.735	5.828	34	35	70%	10	11
	Family Pub/ Restaurant (1,600sqm)	1.828	1.195	15	10	25%	11	8
	100-Bed Care Home	0.068	0.053	7	5	0%	7	5
Poplars Ave. *(West)*	Employment (7,500sqm)	0.473	0.668	36	50	0%	36	50
Birch Avenue	20 Dwellings	0.419	0.248	8	5	0%	8	5
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	8	7	0%	8	7
			Total	813	628	-	**577**	**425**
							1,002	

***Pass-by trips account for 10%**

Updated TN/08 Table 2.5 - Number of Vehicular Trips at Site Accesses 1700-1800

PM Peak 1700-1800								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.495	0.307	74	46	0%	74	46
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.495	0.307	347	215	20%	278	172
	Primary School (up to 420 pupils)	0.045	0.063	19	27	50%	10	14
Poplars Ave. *(Central)*	330 Dwellings	0.495	0.307	163	101	20%	130	81
	Food Store (2,000sqm)	9.056	9.550	181	191	60%	72*	76*
	Local Centre (600sqm)	6.039	6.495	36	39	70%	11	12
	Family Pub/ Restaurant (1,600sqm)	2.847	1.845	23	15	25%	17	11
	100-Bed Care Home	0.083	0.113	8	11	0%	8	11
Poplars Ave. *(West)*	Employment (7,500sqm)	0.262	0.621	20	47	0%	20	47
Birch Avenue	20 Dwellings	0.495	0.307	10	6	0%	10	6
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	7	8	0%	7	8
			Total	888	706	-	**637**	**484**
							1,121	

***Pass-by trips account for 10%**

Updated TN/08 Table 2.6 - Number of Vehicular Trips at Site Accesses 1800-1830

PM Peak 1800-1830								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.182	0.137	27	21	0%	27	21
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.182	0.137	127	96	20%	102	77
	Primary School (up to 420 pupils)	0.020	0.015	8	6	50%	4	3
Poplars Ave. *(Central)*	330 Dwellings	0.182	0.137	60	45	20%	48	36
	Food Store (2,000sqm)	3.554	4.251	71	85	60%	28*	34*
	Local Centre (600sqm)	2.910	3.049	18	18	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	1.512	1.257	12	10	25%	9	8
	100-Bed Care Home	0.049	0.053	5	5	0%	5	5
Poplars Ave. *(West)*	Employment (7,500sqm)	0.067	0.216	5	16	0%	5	16
Birch Avenue	20 Dwellings	0.182	0.137	4	3	0%	4	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
			Total	347	310	-	**247**	**213**
							460	

***Pass-by trips account for 10%**

Appendix 43

AECOM Technical Note Extract on Omega VISSIM Trip Rates

Trip Generation and Distribution Extract.

(From note produced on 26th October 2015 on behalf of Highways England)

The Technical Note (TN) was prepared to summarise the work undertaken by AECOM to update an existing VISSIM model of the M62 to include the proposed Omega Zones 3-6 development proposals and a parallel Section 73 application for variation of prior planning permission at Omega Zones 1 and 2.

Trip Generation and Distribution

This section presents the trip rates which were used to derive the trip generation of the OMEGA Zones 3-6 and Section 73 development proposals; describes how the development traffic was distributed on the highway network along with all the necessary assumptions; and defines which VISSIM zones were utilised to assign the traffic in the VISSIM model.

AECOM has undertaken a review of the trip generation and distribution assumptions proposed in WSP's documentation for the development proposals, which is described in detail in a parallel TN produced by AECOM. For consistency, those assumptions which were accepted by AECOM have also been utilised in the VISSIM model. The trip generation and distribution assumptions utilised within the VISSIM model are summarised below.

OMEGA Zones 3-6 Development Trip Generation and Distribution

Residential Development

The trip rates and resulting trip generation for the proposed residential units used in the model, are presented in **Table 1**.

Table 1: Residential Trip Rates and Generation, utilised by AECOM in the VISSIM model

Development Traffic	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
85th Percentile Trip Rates	0.225	0.523	0.495	0.307
Residential Trips (1100 units)	248	575	545	338

The trip distribution of the residential units has been based upon WSP's gravity model, described within WSP'S TA Scope. The external links of WSP's gravity model were represented by a series of VISSIM zones, as summarised in **Table 2**.

Table 2: Zones in VISSIM utilised for the residential trip distribution

Ref	Road	Zones in VISSIM
1	Lingley Green Ave	21
2	Barrow Hall Lane	20
3	Kingsdale Road	19
4	Whittle Ave	18
5	Malvern Cl	17

6	Burtonwood Rd	16
7	Westbrook Way	15
8	Kingswood Rd	14
9	Charon Way	13
10	A57 (S)	1
11	A557	1
12	M62 (W)	1
13	A57 (N)	1
14	St. Helens Linkway	1
15	Lockheed Rd	2
16	Burtonwood Rd	3
17	Service Area Access	5
18	Delph Ln	6
19	Winwick Park Ave	6
20	A48 (N)	7
21	Winwick Link Rd	7
22	M6 (N)	8
23	M62 (E)	9
24	M6 (S)	10
25	Winwick Rd (S)	11

Food Store

The trip rates used to derive the discount food store development traffic, are summarised alongside the resulting trip generation in **Table 3**.

Table 3: Discount Food Store Trip Rates and Generation, utilised by AECOM in the VISSIM model

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	Arrivals	Departures	Arrivals	Departures
Discount Food Store (per 100 sq.m)	0.660	0.321	2.799	3.280
Trip Generation (2,000 sq.m)	14	7	56	66

The WSP TA Scope Addendum proposed that 70% of vehicle trips would be "internal" and generated from within the Omega site, and the other 30% would be "external" and generated elsewhere in the wider area. Considering the proportion of trips for this land use type likely to use the SRN from this land would be low, AECOM applied the same assumptions to derive the food store trip distribution.

The 70% "internal" foodstore trips were distributed equally on all available internal zones, resulting in 14.2% of such trips being assumed to arrive/depart at each 7 no. zones within the modelled Omega development area.

The 30% "external" trips for the foodstore were assumed to arrive depart via the Burtonwood Road roundabout, and therefore zones representing each of the four existing arms of the roundabout were selected and the 25% of the external trips assigned to each of these zones.

The discount food store distribution percentages and the corresponding VISSIM zones are shown in **Table 4** and **Table 5**.

Table 4: Zones in VISSIM utilised to distribute 70% of the Discount Food Store Traffic

70% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	14%	601
	14%	602
	14%	603
	14%	605
	14%	606
	14%	607
	14%	610

Table 5: Zones in VISSIM utilised to distribute 30% of the Discount Food Store Development Traffic

30% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	25%	13
	25%	14
	25%	15
	25%	16

Hotel and Pub/Restaurant

Table 6 shows the trip rates/trip generation for the proposed Hotel and Pub/Restaurant development.

Table 6: Hotel and Pub/Restaurant Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Hotel Pub/Res (per 100 sq.m)	0.302	0.631	1.033	0.474
Trip Generation (2,850 sq.m)	9	18	30	14

The hotel and pub/restaurant trip distribution percentages and the relevant VISSIM zones are shown in **Table 7**.

Table 7: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
M62 East	40%	9
M62 West	20%	1
Westbrook Way (Warrington N)	20%	15
Whittle Avenue (Warrington W)	20%	18

Care Home

Table 8 shows the trip rates/trip generation for the proposed Care Home development.

Table 8: Care Home Trip Rates Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Care Home (per bed)	0.068	0.068	0.083	0.113
Trip Generation (80 beds)	6	6	7	10

Table 9 indicates the VISSIM zones and the trip distribution percentages which were used to distribute the Care Home development trips.

Table 9: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
Westbrook Way (Warrington N)	50%	15
Whittle Avenue (Warrington W)	50%	18

Omega B1 Trip Off-Setting Trip Generation and Distribution

In addition to reviewing the trip rates and trip distribution proposed by WSP, AECOM has also undertaken a review of a proposed off-setting analysis proposed by WSP. This review is detailed in a parallel TN produced by AECOM, while the net trip generation "offset" resulting from the replacement

of 55,740sq.m of consented B1 development with 30% B2 and 70% B8 uses is summarised in **Table 10** for reference.

Table 10: Net Trip Reduction from B1 to B2/B8 Land Use Offsetting

B1 – B2/B8 Offset	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two - Way
Net Trips	924	41	965	43	684	727

Table 11 indicates the trip reduction percentages from B1 to B2/B8 land use offsetting.

Table 11: Trip Reduction percentages from B1 to B2/B8 Land Use Offsetting

Trips	AM Peak		PM Peak		AM Peak	PM Peak
	Arrivals	Departures	Arrivals	Departures	Two-Way	Two Way
Vehicles	12%	56%	48%	14%	15%	17%

In order to apply the above net trip reduction on the existing VISSIM model, AECOM requested from Atkins detailed information regarding the distribution of traffic of the OMEGA Phase 2 Office development. Atkins provided a TN (dated 27th August 2015) and an additional spreadsheet which together describe how the trip distribution for the B1 Office development was derived and which zones were utilised in their VISSIM models. These zones are shown in **Table 12**.

Table 12: Zones in VISSIM on which Atkins has applied OMEGA B1 Development Traffic

Origin Zone in VISSIM	Destination Zones in VISSIM
500	1,3,7,8,9,10,11,13,15,17,18,19,20,21

AECOM derived a formula which (was applied) to the original traffic matrices provided by Atkins, to represent the development trip reduction due to the B1 to B2/B8 land use offsetting.

This formula is as follows:

((57.1%* Original Traffic O/D Value) +

(42.9%*Original Traffic O/D Value*Net Trip Reduction Percentage))

In addition to updating the traffic matrices to include the above assumptions, AECOM has also applied a traffic profile adjustment to the hourly traffic matrices, based on information provided by Atkins. Atkins' traffic profile is shown in **Table 13**.

Table 13: Peak Hour Traffic Profile

Start time	AM profile	Start time	PM profile
07:00:00	17.50%	16:00:00	20.99%
07:15:00	20.97%	16:15:00	21.47%
07:30:00	23.99%	16:30:00	23.57%
07:45:00	28.78%	16:45:00	24.19%
08:00:00	26.98%	17:00:00	25.63%
08:15:00	26.71%	17:15:00	25.56%
08:30:00	24.73%	17:30:00	26.13%
08:45:00	21.58%	17:45:00	22.67%
09:00:00	19.41%	18:00:00	22.46%
09:15:00	15.17%	18:15:00	19.12%
09:30:00	13.93%	18:30:00	17.70%
09:45:00	12.95%	18:45:00	14.60%

Appendix 44

HTp/1107/TN/02/A -Trip Rates

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Trip Rates

(HTp/1107/TN/02/Revision A)

March 2016

Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited on behalf of Satnam Millennium Limited to set out the strategy for trip generation of the proposed development of land at Peel Hall, Warrington for the following:

i. A residential neighbourhood with up to 1,200 residential dwellings.

ii. A 100-bed care home.

iii. An area of employment land comprising up to 7,500 square metres Gross Floor Area (GFA) of B1(c) light industry.

iv. A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 1,600 square metres GFA.

v. A primary school for up to two-form entry (i.e. up to 420 pupils).

vi. Open space including sports pitches and ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that could be used for local community uses such as a local mother and toddler group.

1.2 The proposed trip rates are provided in **Sections 2.0** to **7.0** respectively for each land use.

1.3 Discussions have taken place between Highgate Transportation and Warrington Borough Council (WBC) and it was agreed that the trip rates proposed by AECOM in their review of the recent Omega application and agreed by WBC as appropriate to be used in this assessment where relevant.

1.4 Those trip rates not set out by AECOM have generally been derived using the TRICS database to provide an indication of the likely number of AM and PM weekday vehicular movements. The expected number of vehicle movements relating to the sports pitches and associated community use off Grasmere Avenue will be based on the approach that was agreed at the 2013 planning appeal (ref: APP/M0655/A/13/2192076).

1.5 Trip distribution and phasing are to be considered in separate Technical Notes. For example, some of the trips set out in this report will be internal and some will be external, and this is set out in HTp Technical Note TN/06. Also vehicle trips associated with the local centre, food store and school will largely be local to the development site and the existing local residential area, and this will also be considered in TN/06.

1.6 It is considered that our general approach is robust due to the assumptions used, as follows:

i. Privately owned houses trip rates have been used to cover all peak period residential trip rates for all 1,200 dwelling units; including retirement flats, social housing and apartments, which are generally considered to result in lower peak period trip rates than privately owned houses.

ii. The TRICS recommended survey data for B1(c) land use classification of Industrial Units was considered to possibly be too low and so a higher trip rate was sought using B1(c) surveys from the Industrial Estate section of the database, to ensure the trip levels are robust and give confidence to the overall figures used in the assessment.

iii. Discount food store trip rates have not been used. Instead higher trip rates from the TRICS database have been used to give confidence to the assessment.

1.7 It is concluded that the trip rates provided in this Technical Note are appropriate to use in the subsequent distribution and modelling elements of the forthcoming Transport Assessment to support the proposals set out above for the development of this site.

2.0 Residential Trip Rate

2.1 The proposed residential element of the development will comprise up to 1,200 dwellings.

2.2 The residential trip rates mirror those agreed by WBC from the AECOM review of the Omega residential trip rates inserted into the Highways England VISSIM model. The AECOM technical note is provided in **Appendix 1** for reference and the resultant TRICS data is provided in the addendum to this Technical Note (TN/02/A/Addendum).

2.3 The peak hour vehicular trip rates and generation are set out in **Table 2.1**.

Table 2.1 – Residential Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
85th Percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

2.4 It can be seen from the above table that there may be up to around 962 vehicular movements associated with the residential element of the proposed development at Peel Hall during the busiest weekday peak hour.

2.5 Within the 1,200 dwellings proposed there will be up to 100 retirement apartments, which have significantly lower weekday peak hour trip rates than those set out in **Table 2.1** above. It should be noted that no allowance has been made for this discount within these trip rate calculations.

2.6 Residential apartments and social housing will also make up a proportion of the 1,200 dwellings proposed on site. No discount has been made to reflect this. It is considered that this approach is robust and gives confidence to the overall figures used in the assessment.

3.0 Care Home Trip Rates

3.1 The proposed scheme includes the development of a 100-bedroomed care home.

3.2 The care home trip rates mirror those agreed by WBC used in the Omega Transport Assessment and inserted into the VISSIM model. The AECOM technical note containing these trip rates is contained in **Appendix 1**.

3.3 The peak hour vehicular trip rate and generation data is summarised in **Table 3.1** below.

Table 3.1 – Care Home Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per bedroom)	0.068	0.068	0.083	0.113
Retirement Flat Trips (100-beds)	7	7	8	8

3.6 It can be seen from **Table 3.1** above that there may be up to around 16 vehicular movements associated with the proposed care home on the Peel Hall site during the busiest weekday peak hour

4.0 Employment Trip Rates

4.1 It is proposed that the development scheme will include an employment zone of up to around 7,500 square metres GFA of B1(c) light industry.

4.2 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by an employment zone of this size.

4.3 An assessment was first made using the TRICS 7.2.4 database for B1(c) Industrial Units; TRICS Land Use Code 02/C highlighted for B1(c) land classifications. The dataset was reviewed based on multi-modal surveys from sites within England, on weekdays for up to 10,000 square metres GFA. Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. Sites within suburban and edge of town locations were available. Four of these sites were then manually removed from the dataset as they did not contain operations classed as B1(C) land uses. This returned two surveys and the trip rates demonstrate that 22 arrivals and 11 departures in the AM peak hour and 4 arrivals and 25 departures in the PM peak hour may result from a development of 7,500sqm GFA. The TRICS data is contained at **Appendix 2**. A sensitivity test of all surveys within TRICS for this category was then carried out, excluding those in Greater London. This returned five surveys but there was negligible difference between the two sets of average trip rates.

4.4 However, it is possible that these trip rates may be too low for the proposed development at Peel Hall if, for example, there were 75 units of 100sqm GFA operating as starter-type units, and so a further sensitivity test was carried out.

4.5 The TRICS 7.2.4 database was then interrogated for surveys of B1(c) units within Industrial Estates; TRICS Land Use Code 02/D. The dataset was reviewed based on multi-modal surveys from sites within England, on weekdays for up to 10,000 square metres GFA. Sites within Greater London were again excluded. An Edge of Town Centre site was manually excluded based on the conflict of location between this and the Edge of Town setting. Further to this, three sites were also manually removed from the dataset as they did not contain operations classed as B1(C) land uses, and another four sites were removed as they only had very low proportions of B1(c) activity on site (i.e. B8 with generally much lower trip rates per square metre GFA). This returned four surveys. Due to the range of sites available within the TRICS database for this land use category, 85th percentile figures were not able to be assessed.

4.6 A sensitivity test of all surveys within TRICS for this category (02/D) was then carried out, excluding those in Greater London, which returned exactly the same survey results.

4.7 The average trip rate data for industrial estates of B1(c) land uses from the search identified in **paragraph 4.5** above is summarised in **Table 4.1** below and the TRICS data is contained at **Appendix 3**.

Table 4.1 – Employment Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm GFA)	69	39	20	47

4.8 It can be seen from **Table 4.1** above that there may be up to around 108 vehicular movements associated with the proposed employment zone on the Peel Hall site during the busiest weekday peak hour. Due to the approach set out in **paragraphs 4.3** to **4.6** it is considered that these figures are robust and give confidence to the overall figures used in the assessment.

4.9 Commercial heavy goods vehicles such as 2-axle with twin rear wheels and 3-axle large vans and lorries and all goods vehicles with 4 or more axles (classified as OGVs within TRICS and OGV1 and OGV2 respectively in DMRB) may account for up to around 8% of total peak hour traffic from the proposed employment zone as set out in **Table 4.2** below.

Table 4.2 – Employment HGV Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.067	0.057	0.025	0.025
Employment Trips (7,500sqm GFA)	5	4	2	2

4.10 Therefore there may be up to 9 large vehicle movements to the proposed employment zone on the Peel Hall site during the peak hour. These vehicle trips are likely to be carried out by 8 metre commercial transporter vans or box-vans, or rigid lorries up to around 12 metres in length. It is considered unlikely that a commercial vehicle as large as an articulated HGV would be regularly attracted to the proposed employment zone to the level set out in **Table 4.2** above.

5.0 Neighbourhood Centre Trip Rates

5.1 The proposed development will include a neighbourhood centre comprising a food store of up to 2,000sqm GFA, plus up to a further 600sqm GFA of local centre type facilities as well as a family pub and restaurant facility of up to 1,600sqm GFA.

Food Store

5.2 A comparison has been carried out between the trip rates from the Discount Food Stores category (01/C) within the TRICS 7.2.4 database and the generic food stores (Food Superstore 01/A) category. It should be noted that the sub land use category of 'Superstore' is misleading as the dataset covers stores from 800sqm to 12,642sqm GFA (for surveys carried out between 01/01/07 and 29/11/14 across the whole of the UK).

5.3 The peak hour trip rates and generation from the Discount Food Stores dataset are set out in **Table 5.1** below, based on all weekday multi-modal surveys of sites within England, excluding Greater London, in Suburban Areas, Edge of Town and Neighbourhood Centre locations. Due to the low number of surveys returned, 85th percentile data was not reliable and so the average dataset has been used. The resultant TRICS report is contained in **Appendix 4**. It should be noted that these trip rates are mirrored in the AECOM technical note as those used within the Omega TA and subsequent VISSIM modelling, which can be found in **Appendix 1** for reference.

Table 5.1 – Discount Food Store Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.660	0.321	2.799	3.280
Discount Food Store Trips (2,000sqm GFA)	14	7	56	66

5.4 It can be seen from the above table that there may be up to around 112 vehicular movements associated with the food store element of the proposed development at Peel Hall during the busiest weekday peak hour, based on the Discount Food Store data in TRICS.

5.5 It is possible that the trip generation set out in **Table 5.1** above may be too low. Therefore the peak hour trip rates and generation from the TRICS Food Superstores dataset are set out in **Table 5.2** below, based on all weekday multi-modal surveys of sites within England, excluding Greater London, in Suburban Areas and Edge of Town locations. Again, due to the low number of surveys returned, 85th percentile data was not reliable and so the average dataset has been used. The TRICS data is also contained in **Appendix 4**.

Table 5.2 – Food Store Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Food Store Trips (2,000sqm GFA)	92	61	181	191

5.6 It can be seen from the above table that there may be up to around 372 vehicular movements associated with the food store element of the proposed development at Peel Hall during the busiest weekday peak hour, based on the Food Superstore data in TRICS.

5.7 As a sensitivity test, TRICS was also interrogated for all multi-modal site surveys within the UK-wide Food Superstore dataset, using the same parameters as set out in paragraph 5.5 above. This returned one additional site in the Isle of Anglesey which slightly reduced the average trip rates shown in **Table 5.2**.

5.8 Therefore, although the lower discount food store trip rate figures have been agreed for use by Omega in their modelling for the same sized store (2,000sqm GFA), we will use the higher trip rate figures set out in **Table 5.2** to be robust and give confidence to the overall figures used in the assessment.

Local Centre

5.9 The proposed development includes a 600 square metre GFA local centre. The local centre may be comprised of, for example, a chemist, dry cleaners, estate agent, take-away, café and/or health care facilities.

5.10 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by a local centre of this size.

5.11 The TRICS 7.2.4 database was reviewed based on the category 'local shops' for all sites within England, with multi-modal weekday surveys, for Suburban Area, Edge of Town and Neighbourhood Centre locations. Average trip rates were used due to the survey sample size available.

5.12 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are contained in **Appendix 5** to this report.

5.13 The peak hour vehicular trip rates and generation for the local centre are set out in **Table 5.3**.

Table 5.3 – Local Centre Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Local Centre Trips (600sqm GFA)	30	29	36	39

5.14 It can be seen from the above table that there may be up to around 75 vehicular movements associated with the local centre element of the proposed development at Peel Hall during the busiest weekday peak hour.

Family Pub/Restaurant

5.15 The proposed development includes a family pub and restaurant facility of up to around 1,600 square metres GFA. TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by a family pub/restaurant of this size.

5.16 The TRICS 7.2.4 database was reviewed based on the category Pub/Restaurant (06/C) and includes, for example, establishments such as Harvester and Beefeater. The data sets were taken from sites within England of up to 2,000 square metres GFA, on weekdays, for Suburban Area and Edge of Town locations.

5.17 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are also contained in **Appendix 6** to this report.

5.18 The peak hour vehicular trip rates and generation for the family pub/restaurant are set out in **Table 5.4**.

Table 5.4 – Family Pub/Restaurant Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	-	-	2.847	1.845
Family Pub/Restaurant Trips (1,600sqm GFA)	-	-	46	30

5.19 It can be seen from the above table that there may be up to around 76 vehicular movements associated with the family pub/restaurant element of the proposed development at Peel Hall during the busiest weekday peak hour.

Summary

5.20 Overall, it can be seen that there may be up to around 523 vehicular movements associated with the neighbourhood centre element of the proposed development at Peel Hall during the busiest weekday peak hour.

6.0 Primary School Trip Rates

6.1 The proposed development scheme includes for up to a two-form entry primary school, which could have up to around 420 pupils.

6.2 From discussions with WBC the indication is that the development of 1,200 houses would result in a demand for around 360 primary school places. The transport assessment will therefore assume that 360 places from the on-site 420 primary school intake would come from within the proposed development, with the remaining 60 pupil places being made-up from those residents living within the area of Poplars and Hulme immediately surrounding the site.

6.3 TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular trips that are likely to be attracted by a primary school on this site.

6.4 An assessment has been made from the TRICS 7.2.4 database based on average data, due to the number of surveys available. The data sets were reviewed based on multi-modal surveys from sites within England for primary schools with up to 450 pupils, on weekdays. The actual range of pupil numbers for the schools surveyed was between 147 and 414.

6.5 The location types returned were Suburban Area, Edge of Town and Neighbourhood Centre. The Edge of Town Centre survey location was discounted in accordance with the TRICS Good Practice Guide due to its conflict in location type with Neighbourhood Centre.

6.6 Sites within Greater London were excluded due to their unrepresentative trip rate as a result of greater public transport opportunities. The full TRICS reports are contained in **Appendix 7** to this report.

6.7 The peak hour vehicular trip rates and generation for the primary school are set out in **Table 6.1**.

Table 6.1 – Primary School Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Primary School Trips (all 420 pupils)	113	79	19	27
External Primary School Trips (60 pupils)	*16*	*11*	*3*	*4*

6.8 It can be seen from the above table that there may be up to around 192 vehicular movements associated with the primary school proposed on the Peel Hall site during the busiest weekday peak hour, with up to around 27 of these trips being generated from outside the development site, as set out in **paragraph 6.2** above.

7.0 Sports Pitches and Ancillary Facilities Trip Rates

7.1 The proposed development at Peel Hall will include the existing open space and local authority community buildings and sports area on the land off Windermere and Grasmere Avenues to the southeast of the site. This will be linked to the site with new sports pitches, to replace those currently located on the HCA land to the east of the site, off Mill Lane.

7.2 The facilities will likely include full-sized grass pitches, a multi-use games area, junior grass pitches and changing facilities for up to four teams, including WCs. The expectation is that these proposals will also include a clubhouse/function room for community use.

7.3 The sports pitches will predominantly be used at the weekends and it was agreed at the 2013 Public Inquiry (Appeal ref: APP/M0655/A/13/2192076) that this element of the development proposals would not need to be included within the weekday modelling. Furthermore there will be an offset in trip generation from the current on-site uses at the existing location and from the sports pitches on the HCA land, which are to be relocated.

7.4 However, it is likely that the proposed clubhouse facilities will be used by the local community, for example, by a mother and toddler group, and also that the sports pitches may be used during the evening after 1800.

7.5 It was also agreed at the 2013 Inquiry that the clubhouse facilities for local community use may attract up to 15 car movements over two-hour slots during the day between the hours of 0900 and 1800.

8.0 Vehicle Trip impact

8.1 It is considered that this Technical Note sets out the likely vehicle trip generation and attraction of each of the proposed land uses on the Peel Hall site.

8.2 It is clear that a proportion of these trips will be retained within this mixed-use site. The proportion of retained trips will be dealt with under a separate Technical Note.

8.3 An addendum to this Technical Note will be produced that sets out the trips rates for all proposed land uses across the whole AM and PM peak periods of 0700-0930 and 1600-1830 to inform the VISSIM modelling of the network.

9.0 Summary

9.1 This Technical Note has been prepared by Highgate Transportation to set out the strategy for trip generation of the proposed development of land at Peel Hall, Warrington for the following:

i. A residential neighbourhood with up to 1,200 residential dwellings.

ii. A 100-bed care home.

iii. An area of employment land comprising up to 7,500 square metres Gross Floor Area (GFA) of B1(c) light industry.

iv. A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities, and a family pub and restaurant facility of up to 1,600 square metres GFA.

v. A primary school for up to two-form entry (i.e. up to 420 pupils).

vi. Open space including sports pitches and ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that could be used for local community uses such as a local mother and toddler group.

9.2 The trip rates provided are a combination of those agreed for use by Omega and supplied by AECOM, which cover the residential and care home land uses and those that have been derived from using the TRICS database. The approach agreed during the 2013 Public Inquiry was used in respect of the anticipated level of peak hour vehicle movements associated with the proposed sports pitches and community facilities.

9.3 The likely number of AM and PM weekday peak hour vehicular generation for all land uses proposed on site are set out in **Table 9.1** for reference.

Table 9.1 – Peel Hall Vehicular Trip Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Family Pub/Restaurant Trips	-	-	46	30
Primary School Trips	113	79	19	27
Community Uses	10	5	8	7
Total Trips	**591**	**848**	**912**	**717**

9.4 It can be seen from the above table that there may be up to around 1,629 vehicular movements associated with the proposed land used on the Peel Hall development during the busiest weekday peak hour.

9.5 It is concluded that the trip rates provided are a fair and robust assessment of the likely base level trip generation and attraction profile of the Peel Hall site, and that the rates used give confidence to the overall trip generation and attraction figures to be used in the assessment.

9.6 It is therefore considered that these trip rates are appropriate to use in the subsequent distribution and modelling elements of the forthcoming Transport Assessment to support the proposals set out above for the development of this site.

Appendix 1

AECOM Technical Note on Omega Trip Rates

Trip Generation and Distribution Extract.

(From note produced on 26th October 2015 on behalf of Highways England)

The Technical Note (TN) was prepared to summarise the work undertaken by AECOM to update an existing VISSIM model of the M62 to include the proposed Omega Zones 3-6 development proposals and a parallel Section 73 application for variation of prior planning permission at Omega Zones 1 and 2.

Trip Generation and Distribution

This section presents the trip rates which were used to derive the trip generation of the OMEGA Zones 3-6 and Section 73 development proposals; describes how the development traffic was distributed on the highway network along with all the necessary assumptions; and defines which VISSIM zones were utilised to assign the traffic in the VISSIM model.

AECOM has undertaken a review of the trip generation and distribution assumptions proposed in WSP's documentation for the development proposals, which is described in detail in a parallel TN produced by AECOM. For consistency, those assumptions which were accepted by AECOM have also been utilised in the VISSIM model. The trip generation and distribution assumptions utilised within the VISSIM model are summarised below.

OMEGA Zones 3-6 Development Trip Generation and Distribution

Residential Development

The trip rates and resulting trip generation for the proposed residential units used in the model, are presented in **Table 1**.

Table 1: Residential Trip Rates and Generation, utilised by AECOM in the VISSIM model

Development Traffic	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
85th Percentile Trip Rates	0.225	0.523	0.495	0.307
Residential Trips (1100 units)	248	575	545	338

The trip distribution of the residential units has been based upon WSP's gravity model, described within WSP'S TA Scope. The external links of WSP's gravity model were represented by a series of VISSIM zones, as summarised in **Table 2**.

Table 2: Zones in VISSIM utilised for the residential trip distribution

Ref	Road	Zones in VISSIM
1	Lingley Green Ave	21
2	Barrow Hall Lane	20
3	Kingsdale Road	19
4	Whittle Ave	18
5	Malvern Cl	17

6	Burtonwood Rd	16
7	Westbrook Way	15
8	Kingswood Rd	14
9	Charon Way	13
10	A57 (S)	1
11	A557	1
12	M62 (W)	1
13	A57 (N)	1
14	St. Helens Linkway	1
15	Lockheed Rd	2
16	Burtonwood Rd	3
17	Service Area Access	5
18	Delph Ln	6
19	Winwick Park Ave	6
20	A48 (N)	7
21	Winwick Link Rd	7
22	M6 (N)	8
23	M62 (E)	9
24	M6 (S)	10
25	Winwick Rd (S)	11

Food Store

The trip rates used to derive the discount food store development traffic, are summarised alongside the resulting trip generation in **Table 3**.

Table 3: Discount Food Store Trip Rates and Generation, utilised by AECOM in the VISSIM model

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	Arrivals	Departures	Arrivals	Departures
Discount Food Store (per 100 sq.m)	0.660	0.321	2.799	3.280
Trip Generation (2,000 sq.m)	14	7	56	66

The WSP TA Scope Addendum proposed that 70% of vehicle trips would be "internal" and generated from within the Omega site, and the other 30% would be "external" and generated elsewhere in the wider area. Considering the proportion of trips for this land use type likely to use the SRN from this land would be low, AECOM applied the same assumptions to derive the food store trip distribution.

The 70% "internal" foodstore trips were distributed equally on all available internal zones, resulting in 14.2% of such trips being assumed to arrive/depart at each 7 no. zones within the modelled Omega development area.

The 30% "external" trips for the foodstore were assumed to arrive depart via the Burtonwood Road roundabout, and therefore zones representing each of the four existing arms of the roundabout were selected and the 25% of the external trips assigned to each of these zones.

The discount food store distribution percentages and the corresponding VISSIM zones are shown in **Table 4** and **Table 5**.

Table 4: Zones in VISSIM utilised to distribute 70% of the Discount Food Store Traffic

70% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	14%	601
	14%	602
	14%	603
	14%	605
	14%	606
	14%	607
	14%	610

Table 5: Zones in VISSIM utilised to distribute 30% of the Discount Food Store Development Traffic

30% of Development Traffic	Attraction %	Zones in VISSIM
Zone 604 in VISSIM (Development Zone)	25%	13
	25%	14
	25%	15
	25%	16

Hotel and Pub/Restaurant

Table 6 shows the trip rates/trip generation for the proposed Hotel and Pub/Restaurant development.

Table 6: Hotel and Pub/Restaurant Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Hotel Pub/Res (per 100 sq.m)	0.302	0.631	1.033	0.474
Trip Generation (2,850 sq.m)	9	18	30	14

The hotel and pub/restaurant trip distribution percentages and the relevant VISSIM zones are shown in **Table 7**.

Table 7: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
M62 East	40%	9
M62 West	20%	1
Westbrook Way (Warrington N)	20%	15
Whittle Avenue (Warrington W)	20%	18

Care Home

Table 8 shows the trip rates/trip generation for the proposed Care Home development.

Table 8: Care Home Trip Rates Trip Rates and Generation, proposed in WSP TA Scope

Trip Rates	AM Peak		PM Peak	
Mode Vehicles	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Care Home (per bed)	0.068	0.068	0.083	0.113
Trip Generation (80 beds)	6	6	7	10

Table 9 indicates the VISSIM zones and the trip distribution percentages which were used to distribute the Care Home development trips.

Table 9: Zones in VISSIM utilised to distribute the Hotel and Pub/Restaurant Development Traffic

Location	Attraction %	Zones in VISSIM
Westbrook Way (Warrington N)	50%	15
Whittle Avenue (Warrington W)	50%	18

Omega B1 Trip Off-Setting Trip Generation and Distribution

In addition to reviewing the trip rates and trip distribution proposed by WSP, AECOM has also undertaken a review of a proposed off-setting analysis proposed by WSP. This review is detailed in a parallel TN produced by AECOM, while the net trip generation "offset" resulting from the replacement

of 55,740sq.m of consented B1 development with 30% B2 and 70% B8 uses is summarised in **Table 10** for reference.

Table 10: Net Trip Reduction from B1 to B2/B8 Land Use Offsetting

B1 – B2/B8 Offset	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two - Way
Net Trips	924	41	965	43	684	727

Table 11 indicates the trip reduction percentages from B1 to B2/B8 land use offsetting.

Table 11: Trip Reduction percentages from B1 to B2/B8 Land Use Offsetting

Trips	AM Peak		PM Peak		AM Peak	PM Peak
	Arrivals	Departures	Arrivals	Departures	Two-Way	Two Way
Vehicles	12%	56%	48%	14%	15%	17%

In order to apply the above net trip reduction on the existing VISSIM model, AECOM requested from Atkins detailed information regarding the distribution of traffic of the OMEGA Phase 2 Office development. Atkins provided a TN (dated 27th August 2015) and an additional spreadsheet which together describe how the trip distribution for the B1 Office development was derived and which zones were utilised in their VISSIM models. These zones are shown in **Table 12**.

Table 12: Zones in VISSIM on which Atkins has applied OMEGA B1 Development Traffic

Origin Zone in VISSIM	Destination Zones in VISSIM
500	1,3,7,8,9,10,11,13,15,17,18,19,20,21

AECOM derived a formula which (was applied) to the original traffic matrices provided by Atkins, to represent the development trip reduction due to the B1 to B2/B8 land use offsetting.

This formula is as follows:

((57.1%* Original Traffic O/D Value) +

(42.9%*Original Traffic O/D Value*Net Trip Reduction Percentage))

In addition to updating the traffic matrices to include the above assumptions, AECOM has also applied a traffic profile adjustment to the hourly traffic matrices, based on information provided by Atkins. Atkins' traffic profile is shown in **Table 13**.

Table 13: Peak Hour Traffic Profile

Start time	AM profile	Start time	PM profile
07:00:00	17.50%	16:00:00	20.99%
07:15:00	20.97%	16:15:00	21.47%
07:30:00	23.99%	16:30:00	23.57%
07:45:00	28.78%	16:45:00	24.19%
08:00:00	26.98%	17:00:00	25.63%
08:15:00	26.71%	17:15:00	25.56%
08:30:00	24.73%	17:30:00	26.13%
08:45:00	21.58%	17:45:00	22.67%
09:00:00	19.41%	18:00:00	22.46%
09:15:00	15.17%	18:15:00	19.12%
09:30:00	13.93%	18:30:00	17.70%
09:45:00	12.95%	18:45:00	14.60%

Appendix 2

TRICS Data for Employment Trip Rates – Industrial Units

Calculation Reference: AUDIT-355901-160310-0315

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1800 to 5070 (units: sqm)
Range Selected by User:	1100 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 22/10/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 HF-02-C-01 INDUSTRIAL UNIT HERTFORDSHIRE
BRIDGE ROAD EAST

WELWYN GARDEN CITY
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1800 sqm
Survey date: THURSDAY 17/07/08 Survey Type: MANUAL

2 WM-02-C-03 INDUSTRIAL GLASS WEST MIDLANDS
DOWNING STREET

SMETHWICK
Edge of Town
Industrial Zone
Total Gross floor area: 5070 sqm
Survey date: TUESDAY 06/11/12 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BR-02-C-01	No B1c
DC-02-C-07	Not B1c
HE-02-C-01	No B1c
HE-02-C-02	No B1c

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.073	2	3435	0.000	2	3435	0.073
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
08:30 - 09:00	2	3435	0.233	2	3435	0.087	2	3435	0.320
09:00 - 09:30	2	3435	0.335	2	3435	0.073	2	3435	0.408
09:30 - 10:00	2	3435	0.116	2	3435	0.044	2	3435	0.160
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.087	2	3435	0.058	2	3435	0.145
11:00 - 11:30	2	3435	0.073	2	3435	0.073	2	3435	0.146
11:30 - 12:00	2	3435	0.073	2	3435	0.073	2	3435	0.146
12:00 - 12:30	2	3435	0.073	2	3435	0.087	2	3435	0.160
12:30 - 13:00	2	3435	0.044	2	3435	0.044	2	3435	0.088
13:00 - 13:30	2	3435	0.044	2	3435	0.102	2	3435	0.146
13:30 - 14:00	2	3435	0.087	2	3435	0.029	2	3435	0.116
14:00 - 14:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
14:30 - 15:00	2	3435	0.015	2	3435	0.044	2	3435	0.059
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.116	2	3435	0.044	2	3435	0.160
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.335	2	3435	0.364
17:00 - 17:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
17:30 - 18:00	2	3435	0.029	2	3435	0.247	2	3435	0.276
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.732			1.805			3.537

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1800 - 5070 (units: sqm)
Survey date date range:	01/01/07 - 22/10/13
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	4

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.029	2	3435	0.029	2	3435	0.058
08:30 - 09:00	2	3435	0.044	2	3435	0.044	2	3435	0.088
09:00 - 09:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
09:30 - 10:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
10:00 - 10:30	2	3435	0.015	2	3435	0.044	2	3435	0.059
10:30 - 11:00	2	3435	0.015	2	3435	0.015	2	3435	0.030
11:00 - 11:30	2	3435	0.015	2	3435	0.015	2	3435	0.030
11:30 - 12:00	2	3435	0.029	2	3435	0.015	2	3435	0.044
12:00 - 12:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
12:30 - 13:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
13:00 - 13:30	2	3435	0.015	2	3435	0.029	2	3435	0.044
13:30 - 14:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
14:00 - 14:30	2	3435	0.015	2	3435	0.000	2	3435	0.015
14:30 - 15:00	2	3435	0.015	2	3435	0.015	2	3435	0.030
15:00 - 15:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
15:30 - 16:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.251			0.280			0.531

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:30 - 09:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:00 - 09:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
09:30 - 10:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:00 - 10:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:30 - 11:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:00 - 11:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:30 - 12:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:00 - 12:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:30 - 13:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
13:00 - 13:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
13:30 - 14:00	2	3435	0.015	2	3435	0.000	2	3435	0.015
14:00 - 14:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
14:30 - 15:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:00 - 15:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:30 - 16:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.044			0.044			0.088

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.102	2	3435	0.000	2	3435	0.102
07:30 - 08:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
08:00 - 08:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
08:30 - 09:00	2	3435	0.262	2	3435	0.102	2	3435	0.364
09:00 - 09:30	2	3435	0.364	2	3435	0.073	2	3435	0.437
09:30 - 10:00	2	3435	0.131	2	3435	0.044	2	3435	0.175
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.116	2	3435	0.073	2	3435	0.189
11:00 - 11:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
11:30 - 12:00	2	3435	0.102	2	3435	0.073	2	3435	0.175
12:00 - 12:30	2	3435	0.073	2	3435	0.087	2	3435	0.160
12:30 - 13:00	2	3435	0.058	2	3435	0.058	2	3435	0.116
13:00 - 13:30	2	3435	0.058	2	3435	0.102	2	3435	0.160
13:30 - 14:00	2	3435	0.087	2	3435	0.029	2	3435	0.116
14:00 - 14:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
14:30 - 15:00	2	3435	0.015	2	3435	0.044	2	3435	0.059
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.131	2	3435	0.058	2	3435	0.189
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.408	2	3435	0.437
17:00 - 17:30	2	3435	0.029	2	3435	0.102	2	3435	0.131
17:30 - 18:00	2	3435	0.029	2	3435	0.262	2	3435	0.291
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.949			1.980			3.929

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
07:30 - 08:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
08:00 - 08:30	2	3435	0.029	2	3435	0.000	2	3435	0.029
08:30 - 09:00	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:00 - 09:30	2	3435	0.029	2	3435	0.000	2	3435	0.029
09:30 - 10:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:00 - 10:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
10:30 - 11:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:00 - 11:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
11:30 - 12:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
12:00 - 12:30	2	3435	0.000	2	3435	0.015	2	3435	0.015
12:30 - 13:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
13:00 - 13:30	2	3435	0.029	2	3435	0.044	2	3435	0.073
13:30 - 14:00	2	3435	0.015	2	3435	0.029	2	3435	0.044
14:00 - 14:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
14:30 - 15:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
15:00 - 15:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
15:30 - 16:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:00 - 16:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
16:30 - 17:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:00 - 17:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
17:30 - 18:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:00 - 18:30	2	3435	0.000	2	3435	0.000	2	3435	0.000
18:30 - 19:00	2	3435	0.000	2	3435	0.000	2	3435	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.131			0.147			0.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	3435	0.102	2	3435	0.000	2	3435	0.102
07:30 - 08:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
08:00 - 08:30	2	3435	0.087	2	3435	0.058	2	3435	0.145
08:30 - 09:00	2	3435	0.320	2	3435	0.102	2	3435	0.422
09:00 - 09:30	2	3435	0.393	2	3435	0.073	2	3435	0.466
09:30 - 10:00	2	3435	0.131	2	3435	0.044	2	3435	0.175
10:00 - 10:30	2	3435	0.044	2	3435	0.073	2	3435	0.117
10:30 - 11:00	2	3435	0.116	2	3435	0.073	2	3435	0.189
11:00 - 11:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
11:30 - 12:00	2	3435	0.102	2	3435	0.073	2	3435	0.175
12:00 - 12:30	2	3435	0.073	2	3435	0.102	2	3435	0.175
12:30 - 13:00	2	3435	0.058	2	3435	0.058	2	3435	0.116
13:00 - 13:30	2	3435	0.087	2	3435	0.160	2	3435	0.247
13:30 - 14:00	2	3435	0.116	2	3435	0.058	2	3435	0.174
14:00 - 14:30	2	3435	0.087	2	3435	0.087	2	3435	0.174
14:30 - 15:00	2	3435	0.015	2	3435	0.058	2	3435	0.073
15:00 - 15:30	2	3435	0.029	2	3435	0.087	2	3435	0.116
15:30 - 16:00	2	3435	0.131	2	3435	0.058	2	3435	0.189
16:00 - 16:30	2	3435	0.058	2	3435	0.058	2	3435	0.116
16:30 - 17:00	2	3435	0.029	2	3435	0.408	2	3435	0.437
17:00 - 17:30	2	3435	0.029	2	3435	0.116	2	3435	0.145
17:30 - 18:00	2	3435	0.029	2	3435	0.291	2	3435	0.320
18:00 - 18:30	2	3435	0.000	2	3435	0.029	2	3435	0.029
18:30 - 19:00	2	3435	0.000	2	3435	0.015	2	3435	0.015
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.123			2.183			4.306

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix 3

TRICS Data for Employment Trip Rates – Industrial Estates

Calculation Reference: AUDIT-355901-160310-0318

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	4133 to 6625 (units: sqm)
Range Selected by User:	1758 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 02/12/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

20,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	3 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CA-02-D-01 IND. ESTATE CAMBRIDGESHIRE
STURROCK WAY
BRETTON
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 4300 sqm
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

2 CA-02-D-03 IND. ESTATE CAMBRIDGESHIRE
SAVILLE ROAD
WESTWOOD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4425 sqm
Survey date: THURSDAY 22/10/09 Survey Type: MANUAL

3 CA-02-D-04 INDUSTRIAL ESTATE CAMBRIDGESHIRE
LINCOLN ROAD

PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4133 sqm
Survey date: TUESDAY 02/12/14 Survey Type: MANUAL

4 ES-02-D-07 INDUSTRIAL ESTATE EAST SUSSEX
HUGHES ROAD

BRIGHTON
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6625 sqm
Survey date: THURSDAY 16/10/14 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BR-02-D-02	Not B1c
BR-02-D-03	Not B1c
CA-02-D-02	Low on B1c
CW-02-D-02	Low on B1c
ES-02-D-06	Low on B1c
HE-02-D-02	Low on B1c
MS-02-D-06	Not B1c

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.175	4	4871	0.041	4	4871	0.216
07:30 - 08:00	4	4871	0.513	4	4871	0.123	4	4871	0.636
08:00 - 08:30	4	4871	0.488	4	4871	0.252	4	4871	0.740
08:30 - 09:00	4	4871	0.431	4	4871	0.262	4	4871	0.693
09:00 - 09:30	4	4871	0.354	4	4871	0.272	4	4871	0.626
09:30 - 10:00	4	4871	0.395	4	4871	0.293	4	4871	0.688
10:00 - 10:30	4	4871	0.359	4	4871	0.334	4	4871	0.693
10:30 - 11:00	4	4871	0.318	4	4871	0.359	4	4871	0.677
11:00 - 11:30	4	4871	0.364	4	4871	0.323	4	4871	0.687
11:30 - 12:00	4	4871	0.293	4	4871	0.349	4	4871	0.642
12:00 - 12:30	4	4871	0.318	4	4871	0.364	4	4871	0.682
12:30 - 13:00	4	4871	0.380	4	4871	0.328	4	4871	0.708
13:00 - 13:30	4	4871	0.298	4	4871	0.328	4	4871	0.626
13:30 - 14:00	4	4871	0.246	4	4871	0.221	4	4871	0.467
14:00 - 14:30	4	4871	0.267	4	4871	0.216	4	4871	0.483
14:30 - 15:00	4	4871	0.287	4	4871	0.308	4	4871	0.595
15:00 - 15:30	4	4871	0.282	4	4871	0.462	4	4871	0.744
15:30 - 16:00	4	4871	0.267	4	4871	0.298	4	4871	0.565
16:00 - 16:30	4	4871	0.221	4	4871	0.298	4	4871	0.519
16:30 - 17:00	4	4871	0.252	4	4871	0.370	4	4871	0.622
17:00 - 17:30	4	4871	0.185	4	4871	0.364	4	4871	0.549
17:30 - 18:00	4	4871	0.077	4	4871	0.257	4	4871	0.334
18:00 - 18:30	4	4871	0.067	4	4871	0.216	4	4871	0.283
18:30 - 19:00	4	4871	0.031	4	4871	0.056	4	4871	0.087
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.868			6.694			13.562

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	4133 - 6625 (units: sqm)
Survey date date range:	01/01/07 - 02/12/14
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	9

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.010	4	4871	0.000	4	4871	0.010
08:00 - 08:30	4	4871	0.015	4	4871	0.010	4	4871	0.025
08:30 - 09:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
11:30 - 12:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
12:00 - 12:30	4	4871	0.021	4	4871	0.000	4	4871	0.021
12:30 - 13:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
13:00 - 13:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.015	4	4871	0.005	4	4871	0.020
15:30 - 16:00	4	4871	0.005	4	4871	0.015	4	4871	0.020
16:00 - 16:30	4	4871	0.010	4	4871	0.005	4	4871	0.015
16:30 - 17:00	4	4871	0.005	4	4871	0.010	4	4871	0.015
17:00 - 17:30	4	4871	0.015	4	4871	0.010	4	4871	0.025
17:30 - 18:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.010	4	4871	0.010	4	4871	0.020
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.121			0.120			0.241

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
07:30 - 08:00	4	4871	0.021	4	4871	0.005	4	4871	0.026
08:00 - 08:30	4	4871	0.031	4	4871	0.026	4	4871	0.057
08:30 - 09:00	4	4871	0.036	4	4871	0.031	4	4871	0.067
09:00 - 09:30	4	4871	0.036	4	4871	0.041	4	4871	0.077
09:30 - 10:00	4	4871	0.046	4	4871	0.036	4	4871	0.082
10:00 - 10:30	4	4871	0.046	4	4871	0.031	4	4871	0.077
10:30 - 11:00	4	4871	0.026	4	4871	0.062	4	4871	0.088
11:00 - 11:30	4	4871	0.036	4	4871	0.026	4	4871	0.062
11:30 - 12:00	4	4871	0.015	4	4871	0.021	4	4871	0.036
12:00 - 12:30	4	4871	0.015	4	4871	0.021	4	4871	0.036
12:30 - 13:00	4	4871	0.026	4	4871	0.015	4	4871	0.041
13:00 - 13:30	4	4871	0.015	4	4871	0.015	4	4871	0.030
13:30 - 14:00	4	4871	0.015	4	4871	0.010	4	4871	0.025
14:00 - 14:30	4	4871	0.026	4	4871	0.010	4	4871	0.036
14:30 - 15:00	4	4871	0.010	4	4871	0.026	4	4871	0.036
15:00 - 15:30	4	4871	0.026	4	4871	0.036	4	4871	0.062
15:30 - 16:00	4	4871	0.015	4	4871	0.026	4	4871	0.041
16:00 - 16:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:30 - 17:00	4	4871	0.026	4	4871	0.021	4	4871	0.047
17:00 - 17:30	4	4871	0.015	4	4871	0.015	4	4871	0.030
17:30 - 18:00	4	4871	0.010	4	4871	0.010	4	4871	0.020
18:00 - 18:30	4	4871	0.005	4	4871	0.015	4	4871	0.020
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.502			0.519			1.021

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:00 - 08:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:30 - 09:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:30 - 14:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:30 - 16:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:00 - 16:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:30 - 17:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
17:00 - 17:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
17:30 - 18:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
08:00 - 08:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
08:30 - 09:00	4	4871	0.010	4	4871	0.005	4	4871	0.015
09:00 - 09:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
09:30 - 10:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
13:30 - 14:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.010	4	4871	0.010	4	4871	0.020
15:30 - 16:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:00 - 16:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
16:30 - 17:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
17:00 - 17:30	4	4871	0.010	4	4871	0.015	4	4871	0.025
17:30 - 18:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
18:00 - 18:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.050			0.060			0.110

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.205	4	4871	0.051	4	4871	0.256
07:30 - 08:00	4	4871	0.606	4	4871	0.159	4	4871	0.765
08:00 - 08:30	4	4871	0.595	4	4871	0.293	4	4871	0.888
08:30 - 09:00	4	4871	0.503	4	4871	0.328	4	4871	0.831
09:00 - 09:30	4	4871	0.416	4	4871	0.359	4	4871	0.775
09:30 - 10:00	4	4871	0.482	4	4871	0.334	4	4871	0.816
10:00 - 10:30	4	4871	0.411	4	4871	0.411	4	4871	0.822
10:30 - 11:00	4	4871	0.400	4	4871	0.436	4	4871	0.836
11:00 - 11:30	4	4871	0.452	4	4871	0.441	4	4871	0.893
11:30 - 12:00	4	4871	0.354	4	4871	0.411	4	4871	0.765
12:00 - 12:30	4	4871	0.359	4	4871	0.416	4	4871	0.775
12:30 - 13:00	4	4871	0.462	4	4871	0.359	4	4871	0.821
13:00 - 13:30	4	4871	0.375	4	4871	0.380	4	4871	0.755
13:30 - 14:00	4	4871	0.303	4	4871	0.272	4	4871	0.575
14:00 - 14:30	4	4871	0.313	4	4871	0.252	4	4871	0.565
14:30 - 15:00	4	4871	0.334	4	4871	0.385	4	4871	0.719
15:00 - 15:30	4	4871	0.318	4	4871	0.616	4	4871	0.934
15:30 - 16:00	4	4871	0.328	4	4871	0.390	4	4871	0.718
16:00 - 16:30	4	4871	0.277	4	4871	0.359	4	4871	0.636
16:30 - 17:00	4	4871	0.293	4	4871	0.441	4	4871	0.734
17:00 - 17:30	4	4871	0.282	4	4871	0.488	4	4871	0.770
17:30 - 18:00	4	4871	0.139	4	4871	0.334	4	4871	0.473
18:00 - 18:30	4	4871	0.092	4	4871	0.257	4	4871	0.349
18:30 - 19:00	4	4871	0.031	4	4871	0.062	4	4871	0.093
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.330			8.234			16.564

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.031	4	4871	0.026	4	4871	0.057
08:00 - 08:30	4	4871	0.082	4	4871	0.010	4	4871	0.092
08:30 - 09:00	4	4871	0.021	4	4871	0.010	4	4871	0.031
09:00 - 09:30	4	4871	0.010	4	4871	0.026	4	4871	0.036
09:30 - 10:00	4	4871	0.015	4	4871	0.015	4	4871	0.030
10:00 - 10:30	4	4871	0.005	4	4871	0.015	4	4871	0.020
10:30 - 11:00	4	4871	0.010	4	4871	0.000	4	4871	0.010
11:00 - 11:30	4	4871	0.010	4	4871	0.010	4	4871	0.020
11:30 - 12:00	4	4871	0.010	4	4871	0.005	4	4871	0.015
12:00 - 12:30	4	4871	0.031	4	4871	0.031	4	4871	0.062
12:30 - 13:00	4	4871	0.036	4	4871	0.026	4	4871	0.062
13:00 - 13:30	4	4871	0.026	4	4871	0.015	4	4871	0.041
13:30 - 14:00	4	4871	0.015	4	4871	0.026	4	4871	0.041
14:00 - 14:30	4	4871	0.010	4	4871	0.005	4	4871	0.015
14:30 - 15:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:00 - 15:30	4	4871	0.021	4	4871	0.000	4	4871	0.021
15:30 - 16:00	4	4871	0.005	4	4871	0.021	4	4871	0.026
16:00 - 16:30	4	4871	0.026	4	4871	0.021	4	4871	0.047
16:30 - 17:00	4	4871	0.021	4	4871	0.015	4	4871	0.036
17:00 - 17:30	4	4871	0.005	4	4871	0.077	4	4871	0.082
17:30 - 18:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:00 - 18:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
18:30 - 19:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.405			0.369			0.774

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
07:30 - 08:00	4	4871	0.021	4	4871	0.000	4	4871	0.021
08:00 - 08:30	4	4871	0.036	4	4871	0.000	4	4871	0.036
08:30 - 09:00	4	4871	0.021	4	4871	0.000	4	4871	0.021
09:00 - 09:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
09:30 - 10:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:00 - 11:30	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:30 - 12:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
12:00 - 12:30	4	4871	0.010	4	4871	0.000	4	4871	0.010
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.005	4	4871	0.010	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
14:30 - 15:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
15:00 - 15:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:30 - 16:00	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:00 - 16:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
16:30 - 17:00	4	4871	0.000	4	4871	0.015	4	4871	0.015
17:00 - 17:30	4	4871	0.000	4	4871	0.041	4	4871	0.041
17:30 - 18:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
18:00 - 18:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.158			0.157			0.315

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
07:30 - 08:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
08:00 - 08:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
08:30 - 09:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
09:00 - 09:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
09:30 - 10:00	4	4871	0.015	4	4871	0.000	4	4871	0.015
10:00 - 10:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
10:30 - 11:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
11:00 - 11:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
11:30 - 12:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:00 - 12:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:30 - 14:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
14:00 - 14:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
14:30 - 15:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:00 - 15:30	4	4871	0.000	4	4871	0.000	4	4871	0.000
15:30 - 16:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
16:00 - 16:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
16:30 - 17:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
17:00 - 17:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
17:30 - 18:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
18:00 - 18:30	4	4871	0.000	4	4871	0.005	4	4871	0.005
18:30 - 19:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.035			0.040			0.075

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
07:30 - 08:00	4	4871	0.026	4	4871	0.000	4	4871	0.026
08:00 - 08:30	4	4871	0.041	4	4871	0.000	4	4871	0.041
08:30 - 09:00	4	4871	0.026	4	4871	0.000	4	4871	0.026
09:00 - 09:30	4	4871	0.015	4	4871	0.000	4	4871	0.015
09:30 - 10:00	4	4871	0.031	4	4871	0.000	4	4871	0.031
10:00 - 10:30	4	4871	0.005	4	4871	0.000	4	4871	0.005
10:30 - 11:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
11:00 - 11:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
11:30 - 12:00	4	4871	0.005	4	4871	0.000	4	4871	0.005
12:00 - 12:30	4	4871	0.010	4	4871	0.000	4	4871	0.010
12:30 - 13:00	4	4871	0.000	4	4871	0.000	4	4871	0.000
13:00 - 13:30	4	4871	0.005	4	4871	0.010	4	4871	0.015
13:30 - 14:00	4	4871	0.005	4	4871	0.005	4	4871	0.010
14:00 - 14:30	4	4871	0.000	4	4871	0.010	4	4871	0.010
14:30 - 15:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
15:00 - 15:30	4	4871	0.005	4	4871	0.005	4	4871	0.010
15:30 - 16:00	4	4871	0.000	4	4871	0.015	4	4871	0.015
16:00 - 16:30	4	4871	0.000	4	4871	0.026	4	4871	0.026
16:30 - 17:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
17:00 - 17:30	4	4871	0.000	4	4871	0.051	4	4871	0.051
17:30 - 18:00	4	4871	0.000	4	4871	0.021	4	4871	0.021
18:00 - 18:30	4	4871	0.000	4	4871	0.015	4	4871	0.015
18:30 - 19:00	4	4871	0.000	4	4871	0.005	4	4871	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.194			0.199			0.393

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4871	0.221	4	4871	0.051	4	4871	0.272
07:30 - 08:00	4	4871	0.678	4	4871	0.185	4	4871	0.863
08:00 - 08:30	4	4871	0.719	4	4871	0.303	4	4871	1.022
08:30 - 09:00	4	4871	0.559	4	4871	0.344	4	4871	0.903
09:00 - 09:30	4	4871	0.447	4	4871	0.385	4	4871	0.832
09:30 - 10:00	4	4871	0.529	4	4871	0.349	4	4871	0.878
10:00 - 10:30	4	4871	0.421	4	4871	0.426	4	4871	0.847
10:30 - 11:00	4	4871	0.411	4	4871	0.441	4	4871	0.852
11:00 - 11:30	4	4871	0.467	4	4871	0.457	4	4871	0.924
11:30 - 12:00	4	4871	0.370	4	4871	0.416	4	4871	0.786
12:00 - 12:30	4	4871	0.400	4	4871	0.447	4	4871	0.847
12:30 - 13:00	4	4871	0.498	4	4871	0.385	4	4871	0.883
13:00 - 13:30	4	4871	0.405	4	4871	0.416	4	4871	0.821
13:30 - 14:00	4	4871	0.323	4	4871	0.303	4	4871	0.626
14:00 - 14:30	4	4871	0.323	4	4871	0.267	4	4871	0.590
14:30 - 15:00	4	4871	0.339	4	4871	0.395	4	4871	0.734
15:00 - 15:30	4	4871	0.354	4	4871	0.631	4	4871	0.985
15:30 - 16:00	4	4871	0.334	4	4871	0.436	4	4871	0.770
16:00 - 16:30	4	4871	0.303	4	4871	0.405	4	4871	0.708
16:30 - 17:00	4	4871	0.313	4	4871	0.482	4	4871	0.795
17:00 - 17:30	4	4871	0.298	4	4871	0.631	4	4871	0.929
17:30 - 18:00	4	4871	0.139	4	4871	0.370	4	4871	0.509
18:00 - 18:30	4	4871	0.098	4	4871	0.272	4	4871	0.370
18:30 - 19:00	4	4871	0.036	4	4871	0.067	4	4871	0.103
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.985			8.864			17.849

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix 4

TRICS Data for Neighbourhood Centre Trip Rates – Food Store

Calculation Reference: AUDIT-355901-160311-0301

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS		
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 1165 to 1900 (units: sqm)
Range Selected by User: 1165 to 1900 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 27/11/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	2
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	1 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	4 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	MS-01-C-02	ALDI		MERSEYSIDE
	SMITHDOWN ROAD			
	WAVERTREE			
	LIVERPOOL			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:		1200 sqm	
	Survey date: MONDAY		18/06/07	Survey Type: MANUAL
2	MS-01-C-03	ALDI		MERSEYSIDE
	LAUREL ROAD			
	ELM PARK			
	LIVERPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1165 sqm	
	Survey date: WEDNESDAY		20/06/07	Survey Type: MANUAL
3	NR-01-C-01	ALDI		NORTHAMPTONSHIRE
	DALTON ROAD			
	CORBY			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:		1345 sqm	
	Survey date: WEDNESDAY		19/11/08	Survey Type: MANUAL
4	SH-01-C-01	LIDL		SHROPSHIRE
	CASTLE STREET			
	HADLEY			
	TELFORD			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		1900 sqm	
	Survey date: TUESDAY		16/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.161	2	1550	0.097	2	1550	0.258
08:00 - 09:00	4	1403	0.660	4	1403	0.321	4	1403	0.981
09:00 - 10:00	4	1403	2.175	4	1403	1.533	4	1403	3.708
10:00 - 11:00	4	1403	3.369	4	1403	3.298	4	1403	6.667
11:00 - 12:00	4	1403	3.280	4	1403	3.173	4	1403	6.453
12:00 - 13:00	4	1403	3.547	4	1403	3.529	4	1403	7.076
13:00 - 14:00	4	1403	3.725	4	1403	3.369	4	1403	7.094
14:00 - 15:00	4	1403	3.690	4	1403	3.512	4	1403	7.202
15:00 - 16:00	4	1403	3.547	4	1403	3.815	4	1403	7.362
16:00 - 17:00	4	1403	3.226	4	1403	3.476	4	1403	6.702
17:00 - 18:00	4	1403	2.799	4	1403	3.280	4	1403	6.079
18:00 - 19:00	4	1403	2.389	4	1403	2.745	4	1403	5.134
19:00 - 20:00	4	1403	0.891	4	1403	1.301	4	1403	2.192
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			33.459			33.449			66.908

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.036	4	1403	0.036	4	1403	0.072
11:00 - 12:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
12:00 - 13:00	4	1403	0.089	4	1403	0.071	4	1403	0.160
13:00 - 14:00	4	1403	0.071	4	1403	0.089	4	1403	0.160
14:00 - 15:00	4	1403	0.089	4	1403	0.053	4	1403	0.142
15:00 - 16:00	4	1403	0.071	4	1403	0.089	4	1403	0.160
16:00 - 17:00	4	1403	0.089	4	1403	0.071	4	1403	0.160
17:00 - 18:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
18:00 - 19:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.552			0.552			1.104

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
09:00 - 10:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
10:00 - 11:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
11:00 - 12:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.018	4	1403	0.018	4	1403	0.036
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.143			0.143			0.286

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.107	4	1403	0.053	4	1403	0.160
12:00 - 13:00	4	1403	0.018	4	1403	0.036	4	1403	0.054
13:00 - 14:00	4	1403	0.036	4	1403	0.053	4	1403	0.089
14:00 - 15:00	4	1403	0.089	4	1403	0.089	4	1403	0.178
15:00 - 16:00	4	1403	0.053	4	1403	0.018	4	1403	0.071
16:00 - 17:00	4	1403	0.089	4	1403	0.089	4	1403	0.178
17:00 - 18:00	4	1403	0.125	4	1403	0.160	4	1403	0.285
18:00 - 19:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.517			0.516			1.033

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.226	2	1550	0.097	2	1550	0.323
08:00 - 09:00	4	1403	0.820	4	1403	0.357	4	1403	1.177
09:00 - 10:00	4	1403	2.870	4	1403	1.800	4	1403	4.670
10:00 - 11:00	4	1403	4.795	4	1403	4.474	4	1403	9.269
11:00 - 12:00	4	1403	4.670	4	1403	4.599	4	1403	9.269
12:00 - 13:00	4	1403	5.330	4	1403	5.223	4	1403	10.553
13:00 - 14:00	4	1403	5.187	4	1403	4.813	4	1403	10.000
14:00 - 15:00	4	1403	5.365	4	1403	5.152	4	1403	10.517
15:00 - 16:00	4	1403	5.561	4	1403	5.936	4	1403	11.497
16:00 - 17:00	4	1403	4.545	4	1403	4.955	4	1403	9.500
17:00 - 18:00	4	1403	4.207	4	1403	4.848	4	1403	9.055
18:00 - 19:00	4	1403	3.743	4	1403	4.367	4	1403	8.110
19:00 - 20:00	4	1403	1.462	4	1403	2.121	4	1403	3.583
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			48.781			48.742			97.523

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.161	2	1550	0.065	2	1550	0.226
08:00 - 09:00	4	1403	0.232	4	1403	0.143	4	1403	0.375
09:00 - 10:00	4	1403	1.070	4	1403	0.980	4	1403	2.050
10:00 - 11:00	4	1403	1.854	4	1403	1.676	4	1403	3.530
11:00 - 12:00	4	1403	1.515	4	1403	1.319	4	1403	2.834
12:00 - 13:00	4	1403	1.889	4	1403	1.943	4	1403	3.832
13:00 - 14:00	4	1403	1.658	4	1403	1.551	4	1403	3.209
14:00 - 15:00	4	1403	1.266	4	1403	1.693	4	1403	2.959
15:00 - 16:00	4	1403	2.139	4	1403	1.907	4	1403	4.046
16:00 - 17:00	4	1403	2.513	4	1403	1.889	4	1403	4.402
17:00 - 18:00	4	1403	1.729	4	1403	1.961	4	1403	3.690
18:00 - 19:00	4	1403	1.176	4	1403	1.836	4	1403	3.012
19:00 - 20:00	4	1403	0.374	4	1403	0.446	4	1403	0.820
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.576			17.409			34.985

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.053	4	1403	0.000	4	1403	0.053
09:00 - 10:00	4	1403	0.143	4	1403	0.143	4	1403	0.286
10:00 - 11:00	4	1403	0.321	4	1403	0.339	4	1403	0.660
11:00 - 12:00	4	1403	0.160	4	1403	0.143	4	1403	0.303
12:00 - 13:00	4	1403	0.232	4	1403	0.196	4	1403	0.428
13:00 - 14:00	4	1403	0.160	4	1403	0.089	4	1403	0.249
14:00 - 15:00	4	1403	0.089	4	1403	0.267	4	1403	0.356
15:00 - 16:00	4	1403	0.214	4	1403	0.125	4	1403	0.339
16:00 - 17:00	4	1403	0.160	4	1403	0.178	4	1403	0.338
17:00 - 18:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
18:00 - 19:00	4	1403	0.053	4	1403	0.089	4	1403	0.142
19:00 - 20:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.638			1.640			3.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
09:00 - 10:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
10:00 - 11:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
11:00 - 12:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
12:00 - 13:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
13:00 - 14:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
14:00 - 15:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
15:00 - 16:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
16:00 - 17:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
17:00 - 18:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
18:00 - 19:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
19:00 - 20:00	4	1403	0.000	4	1403	0.000	4	1403	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.000	2	1550	0.000	2	1550	0.000
08:00 - 09:00	4	1403	0.053	4	1403	0.000	4	1403	0.053
09:00 - 10:00	4	1403	0.143	4	1403	0.143	4	1403	0.286
10:00 - 11:00	4	1403	0.321	4	1403	0.339	4	1403	0.660
11:00 - 12:00	4	1403	0.160	4	1403	0.143	4	1403	0.303
12:00 - 13:00	4	1403	0.232	4	1403	0.196	4	1403	0.428
13:00 - 14:00	4	1403	0.160	4	1403	0.089	4	1403	0.249
14:00 - 15:00	4	1403	0.089	4	1403	0.267	4	1403	0.356
15:00 - 16:00	4	1403	0.214	4	1403	0.125	4	1403	0.339
16:00 - 17:00	4	1403	0.160	4	1403	0.178	4	1403	0.338
17:00 - 18:00	4	1403	0.053	4	1403	0.053	4	1403	0.106
18:00 - 19:00	4	1403	0.053	4	1403	0.089	4	1403	0.142
19:00 - 20:00	4	1403	0.000	4	1403	0.018	4	1403	0.018
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.638			1.640			3.278

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1550	0.387	2	1550	0.161	2	1550	0.548
08:00 - 09:00	4	1403	1.105	4	1403	0.499	4	1403	1.604
09:00 - 10:00	4	1403	4.082	4	1403	2.923	4	1403	7.005
10:00 - 11:00	4	1403	6.970	4	1403	6.488	4	1403	13.458
11:00 - 12:00	4	1403	6.453	4	1403	6.114	4	1403	12.567
12:00 - 13:00	4	1403	7.469	4	1403	7.398	4	1403	14.867
13:00 - 14:00	4	1403	7.041	4	1403	6.506	4	1403	13.547
14:00 - 15:00	4	1403	6.809	4	1403	7.201	4	1403	14.010
15:00 - 16:00	4	1403	7.968	4	1403	7.986	4	1403	15.954
16:00 - 17:00	4	1403	7.308	4	1403	7.112	4	1403	14.420
17:00 - 18:00	4	1403	6.114	4	1403	7.023	4	1403	13.137
18:00 - 19:00	4	1403	4.973	4	1403	6.310	4	1403	11.283
19:00 - 20:00	4	1403	1.836	4	1403	2.585	4	1403	4.421
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			68.515			68.306			136.821

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1165 - 1900 (units: sqm)
Survey date date range:	01/01/07 - 27/11/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-355901-160311-0313

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DV	DEVON	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1700 to 5000 (units: sqm)
Range Selected by User:	800 to 5000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 19/07/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

15,001 to 20,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

PFS is present at the site and is included in the count	1 days
PFS is present at the site but is excluded from the count	0 days
There is no PFS at the site	2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CB-01-A-07	SOMERFIELD		CUMBRIA
	WIGTON ROAD			
	NEWTOWN			
	CARLISLE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1700 sqm	
	Survey date: FRIDAY		05/02/10	Survey Type: MANUAL
2	DV-01-A-21	MORRISONS		DEVON
	TORR LANE			
	PENNYCROSS			
	PLYMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		5000 sqm	
	Survey date: FRIDAY		23/10/09	Survey Type: MANUAL
3	LE-01-A-01	SAINSBURYS		LEICESTERSHIRE
	GLEN ROAD			
	OADBY			
	LEICESTER			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		4850 sqm	
	Survey date: FRIDAY		19/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	1.801	3	3850	1.082	3	3850	2.883
08:00 - 09:00	3	3850	4.615	3	3850	3.030	3	3850	7.645
09:00 - 10:00	3	3850	6.736	3	3850	5.108	3	3850	11.844
10:00 - 11:00	3	3850	7.835	3	3850	6.727	3	3850	14.562
11:00 - 12:00	3	3850	7.965	3	3850	8.026	3	3850	15.991
12:00 - 13:00	3	3850	7.784	3	3850	7.931	3	3850	15.715
13:00 - 14:00	3	3850	7.723	3	3850	7.342	3	3850	15.065
14:00 - 15:00	3	3850	7.818	3	3850	8.407	3	3850	16.225
15:00 - 16:00	3	3850	7.342	3	3850	7.784	3	3850	15.126
16:00 - 17:00	3	3850	8.121	3	3850	7.697	3	3850	15.818
17:00 - 18:00	3	3850	9.056	3	3850	9.550	3	3850	18.606
18:00 - 19:00	3	3850	7.108	3	3850	8.502	3	3850	15.610
19:00 - 20:00	3	3850	6.113	3	3850	6.632	3	3850	12.745
20:00 - 21:00	3	3850	2.944	3	3850	4.225	3	3850	7.169
21:00 - 22:00	3	3850	1.126	3	3850	2.190	3	3850	3.316
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			94.087			94.233			188.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.043	3	3850	0.035	3	3850	0.078
08:00 - 09:00	3	3850	0.009	3	3850	0.009	3	3850	0.018
09:00 - 10:00	3	3850	0.061	3	3850	0.052	3	3850	0.113
10:00 - 11:00	3	3850	0.113	3	3850	0.104	3	3850	0.217
11:00 - 12:00	3	3850	0.199	3	3850	0.182	3	3850	0.381
12:00 - 13:00	3	3850	0.113	3	3850	0.078	3	3850	0.191
13:00 - 14:00	3	3850	0.139	3	3850	0.147	3	3850	0.286
14:00 - 15:00	3	3850	0.121	3	3850	0.130	3	3850	0.251
15:00 - 16:00	3	3850	0.139	3	3850	0.121	3	3850	0.260
16:00 - 17:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
17:00 - 18:00	3	3850	0.139	3	3850	0.113	3	3850	0.252
18:00 - 19:00	3	3850	0.078	3	3850	0.147	3	3850	0.225
19:00 - 20:00	3	3850	0.061	3	3850	0.069	3	3850	0.130
20:00 - 21:00	3	3850	0.061	3	3850	0.061	3	3850	0.122
21:00 - 22:00	3	3850	0.035	3	3850	0.052	3	3850	0.087
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.389			1.387			2.776

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.026	3	3850	0.043
08:00 - 09:00	3	3850	0.043	3	3850	0.035	3	3850	0.078
09:00 - 10:00	3	3850	0.061	3	3850	0.052	3	3850	0.113
10:00 - 11:00	3	3850	0.009	3	3850	0.043	3	3850	0.052
11:00 - 12:00	3	3850	0.017	3	3850	0.026	3	3850	0.043
12:00 - 13:00	3	3850	0.017	3	3850	0.017	3	3850	0.034
13:00 - 14:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.009	3	3850	0.017	3	3850	0.026
16:00 - 17:00	3	3850	0.017	3	3850	0.000	3	3850	0.017
17:00 - 18:00	3	3850	0.026	3	3850	0.035	3	3850	0.061
18:00 - 19:00	3	3850	0.009	3	3850	0.009	3	3850	0.018
19:00 - 20:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
20:00 - 21:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.242			0.287			0.529

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.000	3	3850	0.017
08:00 - 09:00	3	3850	0.035	3	3850	0.017	3	3850	0.052
09:00 - 10:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
10:00 - 11:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
11:00 - 12:00	3	3850	0.069	3	3850	0.043	3	3850	0.112
12:00 - 13:00	3	3850	0.026	3	3850	0.069	3	3850	0.095
13:00 - 14:00	3	3850	0.052	3	3850	0.035	3	3850	0.087
14:00 - 15:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
15:00 - 16:00	3	3850	0.061	3	3850	0.078	3	3850	0.139
16:00 - 17:00	3	3850	0.069	3	3850	0.035	3	3850	0.104
17:00 - 18:00	3	3850	0.035	3	3850	0.052	3	3850	0.087
18:00 - 19:00	3	3850	0.009	3	3850	0.035	3	3850	0.044
19:00 - 20:00	3	3850	0.026	3	3850	0.017	3	3850	0.043
20:00 - 21:00	3	3850	0.000	3	3850	0.009	3	3850	0.009
21:00 - 22:00	3	3850	0.009	3	3850	0.026	3	3850	0.035
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.459			0.443			0.902

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	2.095	3	3850	1.169	3	3850	3.264
08:00 - 09:00	3	3850	5.645	3	3850	3.610	3	3850	9.255
09:00 - 10:00	3	3850	8.667	3	3850	6.268	3	3850	14.935
10:00 - 11:00	3	3850	10.970	3	3850	8.468	3	3850	19.438
11:00 - 12:00	3	3850	11.091	3	3850	11.117	3	3850	22.208
12:00 - 13:00	3	3850	10.823	3	3850	10.615	3	3850	21.438
13:00 - 14:00	3	3850	11.056	3	3850	9.974	3	3850	21.030
14:00 - 15:00	3	3850	10.779	3	3850	12.017	3	3850	22.796
15:00 - 16:00	3	3850	10.494	3	3850	11.411	3	3850	21.905
16:00 - 17:00	3	3850	11.351	3	3850	10.580	3	3850	21.931
17:00 - 18:00	3	3850	12.416	3	3850	13.437	3	3850	25.853
18:00 - 19:00	3	3850	10.173	3	3850	12.346	3	3850	22.519
19:00 - 20:00	3	3850	8.900	3	3850	9.463	3	3850	18.363
20:00 - 21:00	3	3850	4.242	3	3850	6.199	3	3850	10.441
21:00 - 22:00	3	3850	1.524	3	3850	3.169	3	3850	4.693
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			130.226			129.843			260.069

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.190	3	3850	0.087	3	3850	0.277
08:00 - 09:00	3	3850	0.952	3	3850	0.918	3	3850	1.870
09:00 - 10:00	3	3850	1.203	3	3850	0.952	3	3850	2.155
10:00 - 11:00	3	3850	1.913	3	3850	1.602	3	3850	3.515
11:00 - 12:00	3	3850	1.481	3	3850	1.342	3	3850	2.823
12:00 - 13:00	3	3850	2.528	3	3850	2.753	3	3850	5.281
13:00 - 14:00	3	3850	1.714	3	3850	1.879	3	3850	3.593
14:00 - 15:00	3	3850	1.022	3	3850	1.013	3	3850	2.035
15:00 - 16:00	3	3850	1.758	3	3850	1.636	3	3850	3.394
16:00 - 17:00	3	3850	1.602	3	3850	1.593	3	3850	3.195
17:00 - 18:00	3	3850	1.273	3	3850	1.212	3	3850	2.485
18:00 - 19:00	3	3850	0.900	3	3850	1.022	3	3850	1.922
19:00 - 20:00	3	3850	0.623	3	3850	0.918	3	3850	1.541
20:00 - 21:00	3	3850	0.372	3	3850	0.528	3	3850	0.900
21:00 - 22:00	3	3850	0.173	3	3850	0.199	3	3850	0.372
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.704			17.654			35.358

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
08:00 - 09:00	3	3850	0.035	3	3850	0.035	3	3850	0.070
09:00 - 10:00	3	3850	0.069	3	3850	0.017	3	3850	0.086
10:00 - 11:00	3	3850	0.078	3	3850	0.035	3	3850	0.113
11:00 - 12:00	3	3850	0.087	3	3850	0.052	3	3850	0.139
12:00 - 13:00	3	3850	0.156	3	3850	0.026	3	3850	0.182
13:00 - 14:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
14:00 - 15:00	3	3850	0.043	3	3850	0.078	3	3850	0.121
15:00 - 16:00	3	3850	0.113	3	3850	0.052	3	3850	0.165
16:00 - 17:00	3	3850	0.035	3	3850	0.069	3	3850	0.104
17:00 - 18:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
18:00 - 19:00	3	3850	0.113	3	3850	0.139	3	3850	0.252
19:00 - 20:00	3	3850	0.087	3	3850	0.147	3	3850	0.234
20:00 - 21:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
21:00 - 22:00	3	3850	0.009	3	3850	0.061	3	3850	0.070
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.024			0.981			2.005

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
08:00 - 09:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
09:00 - 10:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
10:00 - 11:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
11:00 - 12:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
12:00 - 13:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
13:00 - 14:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
14:00 - 15:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
15:00 - 16:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
16:00 - 17:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
17:00 - 18:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
18:00 - 19:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
19:00 - 20:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
20:00 - 21:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
21:00 - 22:00	3	3850	0.000	3	3850	0.000	3	3850	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	0.017	3	3850	0.009	3	3850	0.026
08:00 - 09:00	3	3850	0.035	3	3850	0.035	3	3850	0.070
09:00 - 10:00	3	3850	0.069	3	3850	0.017	3	3850	0.086
10:00 - 11:00	3	3850	0.078	3	3850	0.035	3	3850	0.113
11:00 - 12:00	3	3850	0.087	3	3850	0.052	3	3850	0.139
12:00 - 13:00	3	3850	0.156	3	3850	0.026	3	3850	0.182
13:00 - 14:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
14:00 - 15:00	3	3850	0.043	3	3850	0.078	3	3850	0.121
15:00 - 16:00	3	3850	0.113	3	3850	0.052	3	3850	0.165
16:00 - 17:00	3	3850	0.035	3	3850	0.069	3	3850	0.104
17:00 - 18:00	3	3850	0.052	3	3850	0.087	3	3850	0.139
18:00 - 19:00	3	3850	0.113	3	3850	0.139	3	3850	0.252
19:00 - 20:00	3	3850	0.087	3	3850	0.147	3	3850	0.234
20:00 - 21:00	3	3850	0.078	3	3850	0.087	3	3850	0.165
21:00 - 22:00	3	3850	0.009	3	3850	0.061	3	3850	0.070
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.024			0.981			2.005

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	3850	2.320	3	3850	1.264	3	3850	3.584
08:00 - 09:00	3	3850	6.667	3	3850	4.580	3	3850	11.247
09:00 - 10:00	3	3850	9.957	3	3850	7.247	3	3850	17.204
10:00 - 11:00	3	3850	12.978	3	3850	10.113	3	3850	23.091
11:00 - 12:00	3	3850	12.727	3	3850	12.554	3	3850	25.281
12:00 - 13:00	3	3850	13.532	3	3850	13.463	3	3850	26.995
13:00 - 14:00	3	3850	12.874	3	3850	11.974	3	3850	24.848
14:00 - 15:00	3	3850	11.861	3	3850	13.117	3	3850	24.978
15:00 - 16:00	3	3850	12.424	3	3850	13.177	3	3850	25.601
16:00 - 17:00	3	3850	13.056	3	3850	12.277	3	3850	25.333
17:00 - 18:00	3	3850	13.775	3	3850	14.788	3	3850	28.563
18:00 - 19:00	3	3850	11.195	3	3850	13.541	3	3850	24.736
19:00 - 20:00	3	3850	9.636	3	3850	10.545	3	3850	20.181
20:00 - 21:00	3	3850	4.693	3	3850	6.823	3	3850	11.516
21:00 - 22:00	3	3850	1.714	3	3850	3.455	3	3850	5.169
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			149.409			148.918			298.327

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/07 - 19/07/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 5

TRICS Data for Neighbourhood Centre Trip Rates – Local Shops

Calculation Reference: AUDIT-355901-160311-0339

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	WM	WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
09	NORTH		
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 260 to 1840 (units: sqm)
Range Selected by User: 240 to 1890 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 28/10/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	4 days
Wednesday	2 days
Thursday	4 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	5 days
20,001 to 25,000	2 days
25,001 to 50,000	4 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	2 days
75,001 to 100,000	1 days
100,001 to 125,000	3 days
125,001 to 250,000	3 days
250,001 to 500,000	5 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	9 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	14 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	14 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CH-01-I-02 LOCAL SHOPS CHESHIRE
CHRISTLETON ROAD
BOUGHTON HEATH
CHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 260 sqm
Survey date: TUESDAY 15/05/12 Survey Type: MANUAL

2 CH-01-I-03 LOCAL SHOPS CHESHIRE
MILL LANE
BACHE
CHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 365 sqm
Survey date: THURSDAY 17/05/12 Survey Type: MANUAL

3 EX-01-I-01 LOCAL SHOPS ESSEX
PYRLES LANE

LOUGHTON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 650 sqm
Survey date: THURSDAY 22/11/07 Survey Type: MANUAL

4 GS-01-I-01 LOCAL SHOPS GLOUCESTERSHIRE
SALISBURY AVENUE
WARDEN HILL
CHELTENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 525 sqm
Survey date: MONDAY 26/04/10 Survey Type: MANUAL

5 HC-01-I-02 LOCAL SHOPS HAMPSHIRE
OLIVER'S BATTERY ROAD S.
OLIVERS BATTERY
WINCHESTER
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1605 sqm
Survey date: TUESDAY 20/11/07 Survey Type: MANUAL

6 LE-01-I-02 LOCAL SHOPS LEICESTERSHIRE
RYDER ROAD

LEICESTER
Edge of Town
Residential Zone
Total Gross floor area: 550 sqm
Survey date: TUESDAY 28/10/14 Survey Type: MANUAL

7 NR-01-I-01 LOCAL SHOPS NORTHAMPTONSHIRE
OCCUPATION ROAD

CORBY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 755 sqm
Survey date: WEDNESDAY 19/11/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	NY-01-I-01	LOCAL SHOPS		NORTH YORKSHIRE
	NEWLANDS PARK DRIVE			
	SCARBOROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	1200 sqm		
	Survey date: FRIDAY	28/09/07		Survey Type: MANUAL
9	SH-01-I-02	LOCAL SHOPS		SHROPSHIRE
	WREKIN DRIVE			
	DONNINGTON			
	TELFORD			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	900 sqm		
	Survey date: THURSDAY	24/10/13		Survey Type: MANUAL
10	TV-01-I-03	LOCAL SHOPS		TEES VALLEY
	ACKLAM ROAD			
	ACKLAM			
	MIDDLESBROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	1840 sqm		
	Survey date: FRIDAY	04/10/13		Survey Type: MANUAL
11	TV-01-I-04	LOCAL SHOPS		TEES VALLEY
	CARGO FLEET LANE			
	ORMESBY			
	MIDDLESBROUGH			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	585 sqm		
	Survey date: MONDAY	07/10/13		Survey Type: MANUAL
12	TW-01-I-02	LOCAL SHOPS		TYNE & WEAR
	DURHAM ROAD			
	BARNES PARK			
	SUNDERLAND			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:	540 sqm		
	Survey date: WEDNESDAY	21/11/12		Survey Type: MANUAL
13	WM-01-I-01	LOCAL SHOPS		WEST MIDLANDS
	HOLYHEAD ROAD			
	COVENTRY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	1550 sqm		
	Survey date: THURSDAY	27/09/07		Survey Type: MANUAL
14	WM-01-I-02	LOCAL SHOPS		WEST MIDLANDS
	MARSHALL LAKE ROAD			
	SHIRLEY			
	SOLIHULL			
	Edge of Town			
	Commercial Zone			
	Total Gross floor area:	515 sqm		
	Survey date: TUESDAY	18/09/07		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	1.296	1	540	1.296	1	540	2.592
07:00 - 08:00	14	846	4.257	14	846	3.792	14	846	8.049
08:00 - 09:00	14	846	5.025	14	846	4.780	14	846	9.805
09:00 - 10:00	14	846	5.701	14	846	5.211	14	846	10.912
10:00 - 11:00	14	846	5.811	14	846	5.405	14	846	11.216
11:00 - 12:00	14	846	5.929	14	846	5.845	14	846	11.774
12:00 - 13:00	14	846	7.382	14	846	7.061	14	846	14.443
13:00 - 14:00	14	846	6.639	14	846	6.596	14	846	13.235
14:00 - 15:00	14	846	5.718	14	846	5.904	14	846	11.622
15:00 - 16:00	14	846	5.473	14	846	5.887	14	846	11.360
16:00 - 17:00	14	846	5.735	14	846	5.828	14	846	11.563
17:00 - 18:00	14	846	6.039	14	846	6.495	14	846	12.534
18:00 - 19:00	14	846	5.819	14	846	6.098	14	846	11.917
19:00 - 20:00	12	935	4.806	12	935	4.833	12	935	9.639
20:00 - 21:00	11	874	3.548	11	874	3.892	11	874	7.440
21:00 - 22:00	6	823	3.846	6	823	4.433	6	823	8.279
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			83.024			83.356			166.380

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.000	14	846	0.000	14	846	0.000
08:00 - 09:00	14	846	0.068	14	846	0.059	14	846	0.127
09:00 - 10:00	14	846	0.101	14	846	0.101	14	846	0.202
10:00 - 11:00	14	846	0.059	14	846	0.068	14	846	0.127
11:00 - 12:00	14	846	0.101	14	846	0.101	14	846	0.202
12:00 - 13:00	14	846	0.101	14	846	0.093	14	846	0.194
13:00 - 14:00	14	846	0.059	14	846	0.068	14	846	0.127
14:00 - 15:00	14	846	0.051	14	846	0.051	14	846	0.102
15:00 - 16:00	14	846	0.084	14	846	0.068	14	846	0.152
16:00 - 17:00	14	846	0.068	14	846	0.068	14	846	0.136
17:00 - 18:00	14	846	0.034	14	846	0.042	14	846	0.076
18:00 - 19:00	14	846	0.101	14	846	0.068	14	846	0.169
19:00 - 20:00	12	935	0.036	12	935	0.089	12	935	0.125
20:00 - 21:00	11	874	0.021	11	874	0.021	11	874	0.042
21:00 - 22:00	6	823	0.020	6	823	0.000	6	823	0.020
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.904			0.897			1.801

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.118	14	846	0.084	14	846	0.202
08:00 - 09:00	14	846	0.118	14	846	0.093	14	846	0.211
09:00 - 10:00	14	846	0.177	14	846	0.194	14	846	0.371
10:00 - 11:00	14	846	0.118	14	846	0.101	14	846	0.219
11:00 - 12:00	14	846	0.093	14	846	0.110	14	846	0.203
12:00 - 13:00	14	846	0.127	14	846	0.144	14	846	0.271
13:00 - 14:00	14	846	0.101	14	846	0.127	14	846	0.228
14:00 - 15:00	14	846	0.084	14	846	0.059	14	846	0.143
15:00 - 16:00	14	846	0.059	14	846	0.051	14	846	0.110
16:00 - 17:00	14	846	0.093	14	846	0.076	14	846	0.169
17:00 - 18:00	14	846	0.034	14	846	0.042	14	846	0.076
18:00 - 19:00	14	846	0.017	14	846	0.051	14	846	0.068
19:00 - 20:00	12	935	0.009	12	935	0.009	12	935	0.018
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.020	6	823	0.020	6	823	0.040
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.168			1.161			2.329

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.034	14	846	0.034	14	846	0.068
08:00 - 09:00	14	846	0.000	14	846	0.000	14	846	0.000
09:00 - 10:00	14	846	0.000	14	846	0.000	14	846	0.000
10:00 - 11:00	14	846	0.017	14	846	0.017	14	846	0.034
11:00 - 12:00	14	846	0.008	14	846	0.008	14	846	0.016
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.008	14	846	0.008	14	846	0.016
14:00 - 15:00	14	846	0.008	14	846	0.000	14	846	0.008
15:00 - 16:00	14	846	0.000	14	846	0.008	14	846	0.008
16:00 - 17:00	14	846	0.017	14	846	0.017	14	846	0.034
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.000	14	846	0.000	14	846	0.000
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.040	6	823	0.040	6	823	0.080
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.140			0.140			0.280

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.185	1	540	0.000	1	540	0.185
07:00 - 08:00	14	846	0.228	14	846	0.186	14	846	0.414
08:00 - 09:00	14	846	0.177	14	846	0.169	14	846	0.346
09:00 - 10:00	14	846	0.144	14	846	0.144	14	846	0.288
10:00 - 11:00	14	846	0.135	14	846	0.110	14	846	0.245
11:00 - 12:00	14	846	0.118	14	846	0.135	14	846	0.253
12:00 - 13:00	14	846	0.076	14	846	0.076	14	846	0.152
13:00 - 14:00	14	846	0.127	14	846	0.135	14	846	0.262
14:00 - 15:00	14	846	0.144	14	846	0.177	14	846	0.321
15:00 - 16:00	14	846	0.279	14	846	0.220	14	846	0.499
16:00 - 17:00	14	846	0.304	14	846	0.262	14	846	0.566
17:00 - 18:00	14	846	0.127	14	846	0.169	14	846	0.296
18:00 - 19:00	14	846	0.279	14	846	0.296	14	846	0.575
19:00 - 20:00	12	935	0.098	12	935	0.116	12	935	0.214
20:00 - 21:00	11	874	0.010	11	874	0.042	11	874	0.052
21:00 - 22:00	6	823	0.202	6	823	0.162	6	823	0.364
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.633			2.399			5.032

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	1.481	1	540	1.481	1	540	2.962
07:00 - 08:00	14	846	4.992	14	846	4.299	14	846	9.291
08:00 - 09:00	14	846	6.419	14	846	5.963	14	846	12.382
09:00 - 10:00	14	846	6.833	14	846	6.258	14	846	13.091
10:00 - 11:00	14	846	7.196	14	846	6.579	14	846	13.775
11:00 - 12:00	14	846	7.264	14	846	7.323	14	846	14.587
12:00 - 13:00	14	846	9.181	14	846	8.843	14	846	18.024
13:00 - 14:00	14	846	8.083	14	846	8.193	14	846	16.276
14:00 - 15:00	14	846	7.204	14	846	7.424	14	846	14.628
15:00 - 16:00	14	846	7.323	14	846	7.914	14	846	15.237
16:00 - 17:00	14	846	7.407	14	846	7.686	14	846	15.093
17:00 - 18:00	14	846	7.965	14	846	8.598	14	846	16.563
18:00 - 19:00	14	846	7.813	14	846	8.133	14	846	15.945
19:00 - 20:00	12	935	6.491	12	935	6.607	12	935	13.098
20:00 - 21:00	11	874	4.745	11	874	5.005	11	874	9.750
21:00 - 22:00	6	823	5.040	6	823	5.304	6	823	10.344
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			105.436			105.610			211.046

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	4.259	1	540	3.333	1	540	7.592
07:00 - 08:00	14	846	3.201	14	846	2.644	14	846	5.845
08:00 - 09:00	14	846	6.943	14	846	7.171	14	846	14.114
09:00 - 10:00	14	846	5.160	14	846	4.772	14	846	9.932
10:00 - 11:00	14	846	4.814	14	846	4.730	14	846	9.544
11:00 - 12:00	14	846	4.535	14	846	4.248	14	846	8.783
12:00 - 13:00	14	846	6.233	14	846	6.090	14	846	12.323
13:00 - 14:00	14	846	5.076	14	846	5.135	14	846	10.211
14:00 - 15:00	14	846	4.721	14	846	4.916	14	846	9.637
15:00 - 16:00	14	846	6.959	14	846	7.095	14	846	14.054
16:00 - 17:00	14	846	4.949	14	846	5.456	14	846	10.405
17:00 - 18:00	14	846	4.476	14	846	4.899	14	846	9.375
18:00 - 19:00	14	846	3.302	14	846	3.784	14	846	7.086
19:00 - 20:00	12	935	3.308	12	935	3.593	12	935	6.901
20:00 - 21:00	11	874	2.060	11	874	2.373	11	874	4.433
21:00 - 22:00	6	823	2.611	6	823	2.996	6	823	5.607
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			72.607			73.235			145.842

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.741	1	540	1.111	1	540	1.852
07:00 - 08:00	14	846	0.068	14	846	0.084	14	846	0.152
08:00 - 09:00	14	846	0.093	14	846	0.169	14	846	0.262
09:00 - 10:00	14	846	0.059	14	846	0.025	14	846	0.084
10:00 - 11:00	14	846	0.144	14	846	0.127	14	846	0.271
11:00 - 12:00	14	846	0.253	14	846	0.313	14	846	0.565
12:00 - 13:00	14	846	0.211	14	846	0.169	14	846	0.380
13:00 - 14:00	14	846	0.253	14	846	0.144	14	846	0.397
14:00 - 15:00	14	846	0.253	14	846	0.144	14	846	0.397
15:00 - 16:00	14	846	0.287	14	846	0.093	14	846	0.380
16:00 - 17:00	14	846	0.135	14	846	0.118	14	846	0.253
17:00 - 18:00	14	846	0.144	14	846	0.101	14	846	0.245
18:00 - 19:00	14	846	0.076	14	846	0.118	14	846	0.194
19:00 - 20:00	12	935	0.125	12	935	0.080	12	935	0.205
20:00 - 21:00	11	874	0.062	11	874	0.073	11	874	0.135
21:00 - 22:00	6	823	0.223	6	823	0.162	6	823	0.385
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.127			3.030			6.157

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.017	14	846	0.008	14	846	0.025
08:00 - 09:00	14	846	0.008	14	846	0.008	14	846	0.016
09:00 - 10:00	14	846	0.008	14	846	0.008	14	846	0.016
10:00 - 11:00	14	846	0.000	14	846	0.000	14	846	0.000
11:00 - 12:00	14	846	0.000	14	846	0.000	14	846	0.000
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.034	14	846	0.025	14	846	0.059
14:00 - 15:00	14	846	0.000	14	846	0.000	14	846	0.000
15:00 - 16:00	14	846	0.000	14	846	0.017	14	846	0.017
16:00 - 17:00	14	846	0.000	14	846	0.000	14	846	0.000
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.017	14	846	0.017	14	846	0.034
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.000	6	823	0.000	6	823	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.092			0.091			0.183

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL COACH PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	14	846	0.034	14	846	0.034	14	846	0.068
08:00 - 09:00	14	846	0.000	14	846	0.000	14	846	0.000
09:00 - 10:00	14	846	0.000	14	846	0.000	14	846	0.000
10:00 - 11:00	14	846	0.017	14	846	0.017	14	846	0.034
11:00 - 12:00	14	846	0.008	14	846	0.008	14	846	0.016
12:00 - 13:00	14	846	0.008	14	846	0.008	14	846	0.016
13:00 - 14:00	14	846	0.008	14	846	0.008	14	846	0.016
14:00 - 15:00	14	846	0.000	14	846	0.000	14	846	0.000
15:00 - 16:00	14	846	0.000	14	846	0.000	14	846	0.000
16:00 - 17:00	14	846	0.008	14	846	0.008	14	846	0.016
17:00 - 18:00	14	846	0.000	14	846	0.000	14	846	0.000
18:00 - 19:00	14	846	0.000	14	846	0.000	14	846	0.000
19:00 - 20:00	12	935	0.000	12	935	0.000	12	935	0.000
20:00 - 21:00	11	874	0.000	11	874	0.000	11	874	0.000
21:00 - 22:00	6	823	0.040	6	823	0.121	6	823	0.161
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.123			0.204			0.327

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.741	1	540	1.111	1	540	1.852
07:00 - 08:00	14	846	0.118	14	846	0.127	14	846	0.245
08:00 - 09:00	14	846	0.101	14	846	0.177	14	846	0.278
09:00 - 10:00	14	846	0.068	14	846	0.034	14	846	0.102
10:00 - 11:00	14	846	0.160	14	846	0.144	14	846	0.304
11:00 - 12:00	14	846	0.262	14	846	0.321	14	846	0.583
12:00 - 13:00	14	846	0.228	14	846	0.186	14	846	0.414
13:00 - 14:00	14	846	0.296	14	846	0.177	14	846	0.473
14:00 - 15:00	14	846	0.253	14	846	0.144	14	846	0.397
15:00 - 16:00	14	846	0.287	14	846	0.110	14	846	0.397
16:00 - 17:00	14	846	0.144	14	846	0.127	14	846	0.271
17:00 - 18:00	14	846	0.144	14	846	0.101	14	846	0.245
18:00 - 19:00	14	846	0.093	14	846	0.135	14	846	0.228
19:00 - 20:00	12	935	0.125	12	935	0.080	12	935	0.205
20:00 - 21:00	11	874	0.062	11	874	0.073	11	874	0.135
21:00 - 22:00	6	823	0.263	6	823	0.283	6	823	0.546
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.345			3.330			6.675

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	6.667	1	540	5.926	1	540	12.593
07:00 - 08:00	14	846	8.539	14	846	7.255	14	846	15.794
08:00 - 09:00	14	846	13.640	14	846	13.480	14	846	27.120
09:00 - 10:00	14	846	12.204	14	846	11.208	14	846	23.412
10:00 - 11:00	14	846	12.306	14	846	11.563	14	846	23.868
11:00 - 12:00	14	846	12.179	14	846	12.027	14	846	24.206
12:00 - 13:00	14	846	15.718	14	846	15.194	14	846	30.912
13:00 - 14:00	14	846	13.581	14	846	13.640	14	846	27.221
14:00 - 15:00	14	846	12.323	14	846	12.660	14	846	24.983
15:00 - 16:00	14	846	14.848	14	846	15.338	14	846	30.186
16:00 - 17:00	14	846	12.804	14	846	13.530	14	846	26.334
17:00 - 18:00	14	846	12.711	14	846	13.767	14	846	26.478
18:00 - 19:00	14	846	11.486	14	846	12.348	14	846	23.834
19:00 - 20:00	12	935	10.022	12	935	10.397	12	935	20.419
20:00 - 21:00	11	874	6.878	11	874	7.492	11	874	14.370
21:00 - 22:00	6	823	8.117	6	823	8.745	6	823	16.862
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			184.023			184.569			368.592

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	260 - 1840 (units: sqm)
Survey date date range:	01/01/07 - 28/10/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 6

TRICS Data for Neighbourhood Centre Trip Rates – Pub/Restaurant

Calculation Reference: AUDIT-355901-160129-0114

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : C - PUB/RESTAURANT
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 285 to 1400 (units: sqm)
Range Selected by User: 270 to 2000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 25/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday	1 days
Friday	6 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	5

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A3	1 days
A4	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	4 days
2.1 to 2.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CW-06-C-01	PUB/RESTAURANT		CORNWALL
	FORE STREET			
	POOL			
	CAMBORNE			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		285 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL
2	EX-06-C-02	HARVESTER		ESSEX
	LONDON ROAD			
	STANWAY			
	COLCHESTER			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		08/11/13	Survey Type: MANUAL
3	HC-06-C-02	BEEFEATER		HAMPSHIRE
	BOURNEMOUTH ROAD			
	AMPFIELD			
	EASTLEIGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		450 sqm	
	Survey date: FRIDAY		16/11/07	Survey Type: MANUAL
4	NT-06-C-02	PUB/RESTAURANT		NOTTINGHAMSHIRE
	MANSFIELD ROAD			
	DAYBROOK			
	NOTTINGHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1185 sqm	
	Survey date: FRIDAY		18/05/07	Survey Type: MANUAL
5	SH-06-C-02	HUNGRY HORSE		SHROPSHIRE
	WELSHPOOL ROAD			
	SHELTON			
	SHREWSBURY			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:		1400 sqm	
	Survey date: FRIDAY		26/06/09	Survey Type: MANUAL
6	ST-06-C-01	HARVESTER		STAFFORDSHIRE
	STONE ROAD			
	TRENTHAM			
	STOKE-ON-TRENT			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		720 sqm	
	Survey date: WEDNESDAY		23/10/13	Survey Type: MANUAL
7	TV-06-C-01	PUB/RES.		TEES VALLEY
	MARTON ROAD			
	MIDDLESBROUGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		1200 sqm	
	Survey date: FRIDAY		21/09/07	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.316	7	813	0.228	7	813	0.544
11:00 - 12:00	7	813	1.248	7	813	0.527	7	813	1.775
12:00 - 13:00	7	813	2.917	7	813	1.248	7	813	4.165
13:00 - 14:00	7	813	2.355	7	813	2.056	7	813	4.411
14:00 - 15:00	7	813	1.195	7	813	2.724	7	813	3.919
15:00 - 16:00	7	813	1.142	7	813	1.336	7	813	2.478
16:00 - 17:00	7	813	1.828	7	813	1.195	7	813	3.023
17:00 - 18:00	7	813	2.847	7	813	1.845	7	813	4.692
18:00 - 19:00	7	813	3.023	7	813	2.513	7	813	5.536
19:00 - 20:00	7	813	3.023	7	813	2.724	7	813	5.747
20:00 - 21:00	7	813	1.880	7	813	2.408	7	813	4.288
21:00 - 22:00	7	813	1.037	7	813	2.056	7	813	3.093
22:00 - 23:00	7	813	0.492	7	813	1.670	7	813	2.162
23:00 - 24:00	7	813	0.211	7	813	1.160	7	813	1.371
Total Rates:			23.514			23.690			47.204

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.053	7	813	0.035	7	813	0.088
13:00 - 14:00	7	813	0.018	7	813	0.018	7	813	0.036
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.018	7	813	0.036
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.088	7	813	0.070	7	813	0.158
18:00 - 19:00	7	813	0.035	7	813	0.053	7	813	0.088
19:00 - 20:00	7	813	0.141	7	813	0.141	7	813	0.282
20:00 - 21:00	7	813	0.070	7	813	0.070	7	813	0.140
21:00 - 22:00	7	813	0.105	7	813	0.088	7	813	0.193
22:00 - 23:00	7	813	0.176	7	813	0.193	7	813	0.369
23:00 - 24:00	7	813	0.105	7	813	0.105	7	813	0.210
Total Rates:			0.845			0.827			1.672

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.018	7	813	0.036
11:00 - 12:00	7	813	0.088	7	813	0.053	7	813	0.141
12:00 - 13:00	7	813	0.000	7	813	0.018	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.018	7	813	0.018
15:00 - 16:00	7	813	0.035	7	813	0.035	7	813	0.070
16:00 - 17:00	7	813	0.018	7	813	0.018	7	813	0.036
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.018	7	813	0.018	7	813	0.036
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.177			0.178			0.355

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.035	7	813	0.000	7	813	0.035
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.018	7	813	0.035	7	813	0.053
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.018	7	813	0.018
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.053			0.053			0.106

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.018	7	813	0.018	7	813	0.036
12:00 - 13:00	7	813	0.018	7	813	0.000	7	813	0.018
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.018	7	813	0.018	7	813	0.036
15:00 - 16:00	7	813	0.018	7	813	0.000	7	813	0.018
16:00 - 17:00	7	813	0.018	7	813	0.035	7	813	0.053
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.035	7	813	0.000	7	813	0.035
20:00 - 21:00	7	813	0.018	7	813	0.053	7	813	0.071
21:00 - 22:00	7	813	0.018	7	813	0.035	7	813	0.053
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.161			0.159			0.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.439	7	813	0.334	7	813	0.773
11:00 - 12:00	7	813	1.845	7	813	0.650	7	813	2.495
12:00 - 13:00	7	813	5.677	7	813	2.021	7	813	7.698
13:00 - 14:00	7	813	4.359	7	813	3.743	7	813	8.102
14:00 - 15:00	7	813	2.144	7	813	5.220	7	813	7.364
15:00 - 16:00	7	813	2.144	7	813	2.355	7	813	4.499
16:00 - 17:00	7	813	3.322	7	813	2.091	7	813	5.413
17:00 - 18:00	7	813	4.938	7	813	3.199	7	813	8.137
18:00 - 19:00	7	813	6.520	7	813	4.534	7	813	11.054
19:00 - 20:00	7	813	5.747	7	813	5.712	7	813	11.459
20:00 - 21:00	7	813	3.902	7	813	4.728	7	813	8.630
21:00 - 22:00	7	813	1.828	7	813	3.884	7	813	5.712
22:00 - 23:00	7	813	0.721	7	813	3.163	7	813	3.884
23:00 - 24:00	7	813	0.211	7	813	2.355	7	813	2.566
Total Rates:			43.797			43.989			87.786

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.070	7	813	0.000	7	813	0.070
11:00 - 12:00	7	813	0.510	7	813	0.123	7	813	0.633
12:00 - 13:00	7	813	0.984	7	813	0.422	7	813	1.406
13:00 - 14:00	7	813	0.896	7	813	1.336	7	813	2.232
14:00 - 15:00	7	813	0.492	7	813	0.879	7	813	1.371
15:00 - 16:00	7	813	0.439	7	813	0.264	7	813	0.703
16:00 - 17:00	7	813	0.422	7	813	0.193	7	813	0.615
17:00 - 18:00	7	813	0.685	7	813	0.492	7	813	1.177
18:00 - 19:00	7	813	0.967	7	813	0.615	7	813	1.582
19:00 - 20:00	7	813	0.967	7	813	0.510	7	813	1.477
20:00 - 21:00	7	813	0.967	7	813	0.475	7	813	1.442
21:00 - 22:00	7	813	0.422	7	813	0.967	7	813	1.389
22:00 - 23:00	7	813	0.105	7	813	0.668	7	813	0.773
23:00 - 24:00	7	813	0.018	7	813	0.721	7	813	0.739
Total Rates:			7.944			7.665			15.609

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.000	7	813	0.000	7	813	0.000
11:00 - 12:00	7	813	0.000	7	813	0.000	7	813	0.000
12:00 - 13:00	7	813	0.000	7	813	0.000	7	813	0.000
13:00 - 14:00	7	813	0.000	7	813	0.000	7	813	0.000
14:00 - 15:00	7	813	0.000	7	813	0.000	7	813	0.000
15:00 - 16:00	7	813	0.000	7	813	0.000	7	813	0.000
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.000	7	813	0.000	7	813	0.000
18:00 - 19:00	7	813	0.000	7	813	0.000	7	813	0.000
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.000	7	813	0.000
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.018	7	813	0.000	7	813	0.018
11:00 - 12:00	7	813	0.123	7	813	0.018	7	813	0.141
12:00 - 13:00	7	813	0.176	7	813	0.000	7	813	0.176
13:00 - 14:00	7	813	0.070	7	813	0.070	7	813	0.140
14:00 - 15:00	7	813	0.053	7	813	0.053	7	813	0.106
15:00 - 16:00	7	813	0.000	7	813	0.123	7	813	0.123
16:00 - 17:00	7	813	0.000	7	813	0.000	7	813	0.000
17:00 - 18:00	7	813	0.018	7	813	0.070	7	813	0.088
18:00 - 19:00	7	813	0.000	7	813	0.018	7	813	0.018
19:00 - 20:00	7	813	0.000	7	813	0.000	7	813	0.000
20:00 - 21:00	7	813	0.000	7	813	0.053	7	813	0.053
21:00 - 22:00	7	813	0.000	7	813	0.000	7	813	0.000
22:00 - 23:00	7	813	0.000	7	813	0.000	7	813	0.000
23:00 - 24:00	7	813	0.000	7	813	0.000	7	813	0.000
Total Rates:			0.458			0.405			0.863

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	7	813	0.527	7	813	0.334	7	813	0.861
11:00 - 12:00	7	813	2.496	7	813	0.808	7	813	3.304
12:00 - 13:00	7	813	6.854	7	813	2.443	7	813	9.297
13:00 - 14:00	7	813	5.325	7	813	5.149	7	813	10.474
14:00 - 15:00	7	813	2.707	7	813	6.169	7	813	8.876
15:00 - 16:00	7	813	2.601	7	813	2.742	7	813	5.343
16:00 - 17:00	7	813	3.761	7	813	2.320	7	813	6.081
17:00 - 18:00	7	813	5.641	7	813	3.761	7	813	9.402
18:00 - 19:00	7	813	7.487	7	813	5.167	7	813	12.654
19:00 - 20:00	7	813	6.749	7	813	6.221	7	813	12.970
20:00 - 21:00	7	813	4.886	7	813	5.308	7	813	10.194
21:00 - 22:00	7	813	2.267	7	813	4.886	7	813	7.153
22:00 - 23:00	7	813	0.826	7	813	3.831	7	813	4.657
23:00 - 24:00	7	813	0.228	7	813	3.076	7	813	3.304
Total Rates:			52.355			52.215			104.570

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	285 - 1400 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 7

TRICS Data for Primary School Trip Rates

Calculation Reference: AUDIT-355901-160303-0325

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : A - PRIMARY
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	SC	SURREY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of pupils
Actual Range: 147 to 414 (units:)
Range Selected by User: 92 to 450 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 20/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
Village	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

D1	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	MS-04-A-02	PRIMARY SCHOOL		MERSEYSIDE
	BOOKER AVENUE			
	ALVERTON			
	LIVERPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of pupils:		264	
	Survey date: THURSDAY		13/06/13	Survey Type: MANUAL
2	NE-04-A-01	PRIMARY SCHOOL		NORTH EAST LINCOLNSHIRE
	SUNNINGDALE ROAD			
	SCUNTHORPE			
	Edge of Town			
	Residential Zone			
	Total Number of pupils:		147	
	Survey date: TUESDAY		20/05/14	Survey Type: MANUAL
3	SC-04-A-01	PRIMARY SCHOOL		SURREY
	SCHOOL LANE			
	PIRBRIGHT			
	NEAR WOKING			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Number of pupils:		414	
	Survey date: THURSDAY		22/11/12	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL VEHICLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.057	3	275	0.023	3	275	0.080
08:00 - 09:00	3	275	0.269	3	275	0.189	3	275	0.458
09:00 - 10:00	3	275	0.048	3	275	0.056	3	275	0.104
10:00 - 11:00	3	275	0.015	3	275	0.010	3	275	0.025
11:00 - 12:00	3	275	0.027	3	275	0.013	3	275	0.040
12:00 - 13:00	3	275	0.018	3	275	0.025	3	275	0.043
13:00 - 14:00	3	275	0.025	3	275	0.041	3	275	0.066
14:00 - 15:00	3	275	0.050	3	275	0.024	3	275	0.074
15:00 - 16:00	3	275	0.120	3	275	0.148	3	275	0.268
16:00 - 17:00	3	275	0.116	3	275	0.165	3	275	0.281
17:00 - 18:00	3	275	0.045	3	275	0.063	3	275	0.108
18:00 - 19:00	3	275	0.040	3	275	0.030	3	275	0.070
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.830			0.787			1.617

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TAXIS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.002	3	275	0.002	3	275	0.004
09:00 - 10:00	3	275	0.002	3	275	0.001	3	275	0.003
10:00 - 11:00	3	275	0.000	3	275	0.001	3	275	0.001
11:00 - 12:00	3	275	0.001	3	275	0.000	3	275	0.001
12:00 - 13:00	3	275	0.000	3	275	0.001	3	275	0.001
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.001	3	275	0.001	3	275	0.002
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL OGVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.001	3	275	0.001	3	275	0.002
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.001	3	275	0.001	3	275	0.002
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PSVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL CYCLISTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.007	3	275	0.000	3	275	0.007
08:00 - 09:00	3	275	0.015	3	275	0.004	3	275	0.019
09:00 - 10:00	3	275	0.002	3	275	0.004	3	275	0.006
10:00 - 11:00	3	275	0.000	3	275	0.001	3	275	0.001
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.001	3	275	0.001
15:00 - 16:00	3	275	0.007	3	275	0.005	3	275	0.012
16:00 - 17:00	3	275	0.001	3	275	0.016	3	275	0.017
17:00 - 18:00	3	275	0.000	3	275	0.002	3	275	0.002
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.079	3	275	0.036	3	275	0.115
08:00 - 09:00	3	275	0.469	3	275	0.210	3	275	0.679
09:00 - 10:00	3	275	0.074	3	275	0.038	3	275	0.112
10:00 - 11:00	3	275	0.018	3	275	0.012	3	275	0.030
11:00 - 12:00	3	275	0.029	3	275	0.016	3	275	0.045
12:00 - 13:00	3	275	0.019	3	275	0.027	3	275	0.046
13:00 - 14:00	3	275	0.029	3	275	0.051	3	275	0.080
14:00 - 15:00	3	275	0.029	3	275	0.028	3	275	0.057
15:00 - 16:00	3	275	0.132	3	275	0.240	3	275	0.372
16:00 - 17:00	3	275	0.093	3	275	0.287	3	275	0.380
17:00 - 18:00	3	275	0.045	3	275	0.092	3	275	0.137
18:00 - 19:00	3	275	0.081	3	275	0.032	3	275	0.113
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.097			1.069			2.166

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.025	3	275	0.002	3	275	0.027
08:00 - 09:00	3	275	0.778	3	275	0.280	3	275	1.058
09:00 - 10:00	3	275	0.058	3	275	0.073	3	275	0.131
10:00 - 11:00	3	275	0.006	3	275	0.001	3	275	0.007
11:00 - 12:00	3	275	0.025	3	275	0.035	3	275	0.060
12:00 - 13:00	3	275	0.018	3	275	0.024	3	275	0.042
13:00 - 14:00	3	275	0.006	3	275	0.011	3	275	0.017
14:00 - 15:00	3	275	0.025	3	275	0.016	3	275	0.041
15:00 - 16:00	3	275	0.288	3	275	0.647	3	275	0.935
16:00 - 17:00	3	275	0.042	3	275	0.144	3	275	0.186
17:00 - 18:00	3	275	0.008	3	275	0.012	3	275	0.020
18:00 - 19:00	3	275	0.008	3	275	0.007	3	275	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.287			1.252			2.539

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.018	3	275	0.000	3	275	0.018
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.013	3	275	0.013
16:00 - 17:00	3	275	0.000	3	275	0.001	3	275	0.001
17:00 - 18:00	3	275	0.000	3	275	0.001	3	275	0.001
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.015			0.033

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.001	3	275	0.000	3	275	0.001
08:00 - 09:00	3	275	0.001	3	275	0.000	3	275	0.001
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.002	3	275	0.002
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.000	3	275	0.000	3	275	0.000
08:00 - 09:00	3	275	0.000	3	275	0.000	3	275	0.000
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.001	3	275	0.000	3	275	0.001
08:00 - 09:00	3	275	0.019	3	275	0.000	3	275	0.019
09:00 - 10:00	3	275	0.000	3	275	0.000	3	275	0.000
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.016	3	275	0.016
16:00 - 17:00	3	275	0.000	3	275	0.001	3	275	0.001
17:00 - 18:00	3	275	0.000	3	275	0.001	3	275	0.001
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.018			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	275	0.113	3	275	0.039	3	275	0.152
08:00 - 09:00	3	275	1.281	3	275	0.493	3	275	1.774
09:00 - 10:00	3	275	0.135	3	275	0.114	3	275	0.249
10:00 - 11:00	3	275	0.024	3	275	0.015	3	275	0.039
11:00 - 12:00	3	275	0.055	3	275	0.051	3	275	0.106
12:00 - 13:00	3	275	0.038	3	275	0.051	3	275	0.089
13:00 - 14:00	3	275	0.035	3	275	0.062	3	275	0.097
14:00 - 15:00	3	275	0.055	3	275	0.045	3	275	0.100
15:00 - 16:00	3	275	0.428	3	275	0.908	3	275	1.336
16:00 - 17:00	3	275	0.137	3	275	0.448	3	275	0.585
17:00 - 18:00	3	275	0.053	3	275	0.108	3	275	0.161
18:00 - 19:00	3	275	0.090	3	275	0.039	3	275	0.129
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.444			2.373			4.817

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	147 - 414 (units:)
Survey date date range:	01/01/07 - 20/05/14
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 45

HTp/1107/TN/13 – Response to AECOM Technical Review for HE

HighgateTransportation

Land at Peel Hall, Warrington

Response to AECOM Technical Review Note (ref: 60344053/1619) for Highways England (HTp/1107/TN/13)

July 2016

www.highgatetransportation.co.uk

Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited in response to AECOM's Technical Note Review on behalf of Highways England (ref: 60344053/1619) dated 25th May 2016, on the following HTp Technical Notes submitted for comment in support of the forthcoming planning application at Peel Hall:

i. 1107/TN/02/A Trip Rates
ii. 1107/TN/02/A Addendum on peak Period Trip Rates
iii. 1107/TN/06 Trip Discounts
iv. 1107/TN/08 Number of Vehicular Trips at Each Site Access Location
v. 1107/TN/10 Committed Developments
vi. 1107/TN/12 Pub Vehicle Trips Update

1.2 The development site covers around 65 hectares and is located to the north of Warrington, south of the M62. It is bounded by the existing urban areas of Warrington to the west, south and east and the motorway to the north. An area of council recreation open space is also included within the application site boundary (4 hectares) giving a total site application area of 69 hectares.

1.3 The outline application will be for a new residential neighbourhood including C2 and C3 uses; local employment (B1 use); local centre including food store up to 2,000 square metres, A1-A5 (inclusive) and D1 use class units of up to 600 square metres total (with no single units of more than 200 square metres) and family restaurant/pub of up to 800 square metres (A3/A4 use); site for primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure and Peel Hall, Warrington.

1.4 The application proposals seek an upper limit on employment floor space to be developed on the site to 7,500 square metres of B1 use type buildings, which will be located to the north western corner of the site. These will be for a range of activities within light industry use class B1(c) i.e. not office buildings, and no individual unit is to be larger than 500 square metres. It is expected that there will be a planning condition to restrict the use class on the local employment land.

1.5 The vehicular access points to the site serve specific areas of development and are as follows:

i. A new roundabout access from the Mill Lane arm of the Mill Lane/Blackbrook Avenue/Ballater Drive roundabout junction.
ii. A new priority junction with ghost right turn lane from Poplars Avenue between the junctions of Newhaven Road and Windermere Avenue.
iii. Mill Lane, north of Radley Lane.
iv. Poplars Avenue (west) between Cotswold Road and Newhaven Road.
v. Birch Avenue.

1.6 The access and transport strategy that underpins the development proposals can be summarised as:

i. To provide as far as possible a largely self-contained development through the provision of a mix of uses including a local centre, a primary school and an area of employment.

ii. To provide a high quality access and connectivity within the development for bus, pedestrian and cycle movement in order encourage non-car modes of travel and subsequently reduce car use.

iii. To provide a new bus service that links the site to key locations including the town centre, Orford Jubilee Hub, Warrington Business Park and Collegiate, Warrington Campus of University of Chester, Birchwood Community High School and College, Birchwood Park and Birchwood Shopping Centre.

iv. To distribute development traffic from the site onto the local highway network at different points in order to reduce the impact.

v. To provide strong pedestrian and cycle links with the existing and surrounding area as this will help ensure that the development is well integrated with the local community.

1.7 The comments from Highways England summarised within the AECOM review are as follows:

i. Information should be provided as to the specific employment land use that is likely to be forthcoming on the site, since there is likely to be huge variability between trip rates/vehicular types associated to the various employment land uses. Highways England therefore request a trip rate sensitivity test using rates for the Employment Office and Warehousing Distribution land uses, along with provision of details of the likely HGV/car split

ii. Highways England wished to clarify whether the size of facilities/sports pitches proposed are consistent with the current facilities.

iii. As part of the trip discounting assumptions, an additional sensitivity test providing a higher weighting to external food store trips will be required to satisfy Highways England.

iv. Highways England request the provision of a summary of the data referred to within their statement concerning the derivation of primary school trip discounts.

v. Clarification should be provided as to whether the school has been designed as a replacement facility for an existing school or whether it is simply being proposed to serve the families of residents within the development site. The assumed catchment area of the school should also be quoted.

vi. Within the assessment comparisons should be made to the discounting assumptions that have been made within the Omega assessment to ensure consistency.

vii. Highways England would wish to establish a commitment to implementing the bus gate identified on the masterplan to ensure the restriction on through trips remain in place, throughout the lifetime of the development.

viii. Once the gravity model, being development by AECOM, has been completed Highways England would wish to comment further upon the assumptions made about the weighting of particular vehicle trips upon each access.

ix. The Omega development should be included as a committed scheme. Supporting information should be provided identifying the negligible net change to the overall GFA of the B&Q extension at Winwick (ref: 2015/26628) and impact on the local highway network during the peak hours. Highways England requests a sensitivity test within the wider TA analysis which includes Omega development and Winwick B&Q as committed schemes.

1.8 Each comment will now be addressed in turn.

2.0 Employment Land Use

Information should be provided as to the specific employment land use that is likely to be forthcoming on the site, since there is likely to be huge variability between trip rates/vehicular types associated to the various employment land uses.

2.1 The planning application is in outline and will be for an area of employment land comprising up to 7,500sqm Gross Floor Area (GFA) of light industrial units. Permission for B1 office land use is not being sought on this land and the developer would be prepared to accept a planning condition restricting the land use to B1(c) activities to ensure suitability with the location next to existing and proposed housing. See **paragraph 1.4** above.

Highways England therefore request a trip rate sensitivity test using rates for the Employment Office and Warehousing Distribution land uses.

2.2 Notwithstanding the above, a sensitivity test has been carried out using TRICS to obtain trip rates for B1(a) office employment and B8 Warehousing land uses. The results are set out in **Tables 2.1** and **2.2** respectively, with the proposed vehicular trip generation for this site set out in **Table 2.3** for reference. The TRICS reports to support **Tables 2.1** and **2.2** are contained in **Appendix 2**.

Table 2.1 – B1(a) Employment Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	1.910	0.260	0.203	1.837	15.301
Employment Trips (7,500sqm GFA)	143	20	15	138	1,148

Table 2.2 – B8 Employment Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	0.301	0.165	0.087	0.251	5.725
Employment Trips (7,500sqm GFA)	23	12	7	19	429

Table 2.3 – B1(c) Employment Vehicular Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621	3.537
Employment Trips (7,500sqm GFA)	69	39	20	47	265

2.3 It can therefore be seen from the above tables that B1(c)employment has a lower daily trip rate than other employment land uses, with a development the size of that proposed at Peel Hall attracting around 265 vehicle trips, compared to 1,148 of B1(a) and 429 of B8. Peak hour trip rates for B1(c) are around half of that for B1(a) but higher than that associated with B8 use, which generally have trips spread more evenly across the day.

Provision of details of the likely HGV/car split

2.4 Commercial heavy goods vehicles such as 2-axle with twin rear wheels and 3-axle large vans and lorries and all goods vehicles with 4 or more axles (classified as OGVs within TRICS and OGV1 and OGV2 respectively in DMRB) have been reviewed. This is set out in Tables 2.4 to 2.6 below.

Table 2.4 – B1(a) Employment HGV Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	0.002	0.002	0.000	0.005	0.178
Employment Trips (7,500sqm GFA)	0	0	0	0	13

Table 2.5 – B8 Employment HGV Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	0.108	0.072	0.014	0.101	2.338
Employment Trips (7,500sqm GFA)	8	5	1	8	175

Table 2.6 – B1(c) Employment HGV Trip Rates and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour		Daily
	Arrival	Departure	Arrival	Departure	
Trip Rates (per 100sqm GFA)	0.067	0.057	0.025	0.025	0.531
Employment Trips (7,500sqm GFA)	5	4	2	2	40

2.5 It can be seen that with B1(c) land use, HGV trips may account for up to around 8% of total peak hour traffic from the proposed employment zone and that there would be around 40 HGV trips daily, which is around three times higher than that associated with B1(a) office developments but only a quarter of the HGV trips expected to be associated with B8 use. As set out in **paragraph 2.1**, the developer would be prepared to accept a planning condition restricting the land use to B1(c) activities to ensure suitability with the location next to existing and proposed housing.

3.0 Sports Pitch Land Use

Highways England wished to clarify whether the size of facilities/sports pitches proposed are consistent with the current facilities.

3.1 It can be confirmed that the existing playing fields at Mill House are to be moved and provided on a like for like basis in terms of number of pitches and site area in the southern part of the site.

3.2 This relocation will be provided to a higher standard than the current provision, with enhancements such as the addition of changing facilities and improved drainage, and will be linked to the improved provision on the council owned Radley Common recreation area at Windermere Avenue (see **paragraphs 1.2** and **1.3**).

4.0 Food Store Land Use

As part of the trip discounting assumptions, an additional sensitivity test providing a higher weighting to external food store trips will be required to satisfy Highways England.

4.1 The Omega assessment set out in their January 2016 TA (see paragraph 4.3.2 extract below) was based on the scoping agreement that no new trips would occur on the local highway network associated with the proposed food store; 70% would be contained within the Omega development and the remaining 30% would be pass-by trips.

> 4.3.2 Through scoping discussions it was agreed that external trips would occur as pass-by trips. It was assumed that pass-by trips would be 30% in the peak periods. The 70% internal foodstore trips were distributed equally on all available internal zones, resulting in 14.2% of such trips being assumed to arrive/depart at each of the 7 zones within the modelled Omega development area.

4.2 The Peel Hall development scheme includes the same size store, at 2,000 square metres GFA, and is of a similar size in terms of residential development (1,200 dwellings compared to 1,100 of Omega).

4.3 The supporting Technical Note on Trip Discounts for the Peel Hall scheme (TN/06) clearly sets out that only 60% of the Peel Hall food store trips are expected to be internal during the peak hours and only 10% are expected to be pass by, with 30 % new trips on the road network.

4.4 Therefore, this is considered to be a more robust approach than that adopted by Omega in their modelling, especially when considering that at Peel Hall 1,180 of the residential dwellings (98.3%) can access the food store without the need to travel off-site.

4.5 It is expected that the local catchment area for the food store on Peel Hall will be the area of Poplars to the immediate south of the site and bounded by the A49, A50 and A574, and Houghton Green to the east. This is based on the proximity of the surrounding areas within north Warrington to other stores such as the Aldi at the Sandy Lane junction with the A49, the Tesco Extra off the A49 by the Halliwell Jones Stadium, and the Asda store at Birchwood.

4.6 In summary, it is considered that the trip discount figures set out in **paragraph 4.3** and the expected catchment area set out above are appropriate for the Peel Hall modelling.

5.0 Primary School Land Use

Highways England request the provision of a summary of the data referred to within their statement concerning the derivation of primary school trip discounts.

5.1 The primary school trip discounts have been based on internal trip containment; the number of pupils expected to be generated by the development based on the calculation factor supplied by Warrington Borough Council, and comparing this to the number of children expected in a school with up to 2-form entry i.e. up to 30 children in each class (therefore 60 children per year group from reception to year 6).

5.2 The information for primary school places issued by WBC was based on census data and the following calculation:

0.3 pupil places per dwelling x number of dwellings

0.3 x 1,200 = 360 (85% of primary school places)

5.3 With the calculation indicating that the development will generate 360 primary school places based on 1,200 dwellings and the WBC figure of 0.3 pupils per dwelling, it was assumed robust to reduce this figure to 75% for the assessment in the AM peak hour (25% external) in order to be robust and to take into account any fluctuation in trips due to school preferences i.e. attendance at a local faith school rather than the primary school provided on site.

5.4 The proportion of external trips has been increased to 50% in the PM peak hour to account for teaching staff living off site as well the traditional pick up time for school children being between 1500 and 1600; outside of the peak period for the assessment. 100% of the trips during 0700 to 0800 have been assumed as external to the site for a robust assessment.

5.5 It should be noted that the drop off to school and continue to work trips would be accounted for within the residential trip rate.

5.6 Furthermore all residential trips will include for school drop off and collection and therefore double counting of trips is occurring if both 75% of the primary school trips in the AM and 50% of the primary school trips in the PM were also included within the assessment of impact on the wider highway network.

Clarification should be provided as to whether the school has been designed as a replacement facility for an existing school or whether it is simply being proposed to serve the families of residents within the development site. The assumed catchment area of the school should also be quoted.

5.7 The proposed school is not a replacement facility, but will be a new primary school to serve the development. This supports the statement set out in **paragraph 5.1** above. The use of TRICS in the assessment is to account for the proportion of trips generated by the school external to the site, such as children living in existing houses in close proximity to the site.

5.8 The assumed catchment area of the primary school is the development, widening to include the local residential area off Poplars Avenue and to the immediate east at Cinnamon Brow. This is based on the new primary school being built to serve the development site and not a replacement as per that earmarked for Phase 6 of Omega.

5.9 Due to the physical location of the school within the heart of the site, it is not considered reasonable to assume that it would have a wider catchment area.

5.10 In the Omega January 2016 TA, it was clear that no assessment of primary school trips was being taken into account bar that accounted for within the residential trip rates derived from TRICS. It has just been assumed that the residential development areas would be well-placed for the new school, as set out in their paragraph 2.1.4 shown below.

2.1.4	Warrington Borough Council is currently promoting a site within Zone 6 of the Omega development for a new primary school (highlighted grey in Figure 2-1) to replace the existing primary school currently located on Barrow Hall Lane. The Omega residential proposal will therefore be extremely well placed for access to education facilities.

6.0 Omega

Within the assessment comparisons should be made to the discounting assumptions that have been made within the Omega assessment to ensure consistency.

6.1 A summary of the trip discounts applied within the Omega assessment to the peak hours is provided in **Table 6.1** below and have been referred to within the report where appropriate.

Table 6.1 – Trip Discount Summary

	OMEGA		PEEL HALL	
Land Use and Size	**Internal Trips**	**External Trips**	**Internal Trips**	**External Trips**
Food store	70%	30% Pass By	60%	30% & 10% Pass By
Hotel & Restaurant	-	100%	-	-
Residential	-	100%	20%	80%
Care Home	-	100%	-	100%
Family Pub/Restaurant	-	-	25%	75%
Primary School	(Phase 6)	(Phase 6)	75% AM / 50% PM	25% AM / 50% PM
Employment	-	-	-	100%
Local Centre	100%	-	70%	30%
Community Uses	-	-	-	100%

6.2 In terms of food store trips, the Omega assessment put no new trips on the network as set out in **paragraph 4.1** but the Peel Hall development has allowed for 30% new trips. Whilst it is acknowledged that food stores generate only a low level of new trips on the network it is considered that an allowance for new trips must be provided for. Furthermore, the residential dwellings proposed at Birch Avenue and Mill Lane and the employment units proposed from the western access on Poplars Avenue will need to travel on the local highway network to access the food store in any event (see **Section 8.0** below).

6.3 With regard to the trip levels associated with the Peel Hall residential land uses on site, the assessment has used the profile set out in **Table 6.2** based on the accessibility of the local centre, food store and employment land uses to the proposed dwellings, and the sustainability of the site in terms of links to the wider footway, cycle and public transport network.

Table 6.2 – Trip Discount Summary

Time Period	External Trips	Internal Trips
0700-0800	95%	5%
0800-0900	80%	20%
0900-0930	70%	30%
1600-1700	80%	20%
1700-1800	80%	20%
1800-1830	80%	20%

6.4 It should be noted that for Peel Hall the residential trip rates used in the assessment have been provided based on all 1,200 dwellings being privately owned houses. The mix of units and housing types has not been taken into account. This broadly the same approach as Omega.

6.5 Retirement housing will also be provided on the Peel Hall site as well as apartments and family homes, and 30% of the dwellings will be provided as affordable units. Retirement housing, affordable units and apartments are known to generally result in much lower trip rates during the peak hours, particularly retirement housing.

7.0 Bus Gate

Highways England would wish to establish a commitment to implementing the bus gate identified on the masterplan to ensure the restriction on through trips remain in place, throughout the lifetime of the development.

7.1 As shown on the parameters plan contained in **Appendix 3**, a bus gate is proposed on site and this forms an integral part of the proposed scheme. As such there is a commitment to provide it and extensive discussions have already been held with Network Warrington on this basis.

7.2 A phasing program has been set out based on year 1 in 2019, with a 12 year build out that finishes in 2030 on the basis of around 100 residential units per year being completed. This is set out in a table and on an illustrative plan contained in **Appendix 4**.

7.3 The spine road is expected to be complete in year 9 (2027), when the bus gate will be introduced and a new bus service provided between the town centre, the site and Birchwood that utilises the bus gate. It is anticipated, based on the initial phasing strategy that the main road through the site and bus gate will be adopted by Warrington Borough Council by 2031.

7.4 The type of gate is not formally fixed, but could be of similar design to the two examples set out in **Figures 7.1** and **7.2** below, which have also been agreed with Network Warrington and discussed with officers and Warrington Borough Council.

Figure 7.1 – Bus gate example (Ravenswood)

Figure 7.2 – Bus gate example

8.0 Vehicular Trips at Access Points

Once the gravity model, being development by AECOM, has been completed Highways England would wish to comment further upon the assumptions made about the weighting of particular vehicle trips upon each access.

8.1 Whilst the whole site will be fully permeable for pedestrians and cyclists, the parcels of land for residential development correspond directly to a single point of vehicular access only. This is set out in **Table 8.1** below and on the Access Strategy plan contained in **Appendix 5**.

Table 8.1 – Quantum of development served off each access

Access	Units/sqm
Mill Lane	150 Dwellings
Mill Lane/ Blackbrook Avenue	700 Dwellings
	Primary School (up to 420 pupils)
Poplars Ave. *(Central)*	330 Dwellings
	Food Store (2,000sqm)
	Local Centre (600sqm)
	Family Pub/ Restaurant (1,600sqm)
	100-Bed Care Home
Poplars Ave. *(West)*	Employment (7,500sqm)
Birch Avenue	20 Dwellings
Grasmere Avenue	Sports Pitches and Community Facilities

8.2 The AECOM gravity model has been used to assign trips from these points of access to the local highway network, which has been based on the matrix contained within the Warrington Multi Modal Model.

9.0 Committed Developments

The Omega development should be included as a committed scheme. Supporting information should be provided identifying the negligible net change to the overall GFA of the B&Q extension at Winwick (ref: 2015/26628) and impact on the local highway network during the peak hours. Highways England requests a sensitivity test within the wider TA analysis which includes Omega development and Winwick B&Q as committed schemes.

Omega

9.1 It was agreed with highway and planning officers at Warrington Borough Council not to separately account for the Omega site as committed development due to distance from the site. However, it should be noted that high motorway growth rates have been used for all traffic within the Peel Hall VISSIM model, and therefore it can be concluded that the Omega development will be included for within this data; the majority of the modelled network is principal roads and local residential roads, which are far more contained in terms of trip growth. A high level of committed development trips have also been added to the local network as part of this assessment.

9.2 Furthermore, it can be seen from the gravity model that the proportion of traffic arising from the Peel Hall development and using the M62 motorway network is relatively low.

9.3 The Omega VISSIM network is shown below, taken from the WSP Transport Assessment Addendum dated January 2016 (HTp annotation).

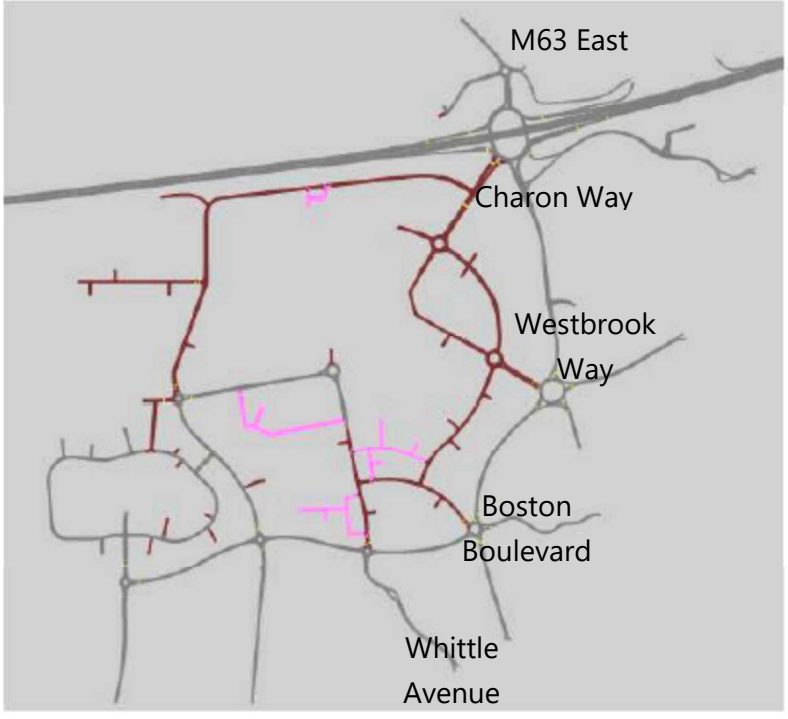

Figure 1: M62 Junction 8 and local area VISSIM Model Coverage

9.4 The VISSIM network encompasses the HE VISSIM model, which extends to junction 10 of the M62 in the east and as such includes junction 9 and where it connects to the A49 (A49 to the south of the M62 is coded as zone 11 in the VISSIM model).

9.5 From the WSP August 2015 Transport Assessment (extract below, HTp highlight) it can be seen that 0.2% of the Omega residential trips are distribution to/from that zone. This level of traffic is not considered significant and will be accounted for within the high growth rates used.

Table 6-1: Residential Trip Distribution

Ref	Road	Percentage
1	Lingley Green Ave	11.5%
2	Barrow Hall Lane	1.1%
3	Kingsdale Road	0%
4	Whittle Ave	19.8%
5	Malvern Cl	0%
6	Burtonwood Rd	2.4%
7	Westbrook Way	18.4%
8	Kingswood Rd	0%
9	Charon Way	0%
10	A57 (S)	0%
11	A557	0%
12	M62 (W)	11.0%
13	A57 (N)	0.1%
14	St Helens Linkway	2.2%
15	Lockheed Rd	0%
16	Burtonwood Rd	2.9%
17	Service Area Access	0%
18	Delph Ln	0%
19	Winwick Park Ave	0%
20	A48 (N)	1.2%
21	Winwick Link Rd	0%
22	M6 (N)	4.2%
23	M62 (E)	19.6%
24	M6 (S)	5.1%
25	Winwick Rd (S)	0.2%

Winwick B&Q

9.6 It was also agreed with highway and planning officers at Warrington Borough Council that the B&Q scheme was to be omitted from the committed development assessment on the basis of lack of change in trips on the local highway network during the peak hour and because there is no increase in floor area as part of the B&Q application.

9.7 A summary of the application proposals is provided below from the IMA Transport Note that supported the planning application.

> **2 Summary of Site Alterations**
>
> 2.1 The alterations to the store comprise;
>
> i. Conversion of the uncovered garden centre in the south-west corner of the site into a covered 'click and collect' area and also storeroom/stock area. The click and collect element will function much like a trade-counter, where items that have already been ordered/purchased will be collected by customers. The entrance to the click-and collect area is on the main front elevation to the site.
>
> ii. The creation of a new stock area in the old-garden centre will result in articulated delivery vehicle entering the service yard at the same point, but making a different turning manoeuvre in the service yard. The service yard is currently located to the north-east of the site (as annotated on Plan 1)
>
> iii. The builders yard, stock area and 'trade point' areas located at the far eastern side of the site will be reconfigured to accommodate the relocated garden centre. The 'trade-point' (where pre-registered trade customer can make purchases in a dedicated trade area) will be disbanded.
>
> iv. An outdoor display area will be created along the stores frontage in the eastern side of the car park. This will result in a loss of some parking and reconfiguration of the exit-isle.

9.8 The statement on trip change from the TA is also set out below, which supports the justification for not including this site within the committed development assessment for the Peel Hall site.

> **7 Summary and Conclusion**
>
> 7.1 The internal change to the site are not predicted to give rise to any increase in traffic as there is no change to the overall floor area of the building. A service vehicle can access the relocated service bay. The loss of just seven parking spaces would not have any impact on the operation of the car park; there is parking to spare at all times.

Appendix 1

AECOM Technical Note Review (dated 25th May 2016)

Technical Review Note

Project:	**Peel Hall**	Job No:	**60344053/1619**
Subject:	**Review of Technical Notes (Trip Rates, Trip Discounting, No' of vehicle Trips at each Access location, Pub Vehicle Trips, and Committed Developments)**		
Prepared by:	**Pam Hibbert**	Date:	**25/05/2016**
Checked by:	**Catherine Zoeftig**	Date:	**25/05/2016**
Approved by:	**Mark Edwards**	Date:	**25/05/2016**

1. Introduction

AECOM has prepared this Technical Review Note (TRN), on behalf of Highways England, in response to a series of TN's, dated March and April 2016, which have been produced by Highgate Transportation (HT) on behalf of Satnam Millennium Ltd.

These TN's have been produced to feed into a Transport Assessment, and support the proposed development of land at Peel Hall in Warrington, for the following:

- A residential neighbourhood with up to 1,200 dwellings
- A 100 bed care home
- An area of employment land comprising up to 7,500 square metres Gross Floor Area (GF) of B1(c) light industry
- A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 800 square metres GFA
- A primary school for up to two-form entry (i.e. up to 420 pupils)
- Open space including sports pitches and ancillary facilities, which are expected to include changing facilities, for up to four teams at any one time,
- and a function room that could be used for local community uses such as a local mother and toddler group

A meeting with representatives from Highways England, Warrington Borough Council (WBC), and their call-off consultant, ATKINS, to discuss the findings of the TRN was held on 10th May 2016.

2. Background

Highways England has been consulted given the proximity of the site to the Strategic Road Network (SRN), in this case the M62, Junction 9. This TRN will provide Highways England with a review of the TN's prepared by HT in March and April 2016, relating to trip generation during peak periods. The following notes have been provided to AECOM:

1. 1107 TN 02A on Trip Rates (March 2016)
2. 1107 TN 02A Addendum on Peak Period Trip Rates (March 2016)
3. 1107 TN 06 Trip Discounts (March 2016)
4. 1107 TN 08 Number of Vehicular Trips at Each Site Access Location (April 2016)
5. 1107 TN 10 on Committed Developments (April 2016)
6. 1107 TN 12 Pub Vehicle Trips Update (April 2016)

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The aim is to review the acceptability of both the methodology proposed, and the information provided, as a suitable approach to assessing the impact on the SRN.

This TRN will provide a review of the adequacy of the assessment undertaken, within the HT technical notes, and the associated impacts, with due regard to the M62, in accordance with Highways England's interests. This review has been undertaken in accordance with relevant guidance, in particular DfT Circular 02/2013 *'The Strategic Road Network and the Delivery of Sustainable Development'*.

The site is located approximately 4.5km (distance by road) north west of Warrington Town Centre. The site forms part of Peel Hall, and is bounded to the north by the M62 and east by Mill Lane. Poplars Avenue and Grasmere Avenue border the site to the west and south.

AECOM has been involved in some initial pre-application discussions regarding this particular application (March 2016) and have also been commissioned by the client, Satnam Developments, to prepare the strategic assessment tool (VISSIM model) to accompany the TA.

3. Review of Highgate Transportation Technical Notes

Each TN has been presented and reviewed in the chronological order for ease of reference.

3a. 1107 TN 02A on Trip Rates (March 2016)

The TN notes that discussions have taken place with WBC, and that it was agreed that trip rates, proposed by AECOM, in their review of the Omega application, are appropriate to be used in this assessment, where relevant. Where trip rates were unable to be derived from the Omega application, it was agreed that the TRICS database could be used to provide an indication of the likely number of AM and PM weekday vehicular movements. As a rule, sites within Greater London have been excluded, as it is considered that greater public transport opportunities result in unrepresentative trip rates.

Trip distribution and phasing is considered and set out in HT TN 1107 TN06 Trip Discounts (March 2016). This is reviewed later in section 3c of this TRN.

The following assumptions have been made within the TN on Trip Rates:

a) Privately owned houses trip rates have been used to cover all peak period residential trips for all 1,200 dwelling units; including retirement flats, social housing and apartments. This is considered a robust approach, since these alternate residential uses are generally considered to result in lower peak period trip rates, than privately owned houses.
b) The TRICS recommended survey data for B1(c) land use classification of Industrial Units was considered to possibly be too low, and so a higher trip rate has been sought, using B1(c) surveys from the Industrial Estate section of the database, again this is considered a robust approach.
c) Discount food store trip rates have not been used as per the Omega development. Instead, Food Store rates have been used from the TRICS database and these generate higher trip rates.

These assumptions have been used to provide robust trip levels and therefore confidence can be given to the overall figures used in the assessment.

Residential Trip Rates

The residential trip rates mirror those agreed by WBC from the AECOM review of the Omega residential trip rates inserted into the Highways England VISSIM model. For completeness within this review, these are presented again within the table following:

Table 1: Residential Vehicular Trip Rate and Generation Summary (Privately Owned Houses)

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
85th Percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

No discounts have been made to account for the 100 retirement apartments included within the 1,200 dwellings total. This particular type of retirement land use generates lower trips during the weekday peak hour therefore it is considered that this a robust trip generation for the residential land use overall.

Residential apartments and social housing will also make up a proportion of the 1,200 dwellings proposed on site, but no discounts have been applied. Again, it is considered that this approach is robust and gives confidence to the overall figures used in the assessment.

Care Home Trip Rates

The care home trip rates identified for the Peel Hall assessment mirror those agreed by WBC, in the Omega Transport Assessment, and the associated VISSIM model, Highways England are therefore content with the application of these rates within the overall assessment. The Care Home trip rates are shown in the table following:

Table 2 – Care Home Vehicular Trip Rates and Generation

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per bedroom)	0.068	0.068	0.083	0.113
Retirement Flat Trips (100-beds)	7	7	8	8

Employment Trip Rates

Due to the lack of suitable 85th percentile data available within TRICS, HT have instead proposed average trip rate data, for the industrial estate (B1(c)) land uses within the site. HT selected the TRICS Land Use codes 02/C and 02/D, and those sites that did not contain operations classed as B1(c), were then manually removed, from the selection.

It is generally Highways England policy that 85th percentile data be used in developing traffic impact assessments for development sites which impact on the SRN, however given the robustness of Trip Rates demonstrated in the previous land uses, Highways England are willing to accept the use of average rates for this particular land use.

Highways England wish to clarify with HT what specific employment land use is likely to be forthcoming on the site, since there is likely to be huge variability between trip rates / vehicular types associated to potential different employment land uses. Highways England therefore request a sensitivity test using 'trip rates' for the 'Employment Office' and 'Warehousing Distribution' land uses, along with provision of details of the likely HGV / Car split. The table following presents the Employment trips rates.

Table 3 – Employment Vehicular Trip Rates

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm GFA)	69	39	20	47

Neighbourhood Centre Trip Rates (Food Store/Local Centre/Family Pub/Restaurant)
A comparison has been carried out between the trip rates from the 'Discount Food Stores' category and the generic 'Food Stores' category.

Due to the low number of surveys returned for 'Discount Food Stores', 85th percentile data has been considered unreliable. Although these rates have been used in the Omega VISSIM model, an assessment of rates for 'Food Stores' has been made to compare trip levels. The table following indicates the trip rates using the 'Discount Food Store' land use, although HT considered that this category generated low trips, and was therefore not considered robust, for use within their assessment.

Table 4 – Discount Food Store Vehicular Trip Rates

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.660	0.321	2.799	3.280
Discount Food Store Trips (2,000sqm GFA)	14	7	56	66

To provide confidence and robustness to the Peel Hall development, the peak hour trip rates and generation from the TRICS 'Food Superstores' dataset was used. The low number of surveys meant that the 85th percentile data was not reliable and consequently the average dataset was used. However, since the trip rates are considerably higher than the 'Discount Food Store' category, Highways England is content with average rates being used. The 'Food Store' rates and generations, proposed to be applied within the Peel Hall development assessment, are presented within the table following.

Table 5 – Food Store Trips

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Food Store Trips (2,000sqm GFA)	92	61	181	191

The proposed Peel Hall development also includes a 600 sqm GFA local centre. TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular that are likely to be attracted by a local centre of this size. Average trip rates were used due to the survey sample size available and the rates and trips are shown in the following table. Similarly to employment trip rates response, although it is generally Highways England policy to use 85th percentile rates, this land use is considered

a small element in the overall development and therefore, in this instance, Highways England are content with the use average trip rates.

Table 6 – Local Centre Trips

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Local Centre Trips (600sqm GFA)	30	29	36	39

Within **TN 1107 TN 02A** on Trip Rates (March 2016), the size of the proposed 'family pub and restaurant facility' was identified at 1,600 sqm GFA. This has now been superseded by **TN 1107 TN 12** Pub Vehicle Trips Update (April 2016), which identifies a reduced size of 'family pub and restaurant' at 800 sqm GFA. The TRICS database has been used to forecast the number PM peak hour vehicular trips that are likely to be attracted by a family pub/restaurant of this size, (AM is not reported due to the operating times of this land use), the trip rates and generations, (associated to an 800 sqm facility), proposed to be applied within this assessment, are identified in the following table:

Table 7 – Family Pub / Restaurant Trips (800 sq m).

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	-	-	2.847	1.845
Family Pub/Restaurant Trips (800sqm GFA)	-	-	23	15

Primary School Trip Rates

The proposed development scheme includes for to the provision of a two-form entry primary school, which could accomodate up to 420 pupils. TRICS has been used to provide an indication of the number of AM and PM peak hour vehicular trips that are likely to be attracted by a primary school of this size.

An assessment has been made from the TRICS 7.2.4 database based on average data, due to the number of surveys available. Again, whilst it is generally Highways England policy to a use 85th percentile rate, this land use is considered a small element in the overall development and therefore Highways England accept the use of average trip rates in this instance. The primary school trip rates are shown in the table following:

Table 8 – Primary School Vehicular Trip Rate

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Primary School Trips (all 420 pupils)	113	79	19	27
External Primary School Trips (60 pupils)	*16*	*11*	*3*	*4*

Sports Pitches and Ancillary Facilities Trip Rates

Adjacent to the proposed development at Peel Hall, is a linked site (Located off Windermere and Grasmere Avenues, to the southeast of Peel Hall). This site will provide a development comprising a series of new sports pitches. It is intended that this will replace those sports pitches currently located on existing Homes and Communities Agency (HCA) land, to the east of the site.

The relocated sports pitches will predominantly be used at the weekends, consequently it has therefore been agreed, at the 2013 Public Inquiry, (*Appeal ref: APP/M0655/A/13/2192076*)), that this element of the development proposals would not need to be included within the weekday assesments and modelling. Furthermore, it is considered that there will be an offset in trip generation, arising from the existing location, (sports pitches on the HCA land). Consequently, it is considered that this forms a measured analysis of the overall proposals.

Highways England is in agreement with these statements / assumptions, however it wishes to clarify whether the size of facilities / sports pitches proposed on the new site, will be consistent with those on the original site.

Vehicle Trip Impact

An addendum - TN 1107 02A (Trip Rates), has been produced as (TN 1107 02A Addendum (Peak Period Trip Rates) , this sets out the trips rates for all proposed land uses across the whole AM and PM peak periods of 0700-0930 and 1600-1830 to inform the VISSIM modelling of the network. The proposed combined peak period trips are summarised in the following table:

Table 9: Proposed Peak Hour Trips

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Family Pub/Restaurant Trips	-	-	23	15
Primary School Trips	113	79	19	27
Community Uses	10	5	8	7
Total Trips	**591**	**848**	**889**	**702**

Whilst 85th percentile rates have not been used for all uses, the uses where average rates have been applied tend to be the smaller uses, and that any difference in the rates identified, are to be off-set by those where higher rates have been selected in particular the residential land uses.

3b. 1107 TN 02A Addendum on Peak Period Trip Rates (March 2016)

The TN states that the AM peak period has been classed as 0700-0930 hours and the PM peak period has been classed as 1600-1830 hours. These peak hours are acceptable to Highways England as they tie in with the peak traffic periods that arise upon the SRN. A series of tables indicating the number of trips, has been provided within this TN.

3c. 1107 TN06 Trip Discounts (March 2016)

A third TN has been prepared by HT to set out the estimated trip discounts applied to the Peel Hall development profile which are based upon the combined factors of site access point location and the number of likely internal trips.

The assumptions made include the following:

- The distribution of vehicle trips is to be provided as per a gravity model being prepared by AECOM.
- None of the food store trips will extend beyond the local area and consequently will not travel along the A49.
- Discounts relating to Primary School trips are based on 360 pupils living on site (circa 86%), and the remaining 60 living off site (circa 14%), in the AM peak. In the PM peak, this has been set at 50% external trips, to account for teaching staff living off site, and a greater proportion of after school club children likely to be living on site.

The trip discounts proposed by HT to be applied to the overall trip generation, are identified in the following tables:

Table 10 – AM Peak Hour Trip Discounts

Land Use	Percentage AM Peak Hour 0800-0900			
	Internal	External Pass-by	External New	External Total
Residential	20%	0%	80%	80%
Care Home	0%	0%	100%	100%
Employment	0%	0%	100%	100%
Food Store	60%	10%	30%	40%
Local Centre	70%	0%	30%	30%
Family Pub/Restaurant	-	-	-	-
Primary School	75%	0%	25%	25%
Community Uses	0%	0%	100%	100%

Table 11 – PM Peak Hour Trip Discounts

Land Use	Percentage PM Peak Hour 1700-1800			
	Internal	External Pass-by	External New	External Total
Residential	20%	0%	80%	80%
Care Home	0%	0%	100%	100%
Employment	0%	0%	100%	100%
Food Store	60%	10%	30%	40%
Local Centre	70%	0%	30%	30%
Family Pub/Restaurant	25%	0%	75%	75%
Primary School	50%	0%	50%	50%
Community Uses	0%	0%	100%	100%

With regard to the food store trips Highways England question whether as much as 60% of trips would arise internally from the site. It is also questioned whether the statement that, 'None of the food store trips will extend beyond the local area and consequently will not travel along the A49', is valid and can be justified. Given the foodstores location, on the periphery of the masterplan, Highways England would expect that a higher proportion of trips would be atracted externally. An additional sensitivity test providing a higher weighting to external food store trips would be appropriate in this instance.

No evidence is provided to support the offering of discounts related to the primary school use. In an initial query made by Highways Englands call off consultants AECOM, HT responded as follows;

'*Information for primary school places issued by WBC was based on census data, and the following calculation: 0.3 places per dwelling x number of dwellings. Allowance for parents who drop off and go to work are contained within residential trips'*.

However, it is requested that HT provide a summary of the data, referred to within this statement (WBC census data and 'drop off to work trips' from TRICS). The assumptions made for the AM peak period, (With 75% of trips assumed internall and the remaining 25% external), seem unrealistic.

Although trip rates are considered robust, background data and justification is required to support these discounts.

HT should also clarify whether the school has been designed as a replacement facility for an existing school, or whether it is simply being proposed to serve the families of residents within the development site. The assumed catchment area of the school should be quoted.

Comparisons should be made to the discounting assuptions that were made in the OMEGA assessment to ensure consistency with this development.

Highways England would wish to establish a comitment to implementing the bus gate identified on the masteplan to ensure the restritiction on through trips remain in place.

3d. 1107 TN08 Number of Vehicular Trips at Each Site Access Location (April 2016)

A fourth TN has been prepared to detail the strategy for distributing internal trips at each access point across the site. The intention is to use these assumptions to inform the gravity model that AECOM are developing.

A series of tables have been provided indicating the number of vehicular trips during the AM and PM peak periods that are expected to use each of the access points of the proposed development site.

The tables indicate the plot area, land used, and associated combined vehicular trips at each access. It appears that those trips, associated to the land use for each specific plot area, will utilise the access for that specific plot. (For example, 150 dwellings are anticipated to use Mill Lane and 700 dwellings & the primary school are expected to use Mill Lane and Blackbrook Avenue).

Although geographical location appears to be a defining reason behind using certain accesses to exit and enter the site, there appears to be no rationale regarding where the vehicular trips may be travelling to on the external network. The gravity model, developed by AECOM, will provide the wider distribution, using a specially developed Gravity Model, once this exercise has been fully complete, Highways England will need to comment further.

3e. 1107 TN10 on Committed Developments (April 2016)

This TN, prepared by HT identifies the local committed developments within Warrington that are to be accounted for within the traffic impact assessment work associated with the Peel Hall site.

The committed developments include:

- Land at Benson Road, Birchwood (ref: 2015/26220).
- Birchwood Shopping Centre (ref: 2015/25880).
- Birchwood Park (ref: 2015/26044, 2014/23358 and 2008/12744).
- Calver Park (ref: 2015/26685 and 2013/22533).

The corresponding vehicular trip numbers over the peak periods of 0700 to 0930 and 1600 to 1830, and subsequent trip loading locations have been assessed for inclusion into the VISSIM model.

Within the TN on Committed Developments HT has noted the following:
Some committed developments are not included for the following reasons;

- B&Q extension at Winwick (ref: 2015/26628) as there will be no net change to the store's overall GFA and it is therefore considered that there would be very little, if any, impact on the local highway network during peak hours as a result of this development.
- Due to the location of the Omega development from the Peel Hall site it would not need to be accounted for separately within the modelling, over and above the local growth rates that are to be applied (HTp Technical Note TN/07).

In summary, the development proposals at Benson Road and Birchwood Park result in the provision of additional GFA and subsequent traffic generation above current operational levels. The trip rates and loading associated with these new developments are based on the 2015 Transport Assessments that accompanied the respective planning applications.

At Birchwood Shopping Centre the proposed changes to the development profile to replace 2,565sqm GFA of B1 land uses with 4,907sqm GFA A1, A3, A5 and D1 land uses results in lower forecast AM peak hour trips but higher PM trip rates during the weekday. This is supported by an associated increase in car parking provision. The net vehicle trips and loading for these changes are also based on the 2015 Transport Assessment.

At Calver Park, the proposed floor area also remains the same with the increase in motor sales GFA offset by a reduction in proposed B2/B8 GFA. The 2015 TA set out that the proposed increase in motor sales floor area would not create an increase in the level of weekday peak hour vehicle trips above the agreed motor sales floor area, which would have been for two car showrooms at a GFA of circa 967sqm each, due to the nature of both the more recent (2015) and previously proposed (2013) permissions.

The peak hour trip rates for the proposed development profiles have been taken from the relevant Transport Assessment for each of the planning applications, taking into the account the associated highway officer consultation responses and Decision Notices. Highways England are content with this approach for these committed development. However Highways England question why the OMEGA development has not been included as a committed development? In addition, supporting information should be provided identifying the negligible net change to the overall GFA of the B&Q extension at Winwick (ref: 2015/26628), and impact on the local highway network during peak hours. A sensitivity

test, with OMEGA and B&Q at Winwick should included as committed development, within the wider assessments in the TA.

3f. 1107 TN 12 Pub Vehicle Trips Update (April 2016)

An update to the size of the proposed family pub and restaurant has been provided in the technical note referenced above. This has already been discussed earlier within this TN, in Section 3a.

4. Summary

Highways England is keen to ensure that a fair and robust assessment is undertaken of the likely development proposals. In order to complete a robust analysis, Highways England request the inclusion of the following further information within the assessment / analysis:

1) Information should be provided as to the specific employment land use, that is likely to be forthcoming on the site, since there is likely to be huge variability between trip rates / vehicular types associated to the various 'employment' land uses. Highways England therefore request a sensitivity test also using 'trip rates' for the 'Employment Office' and 'Warehousing Distribution' land uses, along with provision of details of the likely HGV / Car split.
2) Highways England wishes to clarify whether the size of facilities / sports pitches proposed on the new site, will be consistent with those on the original site.
3) As part of the trip discounting assumptions, an additional sensitivity test, providing a higher weighting to 'external' food store trips will be required to satisfy Highways England.
4) HT are requested to provide a summary of the data, referred to within their statement concerning the derivation of primary school trip discounts, (WBC census data and 'drop off to work trips' from TRICS).
5) Clarification should be provided as to whether the school has been designed as a replacement facility for an existing school, or whether it is simply being proposed to serve the families of residents within the development site. The assumed catchment area of the school should also be quoted.
6) Within the assessment, comparisons should be made to the discounting assumptions, that have been made within the OMEGA assessment, to ensure consistency.
7) Highways England would wish to establish a commitment to implementing the bus gate identified on the masterplan to ensure the restriction on through trips remain in place, throughout the life of the development.
8) Once the gravity model, being developed by AECOM, has been complete, Highways England would wish to comment further upon the assumptions made about the weighting of vehicular trips upon each access.
9) The OMEGA development should be included as a committed scheme. Supporting information should be provided identifying the negligible net change to the overall GFA of the B&Q extension at Winwick (ref: 2015/26628), and impact on the local highway network during peak hours. Highways England requests a sensitivity test, within the wider TA analysis, which includes OMEGA development and Winwick B&Q, as committed schemes.

Appendix 2

TRICS Reports - Employment

Calculation Reference: AUDIT-355901-160725-0706

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	KC	KENT	3 days
	SC	SURREY	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
09	NORTH		
	DH	DURHAM	2 days
	TW	TYNE & WEAR	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 1500 to 8000 (units: sqm)
Range Selected by User: 1100 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 26/11/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	6 days
Thursday	2 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	6

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	4
Commercial Zone	3
Residential Zone	4
Built-Up Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	4 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	3 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	6 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 DH-02-A-01 RPMI OFFICES DURHAM
BRINKBURN ROAD

DARLINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 3372 sqm
Survey date: FRIDAY 05/11/10 Survey Type: MANUAL

2 DH-02-A-02 CONSTRUCTION COMPANY DURHAM
DURHAM ROAD
BOWBURN
NEAR DURHAM
Edge of Town
Industrial Zone
Total Gross floor area: 2000 sqm
Survey date: TUESDAY 27/11/12 Survey Type: MANUAL

3 KC-02-A-06 LAND REGISTRY KENT
FOREST ROAD
CAMDEN PARK
TUNBRIDGE WELLS
Edge of Town
Residential Zone
Total Gross floor area: 5677 sqm
Survey date: TUESDAY 01/12/09 Survey Type: MANUAL

4 KC-02-A-07 KCC HIGHWAYS REG. KENT
KAVELIN WAY
HENWOOD IND. ESTATE
ASHFORD
Edge of Town
Commercial Zone
Total Gross floor area: 2525 sqm
Survey date: MONDAY 05/12/11 Survey Type: MANUAL

5 KC-02-A-08 KCC HIGHWAYS REG. OFFICE KENT
ST MICHAEL'S CLOSE
CLAY WOOD
AYLESFORD
Edge of Town
Industrial Zone
Total Gross floor area: 3168 sqm
Survey date: MONDAY 28/11/11 Survey Type: MANUAL

6 LC-02-A-09 OFFICES LANCASHIRE
FURTHERGATE

BLACKBURN
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 2600 sqm
Survey date: TUESDAY 04/06/13 Survey Type: MANUAL

7 SC-02-A-15 ACCOUNTANTS SURREY
BOXGROVE ROAD

GUILDFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1896 sqm
Survey date: TUESDAY 05/10/10 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SF-02-A-01 COUNCIL OFFICES SUFFOLK
BEETONS WAY

BURY ST. EDMUNDS
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 8000 sqm
Survey date: MONDAY 27/09/10 Survey Type: MANUAL

9 TW-02-A-03 DEVELOPMENT AGENCY TYNE & WEAR
KINGFISHER BOULEVARD
LEMINGTON
NEWCASTLE UPON TYNE
Edge of Town
Commercial Zone
Total Gross floor area: 6480 sqm
Survey date: THURSDAY 11/12/08 Survey Type: MANUAL

10 TW-02-A-04 HOUSING CO. TYNE & WEAR
EARLSWAY
TEAM VALLEY TRAD. EST.
GATESHEAD
Edge of Town
Industrial Zone
Total Gross floor area: 2500 sqm
Survey date: TUESDAY 29/09/09 Survey Type: MANUAL

11 TW-02-A-05 TELEVISION CO. TYNE & WEAR
DELTA BANK ROAD
METRO RIVERSIDE PARK
GATESHEAD
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 1500 sqm
Survey date: TUESDAY 29/09/09 Survey Type: MANUAL

12 WY-02-A-03 OFFICE WEST YORKSHIRE
VICTORIA ROAD
HEADINGLEY
LEEDS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2696 sqm
Survey date: THURSDAY 17/06/10 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.266	12	3535	0.035	12	3535	0.301
07:30 - 08:00	12	3535	0.467	12	3535	0.085	12	3535	0.552
08:00 - 08:30	12	3535	0.804	12	3535	0.137	12	3535	0.941
08:30 - 09:00	12	3535	1.106	12	3535	0.123	12	3535	1.229
09:00 - 09:30	12	3535	0.905	12	3535	0.198	12	3535	1.103
09:30 - 10:00	12	3535	0.512	12	3535	0.248	12	3535	0.760
10:00 - 10:30	12	3535	0.288	12	3535	0.179	12	3535	0.467
10:30 - 11:00	12	3535	0.186	12	3535	0.205	12	3535	0.391
11:00 - 11:30	12	3535	0.212	12	3535	0.207	12	3535	0.419
11:30 - 12:00	12	3535	0.198	12	3535	0.196	12	3535	0.394
12:00 - 12:30	12	3535	0.243	12	3535	0.323	12	3535	0.566
12:30 - 13:00	12	3535	0.340	12	3535	0.347	12	3535	0.687
13:00 - 13:30	12	3535	0.347	12	3535	0.297	12	3535	0.644
13:30 - 14:00	12	3535	0.340	12	3535	0.217	12	3535	0.557
14:00 - 14:30	12	3535	0.224	12	3535	0.200	12	3535	0.424
14:30 - 15:00	12	3535	0.205	12	3535	0.309	12	3535	0.514
15:00 - 15:30	12	3535	0.156	12	3535	0.328	12	3535	0.484
15:30 - 16:00	12	3535	0.189	12	3535	0.323	12	3535	0.512
16:00 - 16:30	12	3535	0.170	12	3535	0.644	12	3535	0.814
16:30 - 17:00	12	3535	0.134	12	3535	0.750	12	3535	0.884
17:00 - 17:30	12	3535	0.130	12	3535	1.174	12	3535	1.304
17:30 - 18:00	12	3535	0.073	12	3535	0.663	12	3535	0.736
18:00 - 18:30	12	3535	0.035	12	3535	0.368	12	3535	0.403
18:30 - 19:00	12	3535	0.019	12	3535	0.196	12	3535	0.215
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			7.549			7.752			15.301

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.005	12	3535	0.005	12	3535	0.010
07:30 - 08:00	12	3535	0.017	12	3535	0.017	12	3535	0.034
08:00 - 08:30	12	3535	0.009	12	3535	0.009	12	3535	0.018
08:30 - 09:00	12	3535	0.009	12	3535	0.009	12	3535	0.018
09:00 - 09:30	12	3535	0.009	12	3535	0.012	12	3535	0.021
09:30 - 10:00	12	3535	0.026	12	3535	0.021	12	3535	0.047
10:00 - 10:30	12	3535	0.005	12	3535	0.009	12	3535	0.014
10:30 - 11:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
11:00 - 11:30	12	3535	0.014	12	3535	0.014	12	3535	0.028
11:30 - 12:00	12	3535	0.005	12	3535	0.005	12	3535	0.010
12:00 - 12:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
12:30 - 13:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:00 - 13:30	12	3535	0.007	12	3535	0.007	12	3535	0.014
13:30 - 14:00	12	3535	0.005	12	3535	0.002	12	3535	0.007
14:00 - 14:30	12	3535	0.005	12	3535	0.005	12	3535	0.010
14:30 - 15:00	12	3535	0.005	12	3535	0.005	12	3535	0.010
15:00 - 15:30	12	3535	0.007	12	3535	0.009	12	3535	0.016
15:30 - 16:00	12	3535	0.009	12	3535	0.005	12	3535	0.014
16:00 - 16:30	12	3535	0.002	12	3535	0.007	12	3535	0.009
16:30 - 17:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
17:00 - 17:30	12	3535	0.012	12	3535	0.009	12	3535	0.021
17:30 - 18:00	12	3535	0.005	12	3535	0.007	12	3535	0.012
18:00 - 18:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
18:30 - 19:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.162			0.163			0.325

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
07:30 - 08:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
08:00 - 08:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
08:30 - 09:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
09:00 - 09:30	12	3535	0.007	12	3535	0.007	12	3535	0.014
09:30 - 10:00	12	3535	0.002	12	3535	0.005	12	3535	0.007
10:00 - 10:30	12	3535	0.009	12	3535	0.009	12	3535	0.018
10:30 - 11:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
11:00 - 11:30	12	3535	0.017	12	3535	0.012	12	3535	0.029
11:30 - 12:00	12	3535	0.005	12	3535	0.009	12	3535	0.014
12:00 - 12:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
12:30 - 13:00	12	3535	0.005	12	3535	0.002	12	3535	0.007
13:00 - 13:30	12	3535	0.002	12	3535	0.005	12	3535	0.007
13:30 - 14:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
14:00 - 14:30	12	3535	0.005	12	3535	0.002	12	3535	0.007
14:30 - 15:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:00 - 15:30	12	3535	0.005	12	3535	0.007	12	3535	0.012
15:30 - 16:00	12	3535	0.007	12	3535	0.005	12	3535	0.012
16:00 - 16:30	12	3535	0.009	12	3535	0.007	12	3535	0.016
16:30 - 17:00	12	3535	0.005	12	3535	0.005	12	3535	0.010
17:00 - 17:30	12	3535	0.000	12	3535	0.005	12	3535	0.005
17:30 - 18:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
18:00 - 18:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
18:30 - 19:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.090			0.088			0.178

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
07:30 - 08:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
08:00 - 08:30	12	3535	0.005	12	3535	0.002	12	3535	0.007
08:30 - 09:00	12	3535	0.007	12	3535	0.002	12	3535	0.009
09:00 - 09:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
09:30 - 10:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
10:00 - 10:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
10:30 - 11:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
11:00 - 11:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
11:30 - 12:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
12:00 - 12:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
12:30 - 13:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
13:00 - 13:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
13:30 - 14:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
14:00 - 14:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
14:30 - 15:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
15:00 - 15:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
15:30 - 16:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
16:00 - 16:30	12	3535	0.002	12	3535	0.002	12	3535	0.004
16:30 - 17:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
17:00 - 17:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
17:30 - 18:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
18:00 - 18:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
18:30 - 19:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.052			0.048			0.100

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
07:30 - 08:00	12	3535	0.005	12	3535	0.000	12	3535	0.005
08:00 - 08:30	12	3535	0.014	12	3535	0.000	12	3535	0.014
08:30 - 09:00	12	3535	0.014	12	3535	0.000	12	3535	0.014
09:00 - 09:30	12	3535	0.005	12	3535	0.000	12	3535	0.005
09:30 - 10:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:00 - 10:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:30 - 11:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
11:00 - 11:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
11:30 - 12:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
12:00 - 12:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
12:30 - 13:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:00 - 13:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
13:30 - 14:00	12	3535	0.002	12	3535	0.005	12	3535	0.007
14:00 - 14:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
14:30 - 15:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:00 - 15:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:30 - 16:00	12	3535	0.002	12	3535	0.002	12	3535	0.004
16:00 - 16:30	12	3535	0.007	12	3535	0.005	12	3535	0.012
16:30 - 17:00	12	3535	0.000	12	3535	0.014	12	3535	0.014
17:00 - 17:30	12	3535	0.000	12	3535	0.009	12	3535	0.009
17:30 - 18:00	12	3535	0.000	12	3535	0.017	12	3535	0.017
18:00 - 18:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
18:30 - 19:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.057			0.056			0.113

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.297	12	3535	0.035	12	3535	0.332
07:30 - 08:00	12	3535	0.507	12	3535	0.075	12	3535	0.582
08:00 - 08:30	12	3535	0.875	12	3535	0.118	12	3535	0.993
08:30 - 09:00	12	3535	1.226	12	3535	0.127	12	3535	1.353
09:00 - 09:30	12	3535	0.976	12	3535	0.219	12	3535	1.195
09:30 - 10:00	12	3535	0.545	12	3535	0.276	12	3535	0.821
10:00 - 10:30	12	3535	0.323	12	3535	0.193	12	3535	0.516
10:30 - 11:00	12	3535	0.205	12	3535	0.219	12	3535	0.424
11:00 - 11:30	12	3535	0.238	12	3535	0.226	12	3535	0.464
11:30 - 12:00	12	3535	0.233	12	3535	0.250	12	3535	0.483
12:00 - 12:30	12	3535	0.259	12	3535	0.361	12	3535	0.620
12:30 - 13:00	12	3535	0.403	12	3535	0.391	12	3535	0.794
13:00 - 13:30	12	3535	0.403	12	3535	0.349	12	3535	0.752
13:30 - 14:00	12	3535	0.415	12	3535	0.243	12	3535	0.658
14:00 - 14:30	12	3535	0.283	12	3535	0.240	12	3535	0.523
14:30 - 15:00	12	3535	0.226	12	3535	0.330	12	3535	0.556
15:00 - 15:30	12	3535	0.156	12	3535	0.377	12	3535	0.533
15:30 - 16:00	12	3535	0.196	12	3535	0.340	12	3535	0.536
16:00 - 16:30	12	3535	0.198	12	3535	0.724	12	3535	0.922
16:30 - 17:00	12	3535	0.153	12	3535	0.811	12	3535	0.964
17:00 - 17:30	12	3535	0.139	12	3535	1.316	12	3535	1.455
17:30 - 18:00	12	3535	0.075	12	3535	0.703	12	3535	0.778
18:00 - 18:30	12	3535	0.042	12	3535	0.398	12	3535	0.440
18:30 - 19:00	12	3535	0.021	12	3535	0.207	12	3535	0.228
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.394			8.528			16.922

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.014	12	3535	0.000	12	3535	0.014
07:30 - 08:00	12	3535	0.033	12	3535	0.000	12	3535	0.033
08:00 - 08:30	12	3535	0.094	12	3535	0.005	12	3535	0.099
08:30 - 09:00	12	3535	0.139	12	3535	0.026	12	3535	0.165
09:00 - 09:30	12	3535	0.097	12	3535	0.042	12	3535	0.139
09:30 - 10:00	12	3535	0.073	12	3535	0.040	12	3535	0.113
10:00 - 10:30	12	3535	0.066	12	3535	0.038	12	3535	0.104
10:30 - 11:00	12	3535	0.026	12	3535	0.092	12	3535	0.118
11:00 - 11:30	12	3535	0.042	12	3535	0.057	12	3535	0.099
11:30 - 12:00	12	3535	0.047	12	3535	0.068	12	3535	0.115
12:00 - 12:30	12	3535	0.132	12	3535	0.212	12	3535	0.344
12:30 - 13:00	12	3535	0.198	12	3535	0.177	12	3535	0.375
13:00 - 13:30	12	3535	0.172	12	3535	0.158	12	3535	0.330
13:30 - 14:00	12	3535	0.196	12	3535	0.094	12	3535	0.290
14:00 - 14:30	12	3535	0.127	12	3535	0.066	12	3535	0.193
14:30 - 15:00	12	3535	0.047	12	3535	0.050	12	3535	0.097
15:00 - 15:30	12	3535	0.026	12	3535	0.040	12	3535	0.066
15:30 - 16:00	12	3535	0.031	12	3535	0.054	12	3535	0.085
16:00 - 16:30	12	3535	0.017	12	3535	0.073	12	3535	0.090
16:30 - 17:00	12	3535	0.045	12	3535	0.073	12	3535	0.118
17:00 - 17:30	12	3535	0.012	12	3535	0.118	12	3535	0.130
17:30 - 18:00	12	3535	0.012	12	3535	0.064	12	3535	0.076
18:00 - 18:30	12	3535	0.005	12	3535	0.040	12	3535	0.045
18:30 - 19:00	12	3535	0.002	12	3535	0.005	12	3535	0.007
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.653			1.592			3.245

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.009	12	3535	0.000	12	3535	0.009
07:30 - 08:00	12	3535	0.017	12	3535	0.000	12	3535	0.017
08:00 - 08:30	12	3535	0.066	12	3535	0.000	12	3535	0.066
08:30 - 09:00	12	3535	0.064	12	3535	0.000	12	3535	0.064
09:00 - 09:30	12	3535	0.035	12	3535	0.000	12	3535	0.035
09:30 - 10:00	12	3535	0.024	12	3535	0.000	12	3535	0.024
10:00 - 10:30	12	3535	0.012	12	3535	0.000	12	3535	0.012
10:30 - 11:00	12	3535	0.009	12	3535	0.000	12	3535	0.009
11:00 - 11:30	12	3535	0.005	12	3535	0.002	12	3535	0.007
11:30 - 12:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
12:00 - 12:30	12	3535	0.009	12	3535	0.005	12	3535	0.014
12:30 - 13:00	12	3535	0.000	12	3535	0.005	12	3535	0.005
13:00 - 13:30	12	3535	0.000	12	3535	0.009	12	3535	0.009
13:30 - 14:00	12	3535	0.007	12	3535	0.007	12	3535	0.014
14:00 - 14:30	12	3535	0.002	12	3535	0.024	12	3535	0.026
14:30 - 15:00	12	3535	0.000	12	3535	0.009	12	3535	0.009
15:00 - 15:30	12	3535	0.000	12	3535	0.005	12	3535	0.005
15:30 - 16:00	12	3535	0.005	12	3535	0.005	12	3535	0.010
16:00 - 16:30	12	3535	0.000	12	3535	0.026	12	3535	0.026
16:30 - 17:00	12	3535	0.002	12	3535	0.071	12	3535	0.073
17:00 - 17:30	12	3535	0.000	12	3535	0.042	12	3535	0.042
17:30 - 18:00	12	3535	0.000	12	3535	0.085	12	3535	0.085
18:00 - 18:30	12	3535	0.000	12	3535	0.042	12	3535	0.042
18:30 - 19:00	12	3535	0.000	12	3535	0.005	12	3535	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.266			0.342			0.608

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
07:30 - 08:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
08:00 - 08:30	12	3535	0.005	12	3535	0.000	12	3535	0.005
08:30 - 09:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
09:00 - 09:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
09:30 - 10:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:00 - 10:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:30 - 11:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
11:00 - 11:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
11:30 - 12:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
12:00 - 12:30	12	3535	0.002	12	3535	0.000	12	3535	0.002
12:30 - 13:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:00 - 13:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:30 - 14:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
14:00 - 14:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
14:30 - 15:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:00 - 15:30	12	3535	0.000	12	3535	0.002	12	3535	0.002
15:30 - 16:00	12	3535	0.000	12	3535	0.005	12	3535	0.005
16:00 - 16:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
16:30 - 17:00	12	3535	0.000	12	3535	0.007	12	3535	0.007
17:00 - 17:30	12	3535	0.000	12	3535	0.005	12	3535	0.005
17:30 - 18:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
18:00 - 18:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
18:30 - 19:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.013			0.021			0.034

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
07:30 - 08:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
08:00 - 08:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
08:30 - 09:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
09:00 - 09:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
09:30 - 10:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:00 - 10:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
10:30 - 11:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
11:00 - 11:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
11:30 - 12:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
12:00 - 12:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
12:30 - 13:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:00 - 13:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
13:30 - 14:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
14:00 - 14:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
14:30 - 15:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:00 - 15:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
15:30 - 16:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
16:00 - 16:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
16:30 - 17:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
17:00 - 17:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
17:30 - 18:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
18:00 - 18:30	12	3535	0.000	12	3535	0.000	12	3535	0.000
18:30 - 19:00	12	3535	0.000	12	3535	0.000	12	3535	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.012	12	3535	0.000	12	3535	0.012
07:30 - 08:00	12	3535	0.019	12	3535	0.000	12	3535	0.019
08:00 - 08:30	12	3535	0.071	12	3535	0.000	12	3535	0.071
08:30 - 09:00	12	3535	0.064	12	3535	0.000	12	3535	0.064
09:00 - 09:30	12	3535	0.035	12	3535	0.002	12	3535	0.037
09:30 - 10:00	12	3535	0.024	12	3535	0.000	12	3535	0.024
10:00 - 10:30	12	3535	0.012	12	3535	0.000	12	3535	0.012
10:30 - 11:00	12	3535	0.009	12	3535	0.000	12	3535	0.009
11:00 - 11:30	12	3535	0.005	12	3535	0.002	12	3535	0.007
11:30 - 12:00	12	3535	0.002	12	3535	0.000	12	3535	0.002
12:00 - 12:30	12	3535	0.012	12	3535	0.005	12	3535	0.017
12:30 - 13:00	12	3535	0.000	12	3535	0.005	12	3535	0.005
13:00 - 13:30	12	3535	0.000	12	3535	0.009	12	3535	0.009
13:30 - 14:00	12	3535	0.007	12	3535	0.007	12	3535	0.014
14:00 - 14:30	12	3535	0.002	12	3535	0.024	12	3535	0.026
14:30 - 15:00	12	3535	0.000	12	3535	0.009	12	3535	0.009
15:00 - 15:30	12	3535	0.000	12	3535	0.007	12	3535	0.007
15:30 - 16:00	12	3535	0.005	12	3535	0.009	12	3535	0.014
16:00 - 16:30	12	3535	0.000	12	3535	0.026	12	3535	0.026
16:30 - 17:00	12	3535	0.002	12	3535	0.078	12	3535	0.080
17:00 - 17:30	12	3535	0.000	12	3535	0.047	12	3535	0.047
17:30 - 18:00	12	3535	0.000	12	3535	0.085	12	3535	0.085
18:00 - 18:30	12	3535	0.000	12	3535	0.042	12	3535	0.042
18:30 - 19:00	12	3535	0.000	12	3535	0.005	12	3535	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.281			0.362			0.643

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	3535	0.325	12	3535	0.035	12	3535	0.360
07:30 - 08:00	12	3535	0.563	12	3535	0.075	12	3535	0.638
08:00 - 08:30	12	3535	1.054	12	3535	0.123	12	3535	1.177
08:30 - 09:00	12	3535	1.443	12	3535	0.153	12	3535	1.596
09:00 - 09:30	12	3535	1.113	12	3535	0.264	12	3535	1.377
09:30 - 10:00	12	3535	0.641	12	3535	0.316	12	3535	0.957
10:00 - 10:30	12	3535	0.401	12	3535	0.231	12	3535	0.632
10:30 - 11:00	12	3535	0.243	12	3535	0.311	12	3535	0.554
11:00 - 11:30	12	3535	0.288	12	3535	0.285	12	3535	0.573
11:30 - 12:00	12	3535	0.285	12	3535	0.318	12	3535	0.603
12:00 - 12:30	12	3535	0.403	12	3535	0.578	12	3535	0.981
12:30 - 13:00	12	3535	0.601	12	3535	0.573	12	3535	1.174
13:00 - 13:30	12	3535	0.575	12	3535	0.519	12	3535	1.094
13:30 - 14:00	12	3535	0.620	12	3535	0.349	12	3535	0.969
14:00 - 14:30	12	3535	0.413	12	3535	0.330	12	3535	0.743
14:30 - 15:00	12	3535	0.273	12	3535	0.389	12	3535	0.662
15:00 - 15:30	12	3535	0.182	12	3535	0.424	12	3535	0.606
15:30 - 16:00	12	3535	0.233	12	3535	0.406	12	3535	0.639
16:00 - 16:30	12	3535	0.222	12	3535	0.828	12	3535	1.050
16:30 - 17:00	12	3535	0.200	12	3535	0.976	12	3535	1.176
17:00 - 17:30	12	3535	0.151	12	3535	1.490	12	3535	1.641
17:30 - 18:00	12	3535	0.087	12	3535	0.868	12	3535	0.955
18:00 - 18:30	12	3535	0.047	12	3535	0.483	12	3535	0.530
18:30 - 19:00	12	3535	0.024	12	3535	0.217	12	3535	0.241
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			10.387			10.541			20.928

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1500 - 8000 (units: sqm)
Survey date date range:	01/01/08 - 26/11/15
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-355901-160613-0622

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
09	NORTH		
	CB	CUMBRIA	1 days
	TV	TEES VALLEY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 387 to 4700 (units: sqm)
Range Selected by User: 387 to 10000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 18/09/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	3 days
Wednesday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	4
Commercial Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B8	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CB-02-F-01	DOMINO'S PIZZA		CUMBRIA
	COWPER ROAD GILWILLY IND. ESTATE PENRITH Edge of Town Industrial Zone			
	Total Gross floor area:		2950 sqm	
	Survey date: TUESDAY		10/06/14	Survey Type: MANUAL
2	DS-02-F-01	ARMADILLO S. STORAGE		DERBYSHIRE
	FORRESTERS BUSINESS P.. SINFIN LANE DERBY Edge of Town Centre Commercial Zone			
	Total Gross floor area:		1900 sqm	
	Survey date: TUESDAY		05/07/11	Survey Type: MANUAL
3	SF-02-F-03	ROAD HAULAGE		SUFFOLK
	CENTRAL AVENUE WARREN HEATH IPSWICH Edge of Town Industrial Zone			
	Total Gross floor area:		4700 sqm	
	Survey date: FRIDAY		18/09/15	Survey Type: MANUAL
4	TV-02-F-03	ELECTRICAL COMPONENTS		TEES VALLEY
	UNIT 8,NAVIGATOR COURT STOCKTON-ON-TEES Suburban Area (PPS6 Out of Centre) Industrial Zone			
	Total Gross floor area:		387 sqm	
	Survey date: TUESDAY		28/06/11	Survey Type: MANUAL
5	WM-02-F-01	LEGETT LOGIS.		WEST MIDLANDS
	SAMPSON ROAD NORTH BIRMINGHAM Edge of Town Centre Industrial Zone			
	Total Gross floor area:		4000 sqm	
	Survey date: WEDNESDAY		17/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.102	1	2950	0.000	1	2950	0.102
06:00 - 06:30	1	2950	0.034	1	2950	0.000	1	2950	0.034
06:30 - 07:00	1	2950	0.102	1	2950	0.034	1	2950	0.136
07:00 - 07:30	5	2787	0.108	5	2787	0.050	5	2787	0.158
07:30 - 08:00	5	2787	0.115	5	2787	0.065	5	2787	0.180
08:00 - 08:30	5	2787	0.100	5	2787	0.079	5	2787	0.179
08:30 - 09:00	5	2787	0.201	5	2787	0.086	5	2787	0.287
09:00 - 09:30	5	2787	0.079	5	2787	0.086	5	2787	0.165
09:30 - 10:00	5	2787	0.100	5	2787	0.065	5	2787	0.165
10:00 - 10:30	5	2787	0.129	5	2787	0.115	5	2787	0.244
10:30 - 11:00	5	2787	0.079	5	2787	0.100	5	2787	0.179
11:00 - 11:30	5	2787	0.108	5	2787	0.129	5	2787	0.237
11:30 - 12:00	5	2787	0.108	5	2787	0.050	5	2787	0.158
12:00 - 12:30	5	2787	0.165	5	2787	0.122	5	2787	0.287
12:30 - 13:00	5	2787	0.108	5	2787	0.079	5	2787	0.187
13:00 - 13:30	5	2787	0.144	5	2787	0.158	5	2787	0.302
13:30 - 14:00	5	2787	0.122	5	2787	0.086	5	2787	0.208
14:00 - 14:30	5	2787	0.129	5	2787	0.129	5	2787	0.258
14:30 - 15:00	5	2787	0.122	5	2787	0.129	5	2787	0.251
15:00 - 15:30	5	2787	0.100	5	2787	0.129	5	2787	0.229
15:30 - 16:00	5	2787	0.057	5	2787	0.136	5	2787	0.193
16:00 - 16:30	5	2787	0.065	5	2787	0.093	5	2787	0.158
16:30 - 17:00	5	2787	0.079	5	2787	0.158	5	2787	0.237
17:00 - 17:30	5	2787	0.065	5	2787	0.129	5	2787	0.194
17:30 - 18:00	5	2787	0.022	5	2787	0.122	5	2787	0.144
18:00 - 18:30	5	2787	0.050	5	2787	0.072	5	2787	0.122
18:30 - 19:00	5	2787	0.029	5	2787	0.057	5	2787	0.086
19:00 - 19:30	1	2950	0.169	1	2950	0.102	1	2950	0.271
19:30 - 20:00	1	2950	0.034	1	2950	0.102	1	2950	0.136
20:00 - 20:30	1	2950	0.034	1	2950	0.034	1	2950	0.068
20:30 - 21:00	1	2950	0.068	1	2950	0.102	1	2950	0.170
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.927			2.798			5.725

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	387 - 4700 (units: sqm)
Survey date date range:	01/01/08 - 18/09/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:00 - 06:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:30 - 07:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
07:00 - 07:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
07:30 - 08:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
08:00 - 08:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
08:30 - 09:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
09:00 - 09:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
09:30 - 10:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:00 - 10:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:30 - 11:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:00 - 11:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:30 - 12:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:00 - 12:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:30 - 13:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
13:00 - 13:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
13:30 - 14:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
14:00 - 14:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
14:30 - 15:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
15:00 - 15:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
15:30 - 16:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
16:00 - 16:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
16:30 - 17:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
17:00 - 17:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
17:30 - 18:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:00 - 18:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:30 - 19:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
19:00 - 19:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
19:30 - 20:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:00 - 20:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:30 - 21:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	387 - 4700 (units: sqm)
Survey date date range:	01/01/08 - 18/09/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:00 - 06:30	1	2950	0.034	1	2950	0.000	1	2950	0.034
06:30 - 07:00	1	2950	0.034	1	2950	0.000	1	2950	0.034
07:00 - 07:30	5	2787	0.029	5	2787	0.036	5	2787	0.065
07:30 - 08:00	5	2787	0.022	5	2787	0.036	5	2787	0.058
08:00 - 08:30	5	2787	0.029	5	2787	0.029	5	2787	0.058
08:30 - 09:00	5	2787	0.079	5	2787	0.043	5	2787	0.122
09:00 - 09:30	5	2787	0.043	5	2787	0.036	5	2787	0.079
09:30 - 10:00	5	2787	0.036	5	2787	0.022	5	2787	0.058
10:00 - 10:30	5	2787	0.050	5	2787	0.029	5	2787	0.079
10:30 - 11:00	5	2787	0.036	5	2787	0.057	5	2787	0.093
11:00 - 11:30	5	2787	0.086	5	2787	0.086	5	2787	0.172
11:30 - 12:00	5	2787	0.029	5	2787	0.029	5	2787	0.058
12:00 - 12:30	5	2787	0.057	5	2787	0.014	5	2787	0.071
12:30 - 13:00	5	2787	0.065	5	2787	0.029	5	2787	0.094
13:00 - 13:30	5	2787	0.079	5	2787	0.036	5	2787	0.115
13:30 - 14:00	5	2787	0.072	5	2787	0.029	5	2787	0.101
14:00 - 14:30	5	2787	0.093	5	2787	0.043	5	2787	0.136
14:30 - 15:00	5	2787	0.072	5	2787	0.029	5	2787	0.101
15:00 - 15:30	5	2787	0.065	5	2787	0.050	5	2787	0.115
15:30 - 16:00	5	2787	0.022	5	2787	0.022	5	2787	0.044
16:00 - 16:30	5	2787	0.036	5	2787	0.043	5	2787	0.079
16:30 - 17:00	5	2787	0.043	5	2787	0.029	5	2787	0.072
17:00 - 17:30	5	2787	0.014	5	2787	0.036	5	2787	0.050
17:30 - 18:00	5	2787	0.000	5	2787	0.065	5	2787	0.065
18:00 - 18:30	5	2787	0.007	5	2787	0.022	5	2787	0.029
18:30 - 19:00	5	2787	0.007	5	2787	0.043	5	2787	0.050
19:00 - 19:30	1	2950	0.000	1	2950	0.102	1	2950	0.102
19:30 - 20:00	1	2950	0.000	1	2950	0.102	1	2950	0.102
20:00 - 20:30	1	2950	0.000	1	2950	0.034	1	2950	0.034
20:30 - 21:00	1	2950	0.000	1	2950	0.068	1	2950	0.068
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.139			1.199			2.338

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	387 - 4700 (units: sqm)
Survey date date range:	01/01/08 - 18/09/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:00 - 06:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:30 - 07:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
07:00 - 07:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
07:30 - 08:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
08:00 - 08:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
08:30 - 09:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
09:00 - 09:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
09:30 - 10:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:00 - 10:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:30 - 11:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:00 - 11:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:30 - 12:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:00 - 12:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:30 - 13:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
13:00 - 13:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
13:30 - 14:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
14:00 - 14:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
14:30 - 15:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
15:00 - 15:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
15:30 - 16:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
16:00 - 16:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
16:30 - 17:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
17:00 - 17:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
17:30 - 18:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:00 - 18:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:30 - 19:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
19:00 - 19:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
19:30 - 20:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:00 - 20:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:30 - 21:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	387 - 4700 (units: sqm)
Survey date date range:	01/01/08 - 18/09/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:00 - 06:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
06:30 - 07:00	1	2950	0.034	1	2950	0.000	1	2950	0.034
07:00 - 07:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
07:30 - 08:00	5	2787	0.007	5	2787	0.000	5	2787	0.007
08:00 - 08:30	5	2787	0.007	5	2787	0.000	5	2787	0.007
08:30 - 09:00	5	2787	0.007	5	2787	0.000	5	2787	0.007
09:00 - 09:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
09:30 - 10:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:00 - 10:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
10:30 - 11:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:00 - 11:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
11:30 - 12:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:00 - 12:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
12:30 - 13:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
13:00 - 13:30	5	2787	0.000	5	2787	0.007	5	2787	0.007
13:30 - 14:00	5	2787	0.007	5	2787	0.000	5	2787	0.007
14:00 - 14:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
14:30 - 15:00	5	2787	0.000	5	2787	0.007	5	2787	0.007
15:00 - 15:30	5	2787	0.000	5	2787	0.007	5	2787	0.007
15:30 - 16:00	5	2787	0.000	5	2787	0.007	5	2787	0.007
16:00 - 16:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
16:30 - 17:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
17:00 - 17:30	5	2787	0.000	5	2787	0.007	5	2787	0.007
17:30 - 18:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:00 - 18:30	5	2787	0.000	5	2787	0.000	5	2787	0.000
18:30 - 19:00	5	2787	0.000	5	2787	0.000	5	2787	0.000
19:00 - 19:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
19:30 - 20:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:00 - 20:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
20:30 - 21:00	1	2950	0.000	1	2950	0.000	1	2950	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.062			0.035			0.097

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	387 - 4700 (units: sqm)
Survey date date range:	01/01/08 - 18/09/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 3

Parameters Plan

KEYS

- Site Boundary
- Areas within Site boundary and excluded from the development
- Public right of way
- Boundary between the historic townships of Arbury and Houghton (Important Hedgerow)
- Boundary between the historic townships of Arbury and Winwick (Important Hedgerow)
- Peel Hall Manor Farm Moat Area (Archeological Feature)
- Gas Main and Easement
- 8m Water Vole buffer zone to Spa Brook.
- Existing Culvert
- Existing hedgerows to be retained
- Existing Pond to be retained
- Existing areas of woodland trees and vegetation to be retained.
- 10m Foraging bat corridor
- 40m Bufferzone to M62 (Air Quality & Noise)
- Developable Land to include for pedestrian and cycle links between plots.
- Indicative Road Line
- Location for Care Home
- Location for Local Centre
- Location for Employment Area
- Location for Primary School
- Location for Bus Gate
- Location for Community Facility
- Proposed Tree/ Shrub Planting
- Proposed Sports Pitches/ Public Open Space
- Proposed wildlife corridor
- Existing areas of off site vegetation
- Area suitable for apartments with mechanical ventilation
- Existing sports field/ facilities
- Radley Common

PEEL HALL, WARRINGTON

Parameters Plan

Project: PEEL HALL, WARRINGTON	
Title: Parameters Plan	
Client: Satnam Millennium Ltd	
Date: 21.10.15	Scale: 1:2,500@A1
Drawn: SW/ DS	Drawing No.: 1820_24
Checked: DA/ DS	Revision: W

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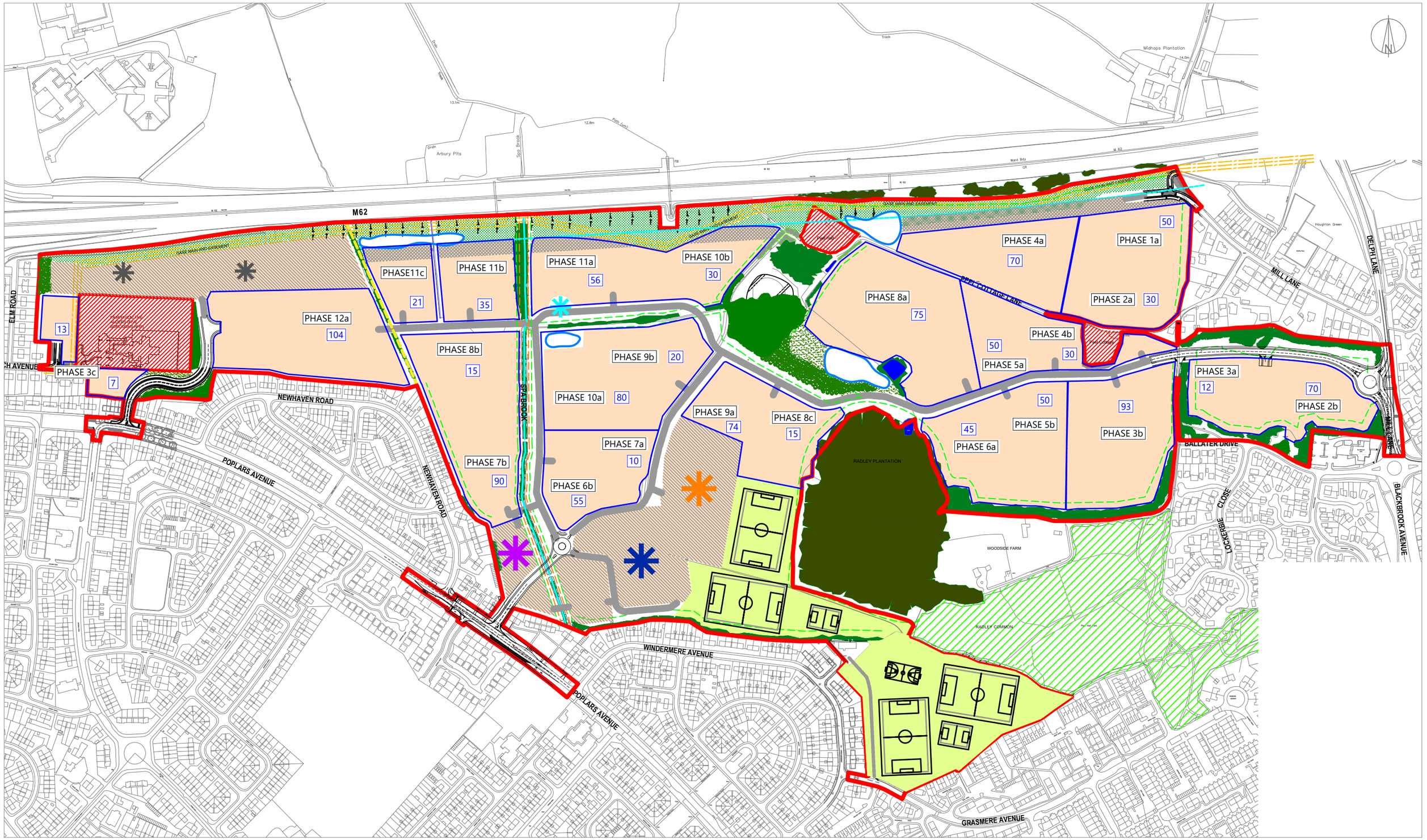
Appendix 4

Indicative Phasing Table and Plan

Peel Hall Indicative Phasing Table

Year End	Number of Residential Units off Each Access								Cumulative Total	Indicative Phasing (number of properties sold at year end)
	Distributor Road Blackbrook Ave		Distributor Road Poplars Ave		Mill Lane		Birch Ave			
	New	Cum.	New	Cum.	New	Cum.	New	Cum.		
1	0	0	0	0	50	50	0	0	50	Phase 1a **50** Relocated sports pitches
2	70	70	0	0	30	80	0	0	150	Phase 2a **30** Phase 2b **70** Temporary emergency link to be via Radley Lane (north). Need first part of distributor road from east and turning area for bus service. Local Centre and Care Home off Poplars Ave.
3	105	175	0	0	0	80	20	20	275	Phase 3a **12** Phase 3b **93** Phase 3c **20** Employment Land off Poplars Ave (west).
4	30	205	0	0	70	150	0	20	375	Phase 4a **70** Phase 4b **30** Requires a temporary emergency link through to Peel Cottage Lane.
5	100	305	0	0	0	150	0	20	475	Phase 5a **50** Phase 5b **50**
6	45	350	55	55	0	150	0	20	575	Phase 6a **45** Phase 6b **55**

Year End	Number of Residential Units off Each Access								Cumulative Total	Indicative Phasing (number of properties sold at year end)
	Distributor Road Blackbrook Ave		Distributor Road Poplars Ave		Mill Lane		Birch Ave			
	New	Cum.	New	Cum.	New	Cum.	New	Cum.		
7	0	350	100	155	0	150	0	20	675	Phase 7a **10** Phase 7b **90**
8	90	440	15	170	0	150	0	20	780	Phase 8a **75** Phase 8b **15** Phase 8c **15**
9	94	534	0	170	0	150	0	20	874	Phase 9a **74** Phase 9b **20** Need to complete distributor road for full bus service. Temporary emergency access through to employment land/Elm Road.
10	110	644	0	170	0	150	0	20	984	Phase 10a **80** Phase 10b **30** Primary School
11	56	700	56	226	0	150	0	20	1,096	Phase 11a **56** Phase 11b **35** Phase 11c **21**
12	0	700	104	330	0	150	0	20	1,200	Phase 12a **104**



NOTES:
Reproduced from Appletons Peel Hall Parameters Plan (Rev.W).
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KEY:
Indicative Phase Numbering — PHASE 8b

Indicative Number of units Completed at Year End — 12

Phasing subject to detailed phasing plan to be submitted at Reserved Matters stage

ISSUE	REASON FOR REVISION	DATE

DATE:	DRAWN BY:	CHECKED:
28/06/16	FB	FB

PROJECT: PEEL HALL, WARRINGTON

CLIENT: SATNAM MILLENNIUM LTD

TITLE: INDICATIVE PHASING PLAN

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	27/B	NOT TO SCALE

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www.highgatetransportation.co.uk
Box 13, 42 Triangle West
Park Street, Bristol BS8 1ES
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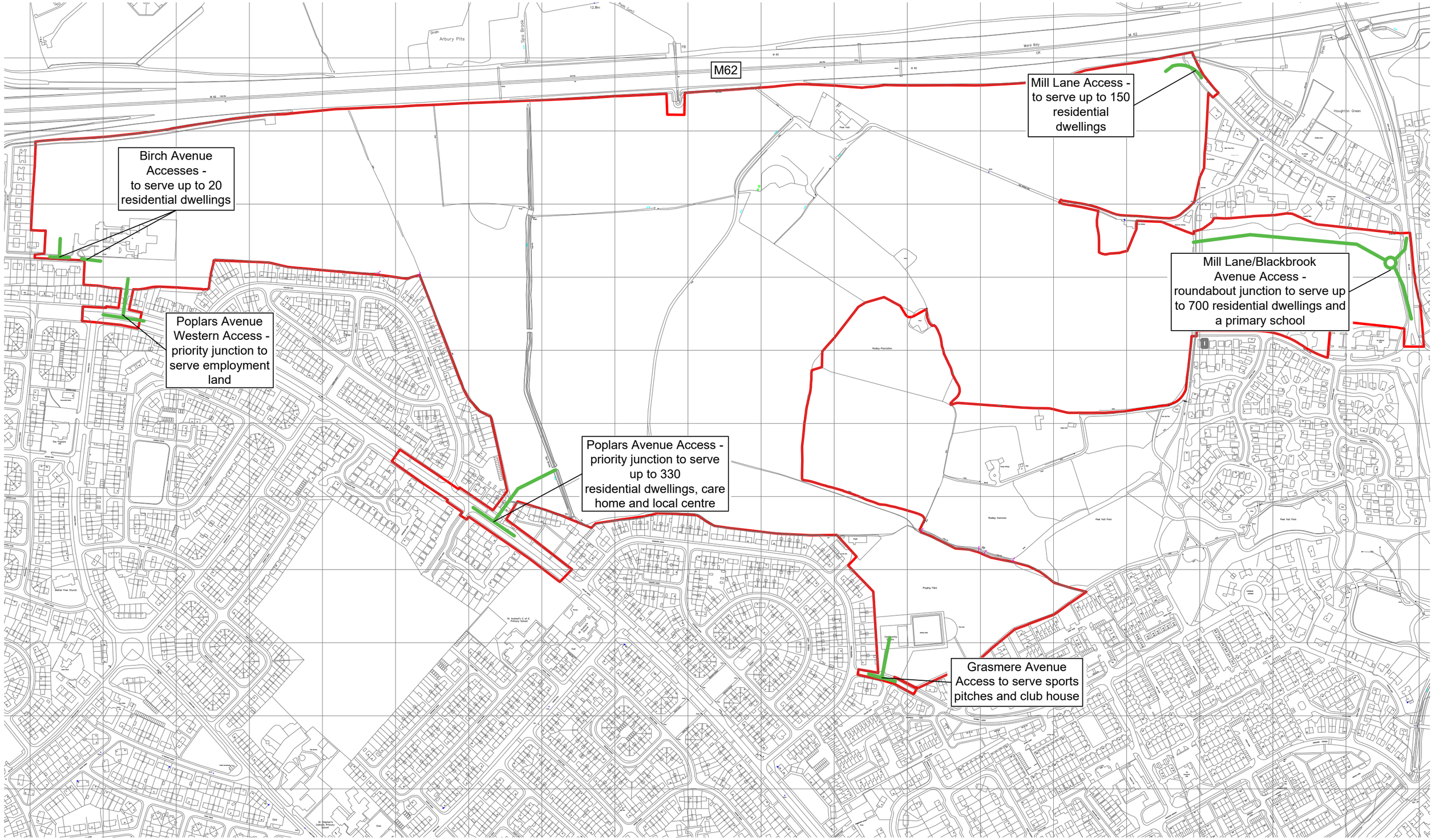
Appendix 5

Access Strategy



NOTES:

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ISSUE	REASON FOR REVISION	DATE

DATE:	DRAWN BY:	CHECKED:
11/05/16	FB	DT

PROJECT:

PEEL HALL, WARRINGTON

CLIENT:

SATNAM

TITLE:

ACCESS STRATEGY - OVERVIEW PLAN

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	34	Not to scale

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Appendix 46

HTp/1107/TN/15 – M62 Trips

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Land at Peel Hall, Warrington

Technical Note

M62 Trips

(HTp/1107/TN/15)

February 2017

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Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited (HTp) to summarise the traffic impact on the M62 in terms of vehicle numbers, following a meeting with Highways England on 23rd January 2017, using the Peel Hall Gravity Model.

1.2 The Peel Hall development can be summarised as:

i. Up to 1,200 residential dwellings. This will include a mix of market and affordable homes as well as houses and apartments. The houses are expected to be a mix of two, three and four bedroomed houses and one and two bedroomed apartments. It is anticipated that up to 60 of these dwellings will be provided as a retirement home development.

ii. A 100 bedroom care home.

iii. An area of employment land comprising up to 7,500sqm Gross Floor Area (GFA) of light industrial units.

iv. A local centre comprising a food store of up to 2,000sqm GFA plus up to a further 600sqm GFA of local centre type facilities (such as A1-A5 and D1) plus a family pub and restaurant of up to 800sqm GFA. The local centre car park will be located so that it can also be conveniently used as a school drop off facility.

v. Up to a two form entry primary school with a maximum of up to 420 pupils.

vi. Relocating and upgrading of existing sports pitches to provide like-for-like replacement in terms of number of pitches and the provision of ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that can be used for local community uses such as a mother and toddler group.

1.3 The aim of the report is to provide an initial summary of the likely level of vehicular impact on the M62 network north of the site.

2.0 Trip Distribution

2.1 AECOM developed a proposed trip distribution for the Peel Hall development. The distribution of trips was calculated at the zoning level derived from the Warrington Multi Modal Transport Model. AECOM's Technical Note TN/TD02 (August 2016) is contained at **Appendix 1** for reference.

2.2 The development trips were grouped into three categories; residential, employment and other. The proposed land uses for the Peel Hall development are set out in Table 1 of the AECOM note, reproduced below for reference.

Table 1, Trip Type for each Land Use

Trip Type	Proposed Land Use
Employment	Employment
Residential	150 Dwellings
	700 Dwellings
	330 Dwellings
	20 Dwellings
Other	Primary School
	Food Store
	Local Centre
	Family Pub
	100-Bed Care Home
	Sports and Community Facilities

2.3 The trip distribution and number of vehicular trips are set out in **Table 2.1** below. The volume of trips has been taken from HTp Technical Note TN/08 – Number of vehicular trips at each site access location (April 2016), which is contained in **Appendix 2** for reference.

2.4 The vehicular trips levels contained in TN/08 resulted from the HTp Technical Note on Trip Rates (TN/02/A), the accompanying addendum for peak period trip rates (TN/02/A/Addendum) and Technical Note TN/06 Trip Discounts.

2.5 TN/06 set out that, in the AM peak hour of 0800-0900, discounts were applied as follows:

i. Residential 20%
ii. Care Home 0%
iii. Employment 0%
iv. Food Store 60% (+10% pass-by)
v. Local Centre 70%
vi. Family Pub/Restaurant N/A
vii. Primary School 75%
viii. Community Uses 0%

2.6 TN/06 set out that, in the PM peak hour of 1700-1800, discounts were applied as follows:

i. Residential 20%
ii. Care Home 0%
iii. Employment 0%
iv. Food Store 60% (+10% pass-by)
v. Local Centre 70%
vi. Family Pub/Restaurant 25%
vii. Primary School 50%
viii. Community Uses 0% (but should not be on M62 network in any event)

Table 2.1 – Trip distribution

Trip Type		M62 West				M62 East			
		AM (0800-0900)		PM (1700-1800)		AM (0800-0900)		PM (1700-1800)	
		Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
Residential	*Percentage Distribution*	*0.6%*	*2.2%*	*10.7%*	*2.5%*	*0.4%*	*1.2%*	*2.2%*	*1.3%*
	Trips	1	11	53	8	1	6	11	4
Employment	*Percentage Distribution*	*8.9%*	*3.4%*	*8.6%*	*14.7%*	*11.2%*	*1.4%*	*5.5%*	*4.4%*
	Trips	6	1	2	7	8	1	1	2
Other	*Percentage Distribution*	*2.4%*	*2.8%*	*0.8%*	*9.4%*	*7.8%*	*1.9%*	*7.1%*	*7.5%*
	Trips	2	2	1	12	7	1	9	10
Total Trip Movements		**9**	**14**	**56**	**27**	**16**	**8**	**21**	**16**
Total Trips		**23**		**83**		**24**		**37**	
M62 Total Trips AM		**47**							
M62 Total Trips PM		**120**							

2.7 From the above it can be seen that there may be up to around 47 vehicular trips on the M62 as a result of the Peel Hall development in the AM peak hour. It is considered that this level of trips is within the daily variation of flow on the M62 and Junction 9 and Junction 10 of the M62.

2.8 From the above Table it can also be seen that there may be up to around 120 vehicular trips on the M62 as a result of the Peel Hall development in the PM peak hour.

3.0 Sensitivity Test

3.1 The overall trip generation and attraction of the proposed Peel Hall development profile is set out in **Table 3.1** below for reference (Table 9.1 of HTp TN/02/A, reproduced in TN/06).

Table 3.1 – Peel Hall trips (100%)

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Family Pub/Restaurant Trips	-	-	46	30
Primary School Trips	113	79	19	27
Community Uses	10	5	8	7
Total Trips	**591**	**848**	**912**	**717**

3.2 A sensitivity test has been carried out further to comments on forecast trip rates and trip levels associated with the Peel Hall development received from Warrington Borough Council and Highways England.

3.3 This sensitivity test uses revised trip discounts for both AM and PM peak hours as follows:

i. Residential 0%
ii. Care Home 0%
iii. Employment 0%
iv. Food Store 100% (70% discount and 30% pass-by, which will not affect the M62)
v. Local Centre 100% (as per Omega application)
vi. Family Pub/Restaurant 0%
vii. Primary School 50%
viii. Community Uses 100% (but will not be on the M62 network, so discounted fully in this scenario test for the avoidance of doubt)

3.4 Primary School trips have been reduced to 50% as it is considered fair to conclude that the majority of trips associated with a primary school in this location would come from the site itself and the immediate surroundings, and as such would have little impact on the M62.

3.5 Based on the sensitivity test set out above, a revised summary of the proposed Peel Hall development trips is set out on **Table 3.2** below.

Table 3.2 – Peel Hall sensitivity test trips

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	0	0	0	0
Local Centre Shop Trips	0	0	0	0
Family Pub/Restaurant Trips	-	-	46	30
Primary School Trips	56	40	10	14
Community Uses	0	0	0	0
Total Trips	**402**	**714**	**678**	**467**

3.6 The trips set out in **Table 3.2** above can be grouped into the three gravity model categories (see **paragraph 2.2**), as shown in **Table 3.3** below.

Table 3.3 – Peel Hall gravity model groupings for sensitivity test

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential	270	628	594	368
Employment	69	39	20	47
Other	63	47	64	52
Total Trips	**402**	**714**	**678**	**467**

3.7 The resultant trip distributions on the M62 using the gravity model, further to **Table 3.3** above, are set out in **Table 3.4** below.

Table 3.4 – Trip Distribution

Trip Type		M62 West				M62 East			
		AM (0800-0900)		PM (1700-1800)		AM (0800-0900)		PM (1700-1800)	
		Arr.	Dep.	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
Residential	*Percentage Distribution*	*0.6%*	*2.2%*	*10.7%*	*2.5%*	*0.4%*	*1.2%*	*2.2%*	*1.3%*
	Trips	2	14	64	9	1	8	13	5
Employment	*Percentage Distribution*	*8.9%*	*3.4%*	*8.6%*	*14.7%*	*11.2%*	*1.4%*	*5.5%*	*4.4%*
	Trips	6	1	2	7	8	1	1	2
Other	*Percentage Distribution*	*2.4%*	*2.8%*	*0.8%*	*9.4%*	*7.8%*	*1.9%*	*7.1%*	*7.5%*
	Trips	2	1	1	5	5	1	5	4
Total Trip Movements		**10**	**16**	**67**	**21**	**14**	**10**	**19**	**11**
Total Trips		**26**		**88**		**24**		**30**	
M62 Total Trips AM		**50**							
M62 Total Trips PM		**118**							

3.8 From the above **Table 3.4** it can be seen that there may be up to around 50 vehicular trips on the M62 as a result of the Peel Hall development in the AM peak hour under this sensitivity test. As set out in **paragraph 2.7**, it is considered that this level of trips is within the daily variation of flow on the M62 and Junction 9 and Junction 10 of the M62.

3.9 From the above Table it can also be seen that there may be up to around 118 vehicular trips on the M62 as a result of the Peel Hall development in the PM peak hour.

3.10 Compared to **Table 2.1**, it can be seen from **Table 3.4** that there is actually little difference in the overall trip levels on the M62 when applying the methodology set out in previous HTp Technical Notes to date and the methodology used for the sensitive tests.

4.0 Summary

4.1 This Technical Note has been prepared by HTp to summarise the traffic impact on the M62 in terms of vehicle numbers using the Peel Hall Gravity Model.

4.2 The report provides an initial summary of the likely level of vehicular impact on the M62 network north of the site.

4.3 It can be seen from the Tables contained in **Section 2.0** and **Section 3.0** that the actual level of vehicular trips on the M62 network north of the Peel Hall site is relatively low in the AM peak hour (circa 50 vehicles) and as such is well within the daily variation of flow on the M62.

4.4 The level of vehicular trips on the M62 network north of the Peel Hall site in the PM peak hour is around 120vph; two vehicles per minute.

Appendix 1

AECOM TN/TD02

Proposed Trip Distribution for Future Year Development Trips

Technical Note

Project:	**Peel Hall VISSIM Model Assessment**	Job No:	**60337714**
Subject:	**Proposed Trip Distribution for Future Year Development Trips**		
Prepared by:	**Alistair Johnson**	Date:	**02/08/2016**
Checked by:	**Duncan Carter**	Date:	**17/08/2016**
Approved by:	**Catherine Zoeftig**	Date:	**17/08/2016**

Introduction

As part of a commission to produce a package of VISSIM microsimulation models to support the planning application for Peel Hall, Warrington, AECOM have developed a proposed trip distribution for the development. This Technical Note details the exercise and provides an evidence base for Highgate Transport (working on behalf of Satnam Developments Ltd) to enable the proposed distribution to be agreed with Warrington Borough Council (WBC).

The volume of trips to and from the proposed development for each modelled time period was provided by Highgate Transport in their Technical Notes listed below:

- TN/02/A – Trip Rates (peak hour);
- TN/02/A/Addendum – Peak Period Trip Rates;
- TN/06 – Trip Discounts;
- TN/08 – Number of Vehicle Trips at Each Site Access Location; and
- TN/12 - Pub/Restaurant Vehicular Trips Update.

Methodology

Initially the distribution of trips was calculated at the zoning level (**Appendix A, Figure 2**) derived from the Warrington Multi Modal Transport Model (WMMTM). Development trips were grouped into three categories:

- Residential;
- Employment; and
- Other.

The development location was represented as a single zone for the initial distribution of trips.
For each trip purpose, existing zones (similar land uses) were selected within the modelled area to act as a proxy for the distribution of trips to and from the new developments. The zones used were:

- For residential, zones 21 (Callands) and 69 (Hulme);
- For employment, zone 226 (Winwick Quay); and
- For other developments, zone 152 (Warrington Collegiate).

The proposed land uses within the Peel Hall development each were then categorised within one of the trip types identified above; these are presented in **Table 1** overleaf.

Table 1, Trip Type for each Land Use

Trip Type	Proposed Land Use
Employment	Employment
Residential	150 Dwellings
	700 Dwellings
	330 Dwellings
	20 Dwellings
Other	Primary School
	Food Store
	Local Centre
	Family Pub
	100-Bed Care Home
	Sports and Community Facilities

The proportion of trips from the new development to each zone within the modelled area and the proportion of trips and directions of travel to zones outside the modelled area were calculated for the AM and PM peak periods on the basis of the updated 2015 trip matrices proportions from these zones. The 2015 matrices were originally developed from the WMMTM and have been updated utilising new traffic counts and matrix estimation techniques within VISUM (TFlowFuzzy).

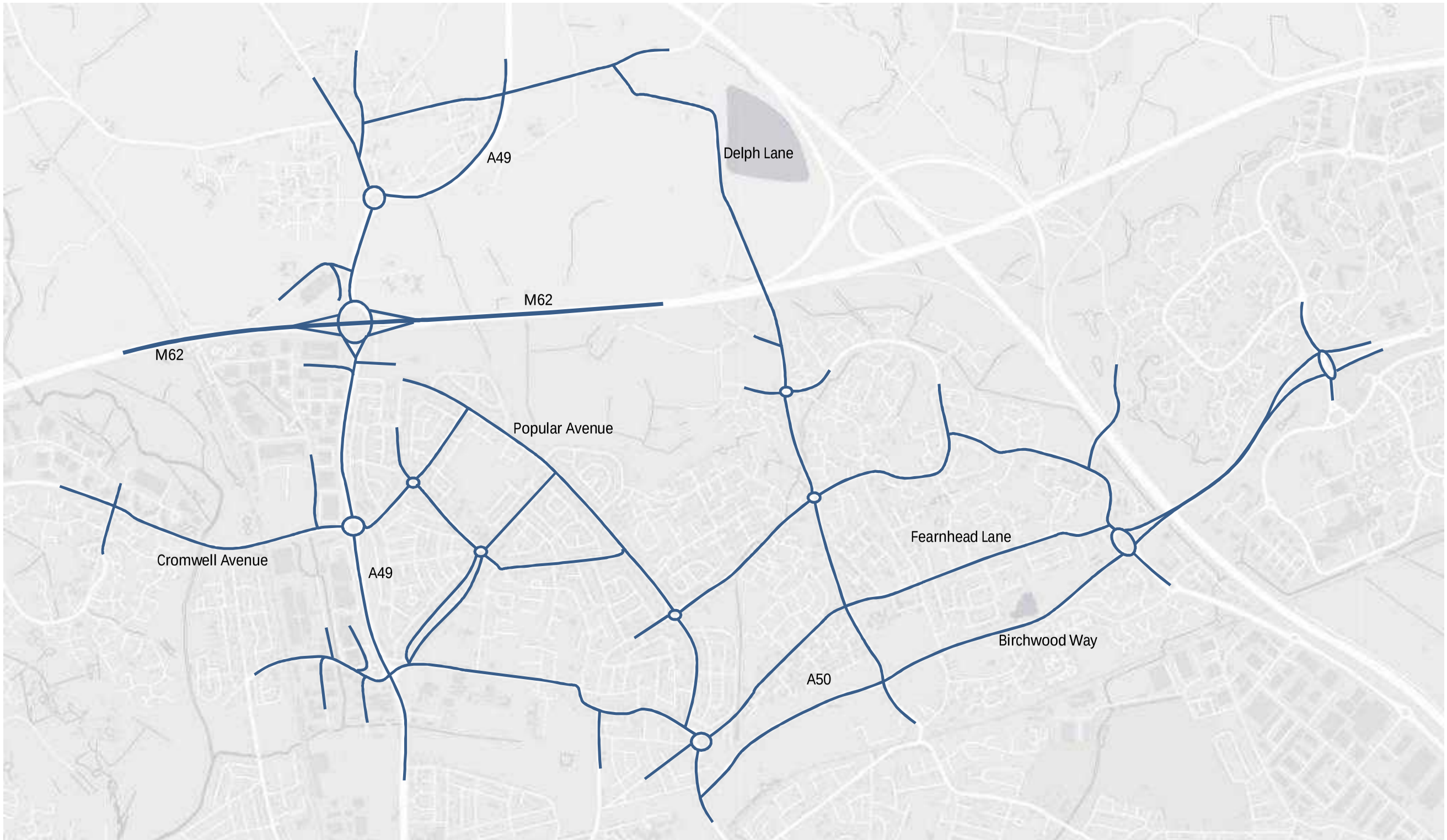
These proportions were applied to the trip numbers supplied to produce origin-destination matrices for each modelled time period. As the WMMTM model represents a single peak hour period, the trip distribution percentages have been applied to each of the corresponding peak hour periods.

The final trip distributions split by trip type and all together are presented in **Appendix B**, **Figures 1 – 16**.

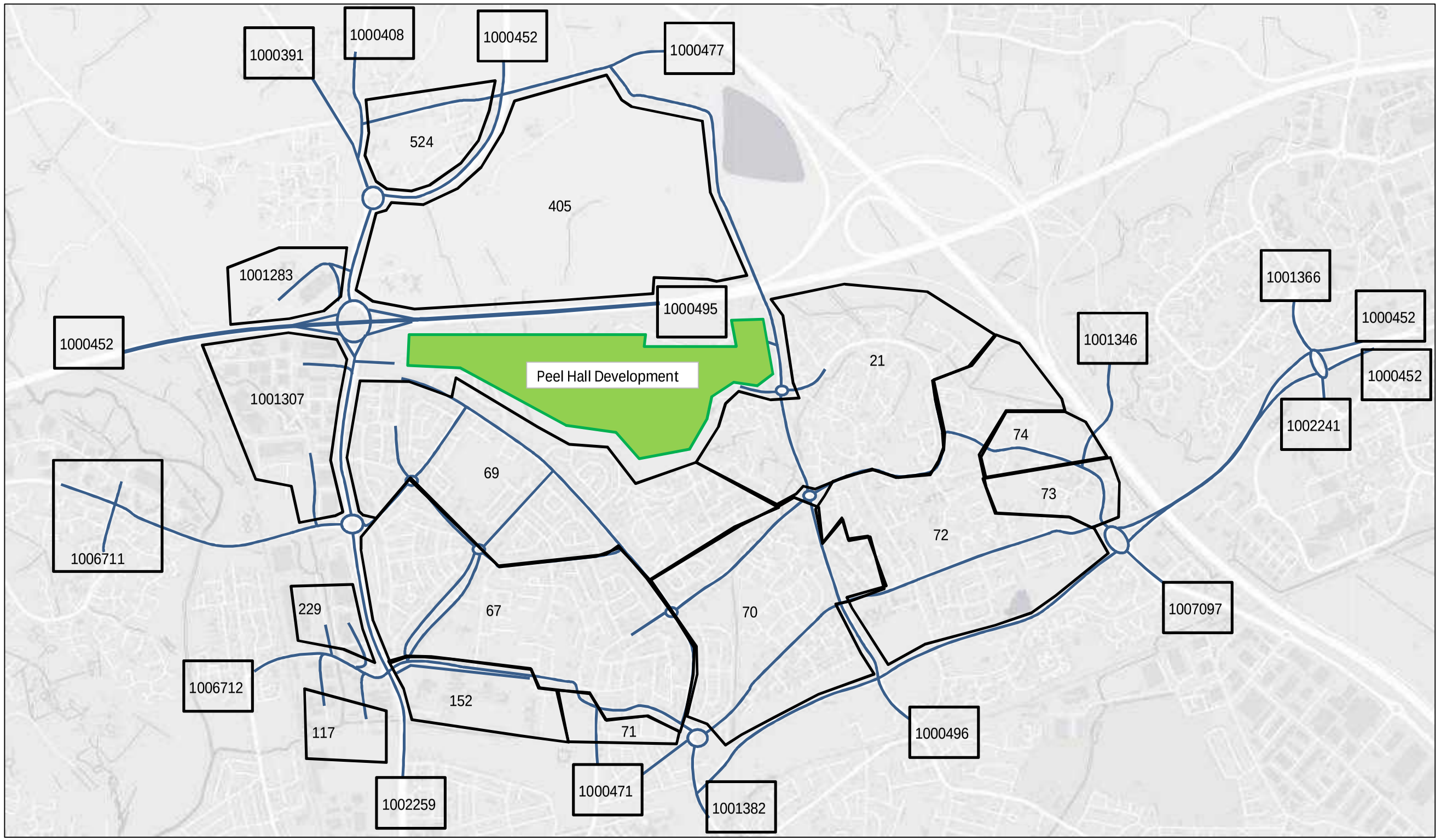
Appendix C, **Figures 1 – 48** present the volume of trips split by land use and total trips for each model time period.

As per Highgate Transport TN/08 – "Number of Vehicle Trips at Each Site Access Location", the proposed development will benefit from six entrance and exit points to the network. The trip distribution (Production and Attraction Factors) presented in **Appendix B**, **Figure 1 - 16** will be applied to the appropriate development for each of the three trip purposes, and loaded into the VISSIM model as a separate matrix for VISSIM to assign the traffic on the model network via the six proposed access points.

Appendix A
Model Network and Zone Structure

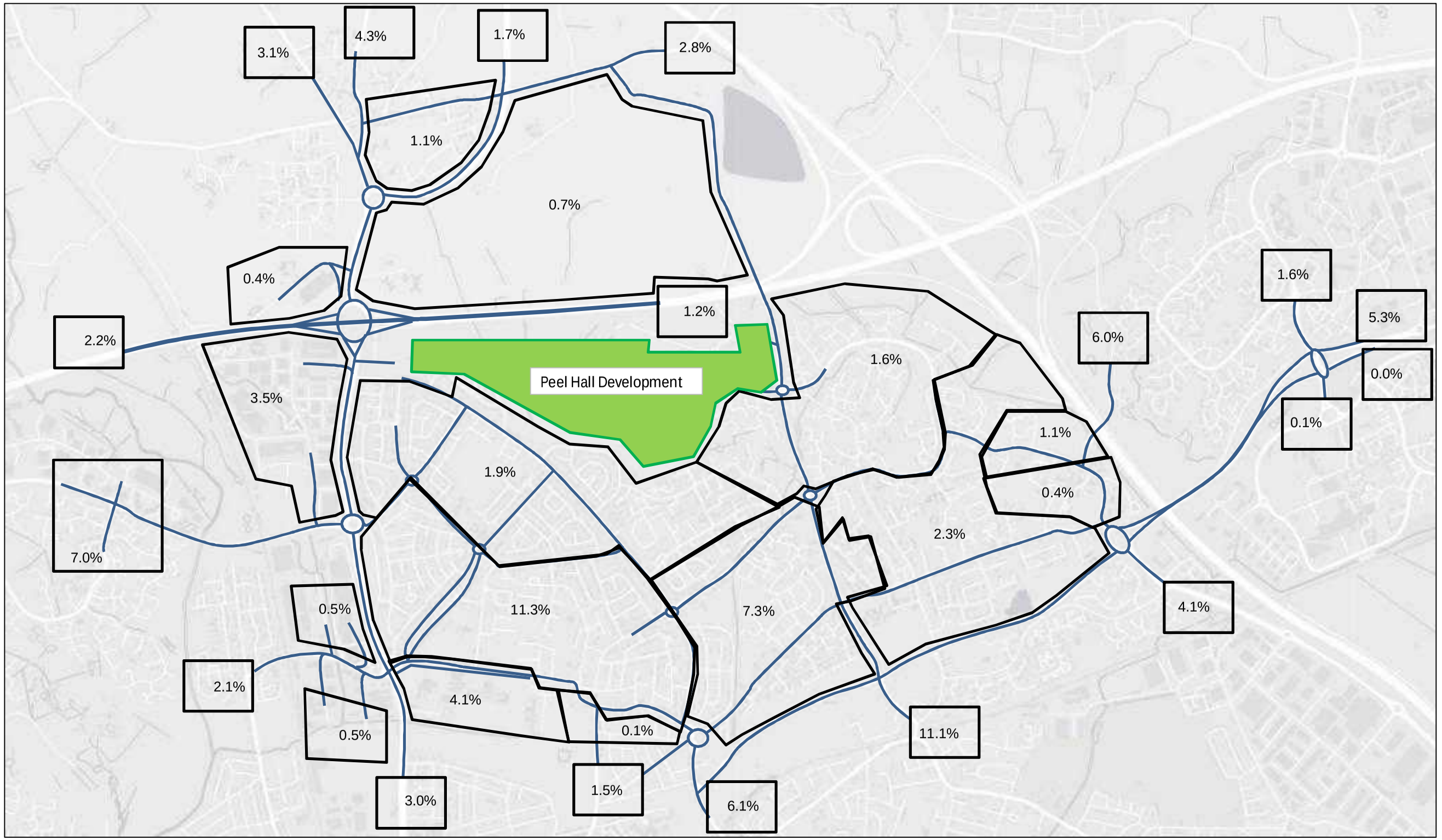


Peel Hall VISSIM Model - Trip Distribution	Appendix A, Figure 1, Model Network	AECOM



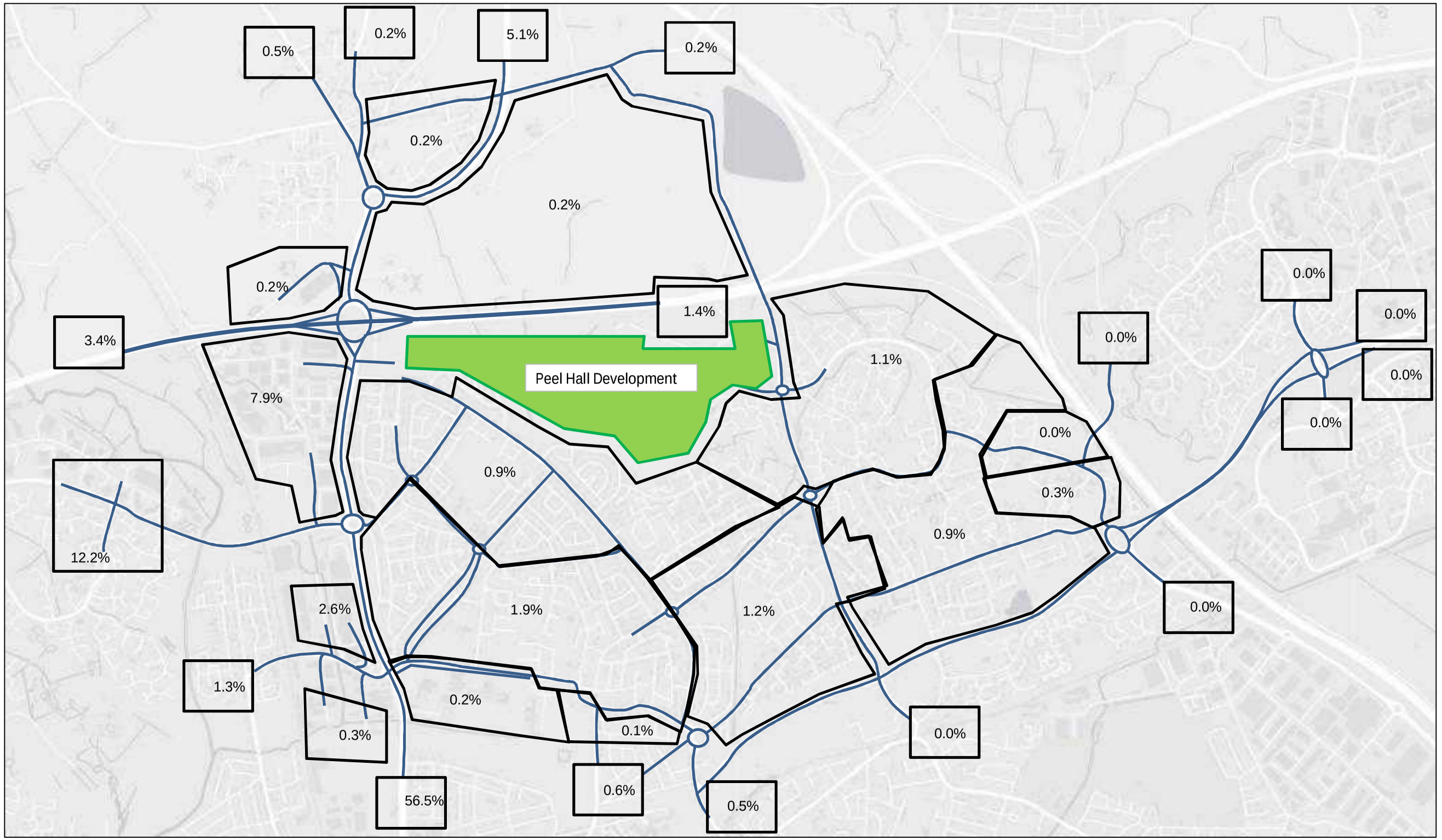
Peel Hall VISSIM Model - Trip Distribution	Appendix A, Figure 2, Zone Plan	AECOM

Appendix B
Proposed Trip Distribution Percentages



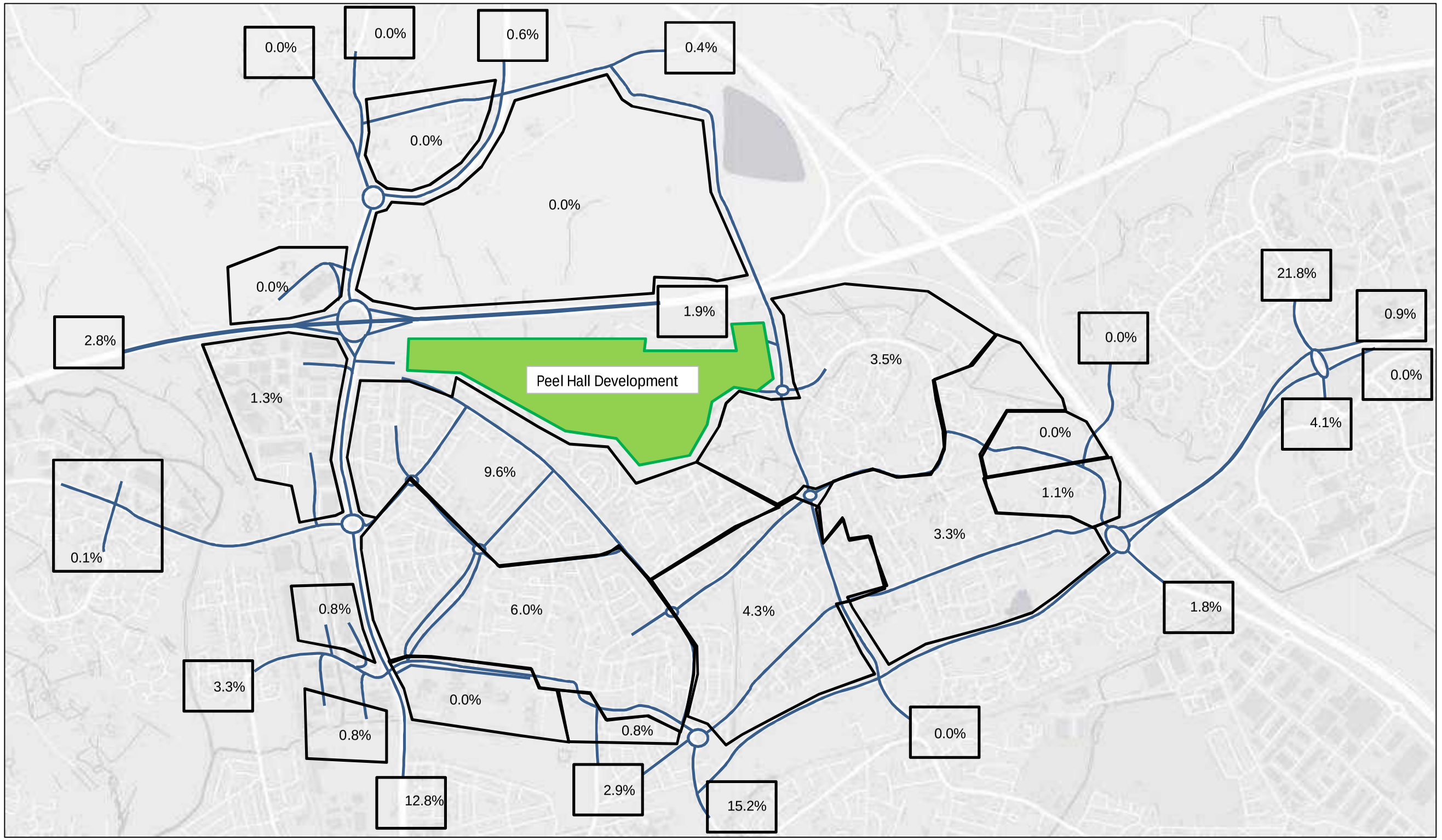
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 1, AM Percentage Distribution for Residential Trips from Peel Hall Development	AECOM



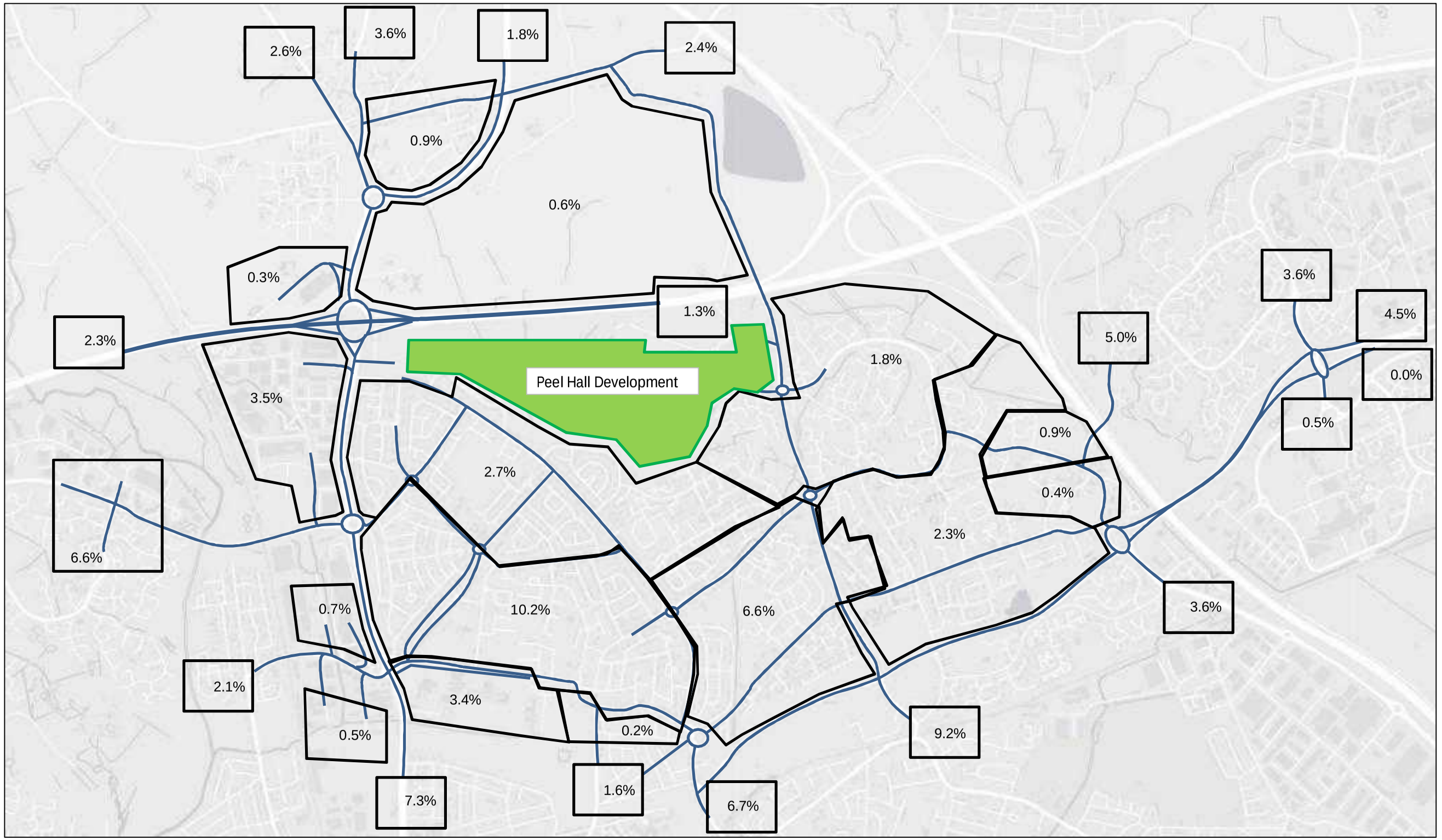
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 2, AM Percentage Distribution for Work Trips from Peel Hall Development	AECOM



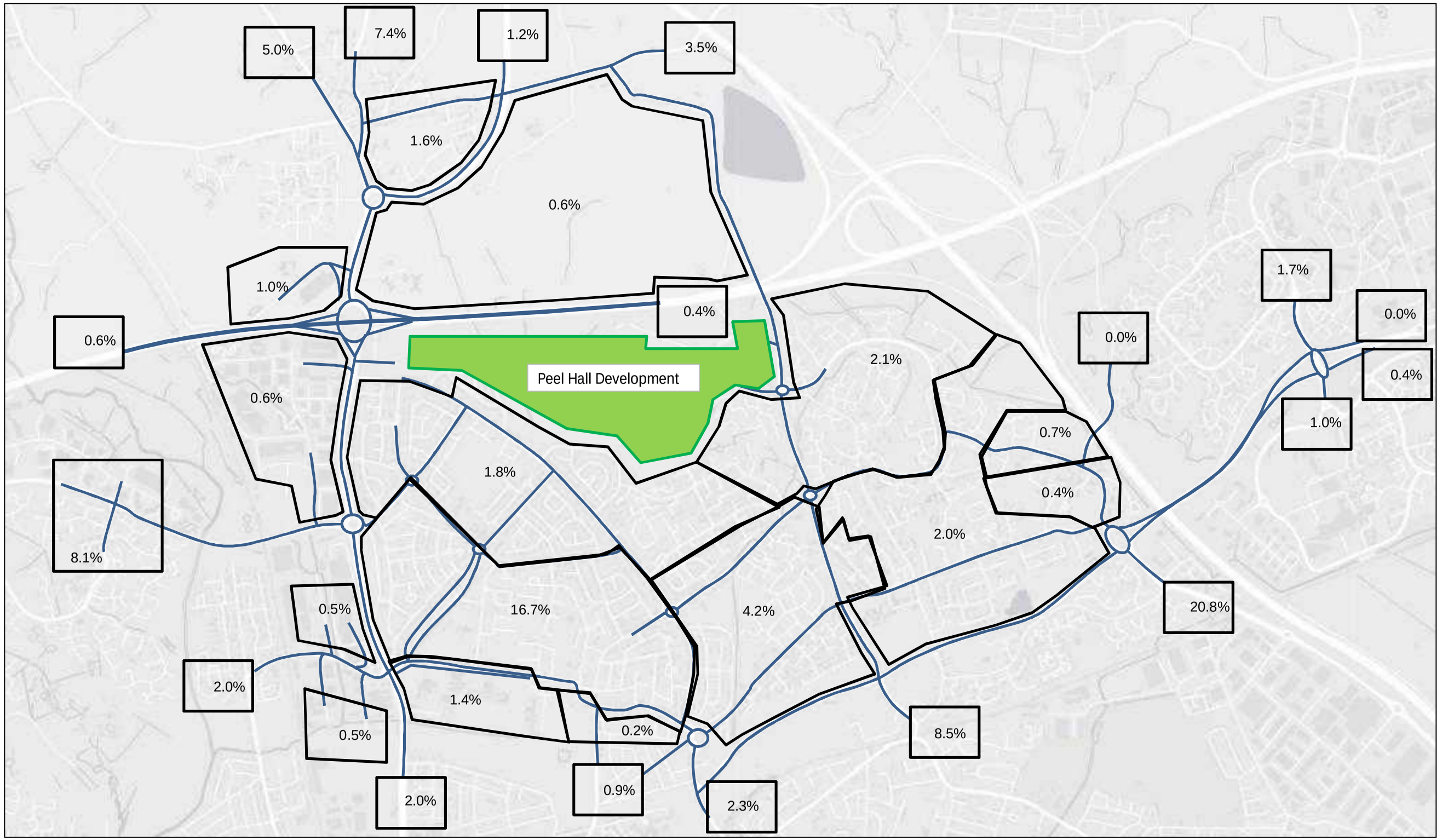
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 3, AM Percentage Distribution for Other Trips from Peel Hall Development	AECOM



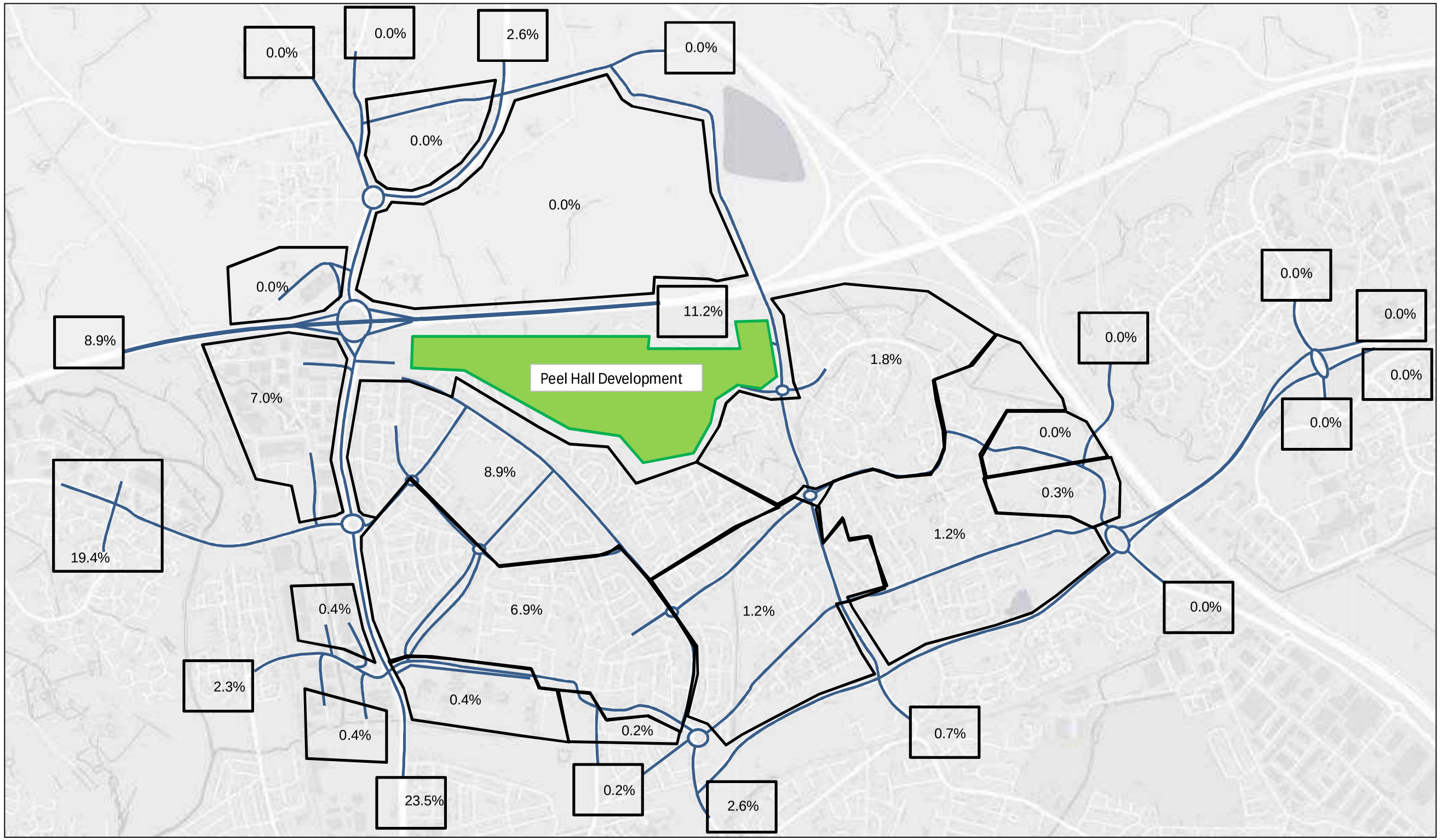
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 4, AM Percentage Distribution for All Trips from Peel Hall Development	AECOM



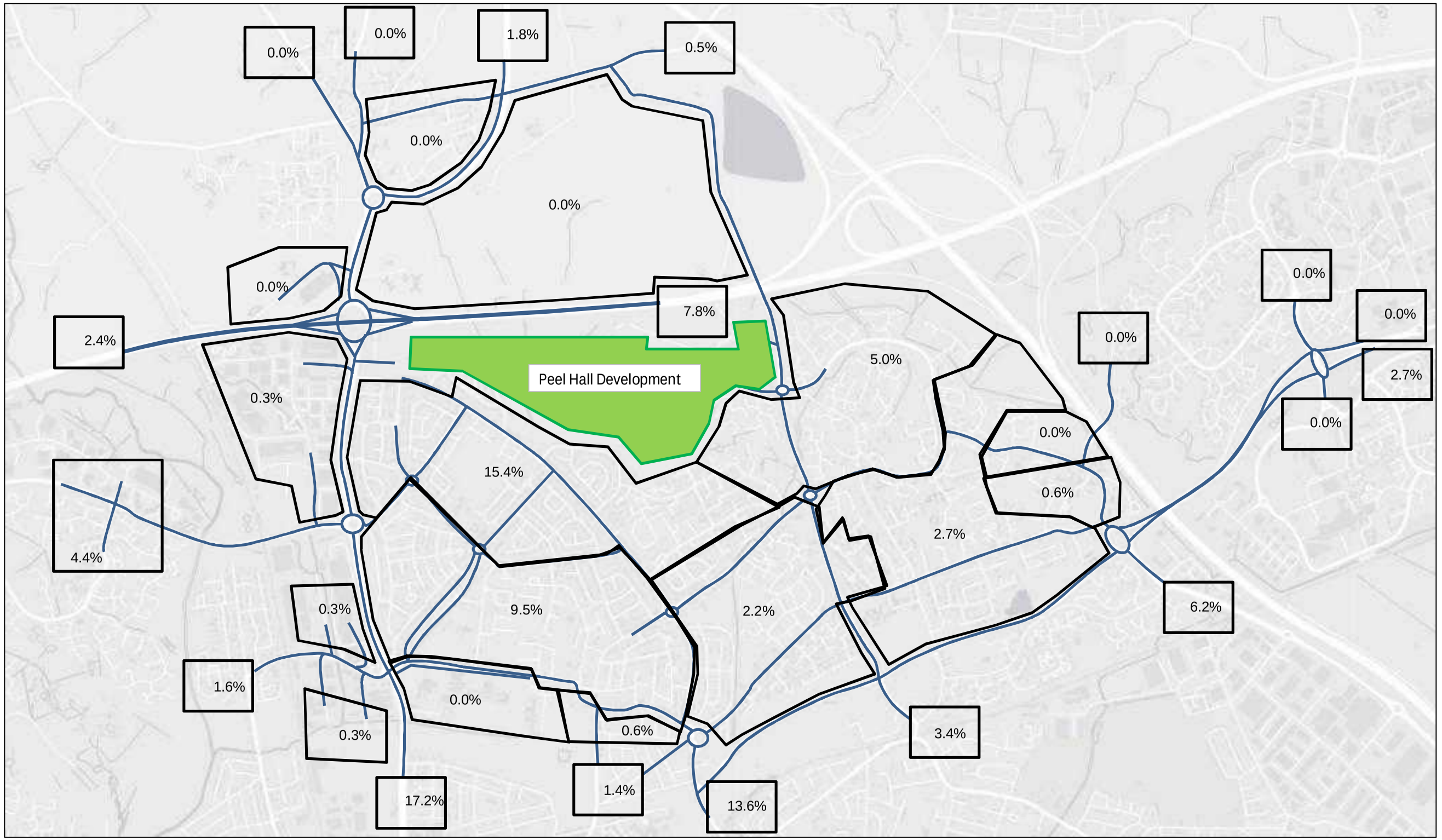
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 5, AM Percentage Distribution for Residential Trips to Peel Hall Development	AECOM



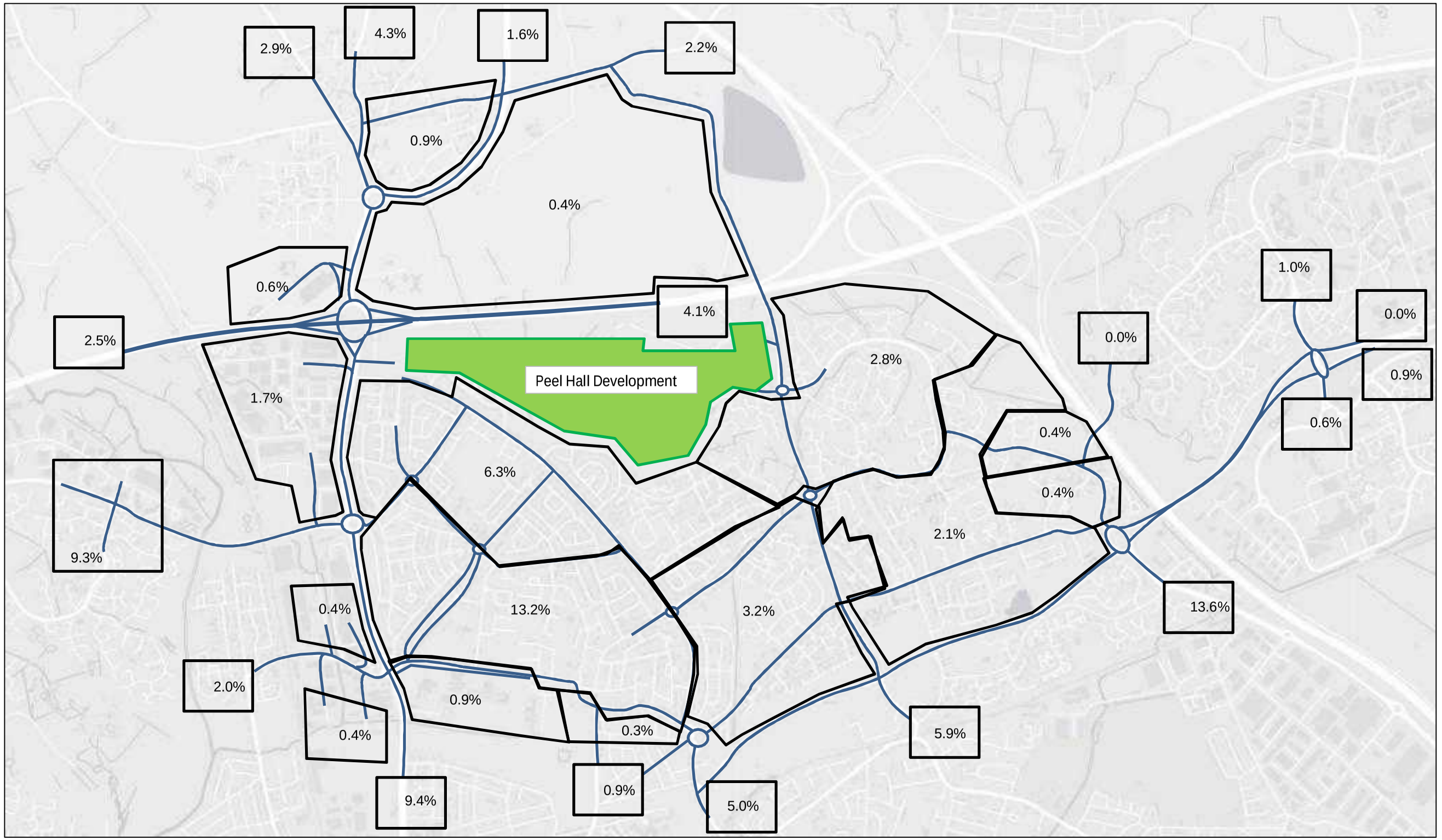
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 6, AM Percentage Distribution for Work Trips to Peel Hall Development	AECOM



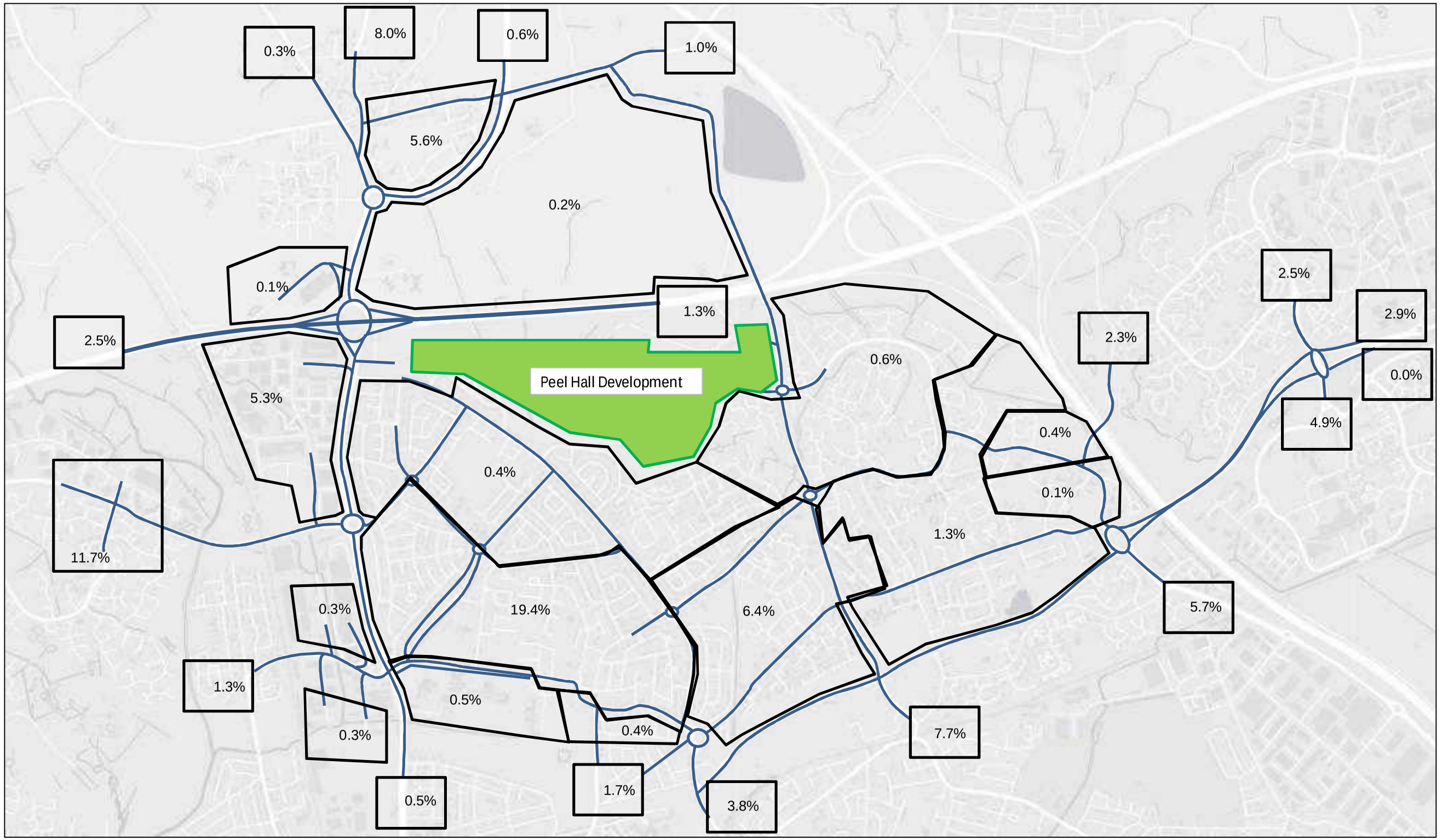
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 7, AM Percentage Distribution for Other Trips to Peel Hall Development	AECOM



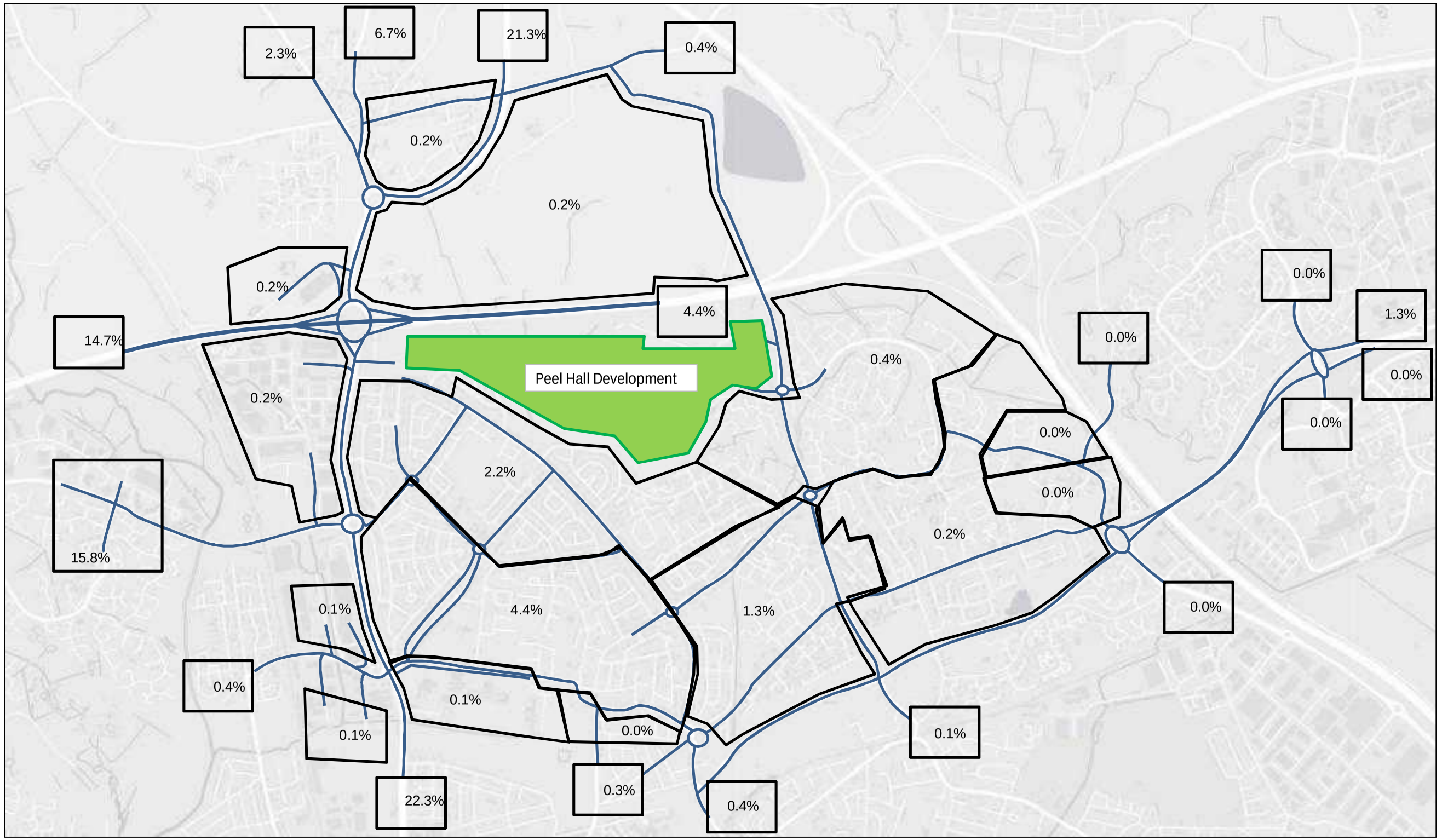
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 8, AM Percentage Distribution for All Trips to Peel Hall Development	AECOM



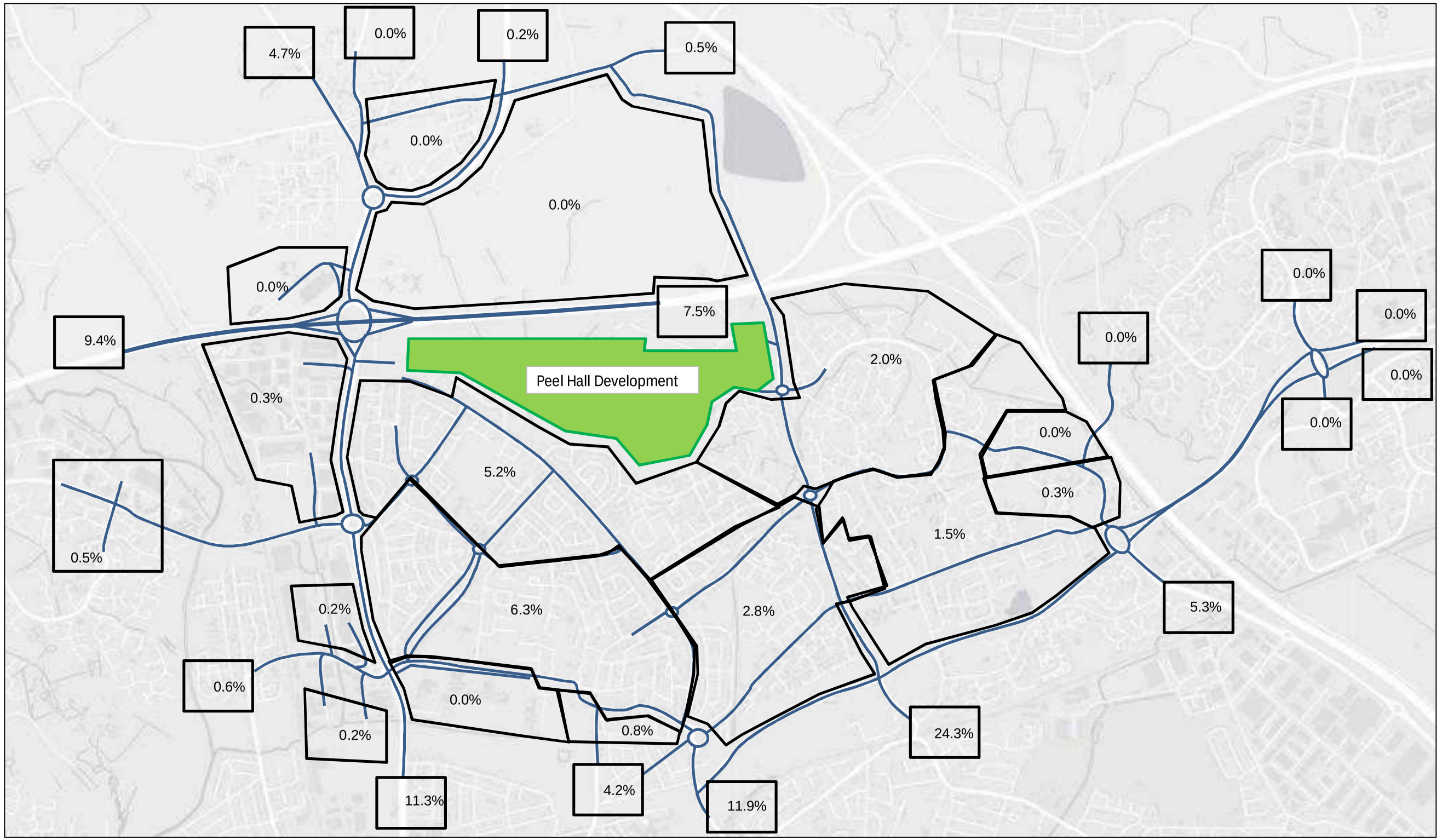
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 9, PM Percentage Distribution for Residential Trips from Peel Hall Development	AECOM



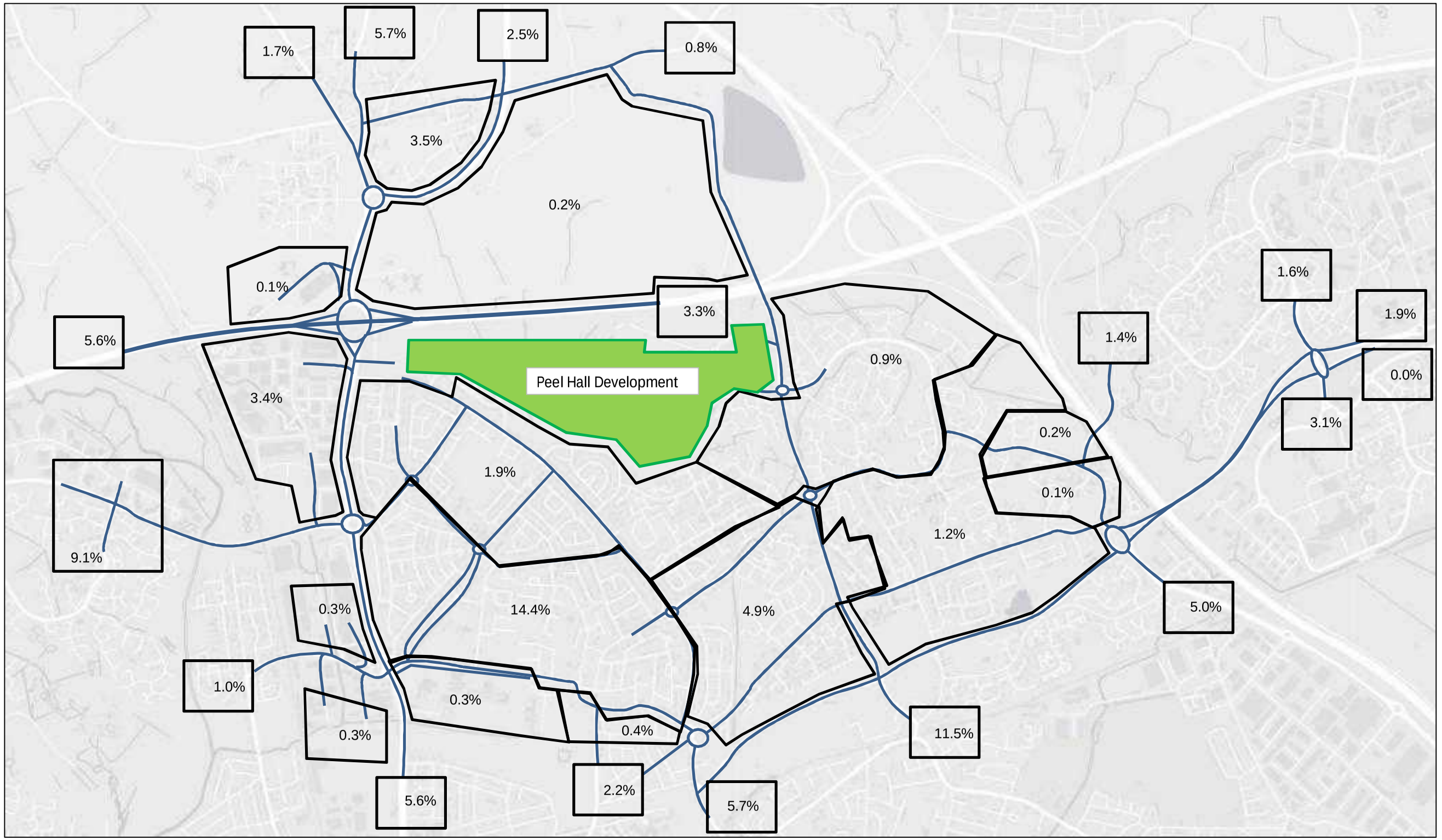
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 10, PM Percentage Distribution for Work Trips from Peel Hall Development	AECOM



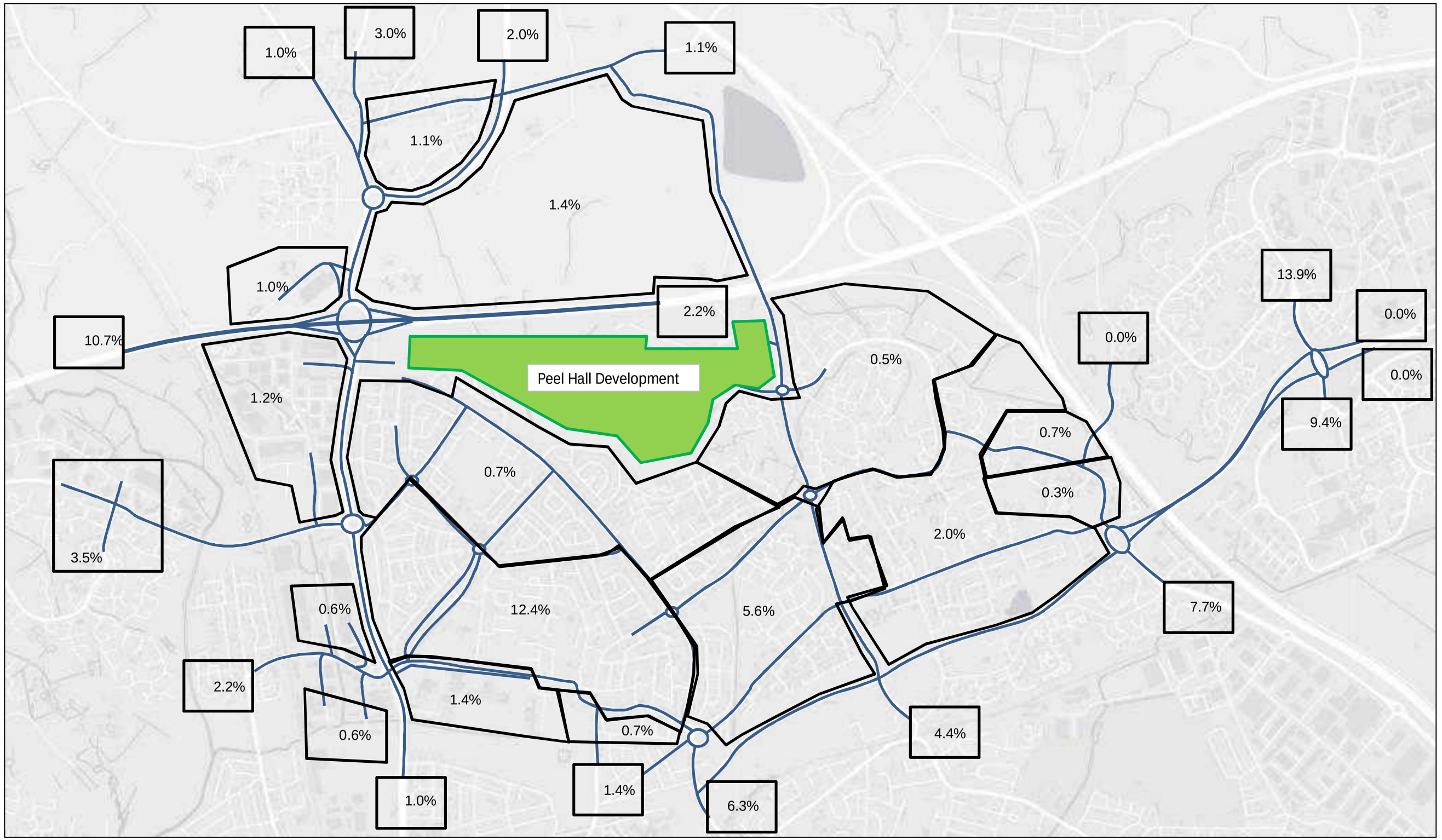
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 11, PM Percentage Distribution for Other Trips from Peel Hall Development	AECOM



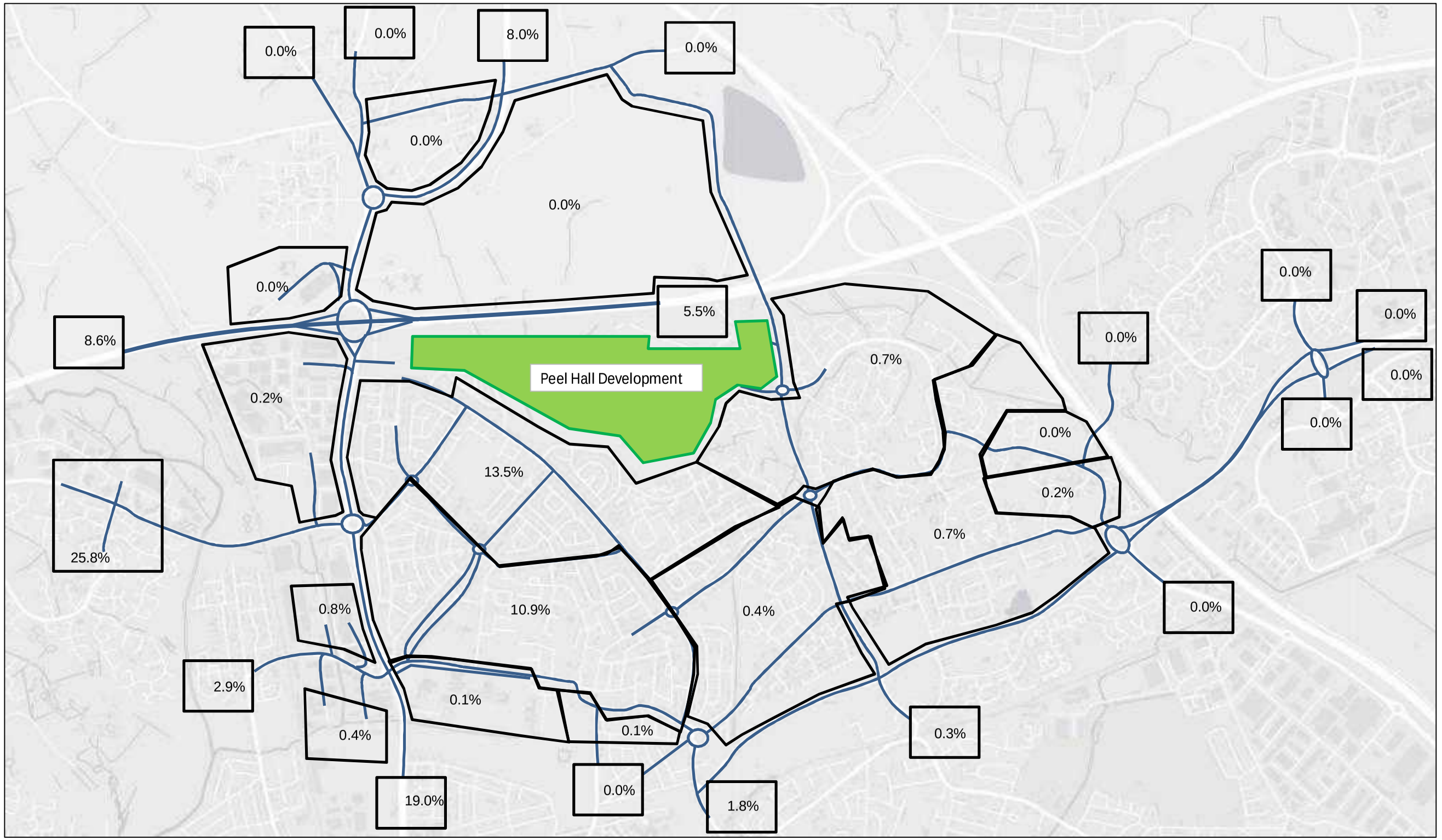
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 12, PM Percentage Distribution for All Trips from Peel Hall Development	AECOM



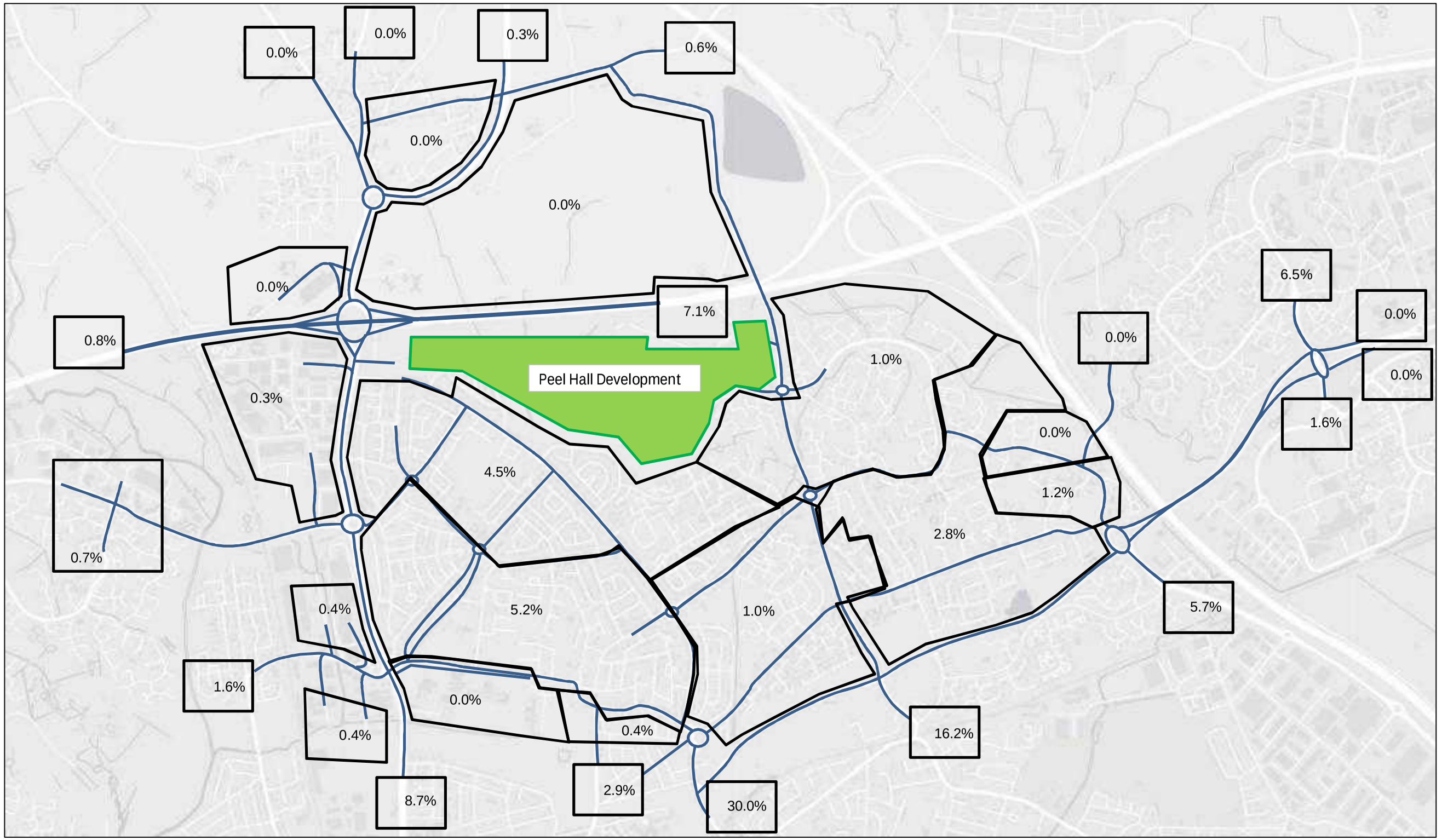
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 13, PM Percentage Distribution for Residential Trips to Peel Hall Development	AECOM



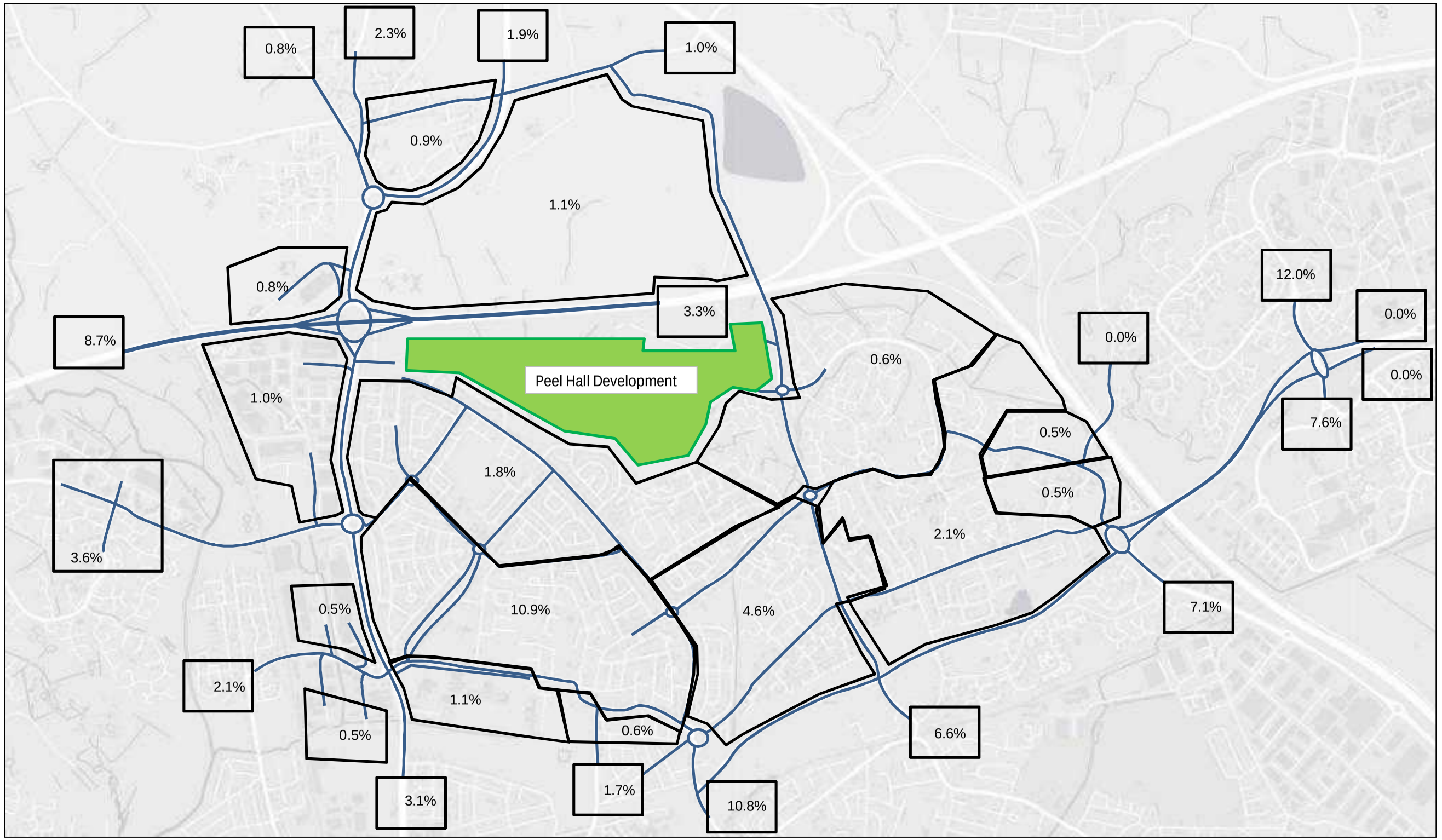
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 14, PM Percentage Distribution for Work Trips to Peel Hall Development	AECOM



** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

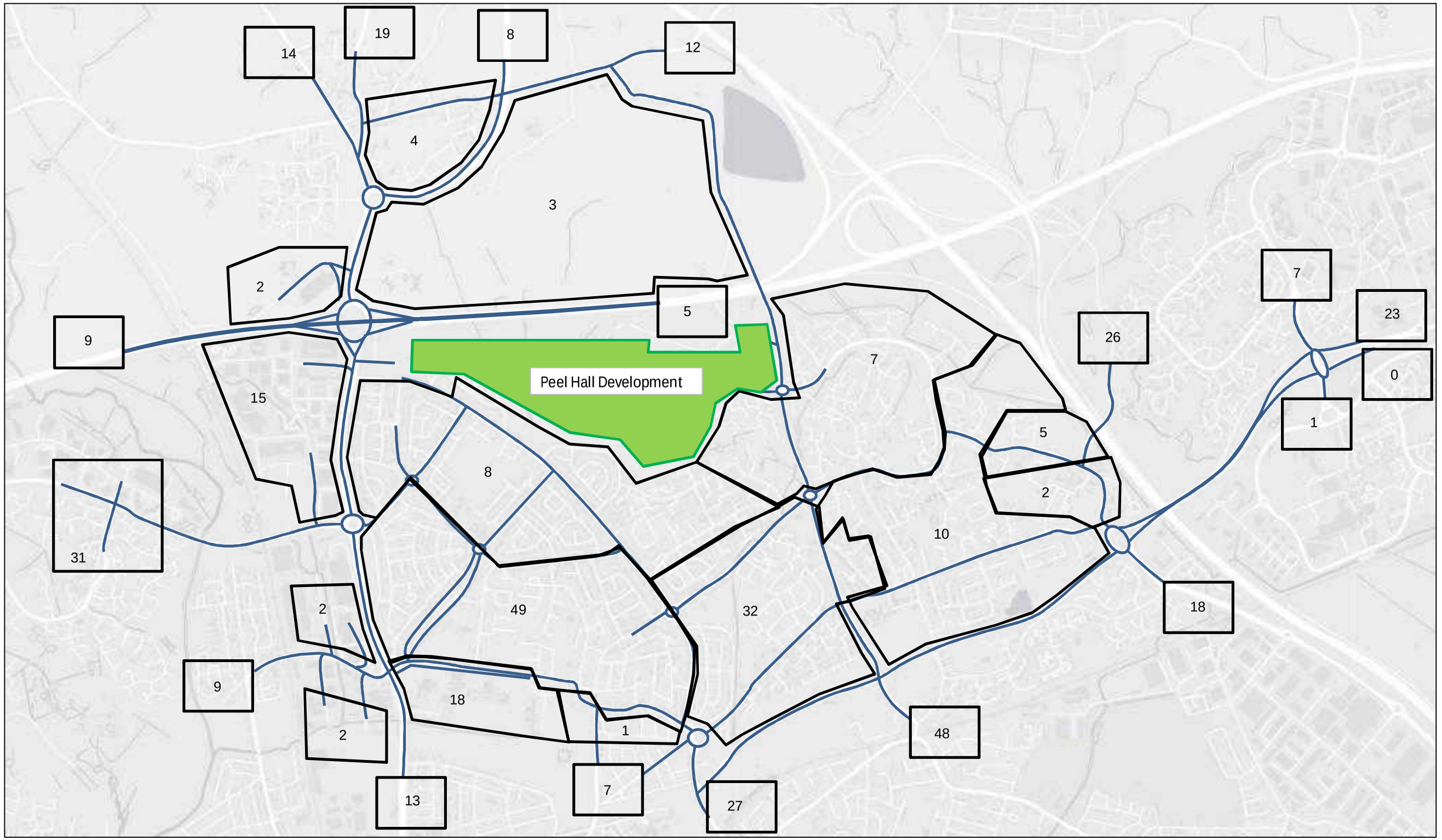
Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 15, PM Percentage Distribution for Other Trips to Peel Hall Development	AECOM



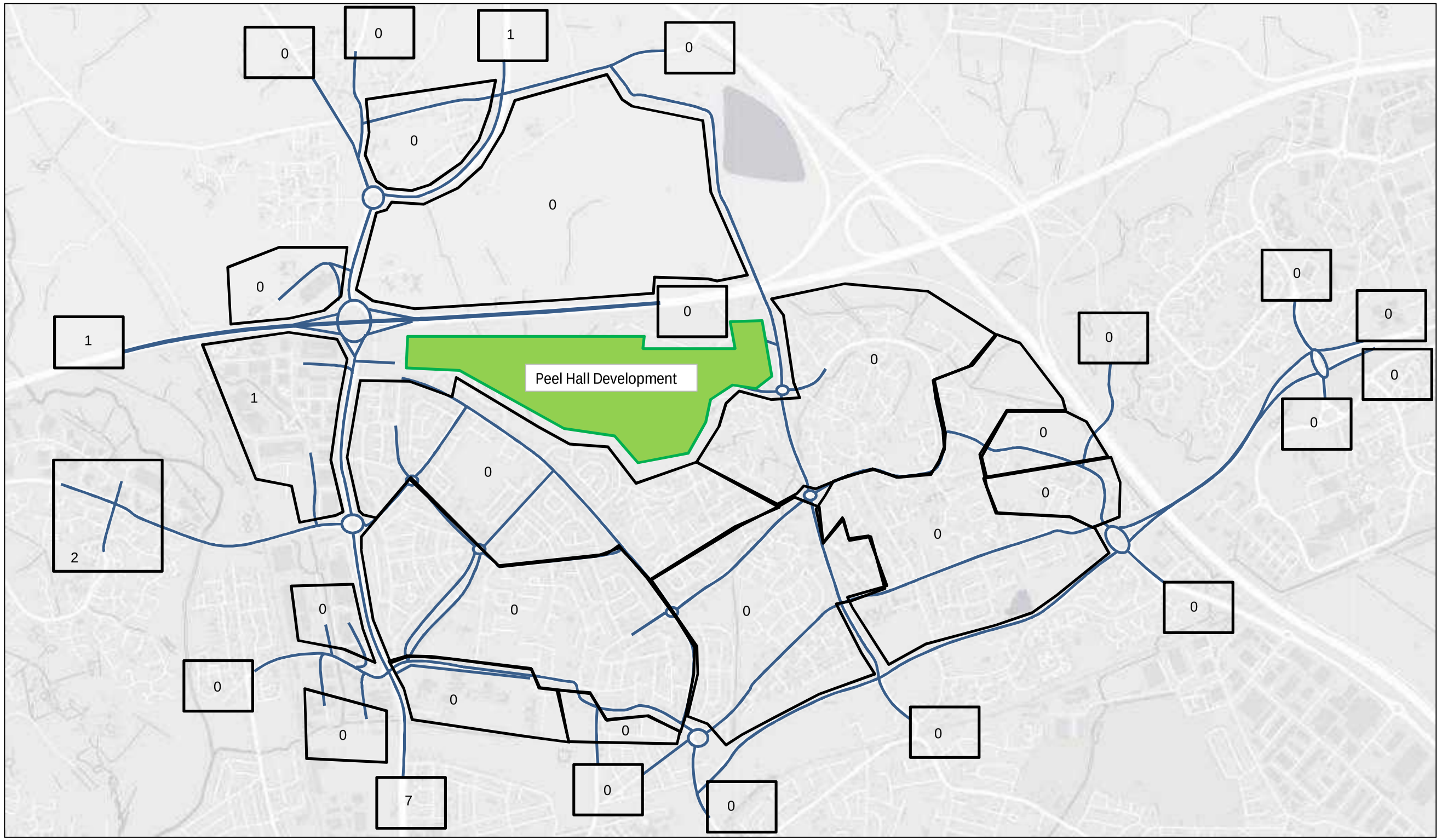
** Due to rounding to nearest number within Excel, percentages presented might not fully add to 100%

Peel Hall VISSIM Model - Trip Distribution	Appendix B, Figure 16, PM Percentage Distribution for All Trips to Peel Hall Development	AECOM

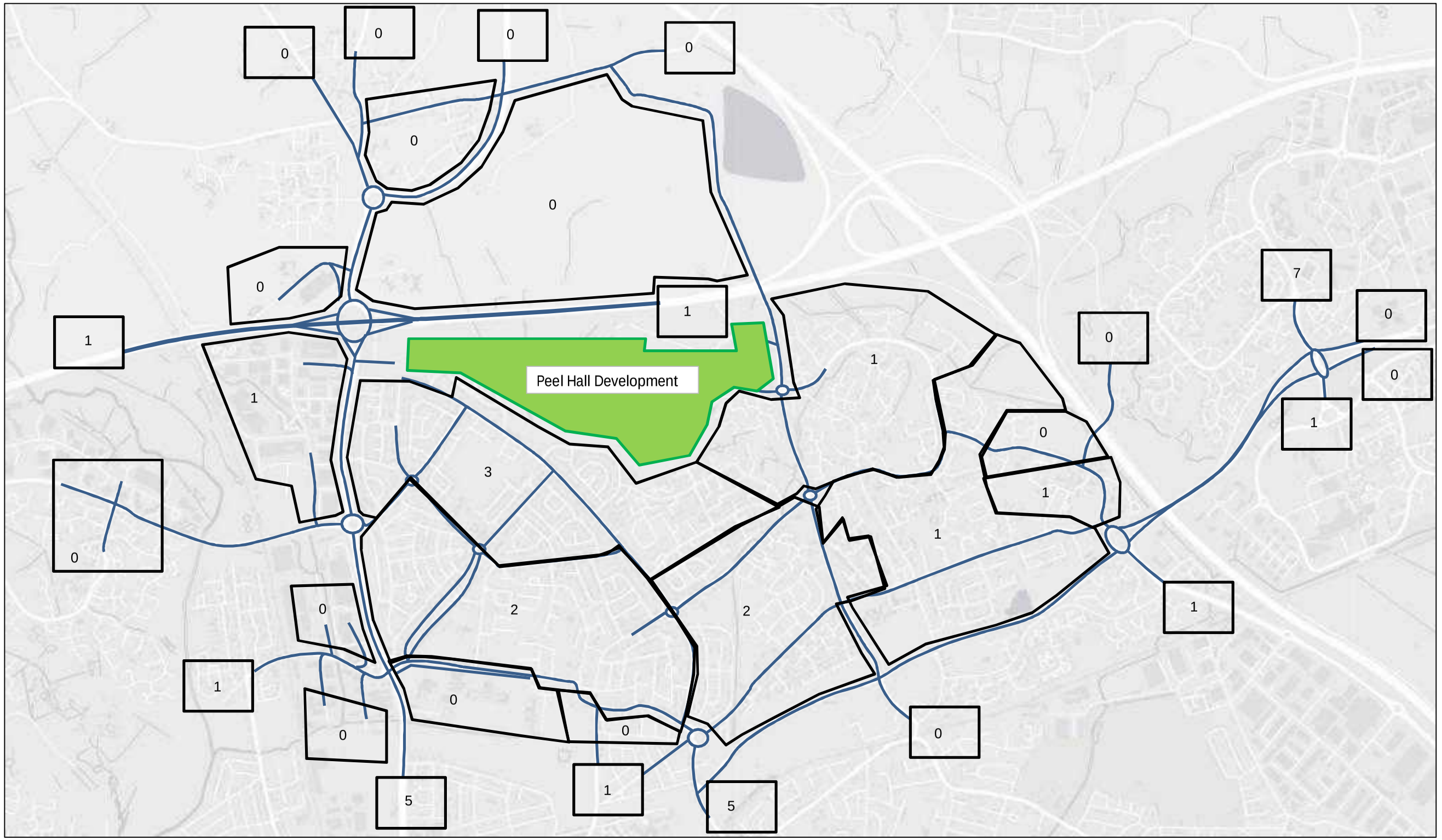
Appendix C
Total Proposed Trips per Time Period



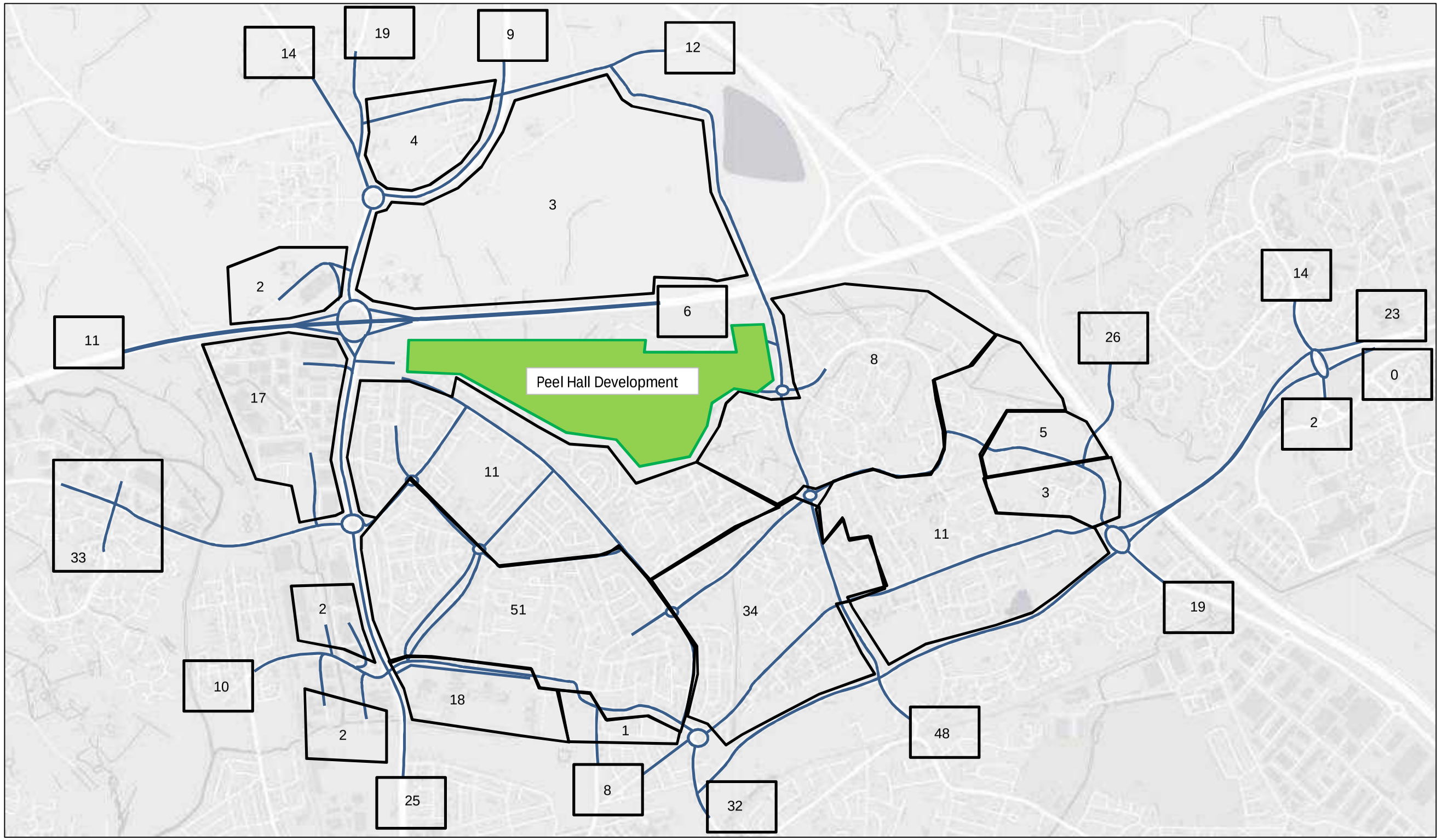
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 1, AM (0700-0800) Residential Trips from Peel Hall Development	AECOM



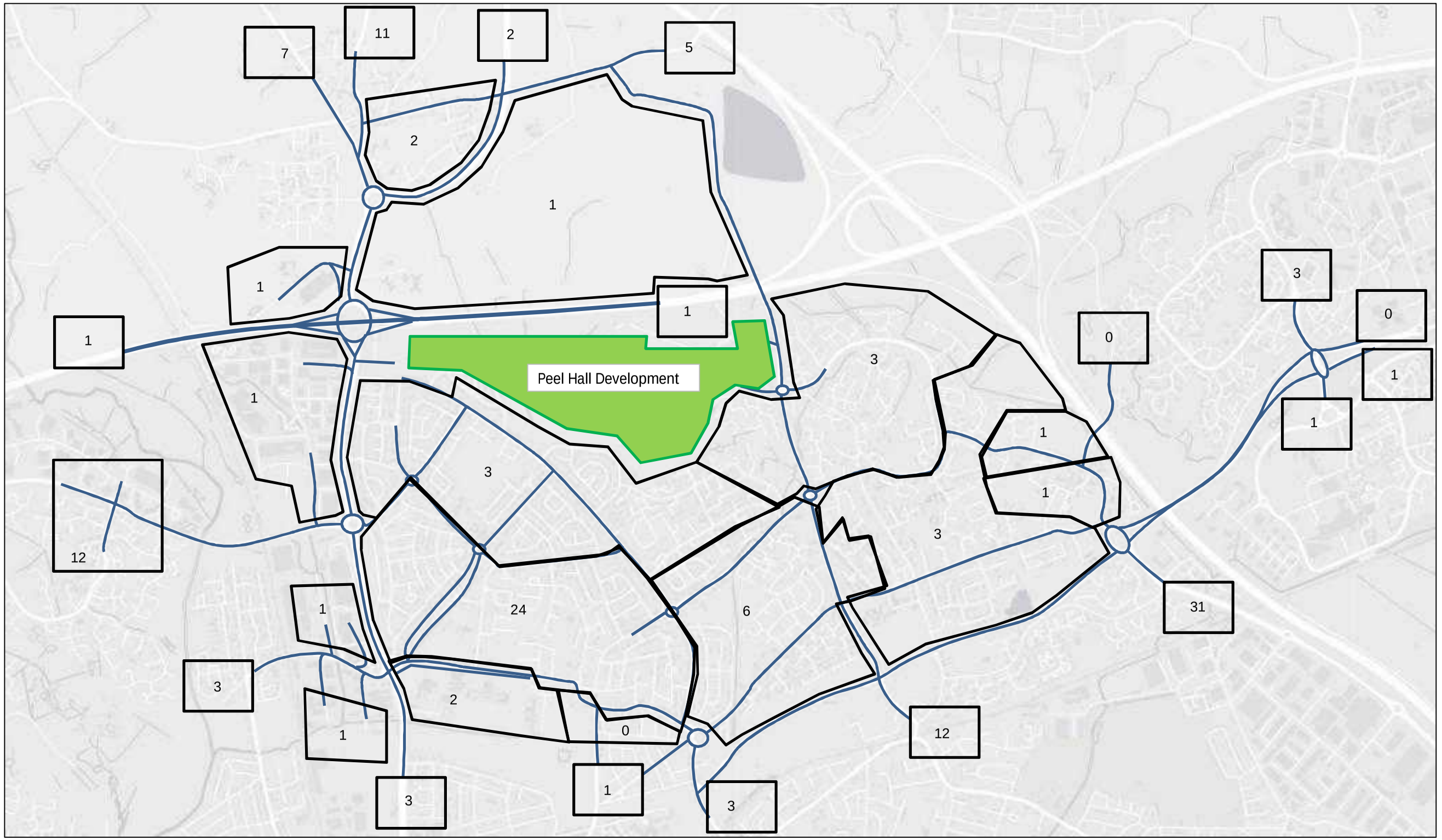
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 2, AM (0700-0800) Work Trips from Peel Hall Development	AECOM



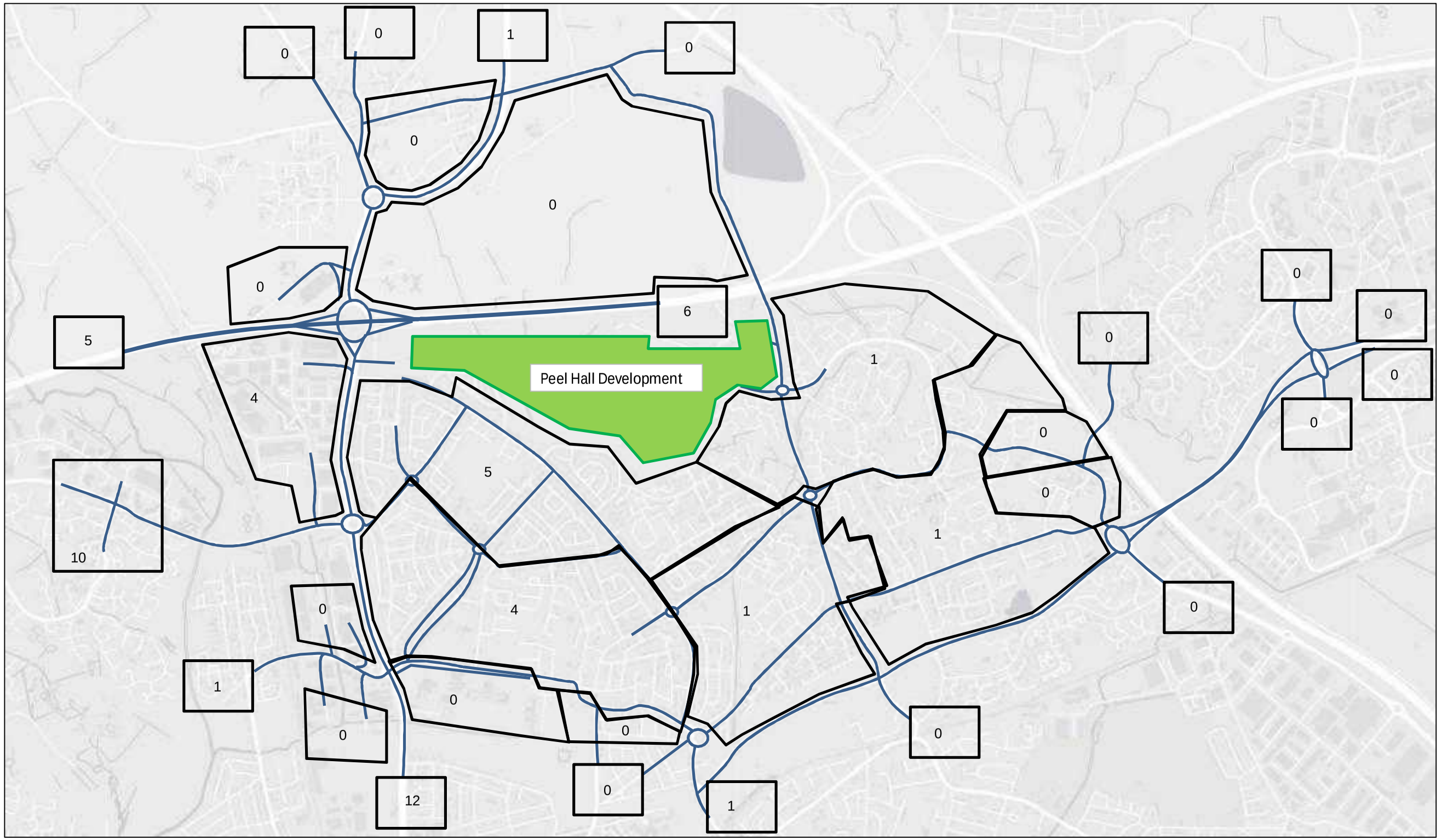
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 3, AM (0700-0800) Other Trips from Peel Hall Development	AECOM



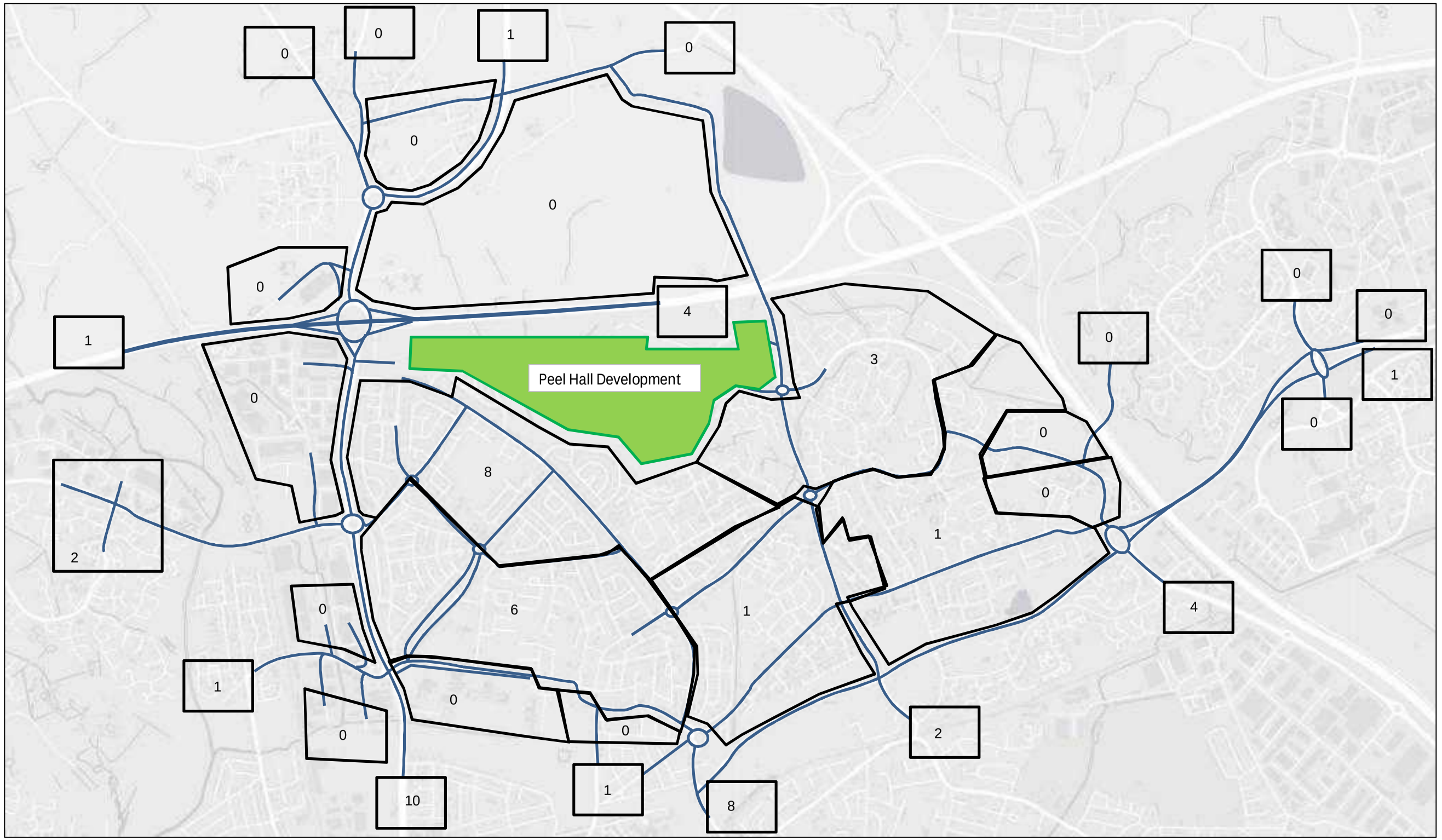
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 4, AM (0700-0800) Total Trips from Peel Hall Development	AECOM



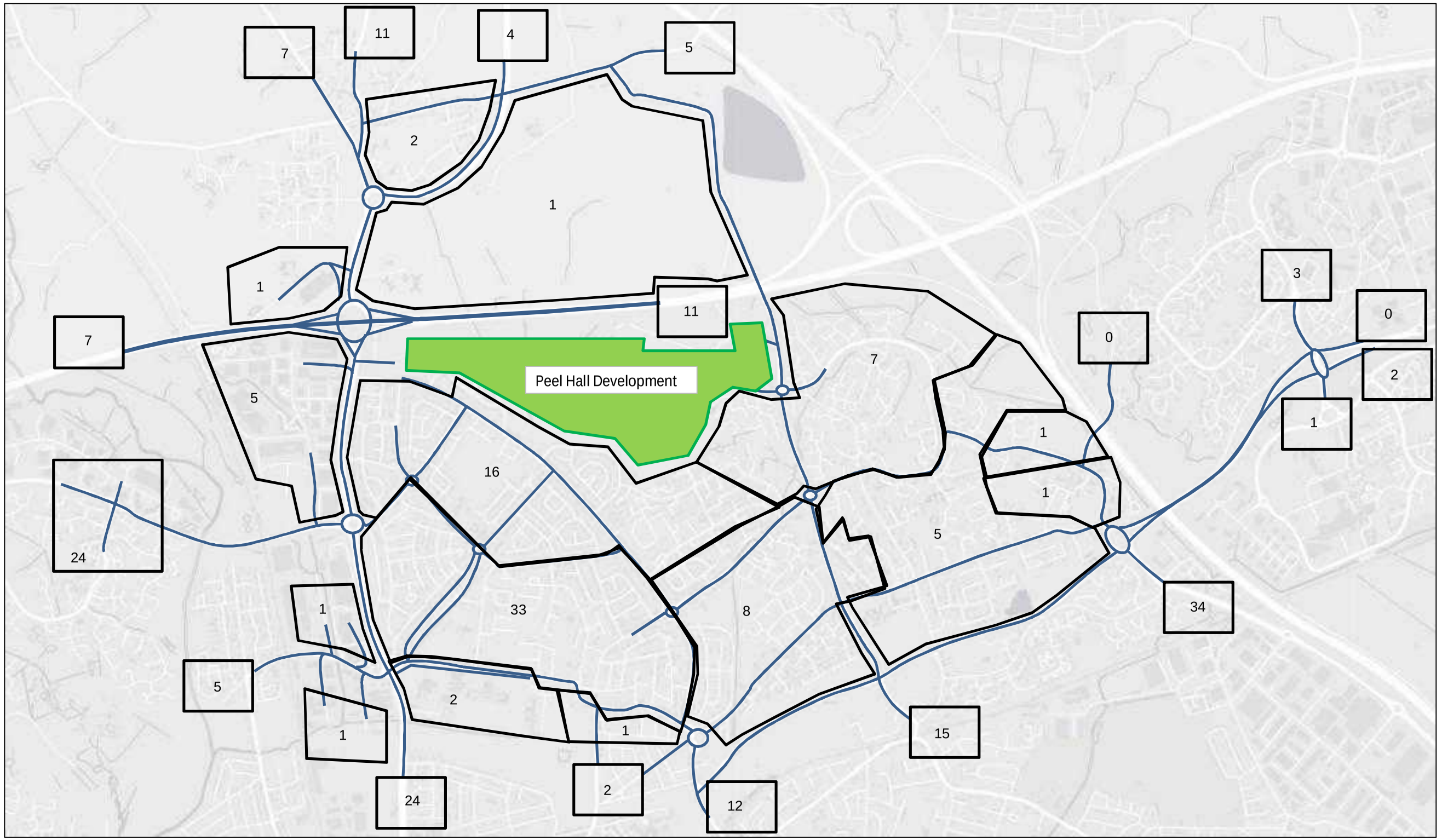
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 5, AM (0700-0800) Residential Trips to Peel Hall Development	AECOM



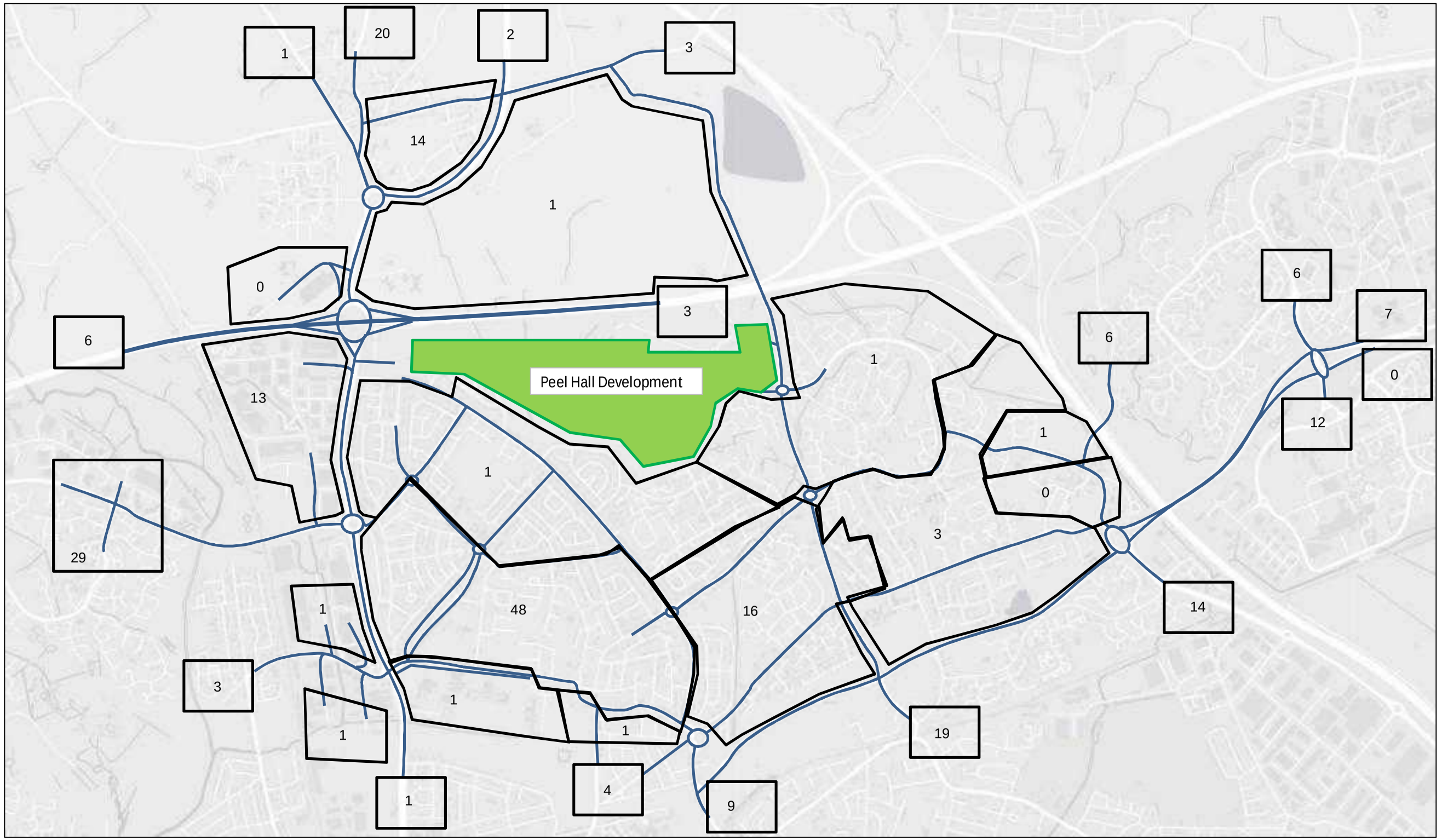
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 6, AM (0700-0800) Work Trips to Peel Hall Development	AECOM



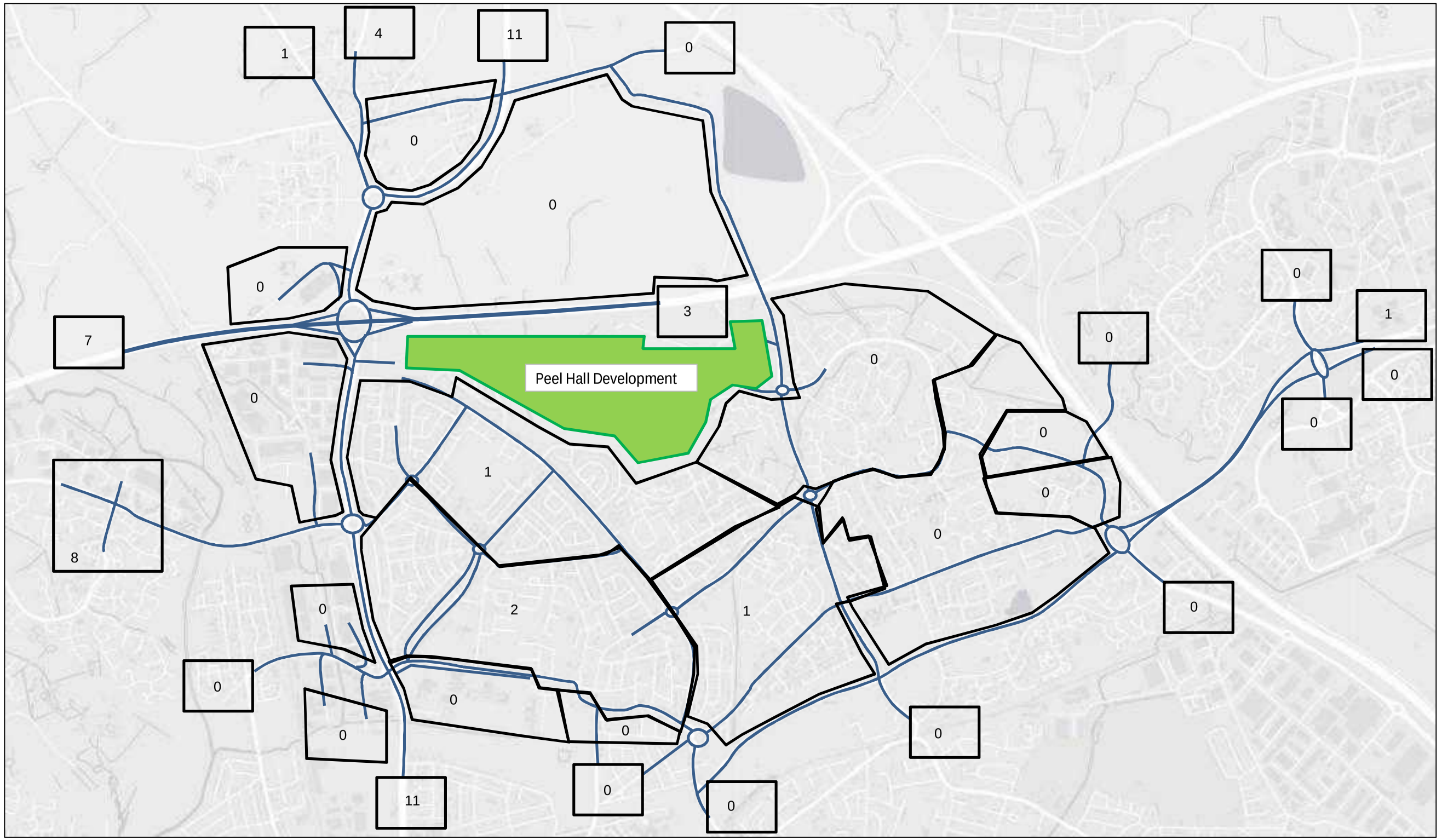
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 7, AM (0700-0800) Other Trips to Peel Hall Development	AECOM



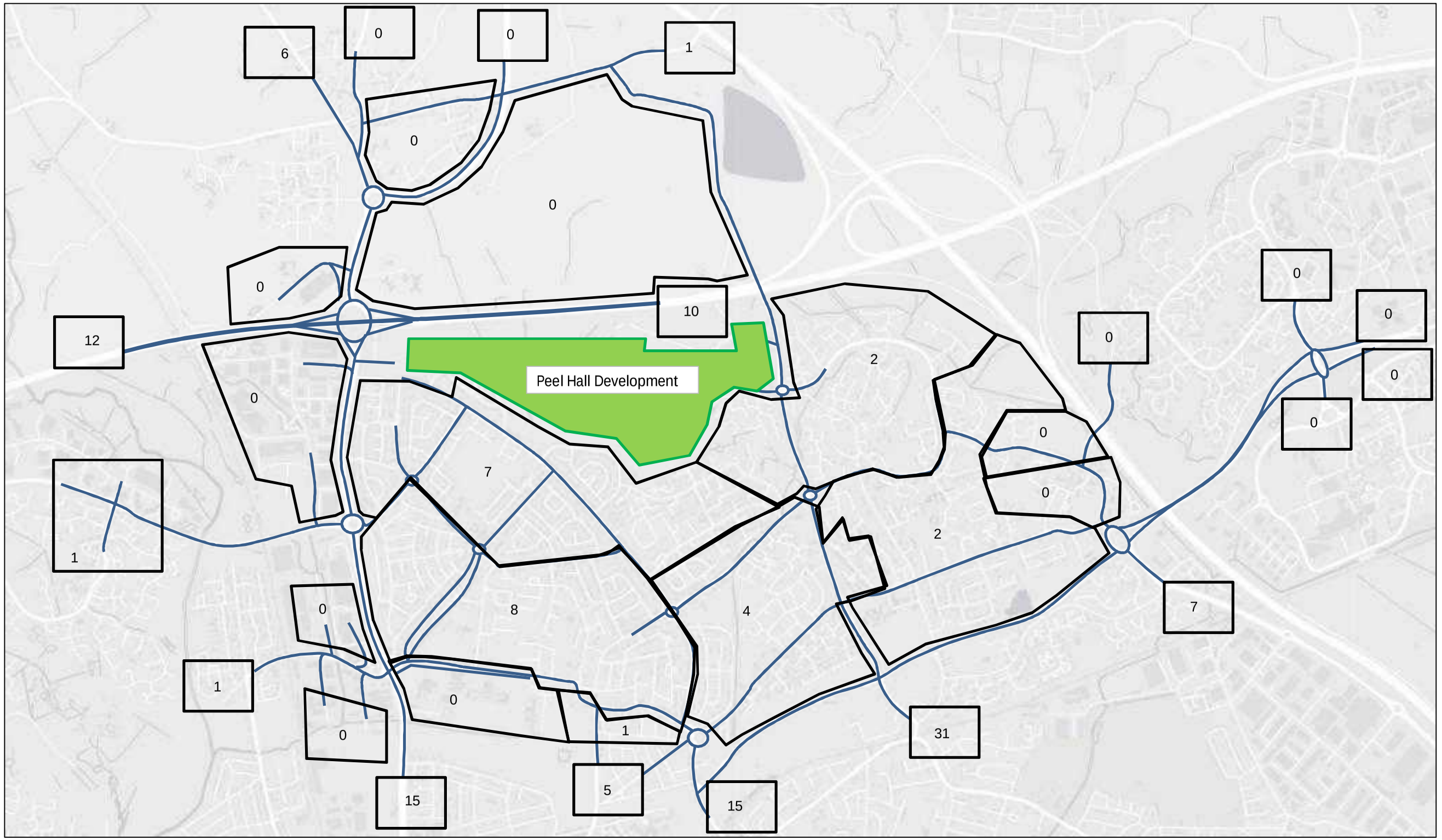
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 8, AM (0700-0800) Total Trips to Peel Hall Development	AECOM



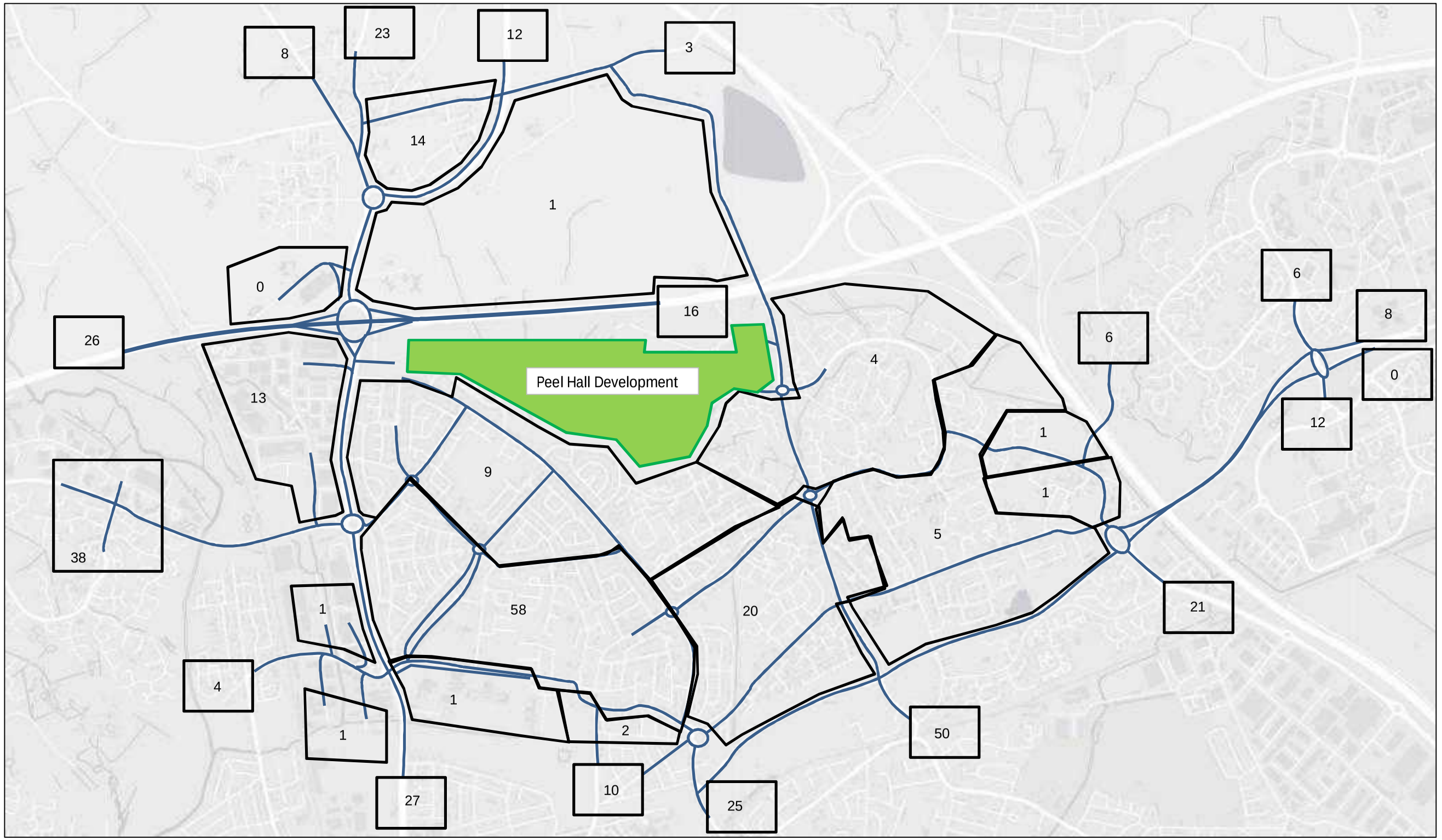
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 9, PM (1600-1700) Residential Trips from Peel Hall Development	AECOM



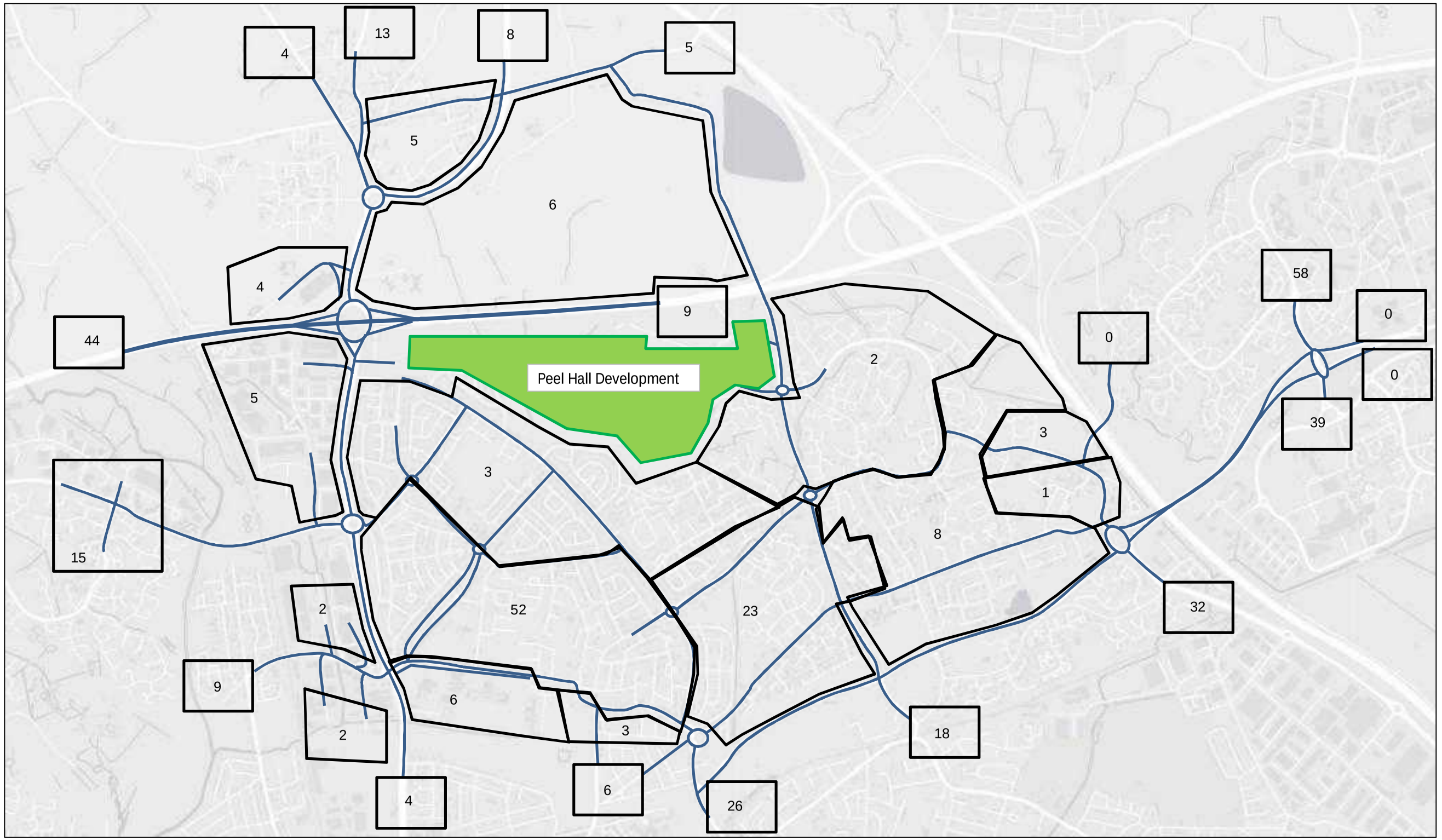
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 10, PM (1600-1700) Work Trips from Peel Hall Development	AECOM



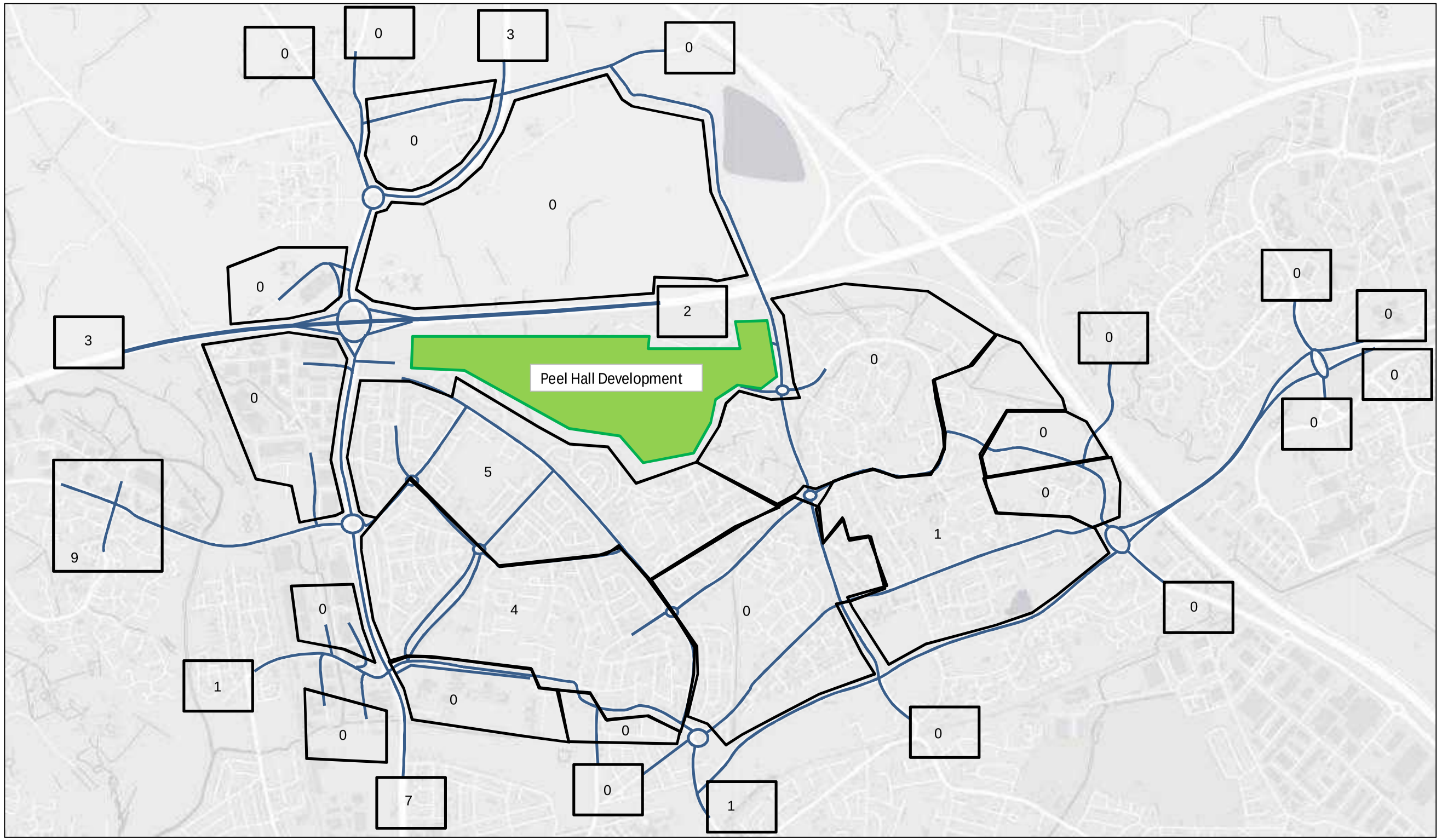
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 11, PM (1600-1700) Other Trips from Peel Hall Development	AECOM



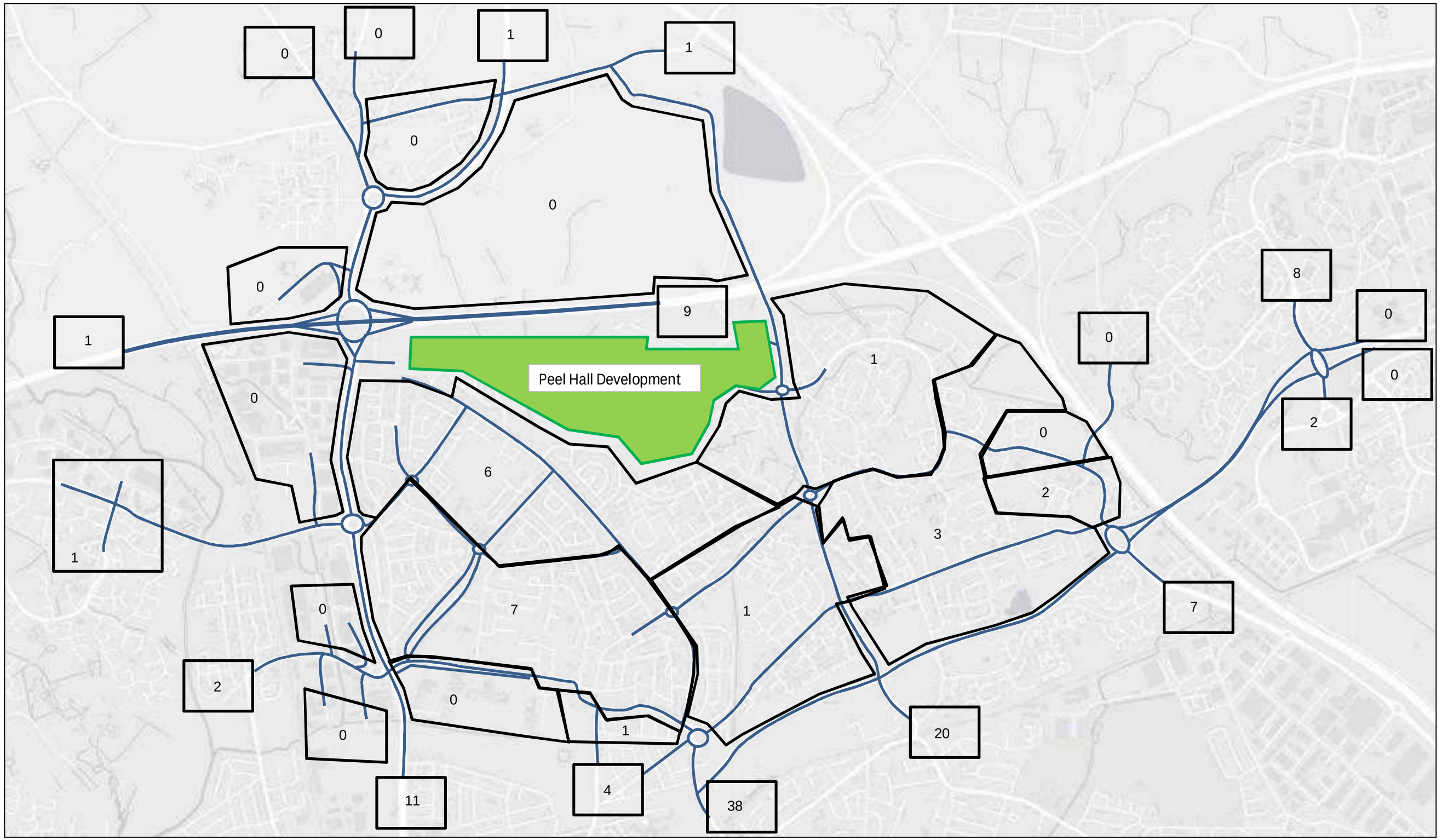
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 12, PM (1600-1700) Total Trips from Peel Hall Development	AECOM



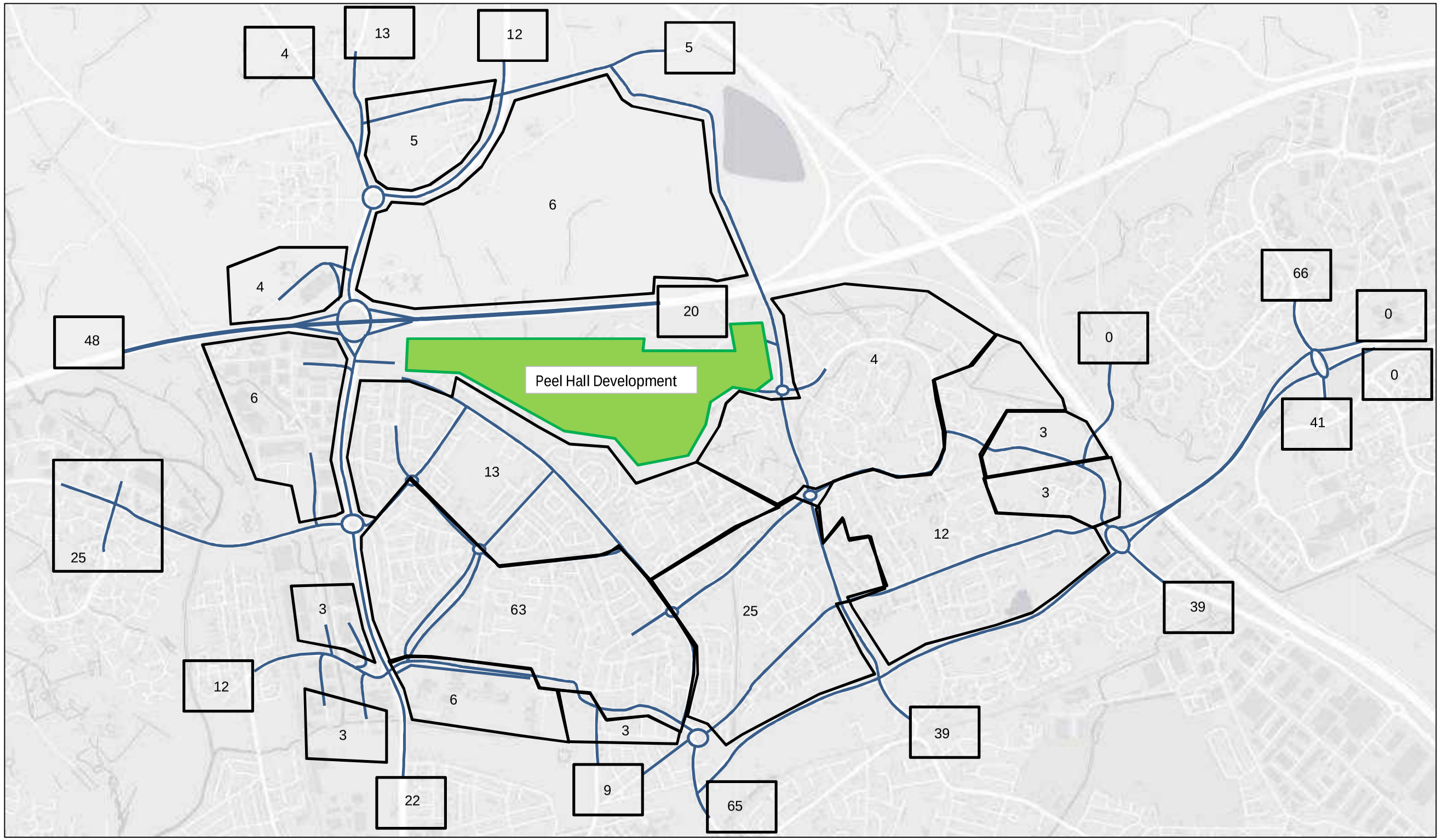
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 13, PM (1600-1700) Residential Trips to Peel Hall Development	AECOM



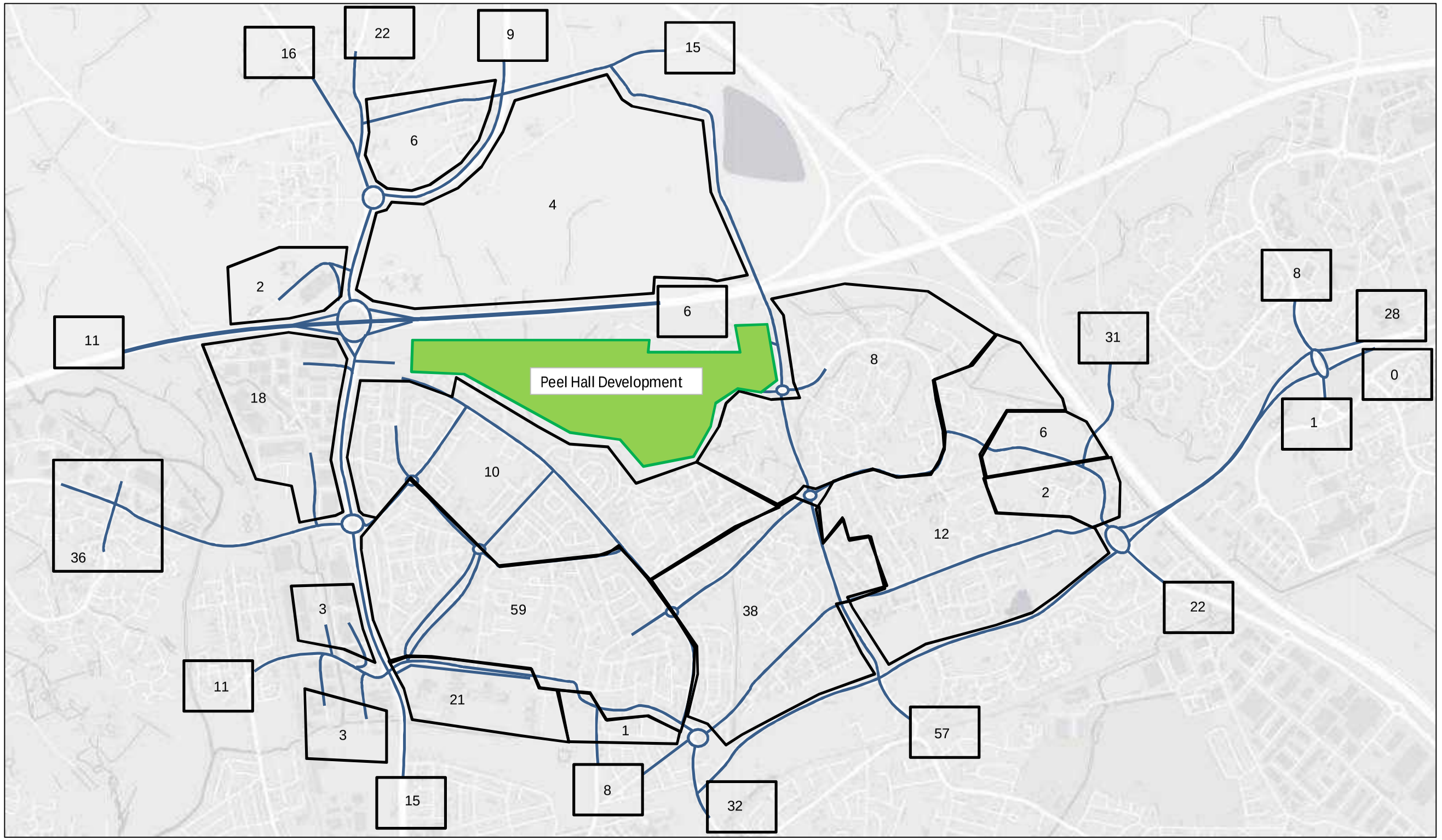
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 14, PM (1600-1700) Work Trips to Peel Hall Development	AECOM



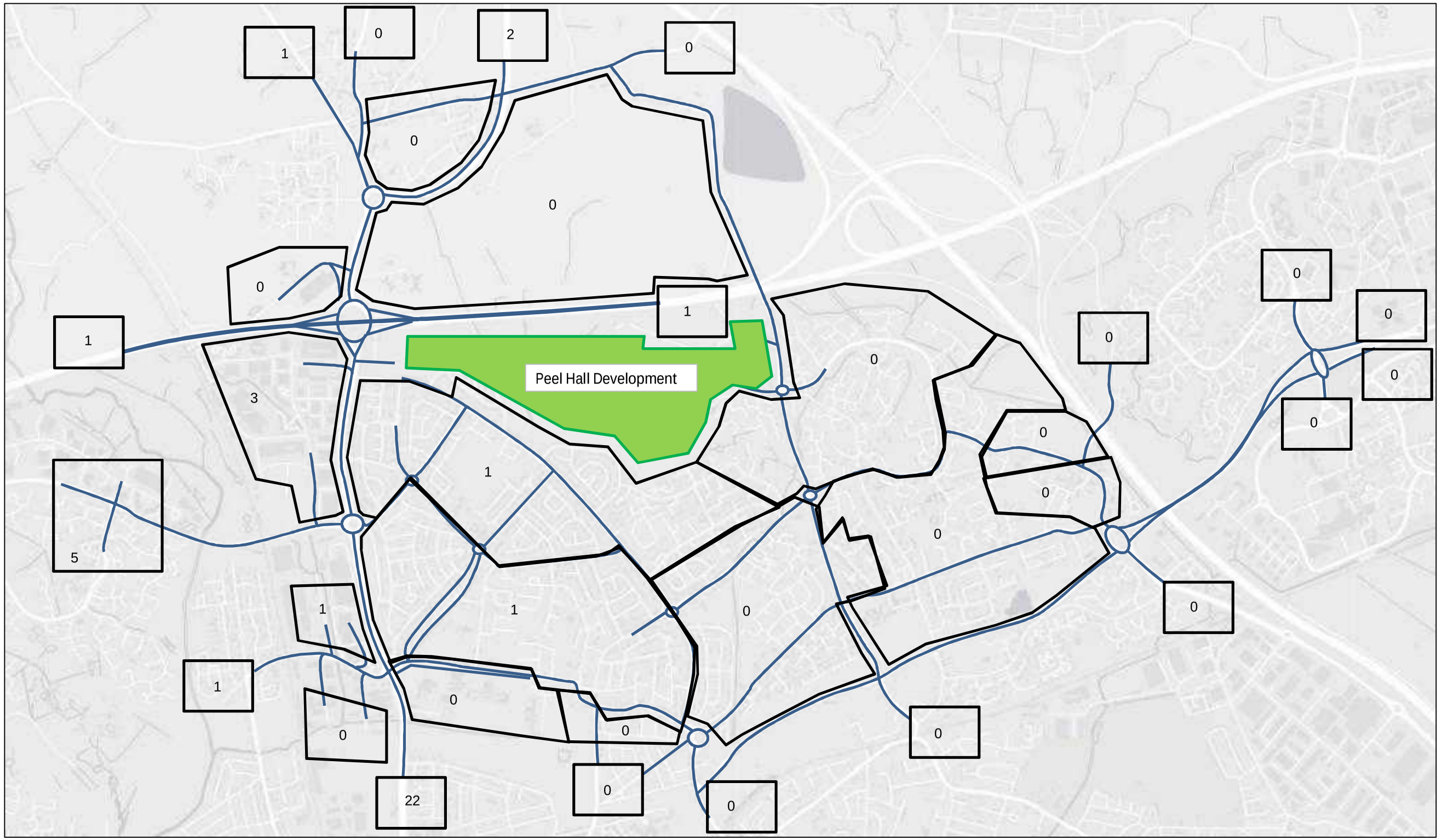
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 15, PM (1600-1700) Other Trips to Peel Hall Development	AECOM



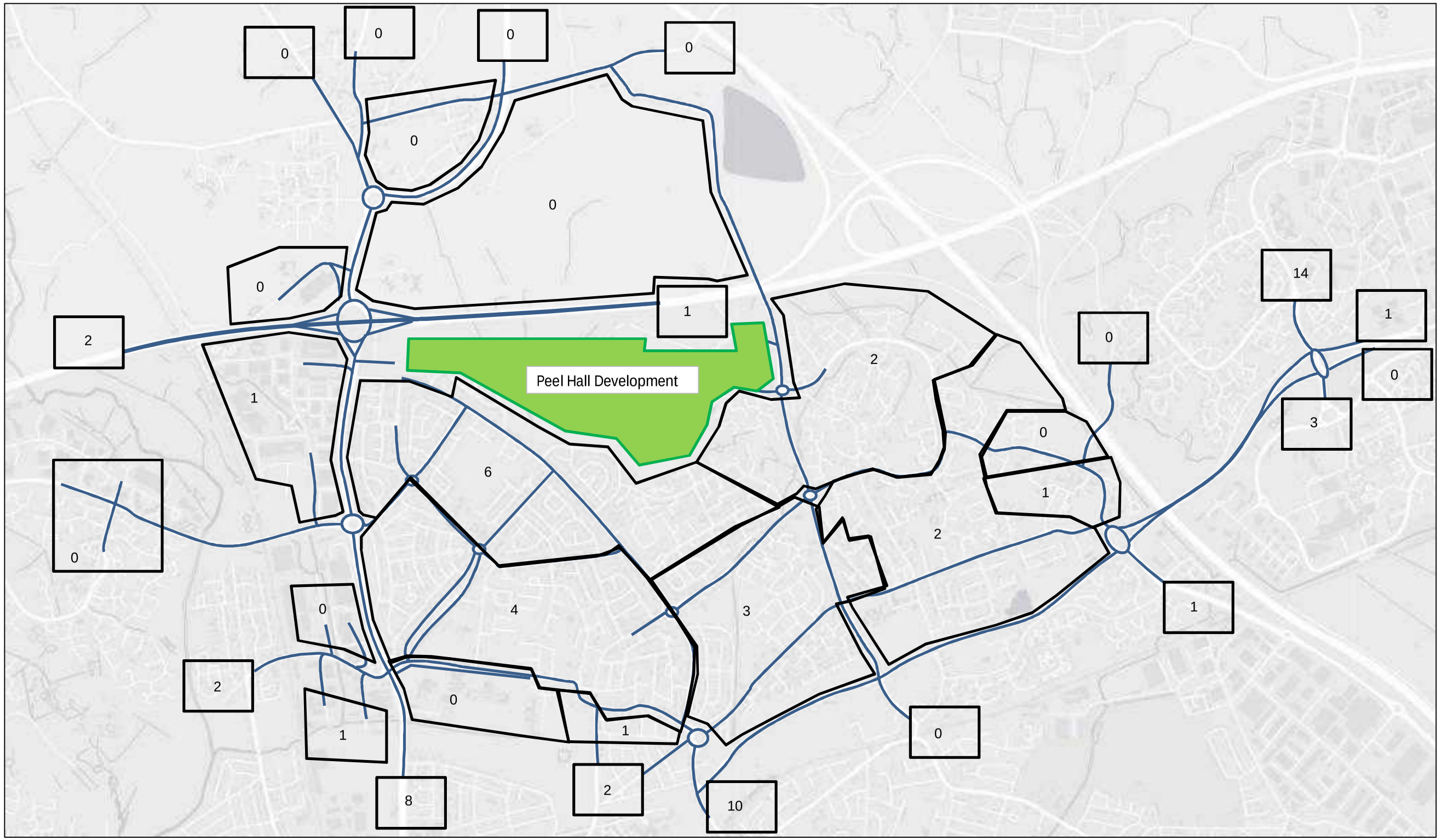
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 16, PM (1600-1700) Total Trips to Peel Hall Development	AECOM



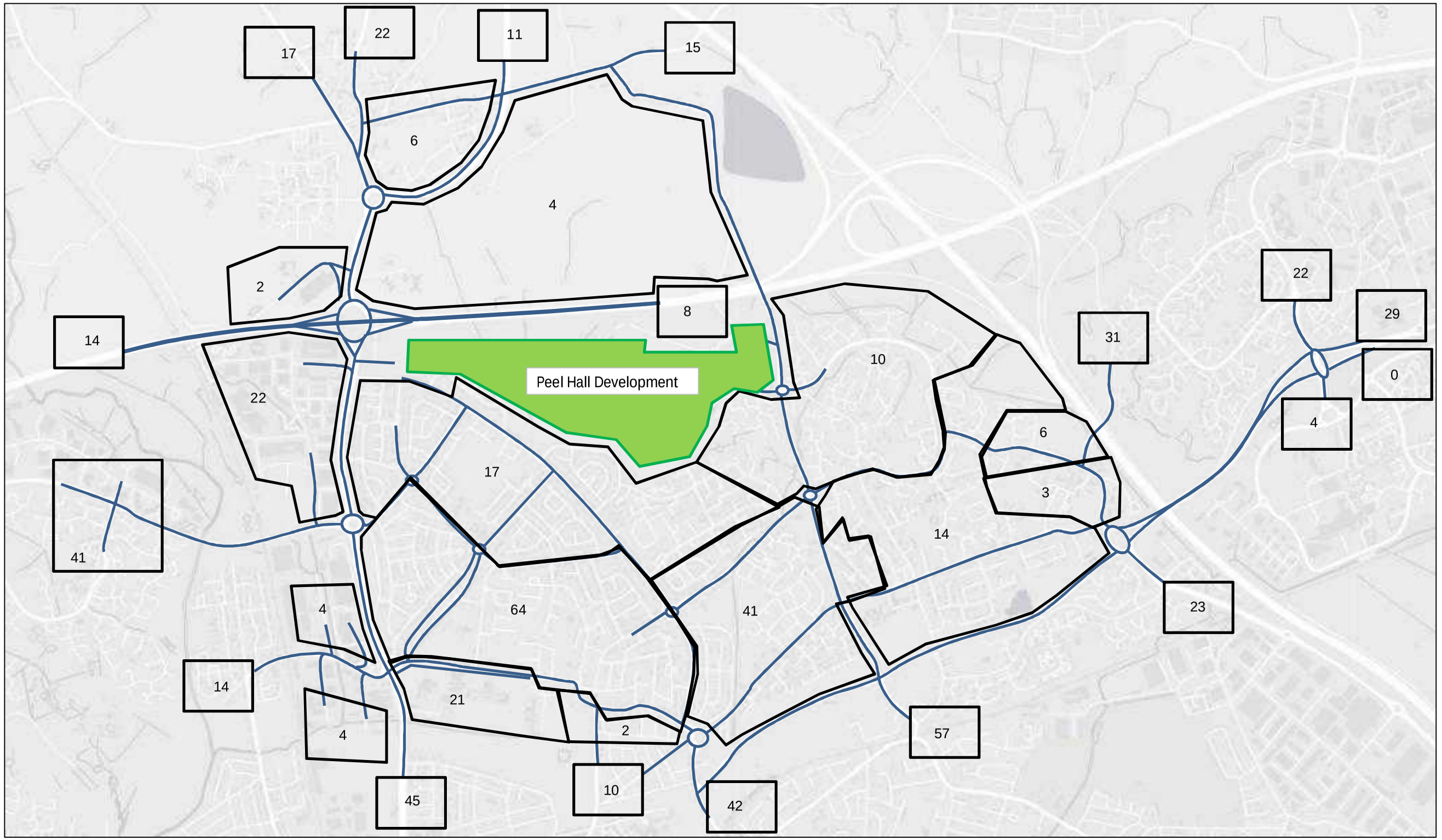
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 17, AM (0800-0900) Residential Trips from Peel Hall Development	AECOM



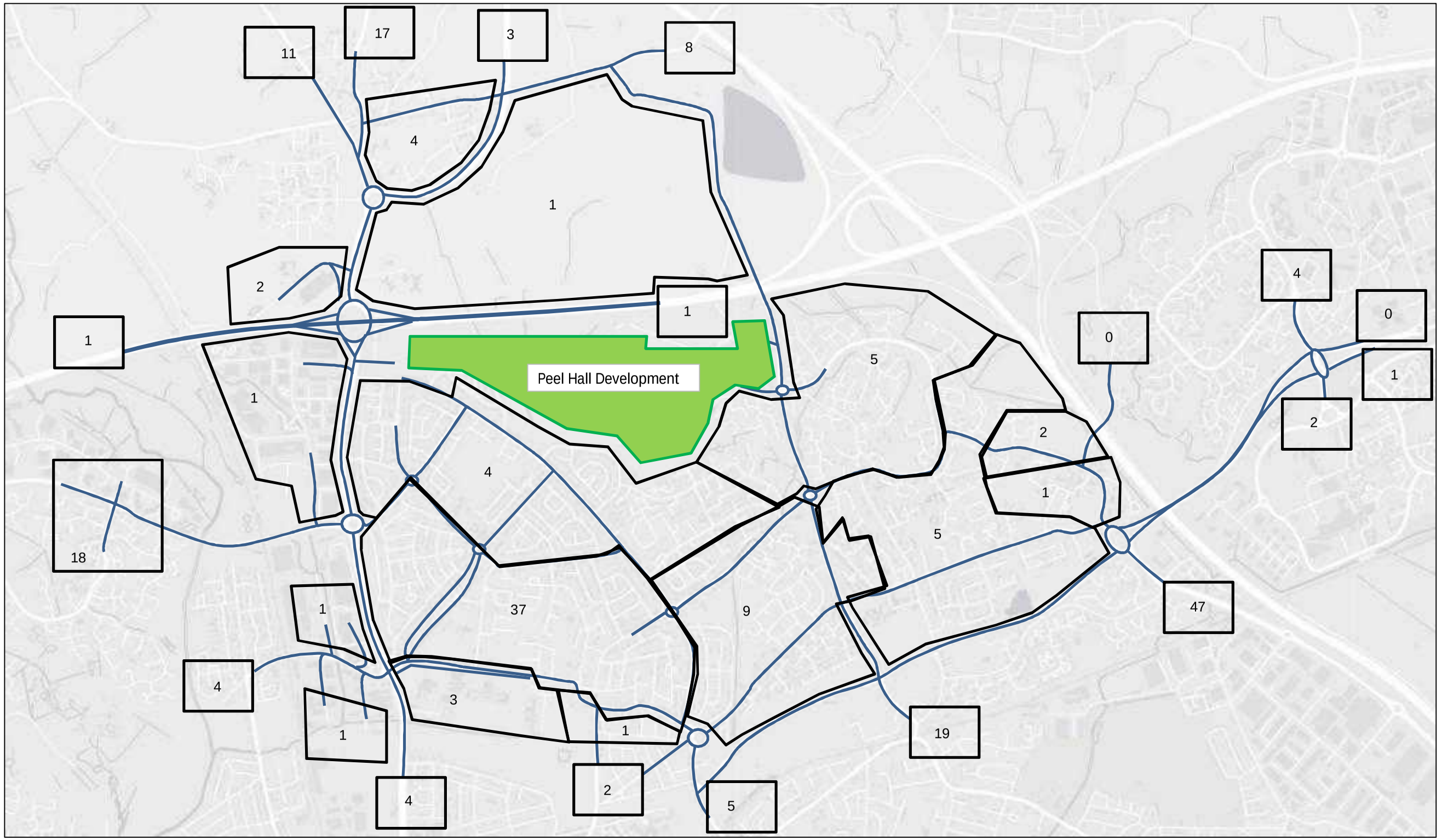
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 18, AM (0800-0900) Work Trips from Peel Hall Development	AECOM



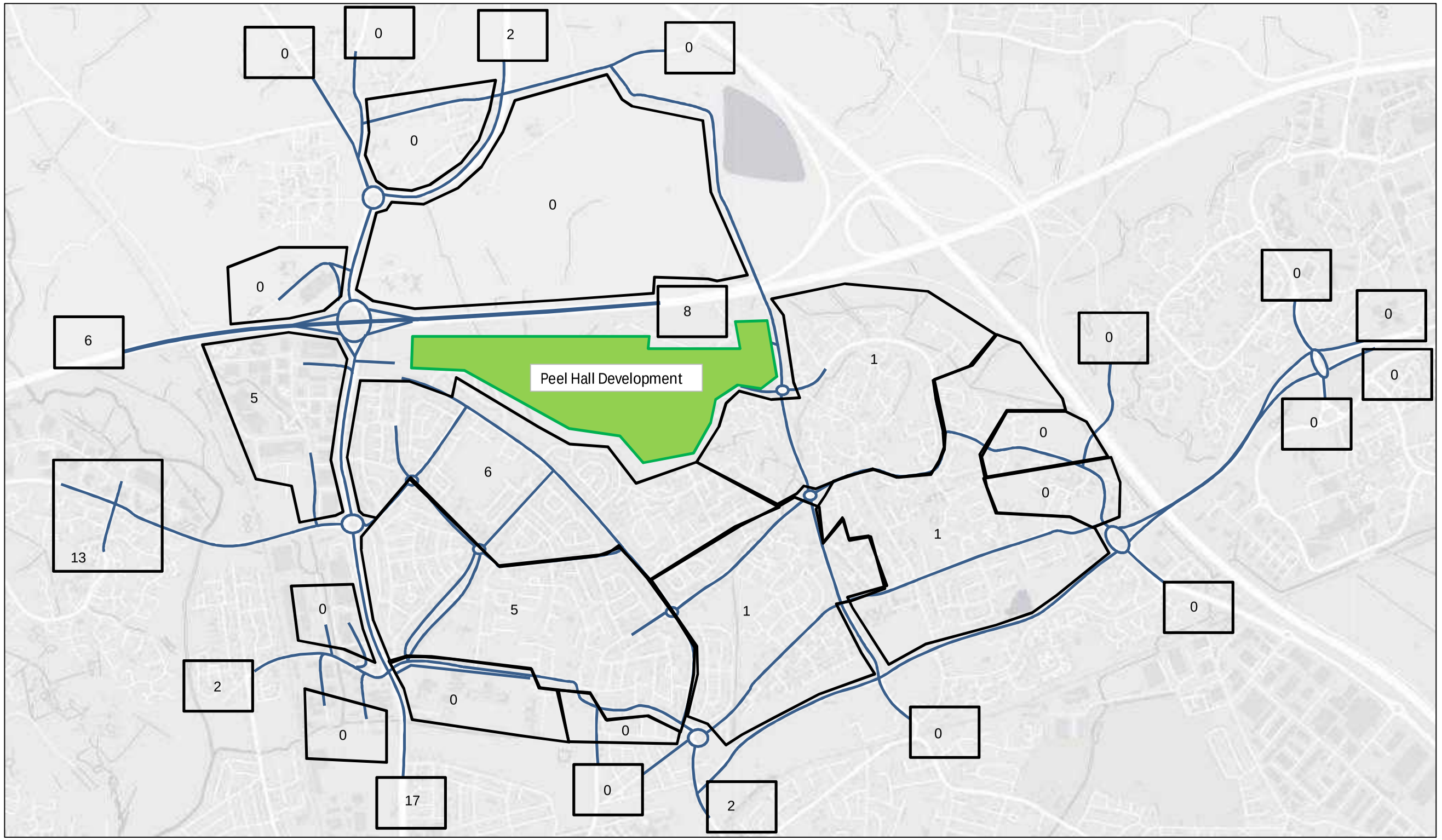
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 19, AM (0800-0900) Other Trips from Peel Hall Development	AECOM



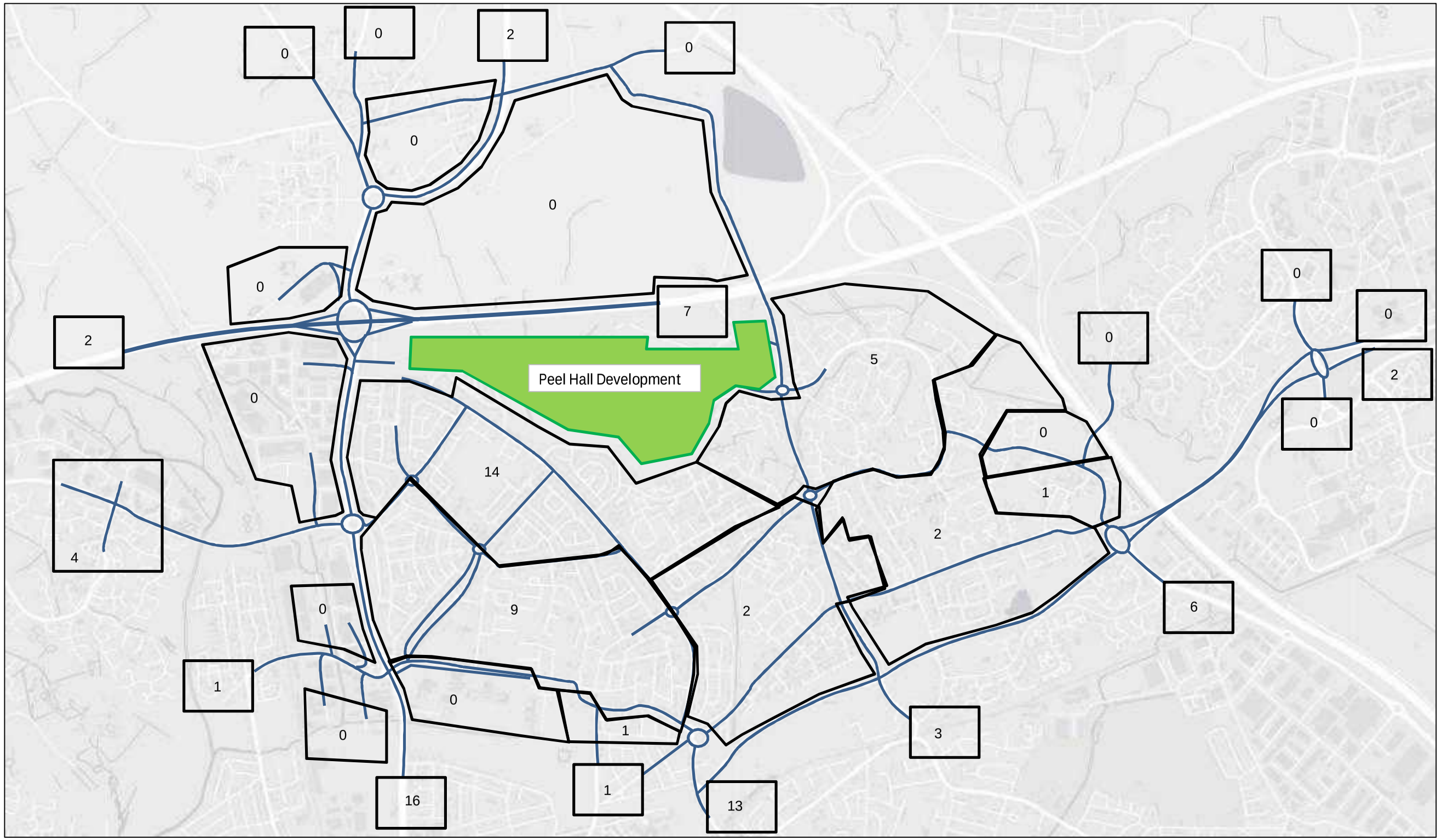
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 20, AM (0800-0900) Total Trips from Peel Hall Development	AECOM



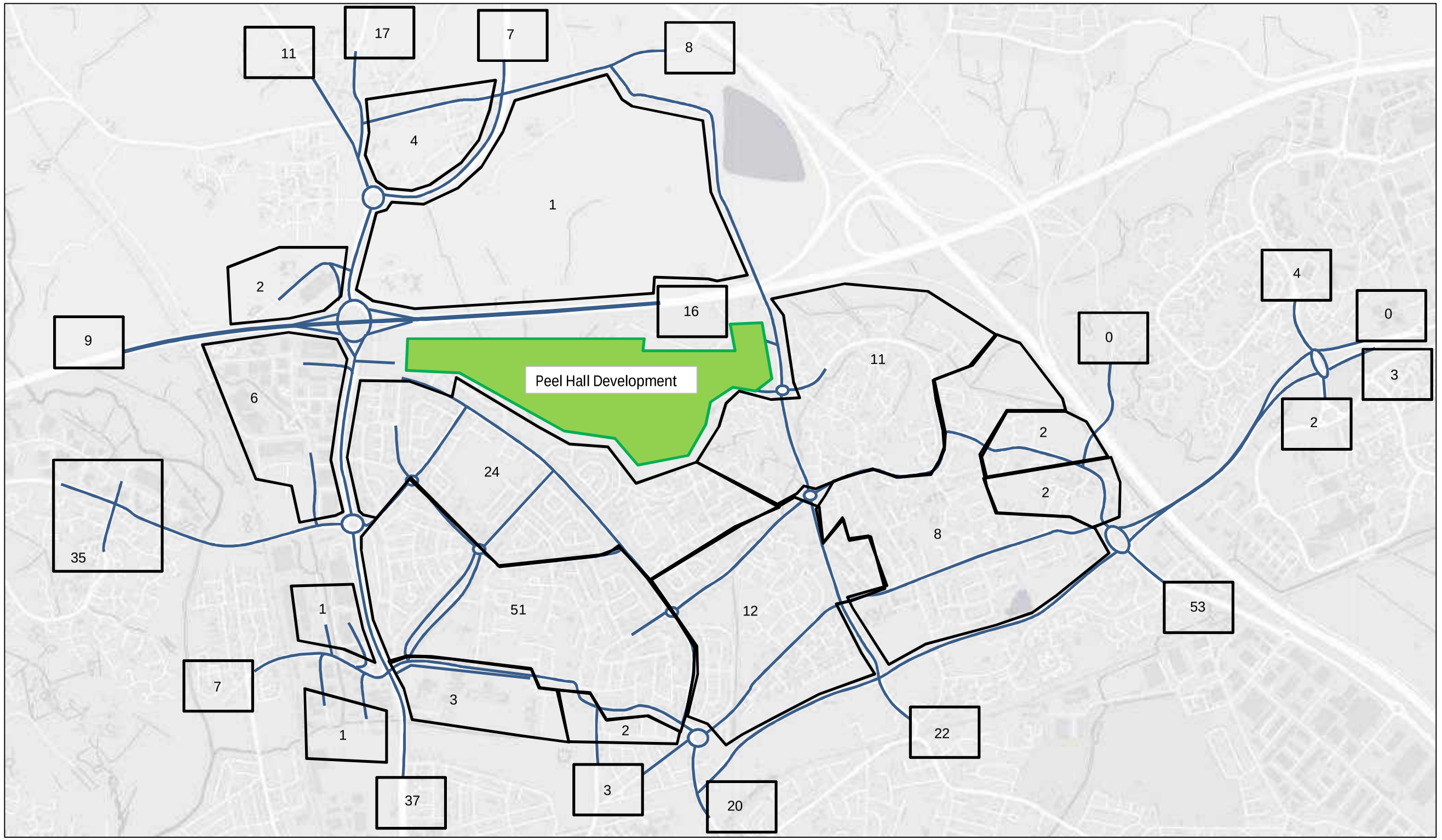
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 21, AM (0800-0900) Residential Trips to Peel Hall Development	AECOM



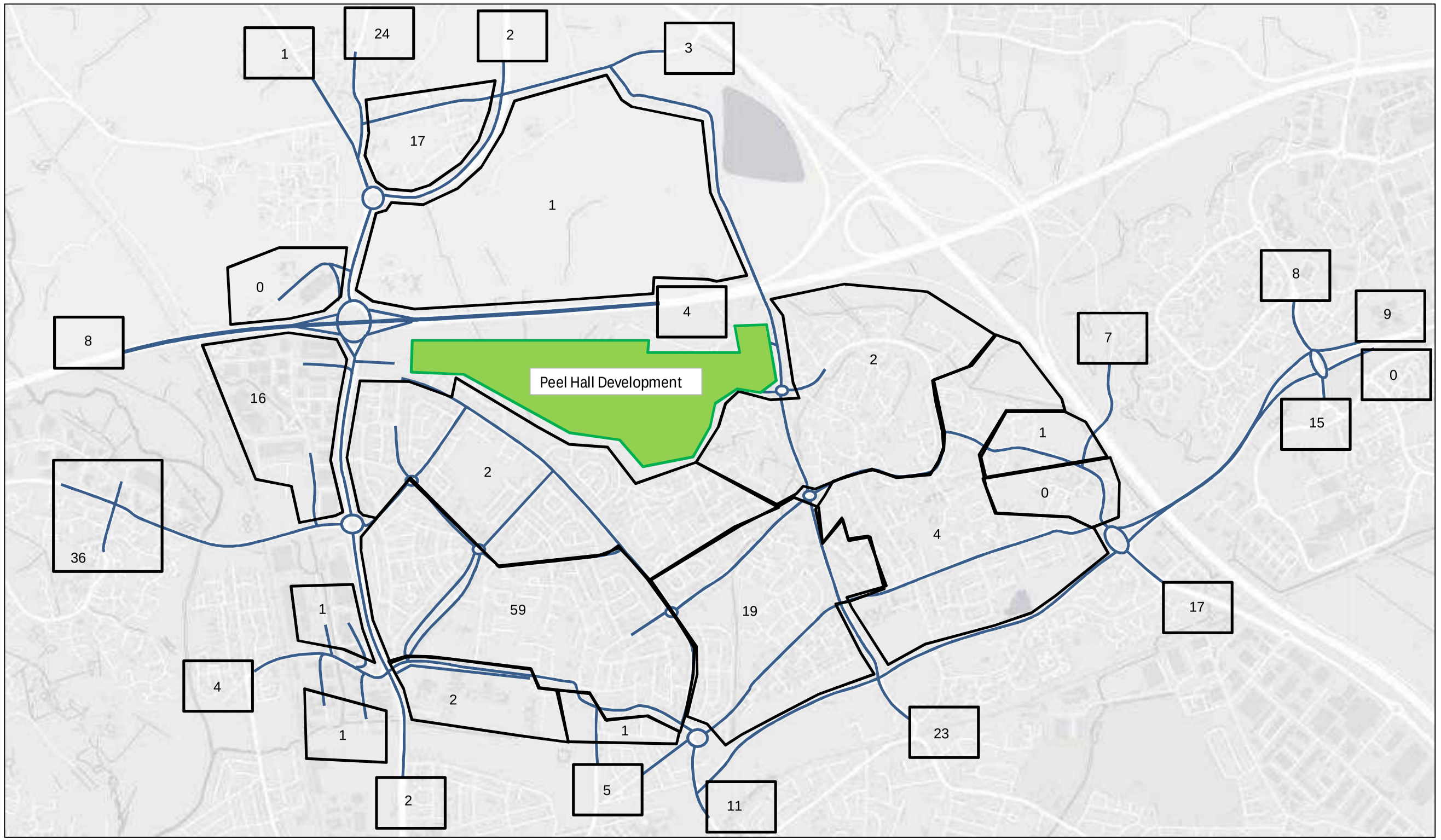
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 22, AM (0800-0900) Work Trips to Peel Hall Development	AECOM



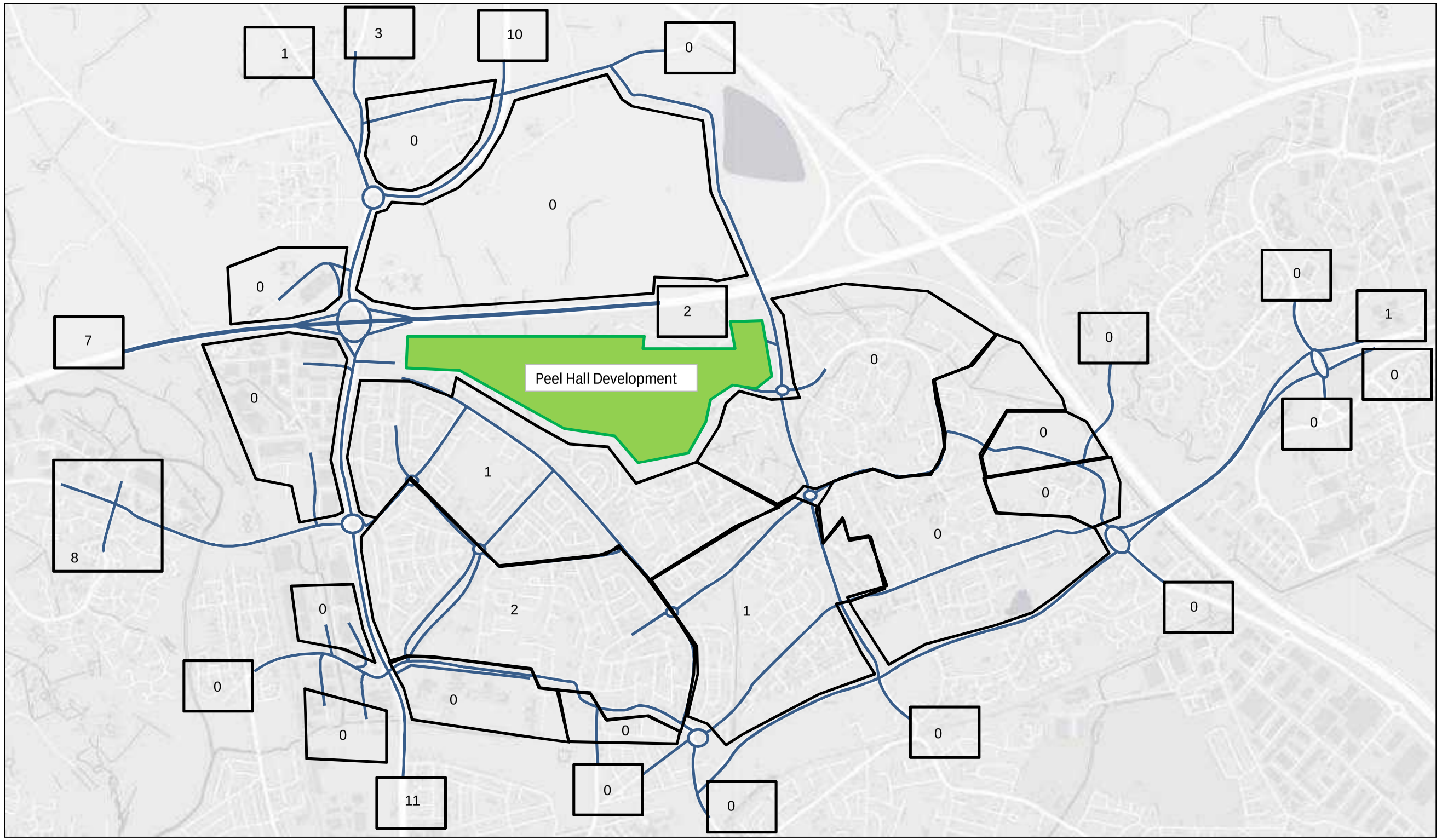
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 23, AM (0800-0900) Other Trips to Peel Hall Development	AECOM



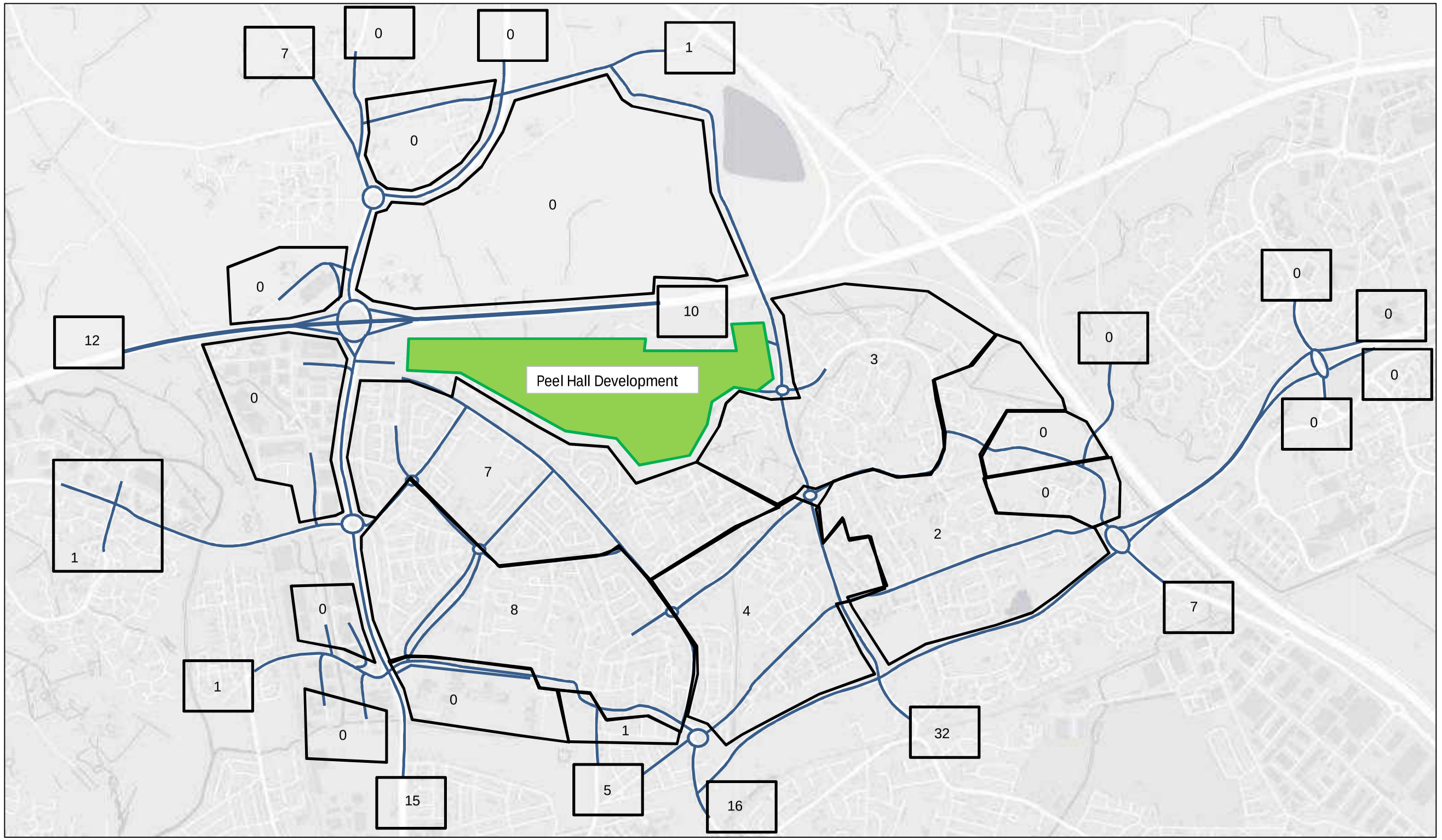
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 24, AM (0800-0900) Total Trips to Peel Hall Development	AECOM



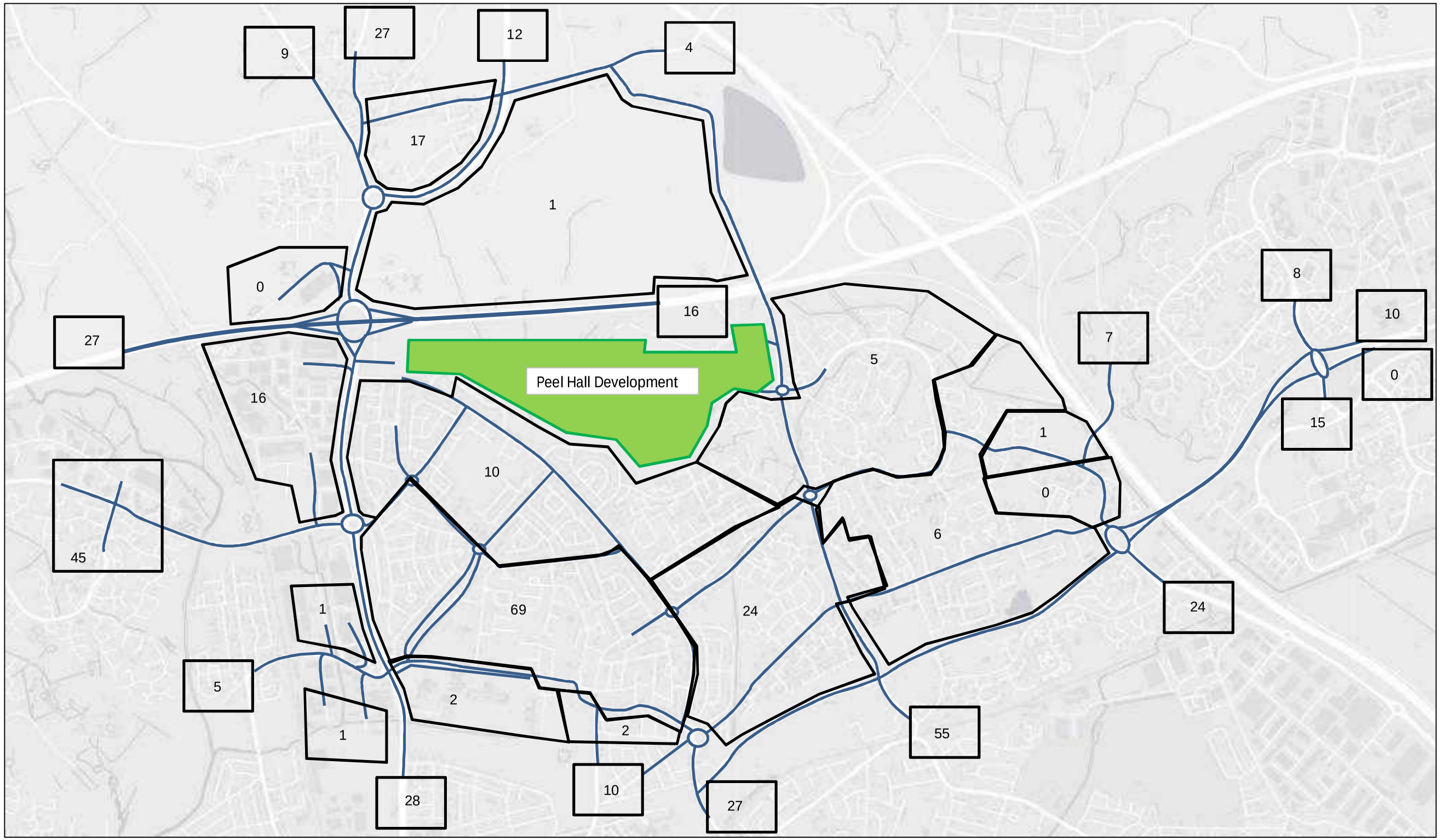
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 25, PM (1700-1800) Residential Trips from Peel Hall Development	AECOM



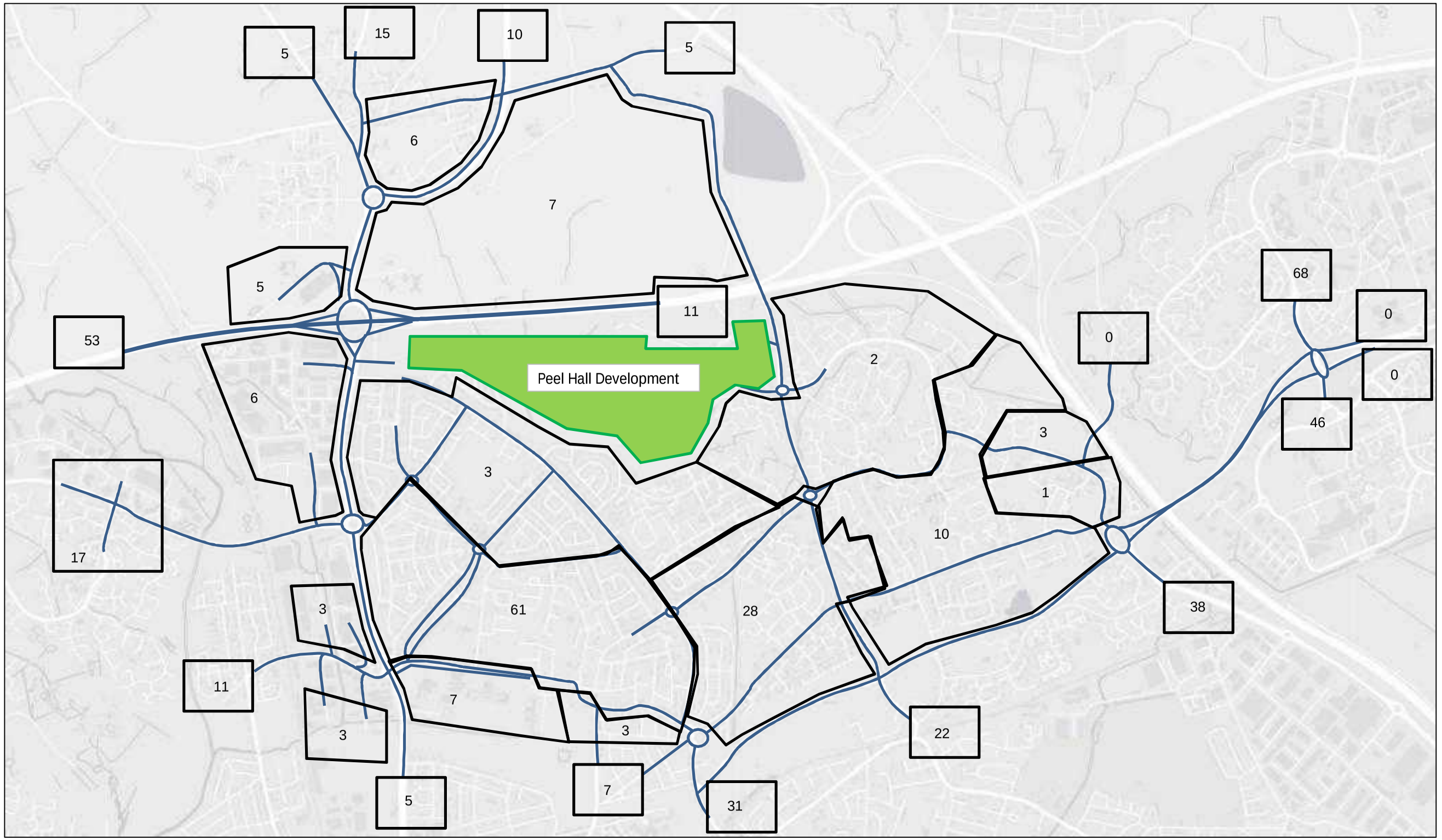
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 26, PM (1700-1800) Work Trips from Peel Hall Development	AECOM



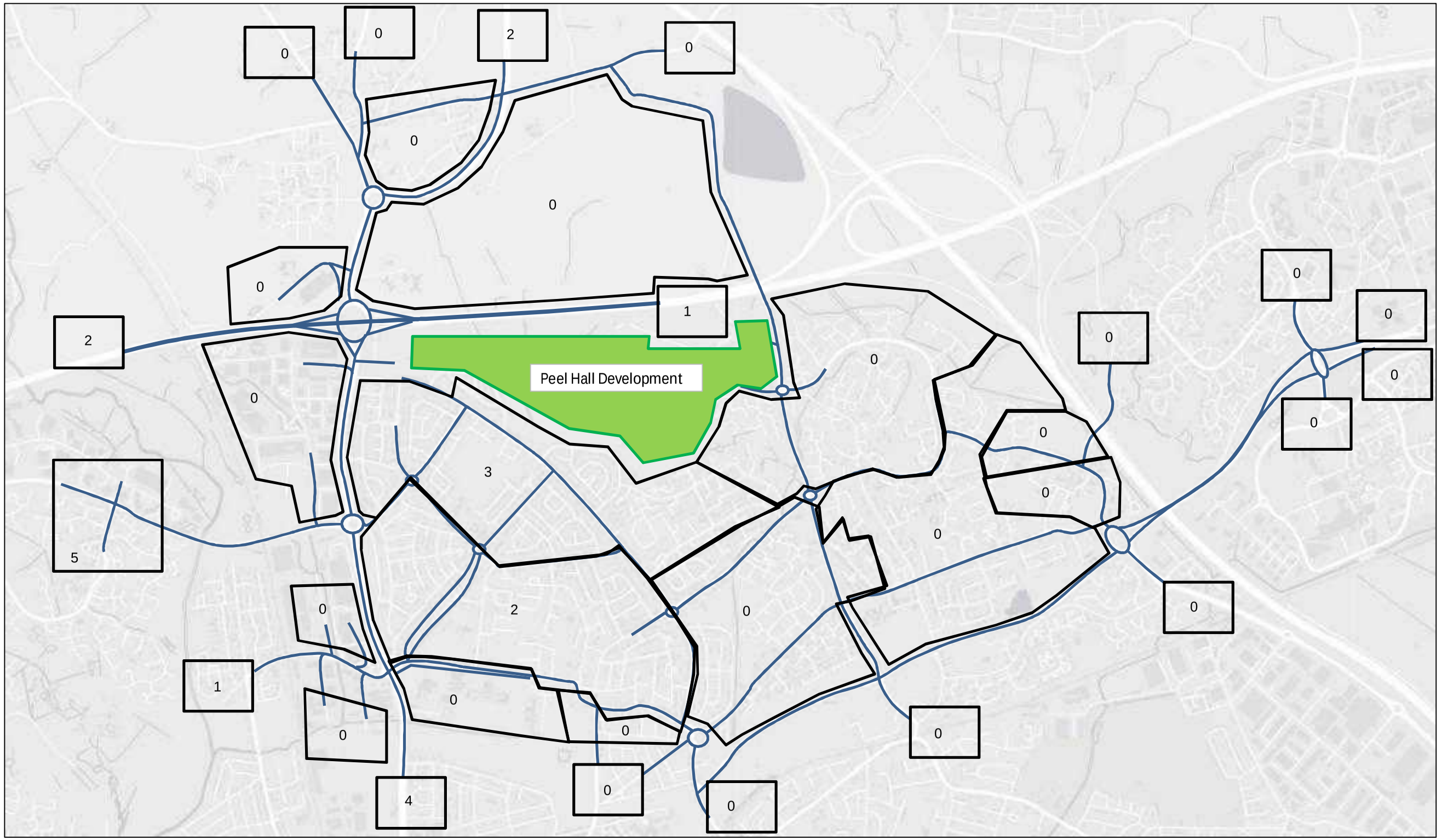
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 27, PM (1700-1800) Other Trips from Peel Hall Development	AECOM



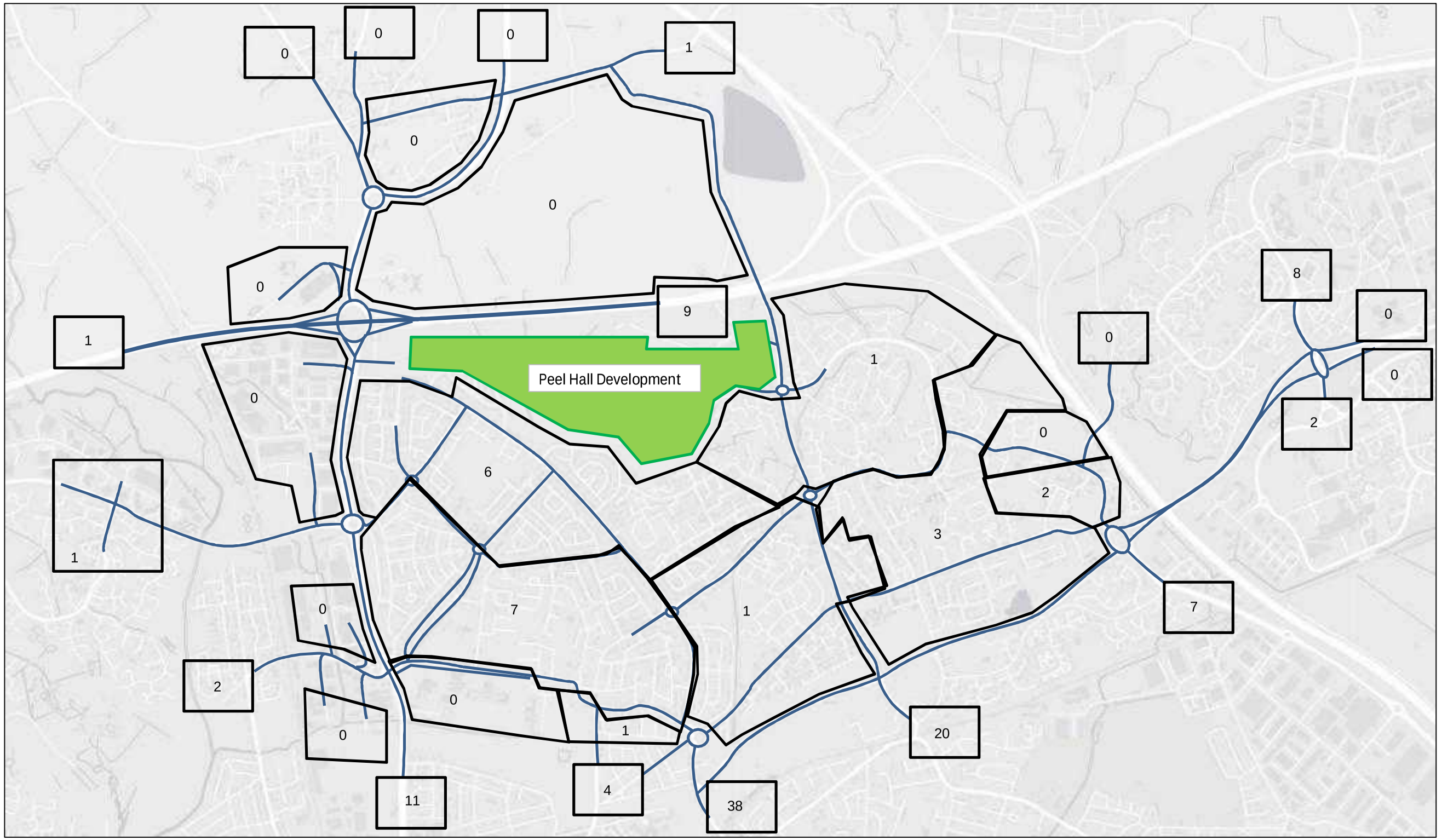
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 28, PM (1700-1800) Total Trips from Peel Hall Development	AECOM



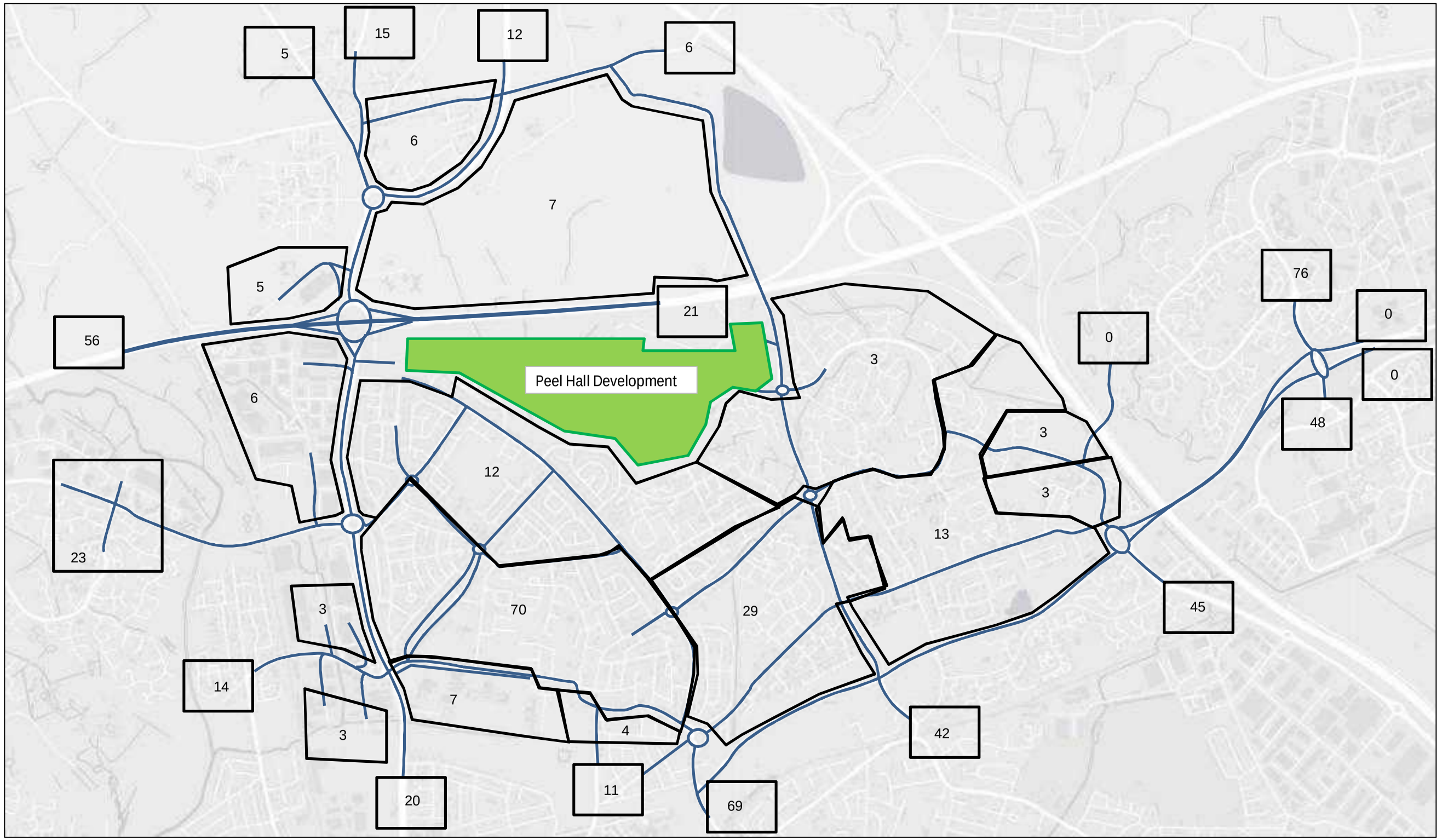
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 29, PM (1700-1800) Residential Trips to Peel Hall Development	AECOM



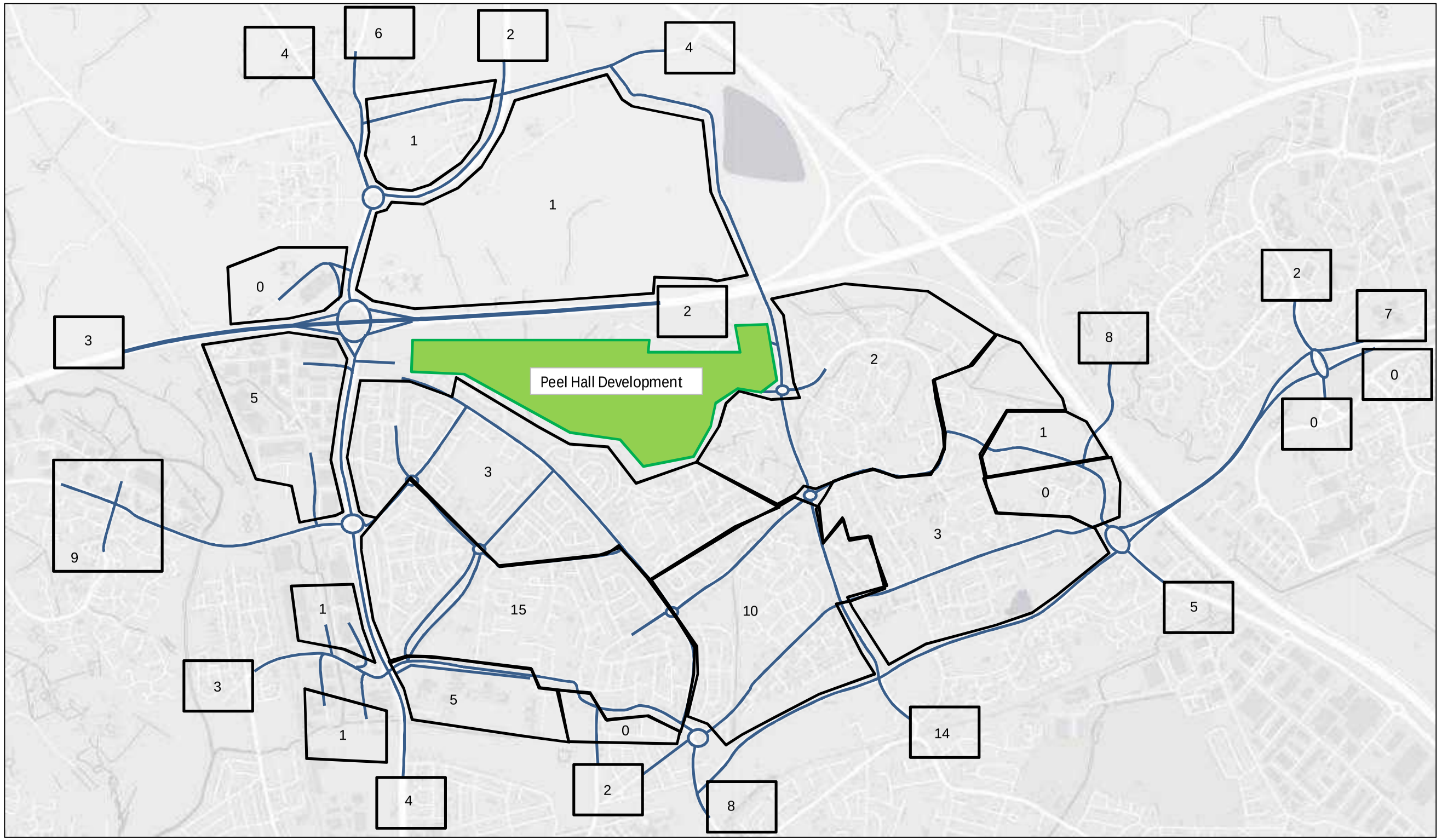
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 30, PM (1700-1800) Work Trips to Peel Hall Development	AECOM



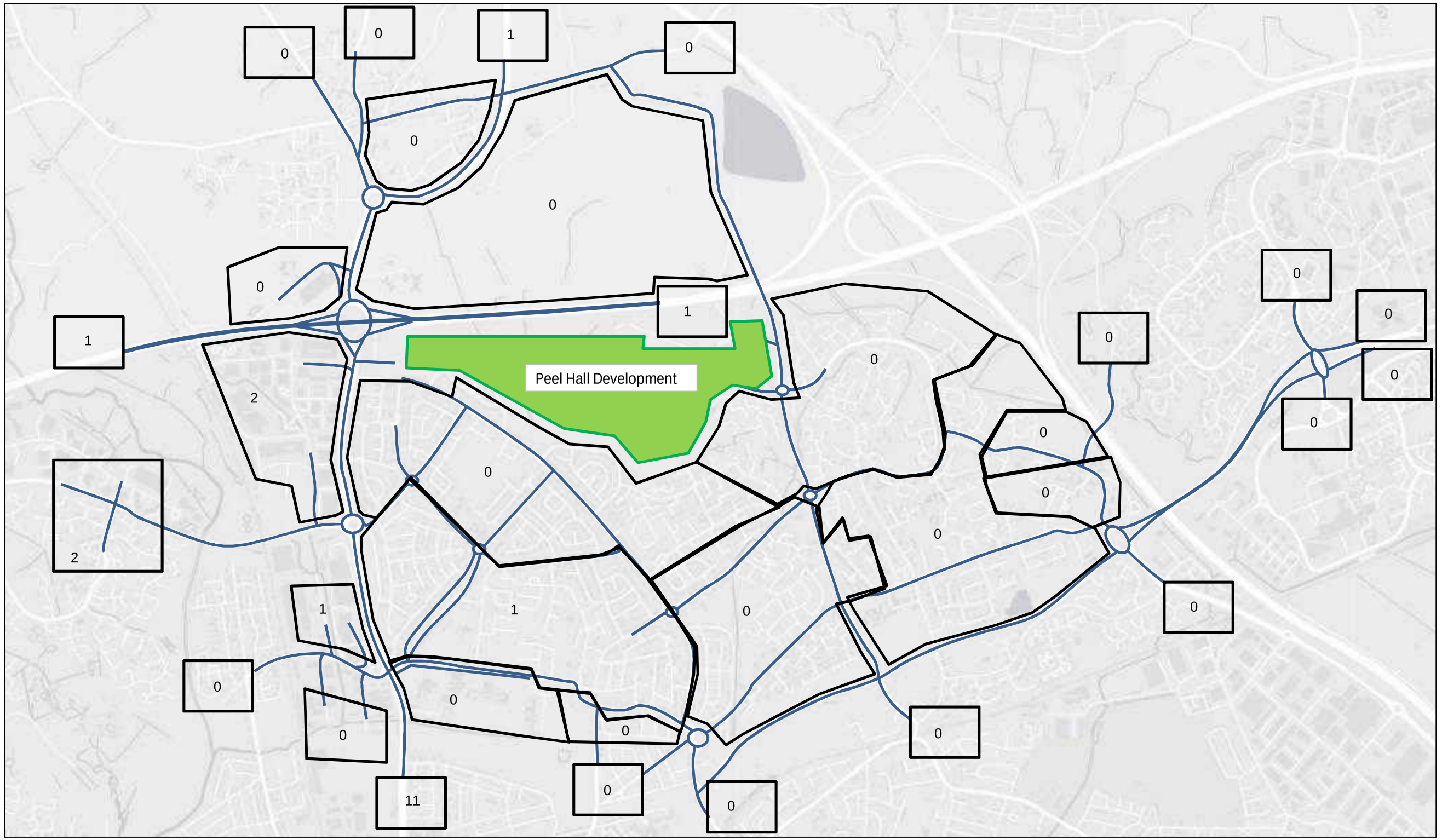
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 31, PM (1700-1800) Other Trips to Peel Hall Development	AECOM



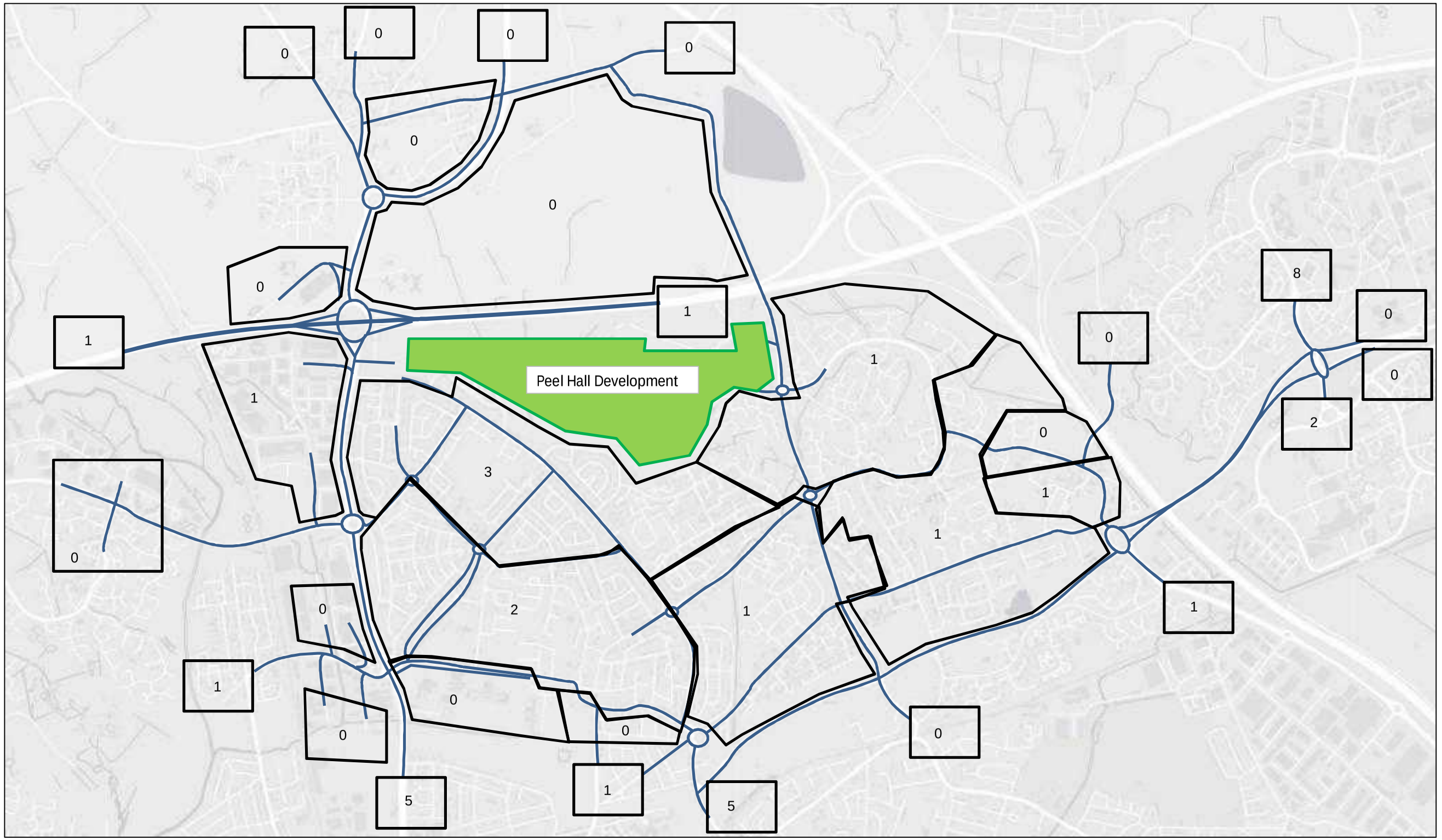
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 32, PM (1700-1800) Total Trips to Peel Hall Development	AECOM



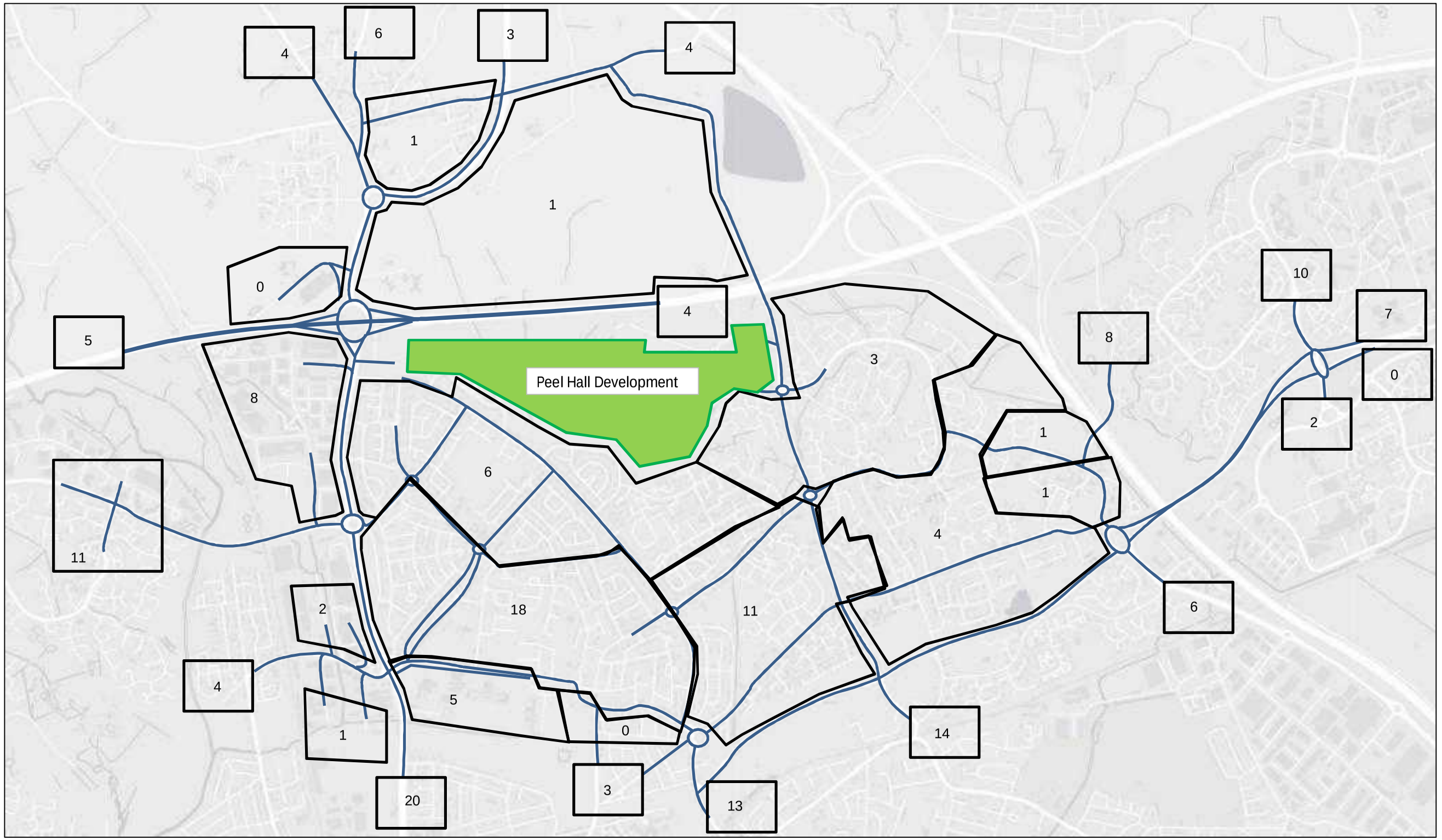
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 33, AM (0900-0930) Residential Trips from Peel Hall Development	AECOM



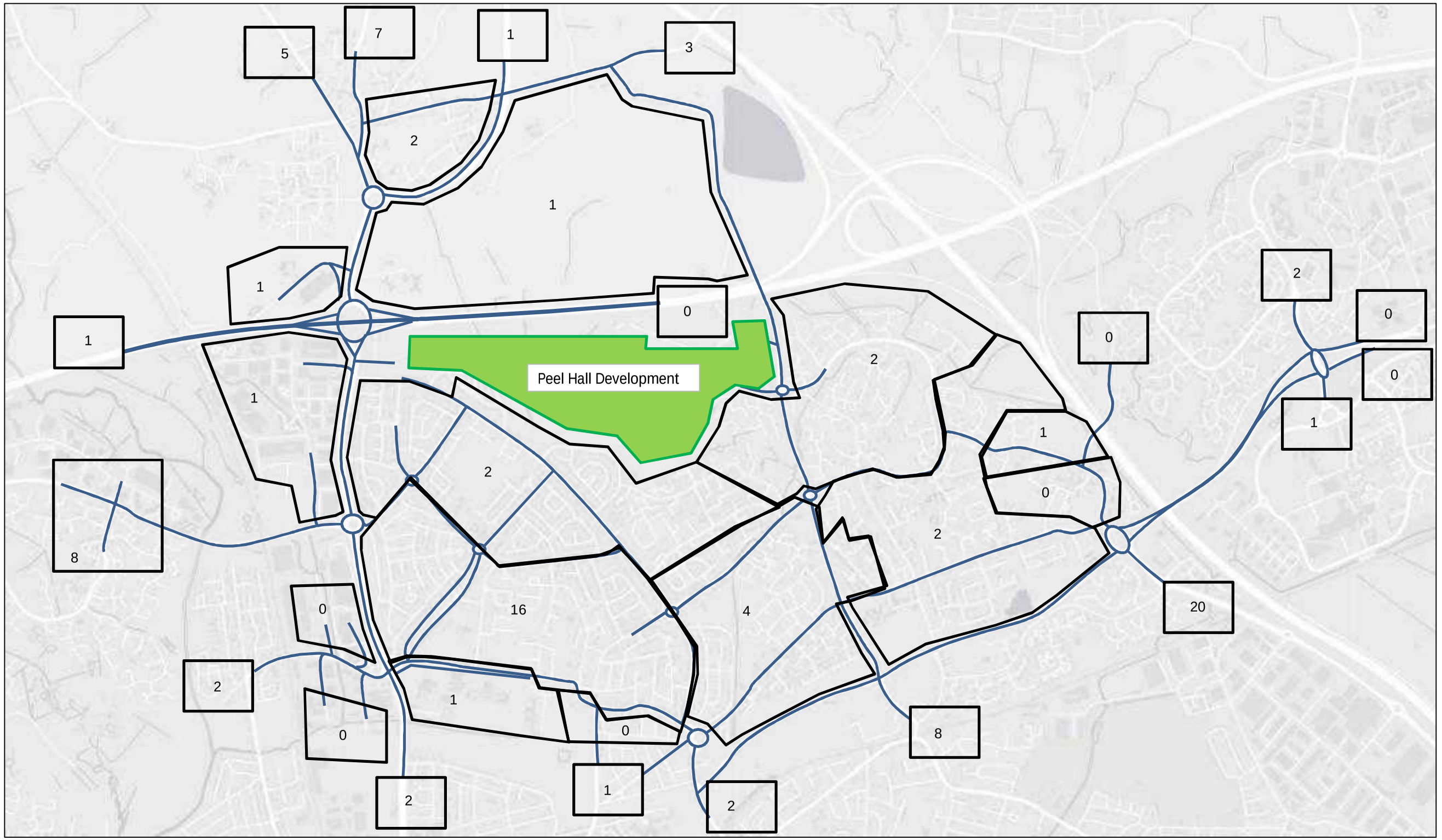
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 34, AM (0900-0930) Work Trips from Peel Hall Development	AECOM



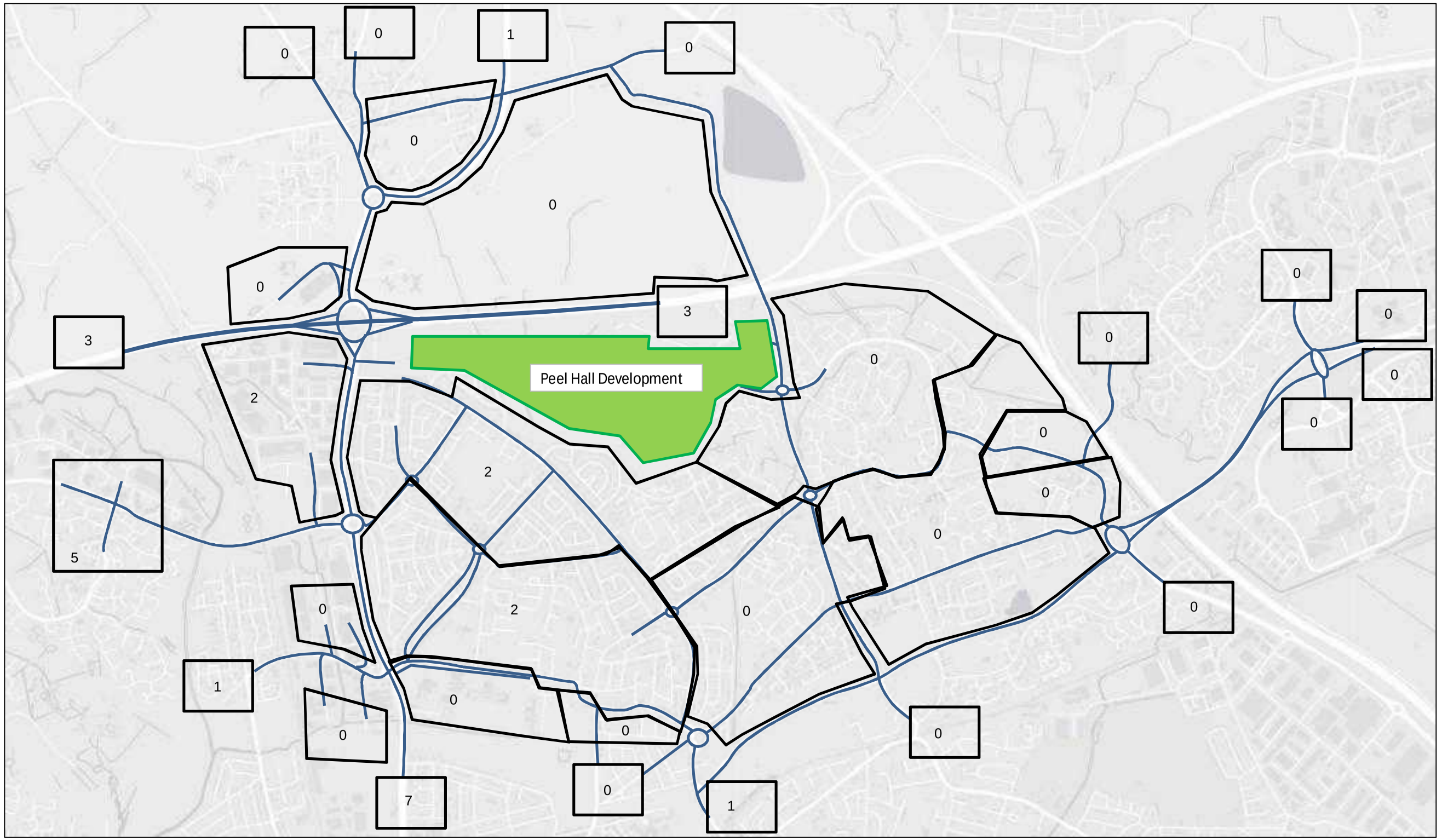
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 35, AM (0900-0930) Other Trips from Peel Hall Development	AECOM



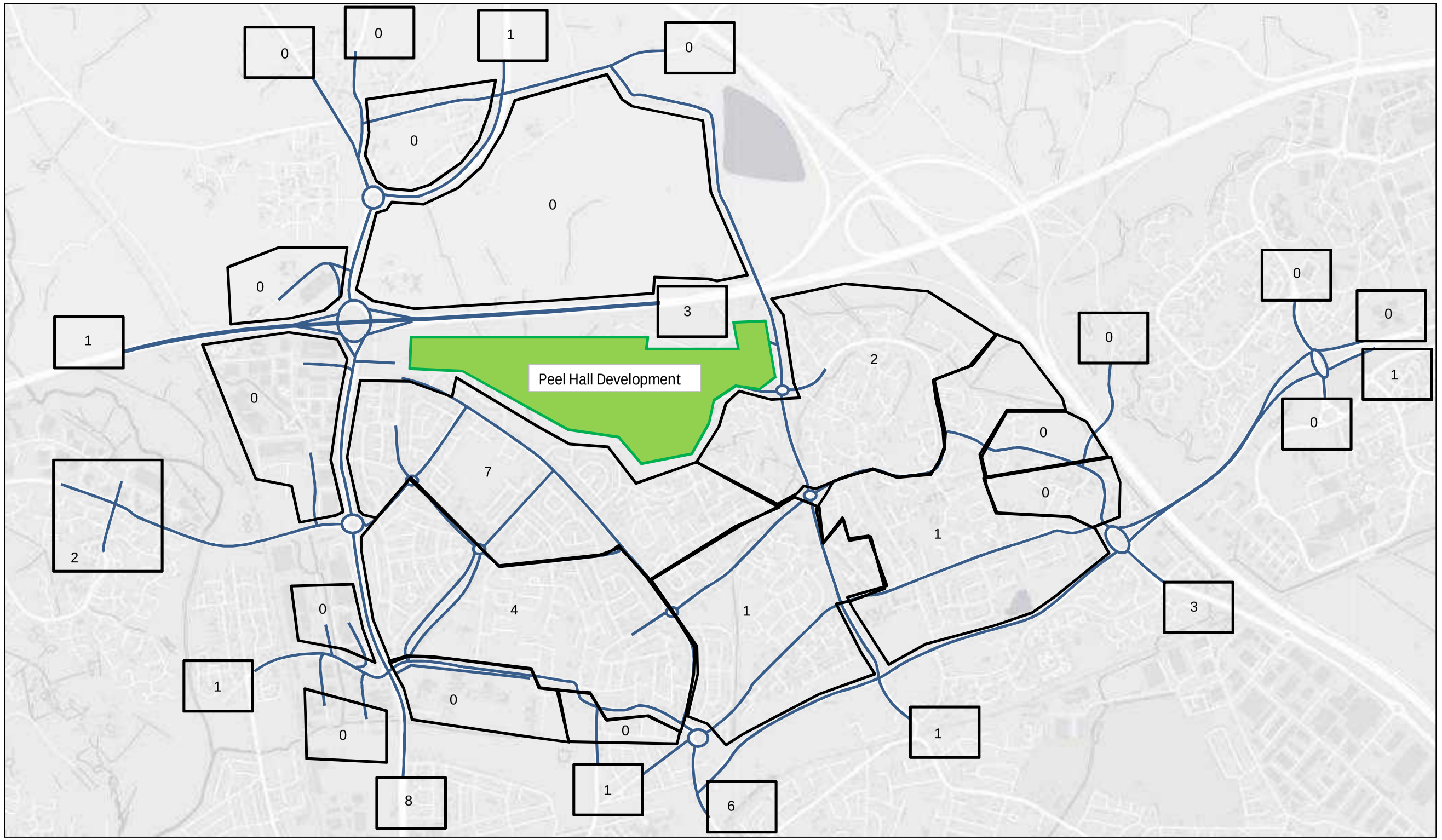
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 36, AM (0900-0930) Total Trips from Peel Hall Development	AECOM



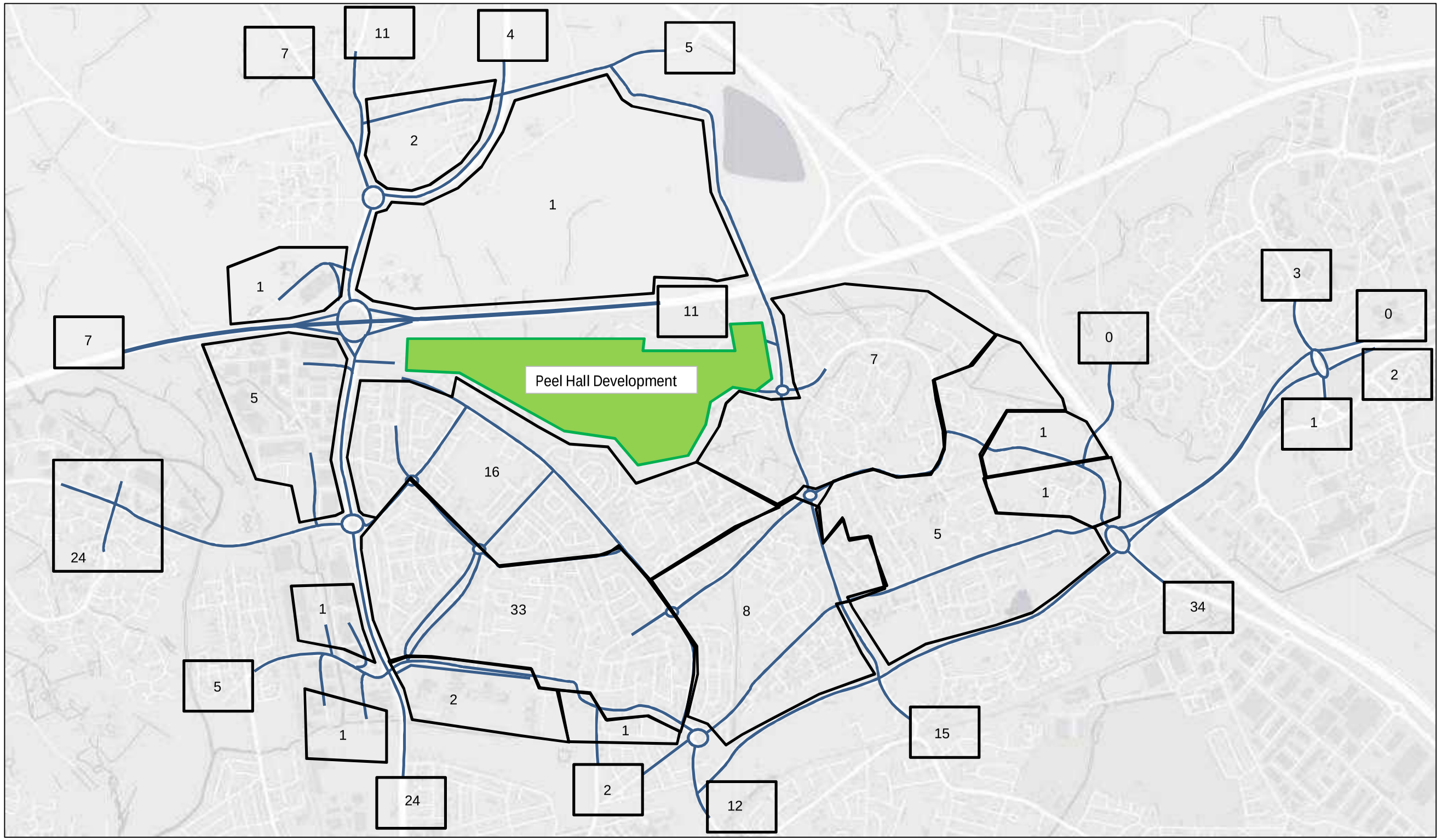
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 37, AM (0900-0930) Residential Trips to Peel Hall Development	AECOM



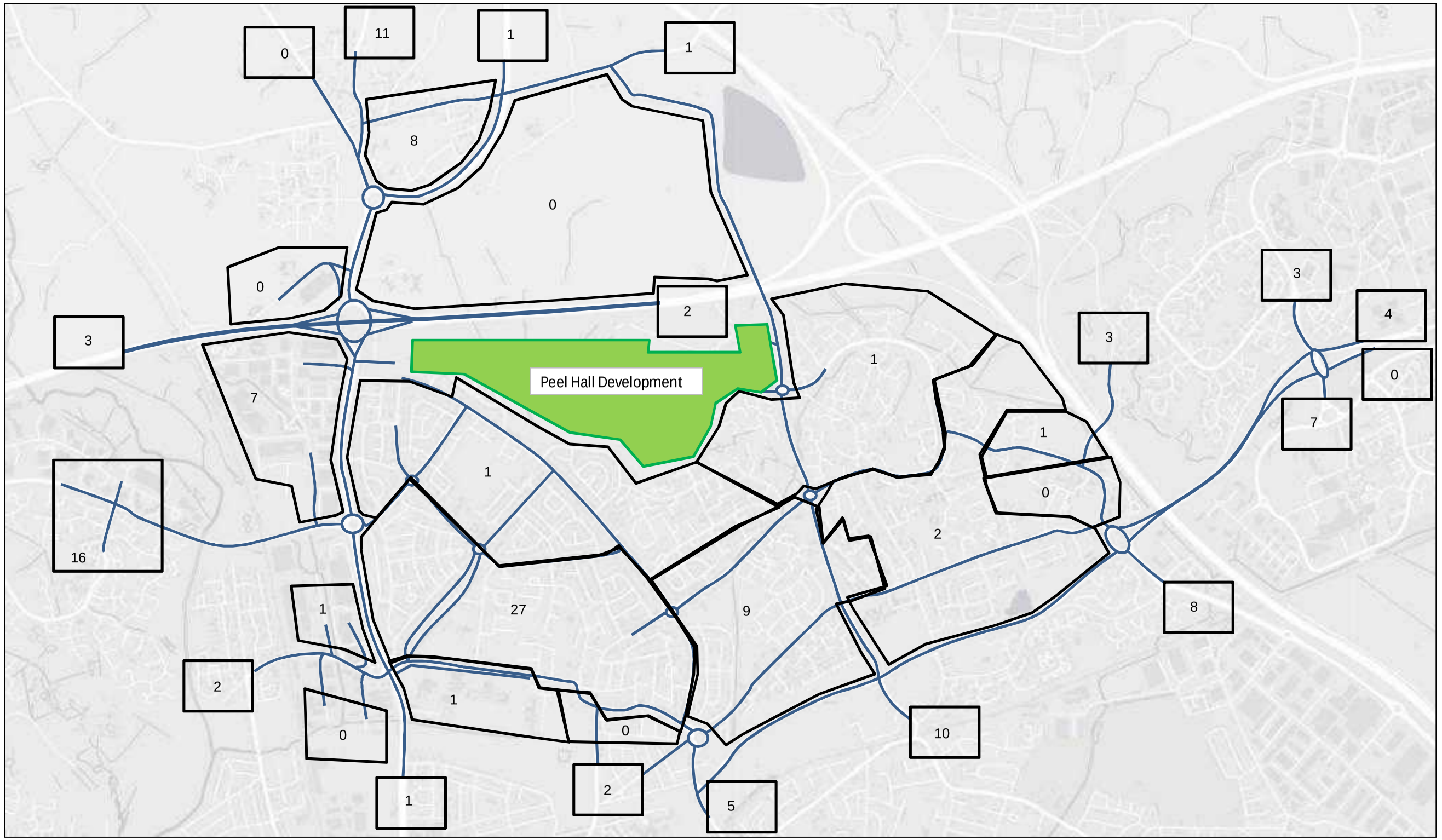
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 38, AM (0900-0930) Work Trips to Peel Hall Development	AECOM



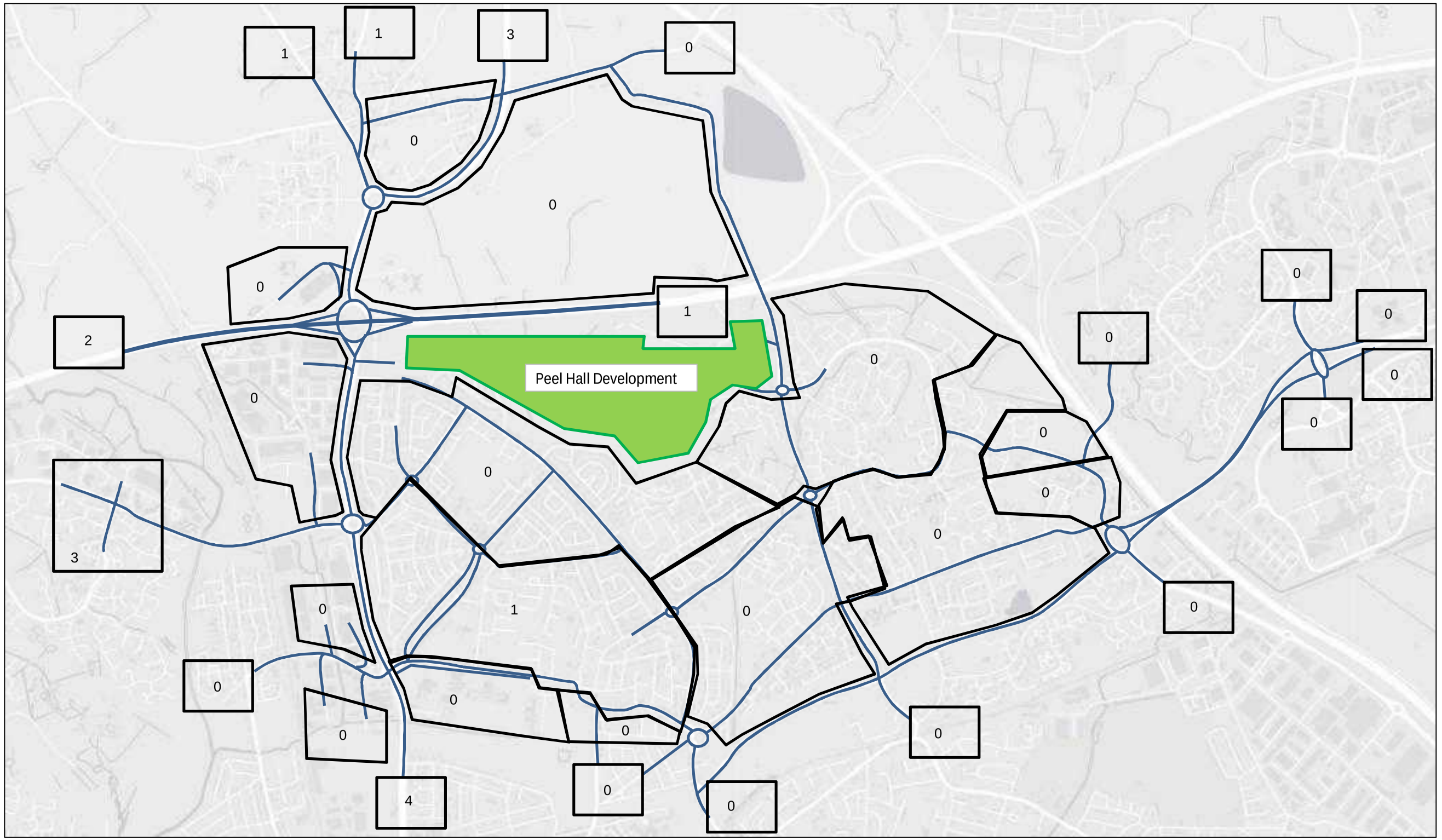
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 39, AM (0900-0930) Other Trips to Peel Hall Development	AECOM



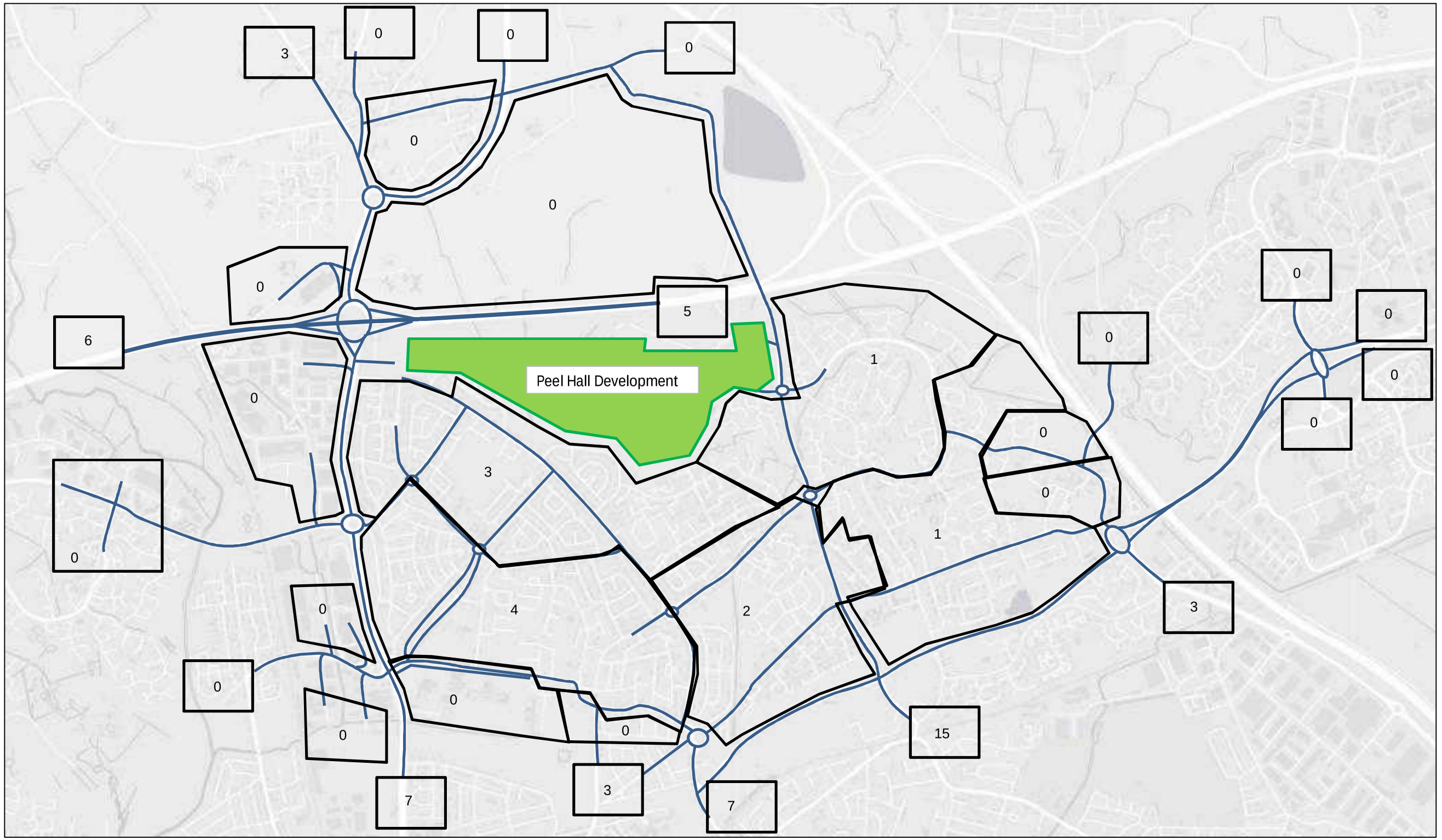
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 40, AM (0900-0930) Total Trips to Peel Hall Development	AECOM



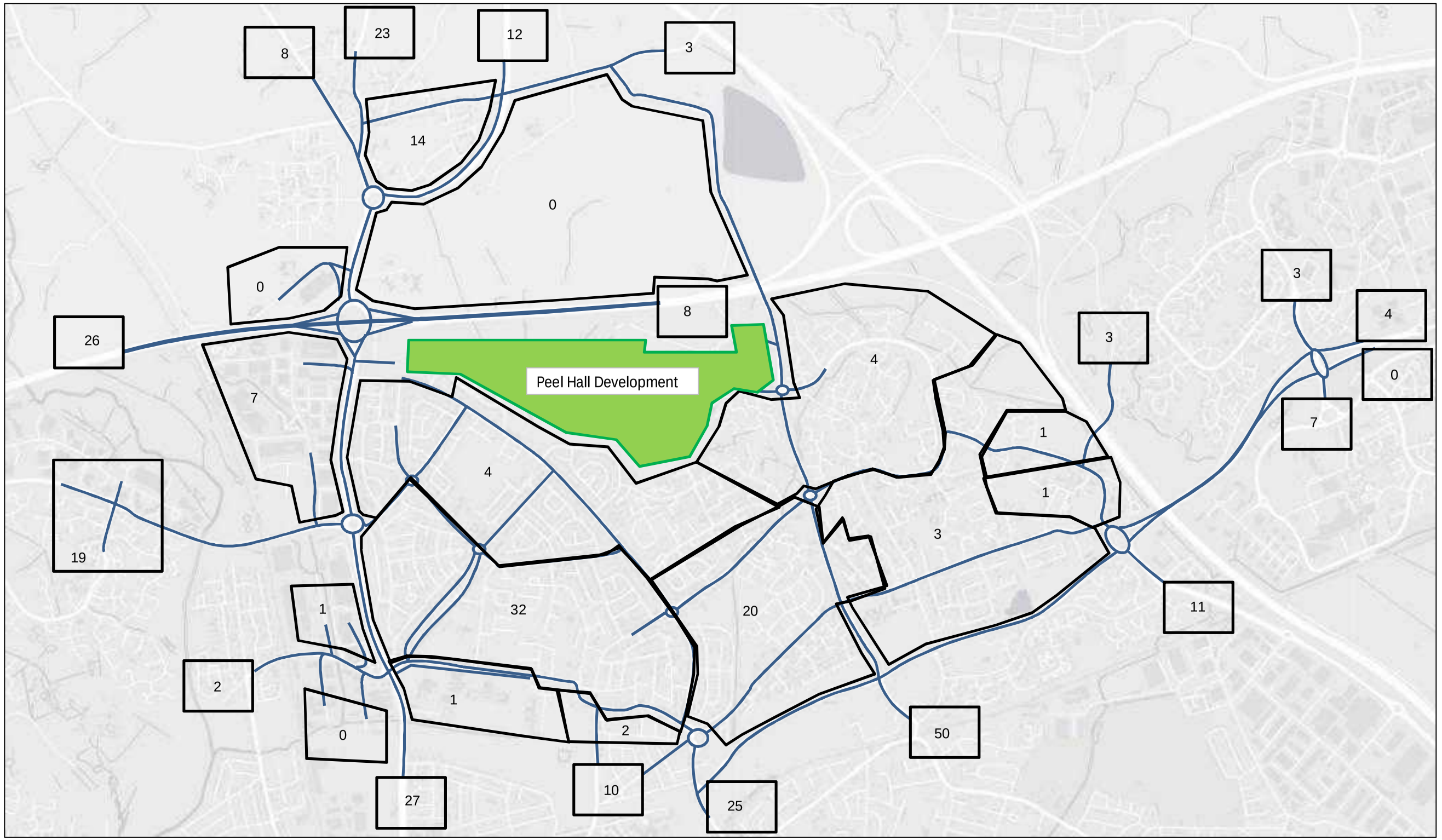
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 41, PM (1800-1830) Residential Trips from Peel Hall Development	AECOM



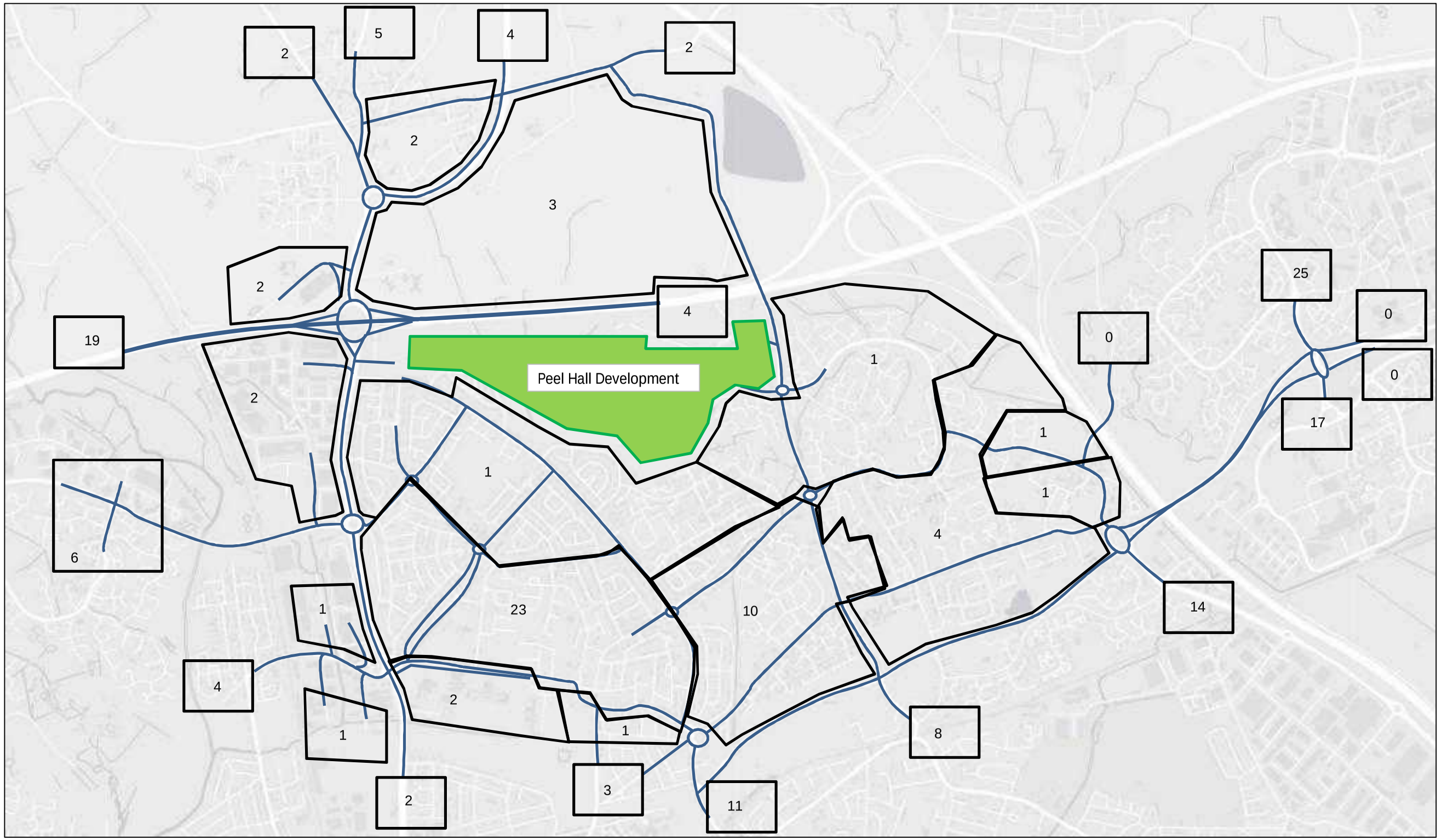
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 42, PM (1800-1830) Work Trips from Peel Hall Development	AECOM



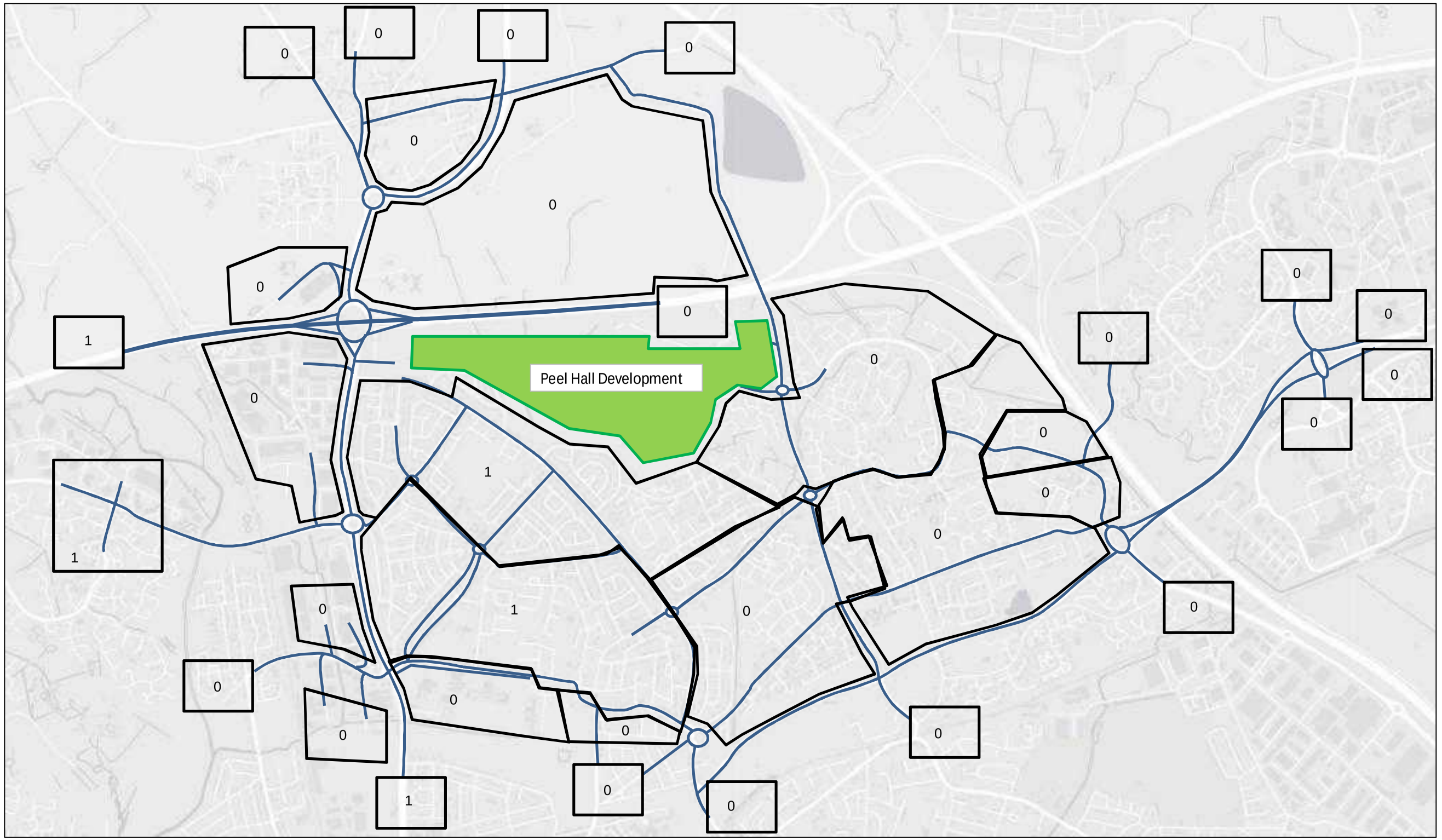
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 43, PM (1800-1830) Other Trips from Peel Hall Development	AECOM



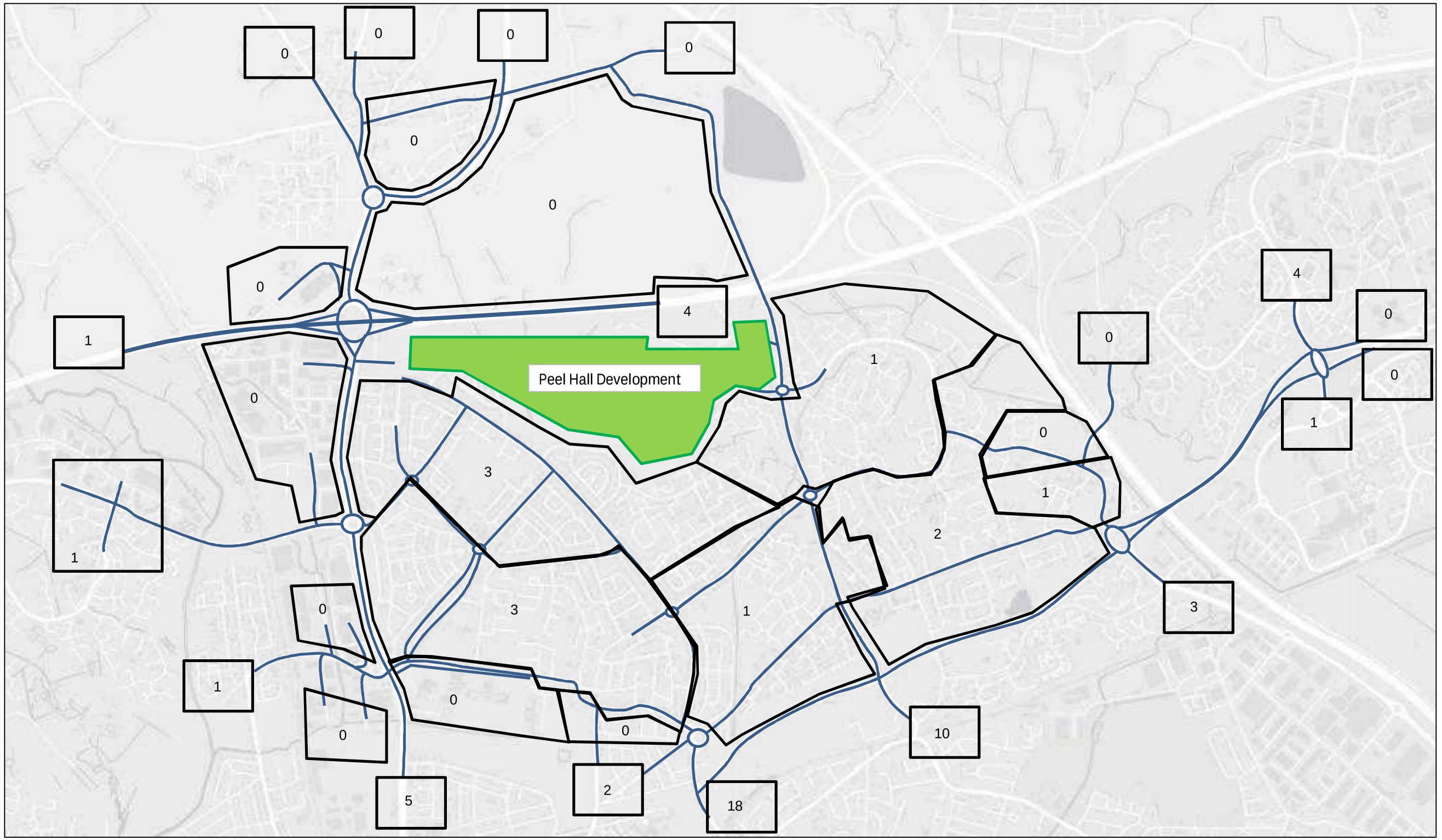
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 44, PM (1800-1830) Total Trips from Peel Hall Development	AECOM



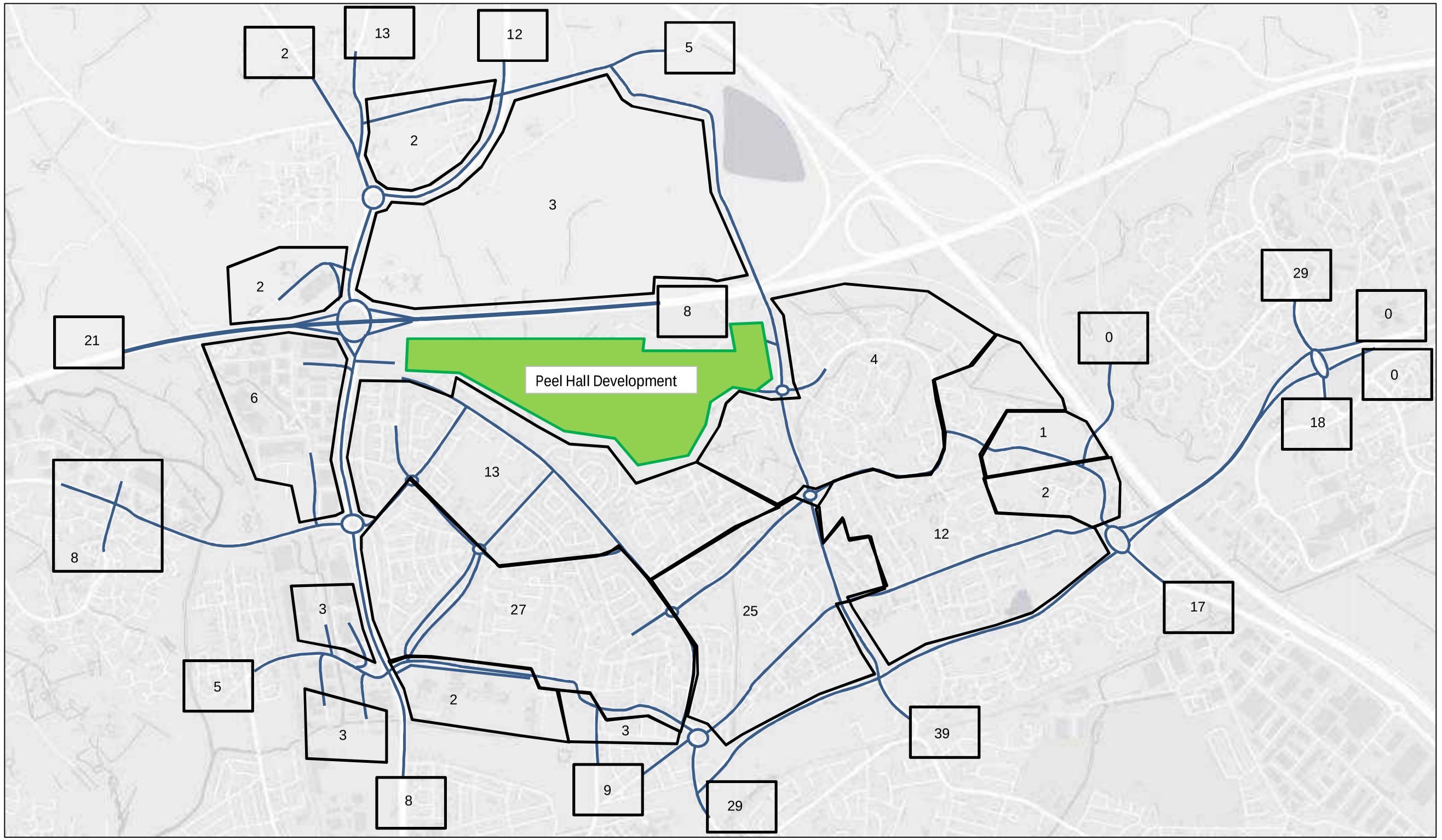
Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 45, PM (1800-1830) Residential Trips to Peel Hall Development	AECOM



Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 46, PM (1800-1830) Work Trips to Peel Hall Development	AECOM



Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 47, PM (1800-1830) Other Trips to Peel Hall Development	AECOM



Peel Hall VISSIM Model - Trip Distribution	Appendix C, Figure 48, PM (1800-1830) Total Trips to Peel Hall Development	AECOM

Appendix 2

HTp TN/08

Number of Vehicular Trips at Each Site Access Location

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Number of Vehicular Trips at Each Site Access Location

(HTp/1107/TN/08)

April 2016

Contents

Appendices

1.0 Introduction

1.1 This initial Technical Note on internal trip distribution has been prepared by Highgate Transportation Limited (HTp) to set out the number of peak period vehicular trips at each of the proposed vehicular access points on the Peel Hall development site, for each proposed land use, to inform the forthcoming modelling and AECOM gravity model.

1.2 An overview of the site access locations are provided on the plan HTp/1107/19/C contained at **Appendix 1** of this report for reference.

1.3 This Technical Note should be read in conjunction with HTp Technical Note on Trip Rates (TN/02/A), the accompanying addendum for peak period trip rates (TN/02/A/Addendum) and Technical Note TN/06 Trip Discounts.

1.4 It is anticipated that there will be a follow-up report to this Technical Note (TN/08) that sets out the traffic distribution on the wider highway network, further to the assumptions set out in TN/06 and the results of the AECOM gravity model.

2.0 Trip Distribution Tables

2.1 The following **Tables 2.1** to **2.6** set out the total number of trips at each of the access points for the land uses proposed for the Peel Hall development.

2.2 A discount has not been applied to the residential vehicular trip rates at Mill Lane/Blackbrook Avenue and Birch Avenue as these areas are self-contained with restricted vehicular permeability and therefore any vehicular trip will require travel off site. Therefore the overall total trip figures provided in each of the following **Tables 2.1** to **2.6** are higher than shown in Table 3.3 of HTp Technical Note TN/06.

2.3 It should be noted that although motorised vehicular access will be restricted from both the Mill Lane/Blackbrook Avenue and the Birch Avenue residential plots, pedestrian and cycle routes will be provided that connect into the wider Peel Hall site.

Table 2.1 – Number of Vehicular Trips at Site Accesses 0700-0800

AM Peak 0700-0800								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.127	0.380	19	57	0%	19	57
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.127	0.380	89	266	5%	85	253
	Primary School (up to 420 pupils)	0.057	0.023	24	10	0%	24	10
Poplars Ave. *(Central)*	330 Dwellings	0.127	0.380	42	125	5%	40	119
	Food Store (2,000sqm)	1.801	1.082	36	22	60%	14*	9*
	Local Centre (600sqm)	4.257	3.792	26	23	70%	8	7
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.075	0.083	8	8	0%	8	8
Poplars Ave. *(West)*	Employment (7,500sqm)	0.688	0.164	52	12	0%	52	12
Birch Avenue	20 Dwellings	0.127	0.380	3	8	0%	3	8
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	0	0	0%	0	0
			Total	299	531	-	**253**	**483**
							736	

***Pass-by trips account for 10%**

Table 2.2 – Number of Vehicular Trips at Site Accesses 0800-0900

AM Peak 0800-0900								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.225	0.523	34	79	0%	34	79
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.225	0.523	158	366	20%	126	293
	Primary School (up to 420 pupils)	0.269	0.189	113	79	75%	28	20
Poplars Ave. *(Central)*	330 Dwellings	0.225	0.523	74	173	20%	59	138
	Food Store (2,000sqm)	4.615	3.030	92	61	60%	37*	24*
	Local Centre (600sqm)	5.025	4.780	30	29	70%	9	9
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.068	0.068	7	7	0%	7	7
Poplars Ave. *(West)*	Employment (7,500sqm)	0.919	0.514	69	39	0%	69	39
Birch Avenue	20 Dwellings	0.225	0.523	5	11	0%	5	11
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
			Total	592	849	-	**384**	**625**
							1,009	

***Pass-by trips account for 10%**

Table 2.3 - Number of Vehicular Trips at Site Accesses 0900-0930

AM Peak 0900-0930								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.109	0.147	16	22	0%	16	22
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.109	0.147	76	103	30%	53	72
	Primary School (up to 420 pupils)	0.024	0.028	10	12	75%	3	3
Poplars Ave. *(Central)*	330 Dwellings	0.109	0.147	36	49	30%	25	34
	Food Store (2,000sqm)	3.368	2.554	67	51	60%	27*	20*
	Local Centre (600sqm)	2.851	2.601	17	16	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.045	0.019	5	2	0%	5	2
Poplars Ave. *(West)*	Employment (7,500sqm)	0.354	0.272	27	20	0%	27	20
Birch Avenue	20 Dwellings	0.109	0.147	2	3	0%	2	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	3	5	0%	3	5
			Total	259	283	-	**166**	**186**
							352	

***Pass-by trips account for 10%**

Table 2.4 - Number of Vehicular Trips at Site Accesses 1600-1700

PM Peak 1600-1700								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.419	0.248	63	37	0%	63	37
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.419	0.248	293	174	20%	234	139
	Primary School (up to 420 pupils)	0.116	0.165	49	69	50%	25	35
Poplars Ave. *(Central)*	330 Dwellings	0.419	0.248	138	82	20%	110	66
	Food Store (2,000sqm)	8.121	7.697	162	154	60%	65*	62*
	Local Centre (600sqm)	5.735	5.828	34	35	70%	10	11
	Family Pub/ Restaurant (1,600sqm)	1.828	1.195	29	19	25%	22	14
	100-Bed Care Home	0.068	0.053	7	5	0%	7	5
Poplars Ave. *(West)*	Employment (7,500sqm)	0.473	0.668	36	50	0%	36	50
Birch Avenue	20 Dwellings	0.419	0.248	8	5	0%	8	5
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	8	7	0%	8	7
			Total	827	637	-	**588**	**431**
							1,019	

***Pass-by trips account for 10%**

Table 2.5 - Number of Vehicular Trips at Site Accesses 1700-1800

PM Peak 1700-1800								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.495	0.307	74	46	0%	74	46
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.495	0.307	347	215	20%	278	172
	Primary School (up to 420 pupils)	0.045	0.063	19	27	50%	10	14
Poplars Ave. *(Central)*	330 Dwellings	0.495	0.307	163	101	20%	130	81
	Food Store (2,000sqm)	9.056	9.550	181	191	60%	72*	76*
	Local Centre (600sqm)	6.039	6.495	36	39	70%	11	12
	Family Pub/ Restaurant (1,600sqm)	2.847	1.845	46	30	25%	35	23
	100-Bed Care Home	0.083	0.113	8	11	0%	8	11
Poplars Ave. *(West)*	Employment (7,500sqm)	0.262	0.621	20	47	0%	20	47
Birch Avenue	20 Dwellings	0.495	0.307	10	6	0%	10	6
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	7	8	0%	7	8
			Total	911	721	-	**655**	**496**
							1,151	

***Pass-by trips account for 10%**

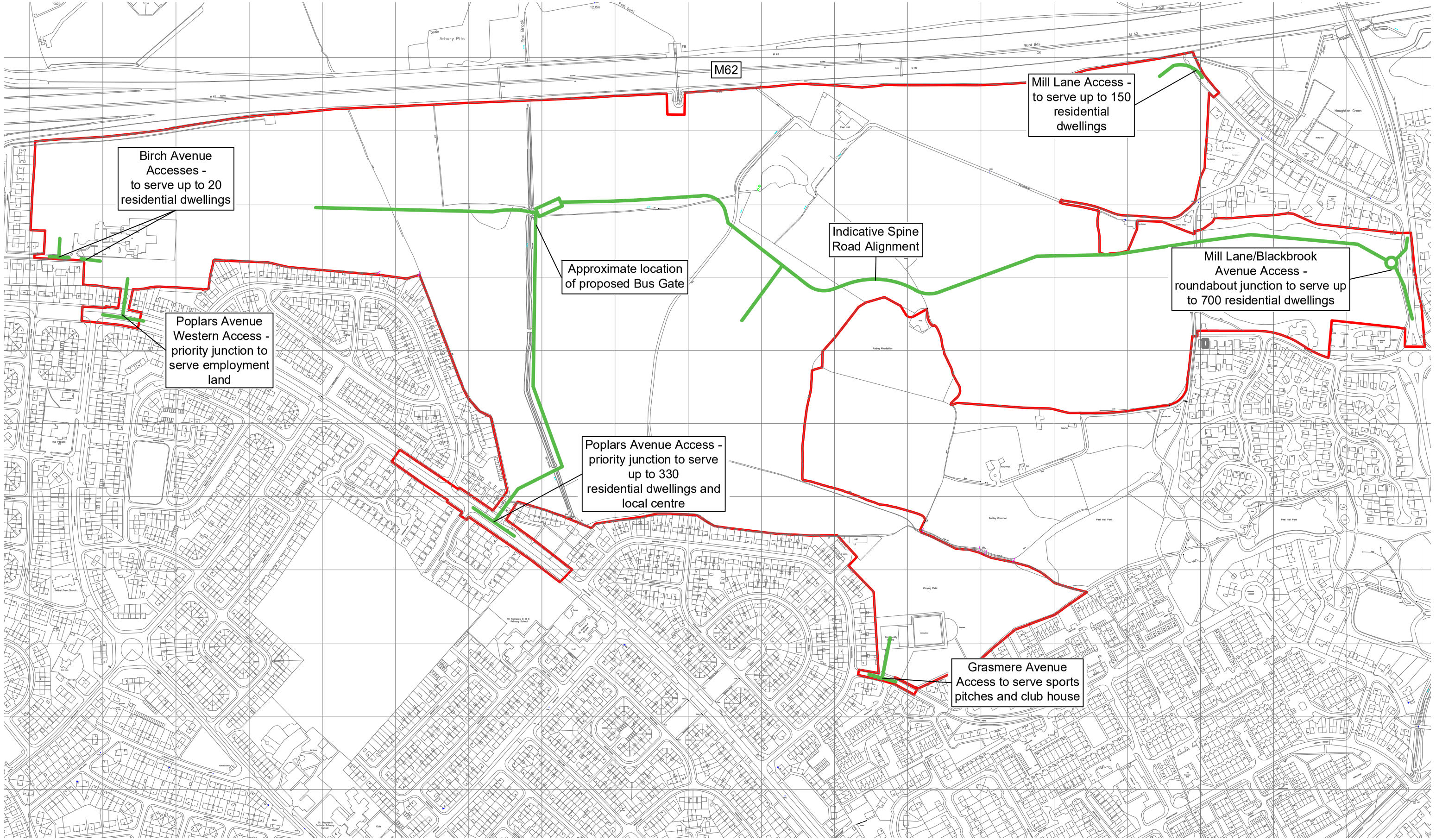
Table 2.6 - Number of Vehicular Trips at Site Accesses 1800-1830

PM Peak 1800-1830								
Access	**Units/sqm**	**Trip Rate**		**Trips**		**Discounts/ Internal Trips**	**Total Trips**	
		Arrival	**Departure**	**Arrival**	**Departure**		**Arrival**	**Departure**
Mill Lane	150 Dwellings	0.182	0.137	27	21	0%	27	21
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.182	0.137	127	96	20%	102	77
	Primary School (up to 420 pupils)	0.020	0.015	8	6	50%	4	3
Poplars Ave. *(Central)*	330 Dwellings	0.182	0.137	60	45	20%	48	36
	Food Store (2,000sqm)	3.554	4.251	71	85	60%	28*	34*
	Local Centre (600sqm)	2.910	3.049	18	18	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	1.512	1.257	24	20	25%	18	15
	100-Bed Care Home	0.049	0.053	5	5	0%	5	5
Poplars Ave. *(West)*	Employment (7,500sqm)	0.067	0.216	5	16	0%	5	16
Birch Avenue	20 Dwellings	0.182	0.137	4	3	0%	4	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
			Total	359	320	-	**256**	**220**
							476	

***Pass-by trips account for 10%**

Appendix 1

Peel Hall Access Locations (HTp/1107/19/C)



NOTES:

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ISSUE	REASON FOR REVISION	DATE
C	Amendment to dwelling numbers at access points	12/04/16
B	Alteration to dwelling numbers at access points	04/03/16
A	Reduction in number of dwellings shown off Birch Avenue	19/02/16

DATE:	DRAWN BY:	CHECKED:
12/01/15	FB	DT

PROJECT:

PEEL HALL, WARRINGTON

CLIENT:

SATNAM

TITLE:

PROPOSED ACCESS POINTS AND INDICATIVE SPINE ROAD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	19	Not to scale

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Park Street, Bristol BS8 1ES
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Appendix 47

HTp/1107/TN/19 – Peel Hall Vehicular Trips (2025, 2030) Option A

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note

Peel Hall Vehicular Trips

(HTp/1107/TN/19)

May 2017

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Contents

Figures

Appendices

1.0 Introduction

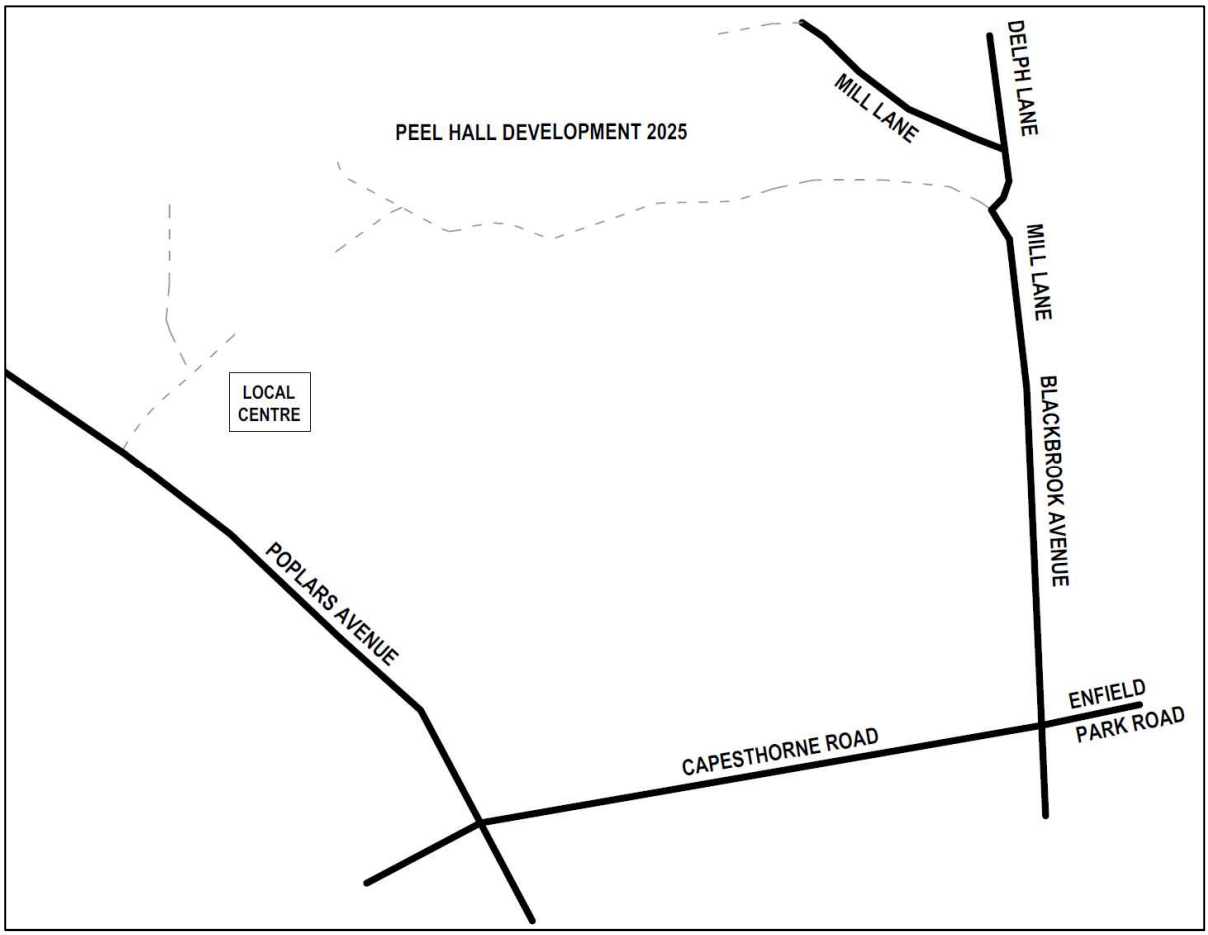
1.1 Following the refusal of application ref: 2016/28492, the opportunity has been taken to review the years of assessment, build out programme and application of trip rate discounts.

1.2 This Technical Note has been prepared by Highgate Transportation Limited to confirm the trip rates used for each land use and to also set out the trip discounting assumptions. This information is then used to summarise the level of vehicular trips at each access point of the proposed Peel Hall development for an intermediate build out year of 2025 and a final year of 2030, as agreed with officers at Warrington Borough Council at a meeting on 22nd March 2017.

1.3 The assessment for a future year of 2025 will be for 600 residential dwellings, the care home, employment land and local centre as well as the relocation of the sports pitches. However, there will be no connecting through-route for dwellings accessed from the Mill Lane/Blackbrook Avenue access point (48% of the 600 dwellings), which is scheduled by the end of that year.

1.4 The opening of a link to the local centre from both sides will provide internal vehicular access to and from the main areas of the site, negating the need for residents to drive around the outside of the site on the local highway network. This link is not anticipated to be a through-route across the site, as the local centre car park is intended to be split with a physical barrier to car traffic provided; this barrier could however also provide the required infrastructure for an initial bus route to be brought through the site in 2025.

Figure 1.1 - Peel Hall network 2025 pre-spine road link to local centre



1.5 The assessment for a future year of 2030 will be for the full development. The local centre traffic will be discounted as a result of the internal accessibility across the site.

1.6 The application is for an outline scheme and the Peel Hall development can be summarised as:

i. Up to 1,200 residential dwellings. This will include a mix of market and affordable homes as well as houses and apartments. The houses are expected to be a mix of two, three and four bedroomed houses and one and two bedroomed apartments. It is anticipated that up to 60 of these dwellings will be provided as a retirement home development.

ii. A 100 bedroom care home.

iii. An area of employment land comprising up to 7,500sqm Gross Floor Area (GFA) of light industrial units.

iv. A local centre comprising a food store of up to 2,000sqm GFA plus up to a further 600sqm GFA of local centre type facilities (such as A1-A5 and D1) plus a family pub and restaurant of up to 800sqm GFA. The local centre car park will be located so that it can also be conveniently used as a school drop off facility.

v. Up to a two form entry primary school with a maximum of up to 420 pupils.

vi. Relocating and upgrading of existing sports pitches to provide like-for-like replacement in terms of number of pitches and the provision of ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that can be used for local community uses such as a mother and toddler group.

1.7 As a guide, the contents of each section of this report are as follows:

i. **Section 2.0 – Access Strategy**
This section provides an overview of the Peel Hall access strategy, including the locations of the accesses, quantum of development from each access and the proposed local centre car park arrangement that provides an overarching through-route for all traffic being created, whilst also negating the need for vehicle trips from the residential dwellings accessed from the Mill Lane/Blackbrook Avenue access junction to leave the site and travel on the local highway network.

ii. **Section 3.0 – Trip Rates Summary**
This section sets out the trip rates that have been used to assess the level of traffic likely to be generated by the different land uses proposed on the Peel Hall site.

iii. **Section 4.0 – Vehicular Trips 2025**
This section provides a summary of the number of vehicular trips from each access point in the future year of 2025, based on the trip rates set out in **Section 3.0**, with justification of the appropriate level of trip discounting to be used in the assessment.

iv. **Section 5.0 – Vehicular Trips 2030**
This section provides a summary of the number of vehicular trips from each access point in the future year of 2030, based on the trip rates set out in **Section 3.0**, with justification of the appropriate level of trip discounting to be used in this assessment for the anticipated year of completion.

1.8 The information in this Technical Note is intended to inform the SATURN modelling and has been provided following a review of the Warrington Borough Council consultation response to application 2016/28492, various meetings held with the Council between January 2016 and March 2017 and correspondence since January 2016 regarding the highways and transportation elements of the scheme.

2.0 Access Strategy

2.1 The access strategy currently proposed has not changed from that previously set out, in that whilst the whole site will be fully permeable for pedestrians and cyclists the parcels of land for residential development correspond directly to a single point of vehicular access only. This is set out in **Table 2.1** below and on the Access Strategy Plan contained in **Appendix 1**.

Table 2.1 – Quantum of development served off each access

Access	Units/sqm
Mill Lane	150 Dwellings
Mill Lane/ Blackbrook Avenue	700 Dwellings
	Primary School (up to 420 pupils)
Poplars Ave. *(Central)*	330 Dwellings
	Food Store (2,000sqm)
	Local Centre (600sqm)
	Family Pub/ Restaurant (1,600sqm)
	100-Bed Care Home
Poplars Ave. *(West)*	Employment (7,500sqm)
Birch Avenue	20 Dwellings
Grasmere Avenue	Sports Pitches and Community Facilities

2.2 For assessment purposes it is assumed that first occupation will be in 2021, with 120 dwellings being occupied per year through to 2030. This has been agreed with officers at Warrington Borough Council.

2.3 The indicative highways build out programme is set out in the table contained at **Appendix 2** and on the accompanying plan, and this has informed the 2025 assessment in terms of the loading of development traffic (and for which land uses) at each respective access point from the existing local highway network (see **Section 4.0**).

2.4 It is proposed that the local centre car park will be split into two sections with a physical barrier as set out in **paragraph 1.3**. This is intended to prevent through-traffic between both sections of the site, whilst facilitating access from both Poplars Avenue in the south and Blackbrook Avenue/Mill Lane in the east. This arrangement results in 86% of the 1,200 dwellings having vehicular access to the local centre and as such will be contained within the Peel Hall site i.e. not travelling onto the local highway network. An indicative layout of the local centre car park is shown on the plan contained at **Appendix 3** of this report.

2.5 Warrington Borough Council have requested that a sensitivity test is also carried out to assess the impact of traffic across the network if a through-route was created across the Peel Hall site to carry traffic between the A49 in the west and Blackbrook Avenue in the east; i.e. the creation of a distributor road through the peel Hall site. This is set out further in Technical Note TN/21 to inform the SATURN modelling sensitivity test for a future year assessment of 2030.

2.6 Technical note TN/20 is provided to set out the growth rates for background traffic growth in both future year models of 2025 and 2030.

3.0 Trip Rates Summary

3.1 The trips rates used for assessing the impact of the Peel Hall development have previously been set out in Technical Notes TN/02/A (March 2016) and TN/12 (April 2016). These trip rates were further substantiated in TN/13 (July 2016).

3.2 Data for the AM and PM peak hours of 0800-0900 and 1700-1800 hours respectively is required for the SATURN modelling work, and this has been taken from the TRICS database output files previously used.

3.3 A summary of the peak hour trip rate data to be used and the resultant trips for each land use are set out below (taken from TN/02/A) as follows:

Table 3.1 – Residential Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
85th Percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

Table 3.2 – Care Home Vehicular Trip Rates and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per bedroom)	0.068	0.068	0.083	0.113
Retirement Flat Trips (100-beds)	7	7	8	8

Table 3.3 – Employment Vehicular Trip Rates and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm GFA)	69	39	20	47
HGV %Proportion	7%	10%	10%	4%

Table 3.4 – Food Store Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Food Store Trips (2,000sqm GFA)	92	61	181	191

Table 3.5 – Local Centre Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Local Centre Trips (600sqm GFA)	30	29	36	39

Table 3.6 – Primary School Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Primary School Trips (all 420 pupils)	113	79	19	27

3.4 The proposed development at Peel Hall will include the existing open space and local authority community buildings and sports area on the land off Windermere Avenue and Grasmere Avenue to the southeast of the site. This will be linked to the site and new sports pitches will be provided to replace those currently located on the HCA land to the east of the site, off Mill Lane.

3.5 The facilities will likely include full-sized grass pitches, a multi-use games area, junior grass pitches and changing facilities for up to four teams. The expectation is that these proposals will also include a clubhouse/function room for community use.

3.6 The sports pitches will predominantly be used at the weekends and it was agreed at the 2013 Public Inquiry (Appeal ref: APP/M0655/A/13/2192076) that this element of the development proposals would not need to be included within the weekday modelling. Furthermore there will be an offset in trip generation from the current on-site uses at the existing location and from the sports pitches on the HCA land, which are to be relocated.

3.4 It is likely that the proposed clubhouse facilities will be used by the local community, for example, by a mother and toddler group, and also that the sports pitches may be used during the evening after 1800 hours. Therefore it was agreed at the 2013 Inquiry that the clubhouse facilities for local community use may attract up to 15 car movements over two-hour time slots during the day between the hours of 0900 and 1800. As this is cannot be accurately modelled within our one hour peak AM and PM time periods, the 15 movements have been concentrated into each peak hour. This is set out on **Table 3.7** below.

Table 3.7 – Sports Pitches and Ancillary Facilities Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Community Use Trips	10	5	7	8

3.7 The size of the family pub was changed in April 2016 as the scheme evolved, reducing to 800sqm GFA. The change in floor area was set out in Technical Note TN/12 and the resulting trips are represented in **Table 3.8** below.

Table 3.8 – Family Pub/Restaurant Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	-	-	2.847	1.845
Family Pub/Restaurant Trips (800sqm GFA)	-	-	23	15

3.8 In summary, the vehicle trips associated with each land use are tabulated below for ease of reference in **Table 3.9**. Please note that no discount has been applied to these figures.

Table 3.9 – Peel Hall Vehicular Trip Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips*	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Primary School Trips	113	79	19	27
Community Uses	10	5	7	8
Family Pub/Restaurant Trips	-	-	23	15
Total Trips	**591**	**848**	**888**	**703**

**** See Table 3.3 for HGV proportion of peak hour traffic***

4.0 Vehicular Trips 2025

4.1 The table contained in **Appendix 2** sets out the anticipated number of dwellings coming forward in each year from each part of the development, and hence off each access point. The table also demonstrates when the other land uses such as the local centre, school and employment land will come forward for development. It can be seen from this table that:

i. The sports pitches will be relocated to the land off Grasmere Avenue in year 1 (i.e. 2021).

ii. The local centre and care home will come forward in year 2 (i.e. 2022).

iii. Employment land may come forward in year 3 (i.e. 2023).

iv. There will be circa 600 dwellings occupied by 2025, as follows:

- Blackbrook Avenue/Mill Lane – 285 dwellings (main site access).
- Poplars Avenue – 145 dwellings (local centre access).
- Mill Lane – 150 dwellings.
- Birch Avenue – 20 dwellings.

4.2 It has been agreed with Warrington Borough Council that an intermediate year of 2025 will be assessed in terms of the traffic impact on the local highway network before the internal link to the local centre is created. As such, all dwellings taking access from the Mill Lane/Blackbrook Avenue access will have to drive onto the surrounding local highway network in order to access the local centre by car. It is agreed that this will present a worst case intermediate build out scenario.

4.3 Therefore, based on the number of dwellings and other land uses coming forward by 2025 as set out above in **paragraph 4.1**, the number of vehicle trips at each access point are provided in **Table 4.1** using the trip rates set out in **Section 3.0**.

Table 4.1 – Summary of 2025 Peak Hour Vehicle Trip Numbers at Each Access Location

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	145 dwellings	33	76	72	45
	care home	7	7	8	8
	food store	92	61	181	191
	local shops	30	29	36	39
	family pub	0	0	23	15
	Total	*162*	*173*	*320*	*298*
Poplars Avenue (West)	employment land	69	39	20	47
Mill Lane	150 dwellings	34	79	74	46
Mill Lane/Blackbrook Avenue	285 dwellings	64	149	141	88
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
	Total	**344**	**456**	**572**	**493**

4.4 It can be seen from the above that when considering the total number of vehicle trips at each access location there may be up to around 800 vehicle movements arising from the Peel Hall development profile in AM peak hour and 1,065 in the PM peak hour.

4.5 No trip discounting for any of the land uses has been carried out for this intermediate build out assessment, and no pass-by trips have been taken into account for the food store and other local centre uses. Furthermore, no discounting for internal trips to the local centre facilities have been made to account for those dwellings accessed from Poplars Avenue (145 dwellings) or linked trips between the non-residential land uses. It is therefore considered that this is a robust assessment.

5.0 Vehicular Trips 2030

5.1 It is agreed acceptable to model the impact of the Peel Hall development on the local highway network as fully built out and occupied by 2030.

5.2 Therefore, the number of vehicle trips at each access point has been provided below in **Table 5.1** using the trip rates set out in **Section 3.0** for the whole Peel Hall development. No discounts have been applied to these figures.

Table 5.1 – Summary of 2030 Peak Hour Vehicle Trip Numbers at Each Access Location

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	330 dwellings	74	173	163	101
	care home	7	7	8	8
	food store	92	61	181	191
	local shops	30	29	36	39
	family pub	0	0	23	15
	Total	*203*	*270*	*411*	*354*
Poplars Avenue (West)	employment land	69	39	20	47
Mill Lane	150 dwellings	34	79	74	46
Mill Lane/Blackbrook Avenue	700 dwellings	158	366	347	215
	primary school	113	79	19	27
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
	Total	**592**	**849**	**888**	**703**

5.3 It can be seen from the above that when considering the total number of vehicle trips at each access location there may be up to around 1,441 vehicle movements arising from the Peel Hall development profile in AM peak hour and 1,591 in the PM peak hour, with no adjustments made for internal trips or discounting.

5.4 However, it is appropriate to apply a trip discount to these figures, as the above represents double counting of vehicular trips when considering, for example, that the vehicular trip associated with a resident travelling to the local centre will be represented as both a trip departing from the dwellings and a trip arriving at the local centre.

5.5 It is proposed that no discounting of trips will occur with the residential, care home, community uses, and family pub/restaurant or employment trips.

5.6 The food store trips are to be discounted by 100% in the SATURN modelling, with 30% of these trips being redistributed from existing traffic on the network passing by the Poplars Avenue access. These pass-by trips will have no material impact on the operation of the wider highway network.

5.7 Furthermore, it has previously been set out in TN/13 that the proposed primary school is not intended as a replacement and that primary school trip discounts should be based on internal trip containment; the number of pupils expected to be generated by the development based on the calculation factor supplied by Warrington Borough Council, and comparing this to the number of children expected in a school with up to two-form entry i.e. up to 30 children in each class (therefore 60 children per year group from reception to year 6 i.e. 420 children).

5.8 The information for primary school places issued by WBC was based on census data and the following calculation:

0.3 pupil places per dwelling x number of dwellings

0.3 x 1,200 = 360 (85% of 420 primary school places)

5.9 The calculation indicates that the development will generate 360 primary school places and therefore it is considered appropriate to apply a 50% discount.

5.10 Therefore trip discounts can be summarised as follows for both the AM and PM peak hours:

i. Residential 0%
ii. Care Home 0%
iii. Employment 0%
iv. Food Store 100% (70% discount and 30% pass-by)
v. Local Centre 100%
vi. Family Pub/Restaurant 0%
vii. Primary School 50%
viii. Community uses 0%

5.11 These discounts have been applied to the figures contained in **Table 5.1** and a revised summary of the proposed Peel Hall development trips is set out on **Table 5.2** below.

Table 5.2 – Summary of 2030 Peak Hour Vehicle Trip Numbers at Each Access Location (with discounts applied)

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	330 dwellings	74	173	163	101
	care home	7	7	8	8
	food store*	28	18	54	57
	local shops	0	0	0	0
	family pub	0	0	23	15
	Total	*109*	*198*	*248*	*181*
Poplars Avenue (West)	employment land	69	39	20	47
Mill Lane	150 dwellings	34	79	74	46
Mill Lane/Blackbrook Avenue	700 dwellings	158	366	347	215
	primary school	57	40	10	14
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
	Total	**442**	**738**	**716**	**517**

*** pass-by trips only**

5.12 It can be seen from the above that when considering the total number of vehicle trips at each access location there may be up to around 1,180 vehicle movements arising from the Peel Hall development profile in AM peak hour and 1,233 in the PM peak hour.

5.13 These figures from **Table 5.2** are to be used in the SATURN modelling.

6.0 Summary

6.1 Following the refusal of application ref: 2016/28492, the opportunity has been taken to review the years of assessment, build out programme and application of trip rate discounts.

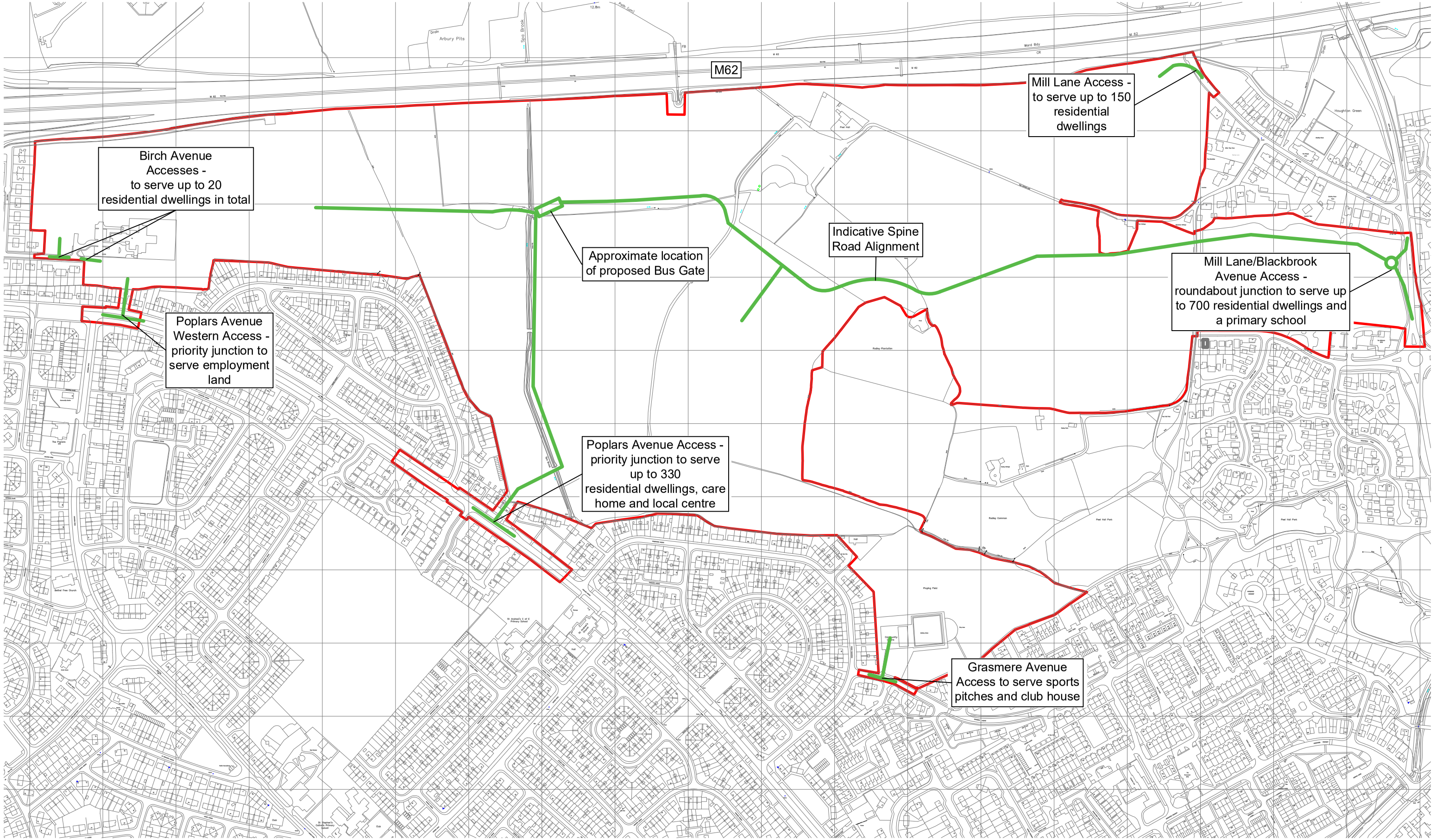
6.2 This Technical Note has been prepared by Highgate Transportation to confirm the trip rates used for each land use and set out the trip discounting assumptions. This information has been used to summarise the level of vehicular trips at each access point of the proposed Peel Hall development for an intermediate build out year of 2025 and a final year of 2030 as agreed with officers at Warrington Borough Council at a meeting on 22nd March 2017.

6.3 The information in this Technical Note is intended to inform the SATURN modelling and has been provided following a review of the Warrington Borough Council consultation response to application 2016/28492, various meetings held with the Council between January 2016 and March 2017 and correspondence since January 2016 regarding the highways and transportation elements of the scheme.

6.4 The vehicular trips contained in **Table 4.1** and **Table 5.2** are to be used to inform the SATURN modelling for future years of 2025 and 2030 respectively.

Appendix 1

Access Strategy Plan



NOTES:

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ISSUE	REASON FOR REVISION	DATE
F	Amendment to annotation	10/05/17
E	Amendment to annotations	10/05/16
D	Amendment to bus gate location	04/05/16
C	Amendment to dwelling numbers at access points	12/04/16
B	Alteration to dwelling numbers at access points	04/03/16
A	Reduction in number of dwellings shown off Birch Avenue	19/02/16

DATE:	DRAWN BY:	CHECKED:
12/01/15	FB	DT

PROJECT:

PEEL HALL, WARRINGTON

CLIENT:

SATNAM

TITLE:

PROPOSED ACCESS POINTS AND INDICATIVE SPINE ROAD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	19	Not to scale

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Appendix 2

Peel Hall Indicative Highways Build Out Table and Plan

Peel Hall Indicative Highways Build Out Table

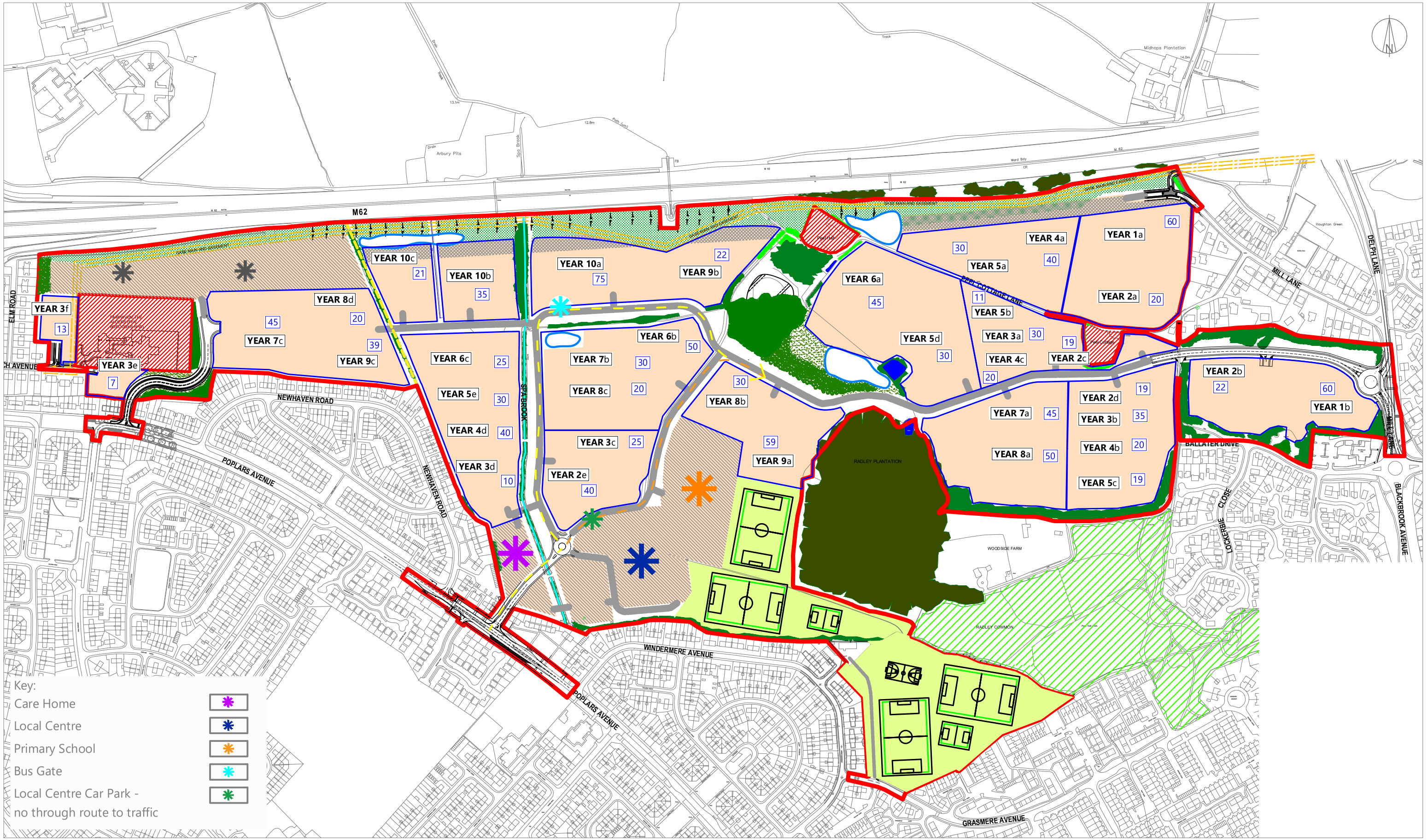
Year End	Number of Residential Units off Each Access								Cumulative Total	Indicative Highways Build Out (number of properties sold at year end)
	Distributor Road Blackbrook Ave		Distributor Road Poplars Ave		Mill Lane		Birch Ave			
	New	Cum.	New	Cum.	New	Cum.	New	Cum.		
1	60	60	0	0	60	60	0	0	120	1a **60** 1b **60** Relocated sports pitches
2	60	120	40	40	20	80	0	0	240	2a **20** 2b **22** 2c **19** 2d **19** 2e **40** Temporary emergency link to be via Radley Lane (north). Need first part of distributor road from east and turning area for bus service Local Centre and Care Home off Poplars Ave
3	65	185	35	75	0	80	20	20	360	3a **30** 3b **35** 3c **25** 3d **10** 3e **7** 3f **13** Employment Land off Poplars Ave (west) with temporary emergency link through to Elm Walk

Peel Hall Indicative Highways Build Out Table

Year End	Number of Residential Units off Each Access								Cumulative Total	Indicative Highways Build Out (number of properties sold at year end)
	Distributor Road Blackbrook Ave		Distributor Road Poplars Ave		Mill Lane		Birch Ave			
	New	Cum.	New	Cum.	New	Cum.	New	Cum.		
4	40	225	40	115	40	120	0	20	480	4a **40** 4b **20** 4c **20** 4d **40** Requires a temporary emergency link through to Peel Cottage Lane
5	60	285	30	145	30	150	0	20	600	5a **30** 5b **11** 5c **19** 5d **30** 5 e **30** Potential for initial bus link through Local Centre and connecting to eastern spine road Emergency link through Local Centre created
6	95	380	25	170	0	150	0	20	720	6a **45** 6b **50** 6c **25**
7	75	455	45	215	0	150	0	20	840	7a **45** 7b **30** 7c **45** Provision of temporary emergency access through to employment spine road

Peel Hall Indicative Highways Build Out Table

Year End	Number of Residential Units off Each Access								Cumulative Total	Indicative Highways Build Out (number of properties sold at year end)
	Distributor Road Blackbrook Ave		Distributor Road Poplars Ave		Mill Lane		Birch Ave			
	New	Cum.	New	Cum.	New	Cum.	New	Cum.		
8	100	555	20	235	0	150	0	20	960	8a **50** 8b **30** 8c **20** 8d **20** Primary School Completion of spine road for full bus service
9	70	625	50	285	0	150	0	20	1,080	9a **59** 9b **22** 9c **39**
10	75	700	45	330	0	150	0	20	1,200	10a **64** 10b **35** 10c **21** Provision of final emergency access through to employment spine road



NOTES:
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KEY:
Indicative Year Numbering — YEAR 8b
Indicative Number of units Completed at Year End — 12
Initial Bus Link
End Bus Link

Phasing subject to detailed phasing plan to be submitted at Reserved Matters stage

ISSUE	REASON FOR REVISION	DATE

DATE:	DRAWN BY:	CHECKED:
11/05/17	FB	FB

PROJECT: PEEL HALL, WARRINGTON

CLIENT: SATNAM MILLENNIUM LTD

TITLE: INDICATIVE HIGHWAYS BUILD OUT PLAN

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	27/G	NOT TO SCALE

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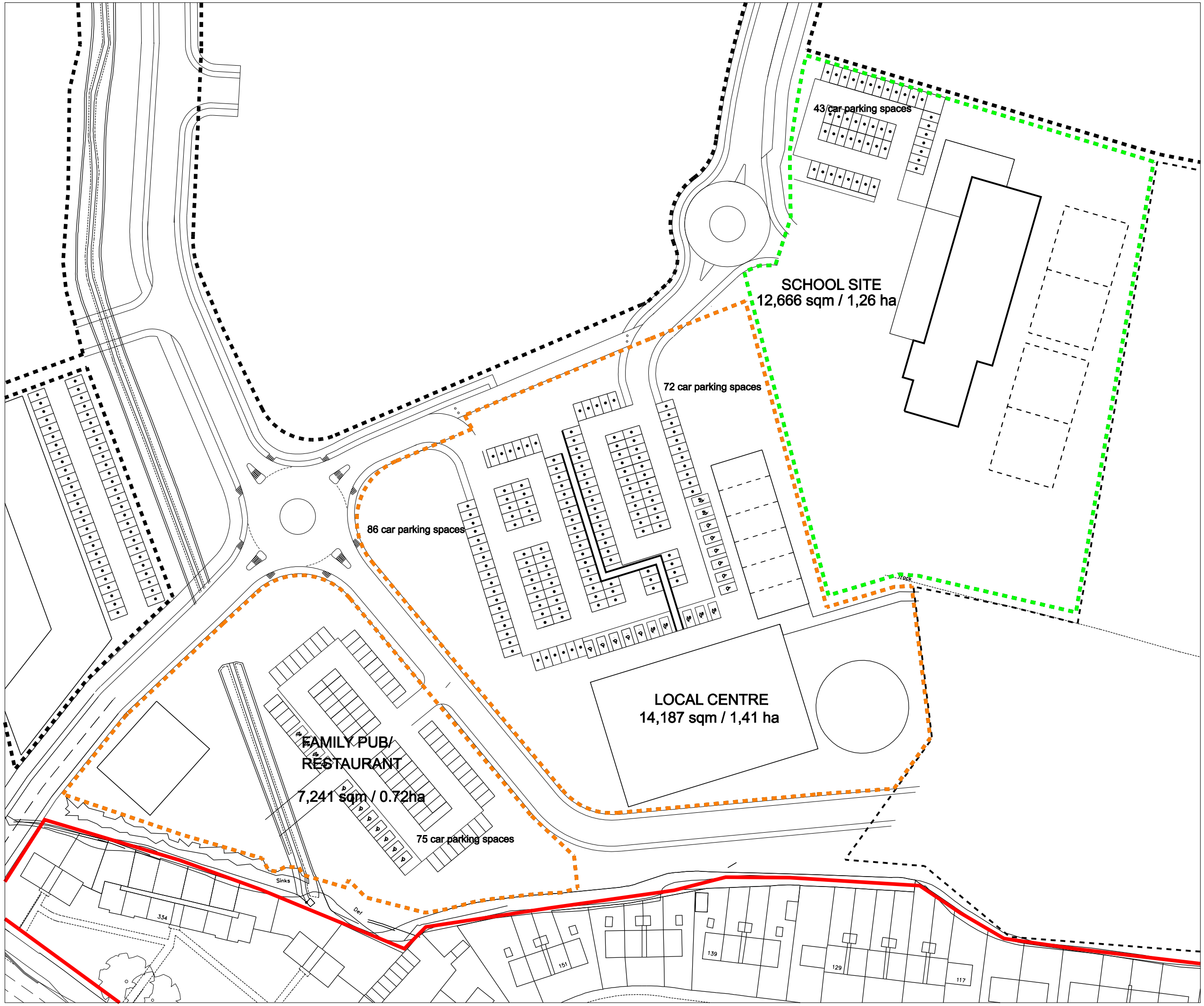
Appendix 3

Proposed Local Centre Car Park



Notes

Do not scale from this drawing.

All dimensions are to be checked prior to construction and any discrepancies are to be identified to the Architect.

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N

A	07.07.16	Issued for comments — JHD

ISSUED FOR PLANNING

Revisions

Client
Satnam Millennium Ltd

Project
Peel Hall Masterplan

Title
Illustrative Local Centre, Family Pub & School Layout

Scale	Size	Date	Drawn	Checked
1:1000	A3	July'16	JHD	DB

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Rev. A

Appendix 48

HTp/1107/TN/21 – Option B Alignment and Vehicular Trips (2030)

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note – Through Route Scenario

(HTp/1107/TN/21/A)

July 2017

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Contents

Figures

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited to set out the proposed alignment for a potential through route for all vehicles to be created from the A49 to the west of the Peel Hall site, through the site to Mill Lane/Blackbrook Avenue in the east. The site location is illustrated in **Figure 1.1** below.

Figure 1.1 – Site location plan

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1.2 The through route has been proposed as a sensitivity test at the request of the Warrington Borough Council (WBC) highway officers. The through route scenario is to be tested in the Peel Hall SATURN model for a full development profile build-out in the future year of 2030.

1.3 The application is for an outline scheme, with access for determination. The Peel Hall development can be summarised as:

i. Up to 1,200 residential dwellings.
ii. A 100 bedroom care home.
iii. An area of employment land comprising up to 7,500sqm Gross Floor Area (GFA) of light industrial units.
iv. A local centre comprising a food store of up to 2,000sqm GFA plus up to a further 600sqm GFA of local centre type facilities (such as A1-A5 and D1) plus a family pub and restaurant of up to 800sqm GFA.
v. Up to a two form entry primary school with a maximum of up to 420 pupils.

vi. Relocating and upgrading of existing sports pitches to provide like-for-like replacement in terms of number of pitches and the provision of ancillary facilities, which are expected to include changing facilities for up to four teams at any one time and a function room that can be used for local community uses such as a mother and toddler group.

1.4 The alignment of the proposed all-vehicle through route and the preliminary proposed junction arrangement with the A49 is set out in **Section 2.0** of this report, which also includes details of the main site access junction to the east of the Peel Hall site from Blackbrook Avenue at Mill Lane. The Blackbrook Avenue junction is a three-arm roundabout as per the original Peel Hall access strategy (2016 application, updated to reflect Road Safety Audit comments).

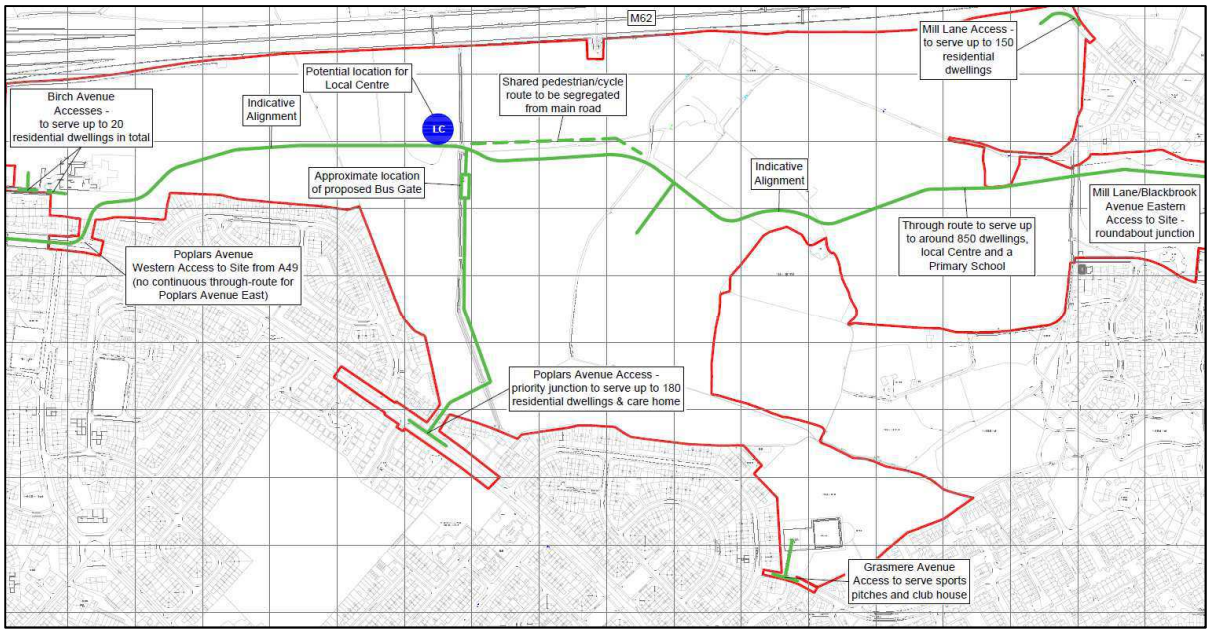
1.5 The 2030 development trip rates are taken from Section 5.0 of the HTp Technical Note TN/19 (dated May 2017) for the purposes of this assessment, and are set out in **Section 3.0** of this report in relation to the vehicular trips forecast to be associated with the through route sensitivity test.

2.0 Through Route

2.1 The through route will act as a local distributor road between the A49 in the east and Blackbrook Avenue through Mill Lane to the west. The alignment will pass through the centre of the site.

2.2 The carriageway will be 7.3 metres wide, with a 3.5 metres shared surface footway-cycleway to one side and a 2.0 metre footway to the other side. The through route is illustrated in **Figure 2.1** below and the full plan is contained at **Appendix 1**.

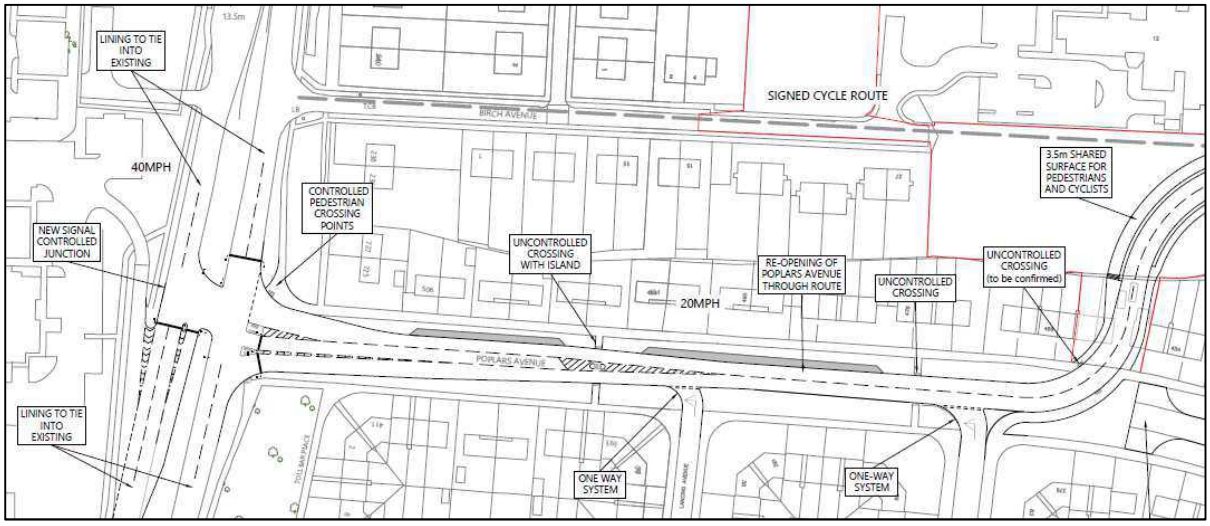
Figure 2.1 - Extract of indicative through route alignment



2.3 The through route will require a new signalised junction with the A49 and for Poplars Avenue to be reopened west of Cotswold Road (east of Lancing Avenue). This will enable traffic from the development to access the A49 without the need to travel through the existing residential area to the south of the site.

2.4 The access to the site from Poplars Avenue West will be a continuation of the Poplars Avenue link with the A49. An extract of this is shown in **Figure 2.2** below and the full plan is contained at **Appendix 2**.

Figure 2.2 - Extract of proposed alignment for through route at A49



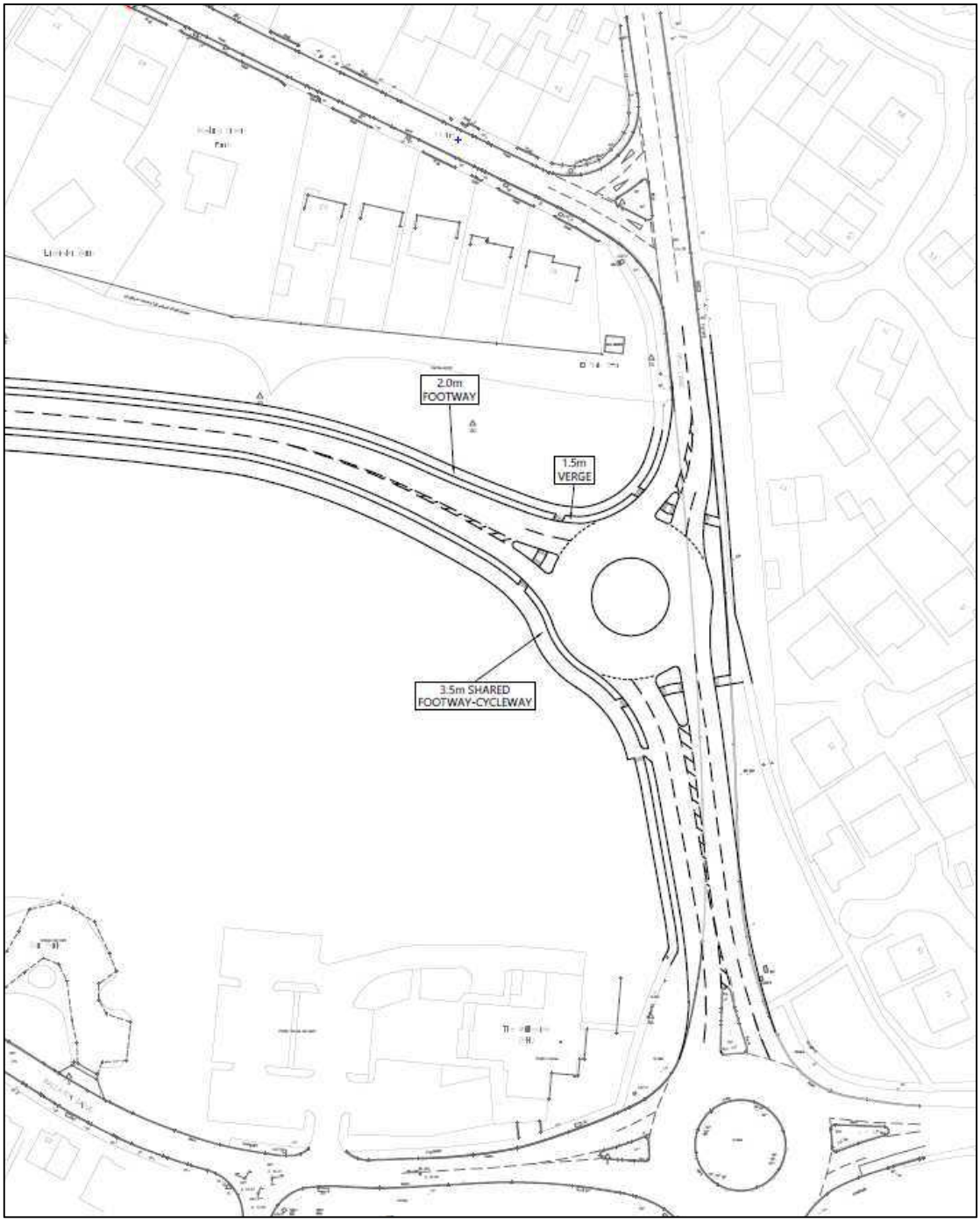
2.5 The new signalised junction will enable development traffic to travel north or south on the A49 and for A49 traffic from the north and the south to access the development and travel through the development to the wider highway network east of the site (and vice versa) via the proposed Blackbrook Avenue site access.

2.6 To ensure that the existing residential areas surrounding the site are protected from development traffic the following measures are proposed:

i. Lancing Avenue one way northbound with a left-turn out only manoeuvre allowed at poplars Avenue.
ii. Cotswold Road one way northbound with a left-turn out only manoeuvre allowed at poplars Avenue.
iii. Poplars Avenue stopped up west of Cotswold Avenue and the proposed access road.
iv. A bus gate provided to prevent traffic from the development travelling to and from the area of Poplars Avenue to the south (see **Figure 2.1**).

2.7 The Blackbrook Avenue access will be as per the original access strategy, with a three arm roundabout from Mill Lane (south) linking to the existing Blackbrook Avenue roundabout. An extract of this is shown in **Figure 2.3** below and the full plan is contained at **Appendix 3**.

Figure 2.3 - Extract of main site access at Blackbrook Avenue



3.0 Traffic Flows

Development Profile

3.1 The through route will carry local traffic as well as serve to facilitate access to the following elements of the development profile:

i. Up to around 850 dwellings.
ii. Local centre (comprising a food store of up to 2,000sqm GFA plus up to a further 600sqm GFA of local centre type facilities plus a family pub and restaurant of up to 800sqm GFA).
iii. Up to two-form entry primary school.
iv. An area of employment land comprising up to 7,500sqm GFA of light industrial units.

3.2 For reference, the remaining development profile is proposed to be served as follows:

i. Up to 20 dwellings off Birch Avenue.
ii. Up to 180 dwellings and a 100 bedroomed care home off Poplars Avenue (Central); with a bus gate to prevent general vehicular traffic travelling further north onto the through route.
iii. Up to 150 dwellings off Mill Lane (north).
iv. Sports pitches and community uses served from Grasmere Avenue.

Traffic Flows

3.3 Section 3.0 of Technical Note TN/19 (May 2017) is repeated below for ease of reference.

3.4 A summary of the peak hour trip rate data to be used and the resultant trips for each land use are set out below (taken from TN/02/A) as follows:

Table 3.1 – Residential Vehicular Trip Rate and Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
85th Percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

Table 3.2 – Care Home Vehicular Trip Rates and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per bedroom)	0.068	0.068	0.083	0.113
Care Home Trips (100-beds)	7	7	8	8

Table 3.3 – Employment Vehicular Trip Rates and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm GFA)	69	39	20	47
HGV %Proportion	7%	10%	10%	4%

Table 3.4 – Food Store Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Food Store Trips (2,000sqm GFA)	92	61	181	191

Table 3.5 – Local Centre Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Local Centre Trips (600sqm GFA)	30	29	36	39

Table 3.6 – Primary School Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Primary School Trips (all 420 pupils)	113	79	19	27

3.5 The proposed development at Peel Hall will include the existing open space and local authority community buildings and sports area on the land off Windermere Avenue and Grasmere Avenue to the southeast of the site. This will be linked to the site and new sports pitches will be provided to replace those currently located on the HCA land to the east of the site, off Mill Lane.

3.6 The facilities will likely include full-sized grass pitches, a multi-use games area, junior grass pitches and changing facilities for up to four teams. The expectation is that these proposals will also include a clubhouse/function room for community use.

3.7 The sports pitches will predominantly be used at the weekends and it was agreed at the 2013 Public Inquiry (Appeal ref: APP/M0655/A/13/2192076) that this element of the development proposals would not need to be included within the weekday modelling. Furthermore there will be an offset in trip generation from the current on-site uses at the existing location and from the sports pitches on the HCA land, which are to be relocated.

3.8 It is likely that the proposed clubhouse facilities will be used by the local community, for example, by a mother and toddler group, and also that the sports pitches may be used during the evening after 1800 hours. Therefore it was agreed at the 2013 Inquiry that the clubhouse facilities for local community use may attract up to 15 car movements over two-hour time slots during the day between the hours of 0900 and 1800. As this is cannot be accurately modelled within our one hour peak AM and PM time periods, the 15 movements have been concentrated into each peak hour. This is set out on **Table 3.7** below.

Table 3.7 – Sports Pitches and Ancillary Facilities Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Community Use Trips	10	5	7	8

3.9 The size of the family pub was changed in April 2016 as the scheme evolved, reducing to 800sqm GFA. The change in floor area was set out in Technical Note TN/12 and the resulting trips are represented in **Table 3.8** below.

Table 3.8 – Family Pub/Restaurant Vehicular Trip Rate and Attraction Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Trip Rates (per 100sqm GFA)	-	-	2.847	1.845
Family Pub/Restaurant Trips (800sqm GFA)	-	-	23	15

3.10 In summary, the vehicle trips associated with each land use are tabulated below for ease of reference in **Table 3.9**. *Please note that no discount has been applied to these figures.*

Table 3.9 – Peel Hall Vehicular Trip Generation Summary

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips*	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Primary School Trips	113	79	19	27
Community Uses	10	5	7	8
Family Pub/Restaurant Trips	-	-	23	15
Total Trips	**591**	**848**	**888**	**703**

**** See Table 3.3 for HGV proportion of peak hour traffic***

2030 Traffic Flows

3.11 It has been agreed that the through route is to be tested in the future year of 2030.

3.12 The development trips set out in **Table 3.9** above are to be discounted in line with TN/19 (Section 5.0) as follows for the AM and PM peak hours:

i. Residential 0%
ii. Care Home 0%
iii. Employment 0%
iv. Food Store 100% (70% discount and 30% pass-by)
v. Local Centre 100%
vi. Family Pub/Restaurant 0%
vii. Primary School 50%
viii. Community uses 0%

3.13 These discounts have been applied to the figures contained in **Table 3.9** and a revised summary of the proposed Peel Hall development trips for 2030 with a through route is set out on **Table 3.10** below for the relevant access locations.

Table 3.10 – Summary of 2030 Peak Hour Vehicle Trip Numbers at Each Access Location (with discounts applied)

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	180 dwellings	41	94	89	55
	care home	7	7	8	8
	Total	*48*	*101*	*97*	*63*
Poplars Avenue (West) through to A49 & Mill Lane/Blackbrook Avenue	food store*	28	18	54	57
	local shops	0	0	0	0
	family pub	0	0	23	15
	850 dwellings	191	445	421	261
	primary school	57	40	10	14
	employment land	69	39	20	47
	Total	*345*	*542*	*528*	*394*
Mill Lane	150 dwellings	34	79	74	46
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
	Total	**442**	**738**	**716**	**517**

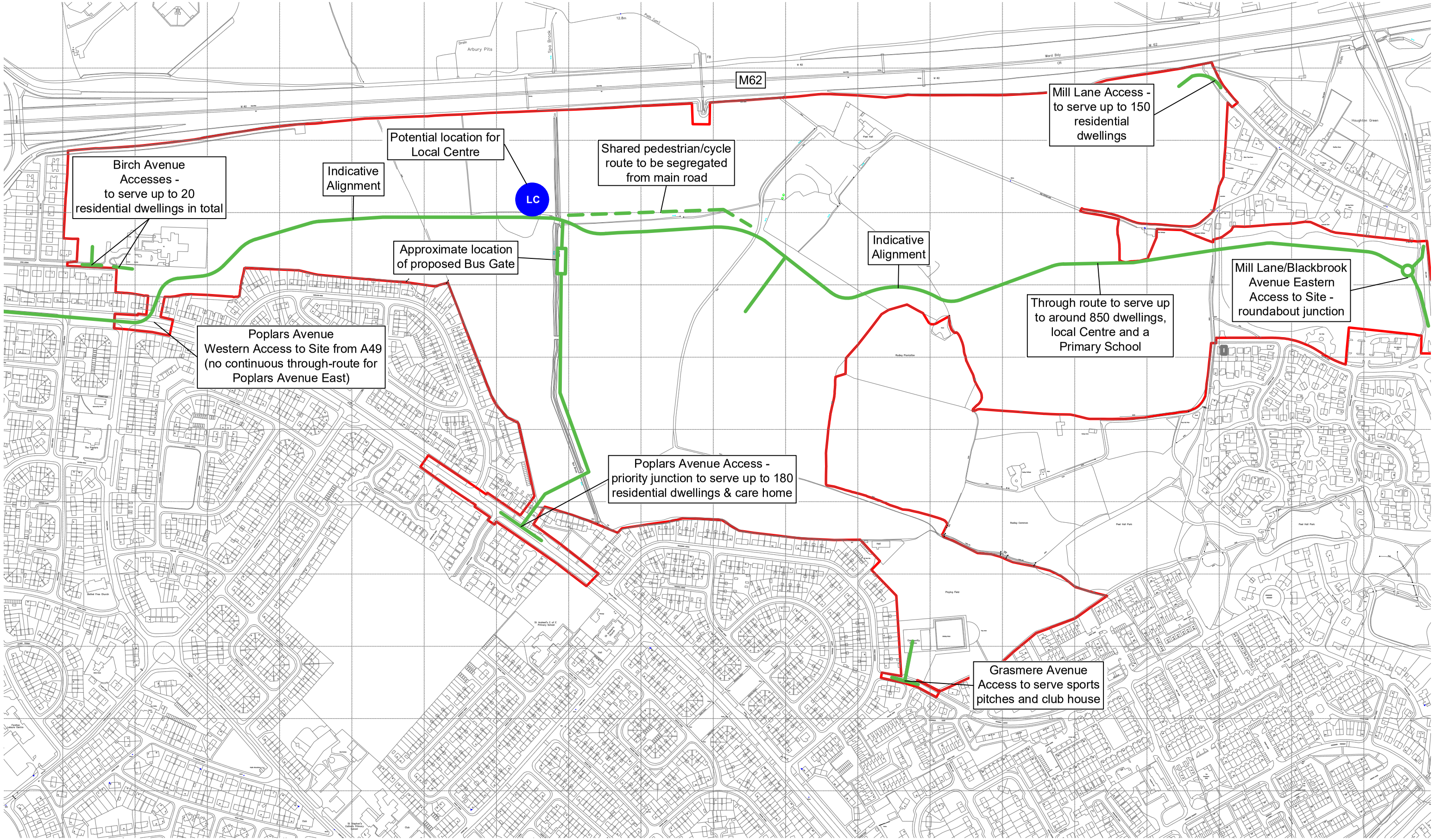
*** pass-by trips only**

3.14 The through route scenario test for the Peel Hall SATURN model can be carried out with the above vehicle trips and loading.

3.15 It can be seen from **Table 3.10** that there will be up to around an additional 1,200 vehicle trips on the local highway network in each of the weekday peak hours as a result of the Peel Hall development.

Appendix 1

Indicative Through Route Alignment



NOTES:

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ISSUE	REASON FOR REVISION	DATE

DATE:	DRAWN BY:	CHECKED:
01/07/17	FB	DT

PROJECT: PEEL HALL, WARRINGTON

CLIENT: SATNAM MILLENNIUM LTD

TITLE: INDICATIVE THROUGH ROUTE AND ACCESS POINTS

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	43	Not to scale

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First Floor, 43-45 Park Street
Bristol BS1 5NL
07973 375 937 / 07595 892 217
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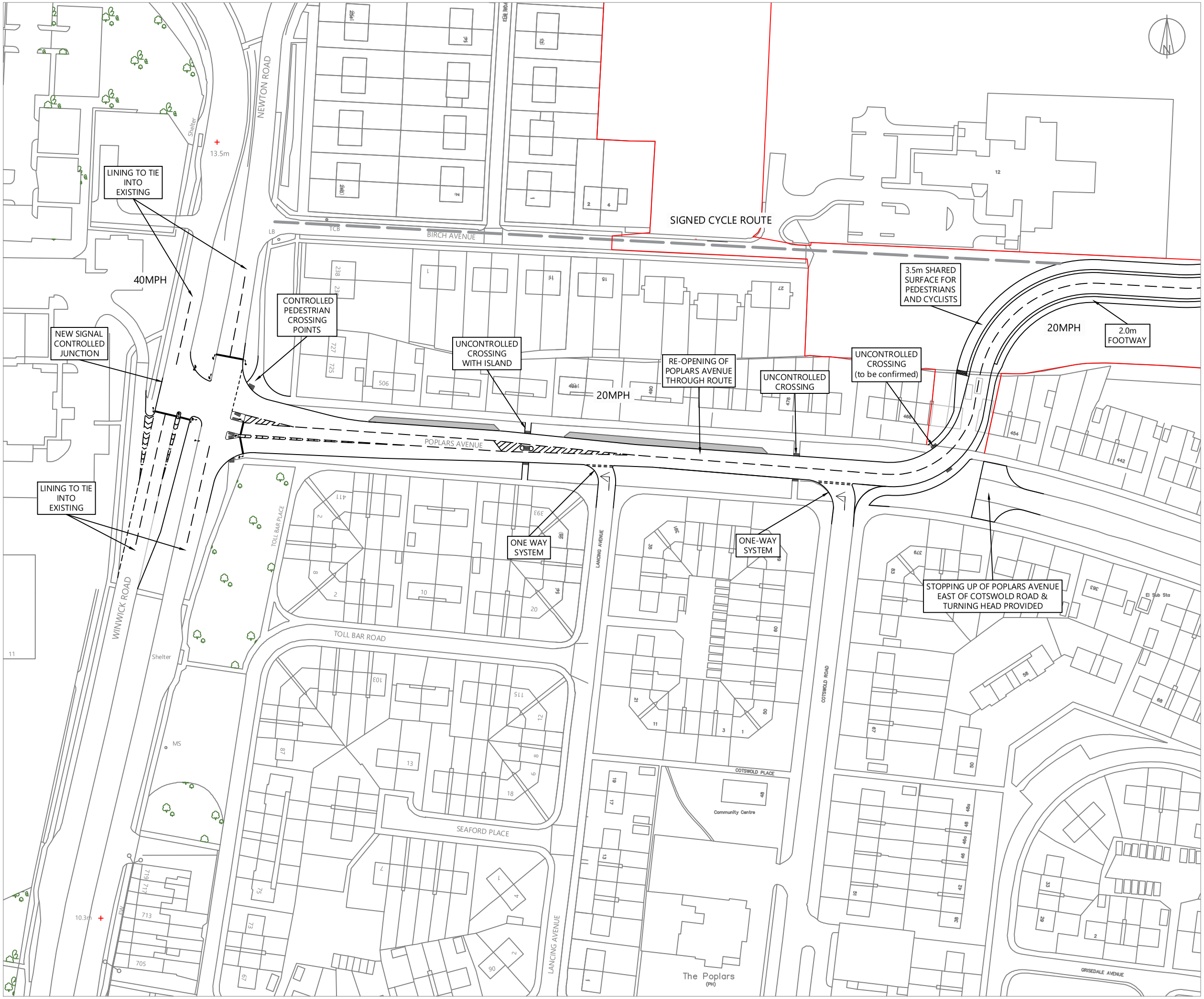
Appendix 2

Peel Hall Proposed Alignment for Through Route to A49



NOTES:

Drawing based on Appletons Opportunities & Constraints plan 1820_21 dated 21/10/14.

PRELIMINARY

KEY

New on-street parking bays

Red line boundary

ISSUE	REASON FOR REVISION	DATE

PROJECT:

PEEL HALL, WARRINGTON

CLIENT:

SATNAM MILLENNIUM LTD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	52/A	1:1,250 @ A3

HighgateTransportation

www.highgatetransportation.co.uk

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Bristol BS8 1ES
07973 375 937 / 07595 892 217

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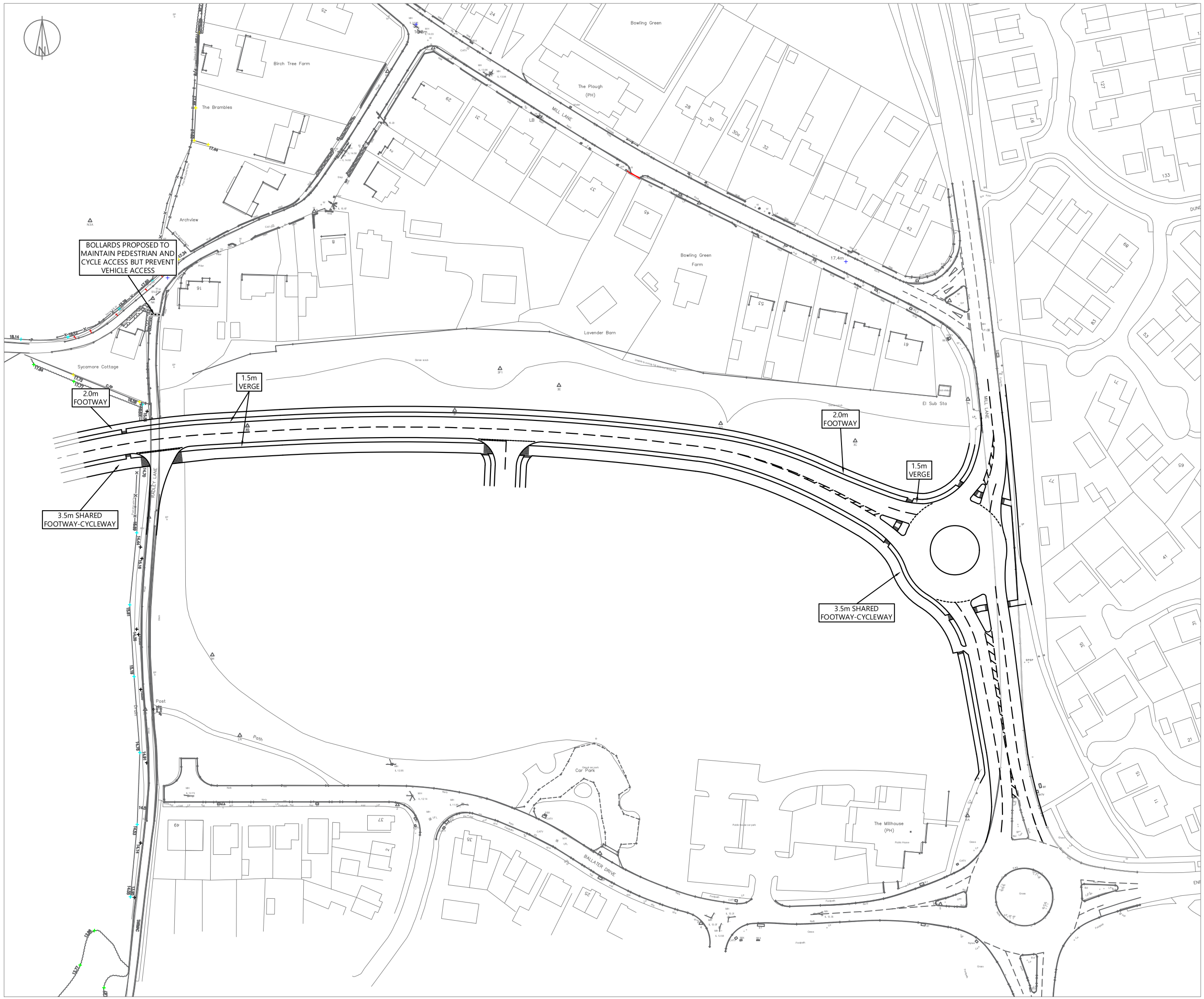
TITLE:

PEEL HALL PROPOSED ALIGNMENT FOR THROUGH ROUTE TO A49

DATE:	DRAWN BY:	CHECKED:
13/06/17	FB	DT

Appendix 3

Proposed Main Site Access at Blackbrook Avenue



NOTES:
Drawing based on Powers & Tiltman topographical survey 6297/01 dated 25/07/11 and Geomatic Surveys Ltd topographical survey 01532/01 dated 27/07/15.

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ISSUE	REASON FOR REVISION	DATE

PROJECT:

PEEL HALL, WARRINGTON

CLIENT:

SATNAM MILLENNIUM LTD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	10/L	1:1,250 @ A3

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TITLE:

PROPOSED MAIN SITE ACCESS AT BLACKBROOK AVENUE

DATE:	DRAWN BY:	CHECKED:
03/02/17	FB	DT

Appendix 49

Saturday/Sunday TRICS Output Reports

Calculation Reference: AUDIT-355901-180115-0148

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 22 to 195 (units:)
Range Selected by User: 6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 12/11/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:
Sunday 8 days

This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual count 8 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:
Suburban Area (PPS6 Out of Centre) 4
Edge of Town 4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:
Residential Zone 8

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
100,001 to 125,000	3 days
125,001 to 250,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	4 days
1.6 to 2.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CA-03-A-03 SEMI-DET. CAMBRIDGESHIRE
SUGAR WAY
WOODSTON
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: SUNDAY 11/05/08 Survey Type: MANUAL

2 CH-03-A-03 SEMI-DETACHED CHESHIRE
SPRING GARDENS

CREWE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 80
Survey date: SUNDAY 19/10/08 Survey Type: MANUAL

3 CH-03-A-04 DETACHED/SEMI-DET. CHESHIRE
LIME TREE AVENUE

CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 25
Survey date: SUNDAY 19/10/08 Survey Type: MANUAL

4 HF-03-A-02 HOUSES HERTFORDSHIRE
BLACK FAN ROAD
PANSHANGER
WELWYN GARDEN CITY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 195
Survey date: SUNDAY 20/07/08 Survey Type: MANUAL

5 MS-03-A-02 DETACHED MERSEYSIDE
RIVERSIDE DRIVE
AIGBURTH
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 31
Survey date: SUNDAY 05/09/10 Survey Type: MANUAL

6 NY-03-A-02 DETACHED NORTH YORKSHIRE
CLOTHERHOLME ROAD

RIPON
Edge of Town
Residential Zone
Total Number of dwellings: 22
Survey date: SUNDAY 21/09/08 Survey Type: MANUAL

7 NY-03-A-04 PRIVATE HOUSING NORTH YORKSHIRE

HORSEFAIR
BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: SUNDAY 14/09/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SH-03-A-02 DETATCHED SHROPSHIRE
GATCOMBE WAY
PRIORSLEE
TELFORD
Edge of Town
Residential Zone
Total Number of dwellings: 57
Survey date: SUNDAY 21/06/09 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.037	8	58	0.043	8	58	0.080
08:00 - 09:00	8	58	0.048	8	58	0.074	8	58	0.122
09:00 - 10:00	8	58	0.072	8	58	0.189	8	58	0.261
10:00 - 11:00	8	58	0.167	8	58	0.234	8	58	0.401
11:00 - 12:00	8	58	0.193	8	58	0.280	8	58	0.473
12:00 - 13:00	8	58	0.252	8	58	0.204	8	58	0.456
13:00 - 14:00	8	58	0.210	8	58	0.165	8	58	0.375
14:00 - 15:00	8	58	0.221	8	58	0.204	8	58	0.425
15:00 - 16:00	8	58	0.210	8	58	0.174	8	58	0.384
16:00 - 17:00	8	58	0.189	8	58	0.128	8	58	0.317
17:00 - 18:00	8	58	0.189	8	58	0.150	8	58	0.339
18:00 - 19:00	8	58	0.161	8	58	0.128	8	58	0.289
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.949			1.973			3.922

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.004	8	58	0.007	8	58	0.011
10:00 - 11:00	8	58	0.002	8	58	0.004	8	58	0.006
11:00 - 12:00	8	58	0.000	8	58	0.000	8	58	0.000
12:00 - 13:00	8	58	0.000	8	58	0.000	8	58	0.000
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.002	8	58	0.000	8	58	0.002
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.002	8	58	0.004	8	58	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.015			0.025

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.000	8	58	0.000
12:00 - 13:00	8	58	0.000	8	58	0.000	8	58	0.000
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.000	8	58	0.000
12:00 - 13:00	8	58	0.000	8	58	0.000	8	58	0.000
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.002	8	58	0.000	8	58	0.002
08:00 - 09:00	8	58	0.004	8	58	0.000	8	58	0.004
09:00 - 10:00	8	58	0.007	8	58	0.002	8	58	0.009
10:00 - 11:00	8	58	0.013	8	58	0.017	8	58	0.030
11:00 - 12:00	8	58	0.011	8	58	0.015	8	58	0.026
12:00 - 13:00	8	58	0.013	8	58	0.024	8	58	0.037
13:00 - 14:00	8	58	0.015	8	58	0.002	8	58	0.017
14:00 - 15:00	8	58	0.028	8	58	0.022	8	58	0.050
15:00 - 16:00	8	58	0.020	8	58	0.022	8	58	0.042
16:00 - 17:00	8	58	0.004	8	58	0.002	8	58	0.006
17:00 - 18:00	8	58	0.009	8	58	0.020	8	58	0.029
18:00 - 19:00	8	58	0.002	8	58	0.002	8	58	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.128			0.128			0.256

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.043	8	58	0.050	8	58	0.093
08:00 - 09:00	8	58	0.059	8	58	0.093	8	58	0.152
09:00 - 10:00	8	58	0.087	8	58	0.289	8	58	0.376
10:00 - 11:00	8	58	0.247	8	58	0.375	8	58	0.622
11:00 - 12:00	8	58	0.278	8	58	0.469	8	58	0.747
12:00 - 13:00	8	58	0.375	8	58	0.364	8	58	0.739
13:00 - 14:00	8	58	0.356	8	58	0.271	8	58	0.627
14:00 - 15:00	8	58	0.358	8	58	0.345	8	58	0.703
15:00 - 16:00	8	58	0.343	8	58	0.299	8	58	0.642
16:00 - 17:00	8	58	0.321	8	58	0.200	8	58	0.521
17:00 - 18:00	8	58	0.354	8	58	0.260	8	58	0.614
18:00 - 19:00	8	58	0.286	8	58	0.206	8	58	0.492
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.107			3.221			6.328

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.009	8	58	0.017	8	58	0.026
08:00 - 09:00	8	58	0.022	8	58	0.033	8	58	0.055
09:00 - 10:00	8	58	0.063	8	58	0.069	8	58	0.132
10:00 - 11:00	8	58	0.072	8	58	0.115	8	58	0.187
11:00 - 12:00	8	58	0.072	8	58	0.091	8	58	0.163
12:00 - 13:00	8	58	0.121	8	58	0.082	8	58	0.203
13:00 - 14:00	8	58	0.126	8	58	0.126	8	58	0.252
14:00 - 15:00	8	58	0.076	8	58	0.100	8	58	0.176
15:00 - 16:00	8	58	0.085	8	58	0.037	8	58	0.122
16:00 - 17:00	8	58	0.082	8	58	0.080	8	58	0.162
17:00 - 18:00	8	58	0.082	8	58	0.080	8	58	0.162
18:00 - 19:00	8	58	0.041	8	58	0.050	8	58	0.091
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.851			0.880			1.731

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.002	8	58	0.002
12:00 - 13:00	8	58	0.000	8	58	0.002	8	58	0.002
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.004			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.000	8	58	0.000
12:00 - 13:00	8	58	0.000	8	58	0.000	8	58	0.000
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.000	8	58	0.000
12:00 - 13:00	8	58	0.000	8	58	0.000	8	58	0.000
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.000	8	58	0.000	8	58	0.000
08:00 - 09:00	8	58	0.000	8	58	0.000	8	58	0.000
09:00 - 10:00	8	58	0.000	8	58	0.000	8	58	0.000
10:00 - 11:00	8	58	0.000	8	58	0.000	8	58	0.000
11:00 - 12:00	8	58	0.000	8	58	0.002	8	58	0.002
12:00 - 13:00	8	58	0.000	8	58	0.002	8	58	0.002
13:00 - 14:00	8	58	0.000	8	58	0.000	8	58	0.000
14:00 - 15:00	8	58	0.000	8	58	0.000	8	58	0.000
15:00 - 16:00	8	58	0.000	8	58	0.000	8	58	0.000
16:00 - 17:00	8	58	0.000	8	58	0.000	8	58	0.000
17:00 - 18:00	8	58	0.000	8	58	0.000	8	58	0.000
18:00 - 19:00	8	58	0.000	8	58	0.000	8	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.004			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	58	0.054	8	58	0.067	8	58	0.121
08:00 - 09:00	8	58	0.085	8	58	0.126	8	58	0.211
09:00 - 10:00	8	58	0.156	8	58	0.360	8	58	0.516
10:00 - 11:00	8	58	0.332	8	58	0.508	8	58	0.840
11:00 - 12:00	8	58	0.360	8	58	0.577	8	58	0.937
12:00 - 13:00	8	58	0.510	8	58	0.473	8	58	0.983
13:00 - 14:00	8	58	0.497	8	58	0.399	8	58	0.896
14:00 - 15:00	8	58	0.462	8	58	0.466	8	58	0.928
15:00 - 16:00	8	58	0.447	8	58	0.358	8	58	0.805
16:00 - 17:00	8	58	0.408	8	58	0.282	8	58	0.690
17:00 - 18:00	8	58	0.445	8	58	0.360	8	58	0.805
18:00 - 19:00	8	58	0.330	8	58	0.258	8	58	0.588
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.086			4.234			8.320

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	22 - 195 (units:)
Survey date date range:	01/01/07 - 12/11/15
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	0
Number of Sundays:	8
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-355901-180115-0154

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : C - PUB/RESTAURANT
MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	SG	SOUTH GLOUCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 270 to 1000 (units: sqm)
Range Selected by User: 270 to 2384 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 25/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:
Saturday 4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:
Manual count 4 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:
Suburban Area (PPS6 Out of Centre) 2
Neighbourhood Centre (PPS6 Local Centre) 2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:
Residential Zone 2
Village 1
No Sub Category 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A3	1 days
A4	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

100,001 to 125,000	2 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CH-06-C-01	HARVESTER		CHESHIRE
	WHITCHURCH ROAD			
	CHRISTLETON			
	CHESTER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Gross floor area:		375 sqm	
	Survey date: SATURDAY		18/10/08	Survey Type: MANUAL
2	DH-06-C-01	PUB/RESTAURANT		DURHAM
	WOOLER ROAD			
	HARTLEPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		1000 sqm	
	Survey date: SATURDAY		29/09/07	Survey Type: MANUAL
3	SG-06-C-02	PUB/RESTAURANT		SOUTH GLOUCESTERSHIRE
	HIGH STREET			
	WINTERBOURNE			
	NEAR BRISTOL			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:		270 sqm	
	Survey date: SATURDAY		17/10/09	Survey Type: MANUAL
4	WY-06-C-02	TOBY CARVERY		WEST YORKSHIRE
	ROOLEY LANE			
	BRADFORD			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		430 sqm	
	Survey date: SATURDAY		08/12/12	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.723	4	519	0.723	4	519	1.446
11:00 - 12:00	4	519	1.783	4	519	0.578	4	519	2.361
12:00 - 13:00	4	519	2.602	4	519	1.590	4	519	4.192
13:00 - 14:00	4	519	3.614	4	519	2.651	4	519	6.265
14:00 - 15:00	4	519	2.747	4	519	3.277	4	519	6.024
15:00 - 16:00	4	519	2.361	4	519	3.181	4	519	5.542
16:00 - 17:00	4	519	2.458	4	519	2.265	4	519	4.723
17:00 - 18:00	4	519	3.855	4	519	3.229	4	519	7.084
18:00 - 19:00	4	519	3.855	4	519	3.084	4	519	6.939
19:00 - 20:00	4	519	6.843	4	519	6.410	4	519	13.253
20:00 - 21:00	4	519	5.494	4	519	5.446	4	519	10.940
21:00 - 22:00	4	519	3.952	4	519	5.831	4	519	9.783
22:00 - 23:00	4	519	1.976	4	519	3.133	4	519	5.109
23:00 - 24:00	4	519	0.482	4	519	1.928	4	519	2.410
Total Rates:			42.745			43.326			86.071

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.048	4	519	0.048	4	519	0.096
11:00 - 12:00	4	519	0.145	4	519	0.145	4	519	0.290
12:00 - 13:00	4	519	0.145	4	519	0.145	4	519	0.290
13:00 - 14:00	4	519	0.241	4	519	0.241	4	519	0.482
14:00 - 15:00	4	519	0.241	4	519	0.241	4	519	0.482
15:00 - 16:00	4	519	0.145	4	519	0.145	4	519	0.290
16:00 - 17:00	4	519	0.193	4	519	0.193	4	519	0.386
17:00 - 18:00	4	519	0.193	4	519	0.193	4	519	0.386
18:00 - 19:00	4	519	0.386	4	519	0.386	4	519	0.772
19:00 - 20:00	4	519	1.735	4	519	1.639	4	519	3.374
20:00 - 21:00	4	519	2.024	4	519	1.880	4	519	3.904
21:00 - 22:00	4	519	2.651	4	519	2.843	4	519	5.494
22:00 - 23:00	4	519	1.108	4	519	0.916	4	519	2.024
23:00 - 24:00	4	519	0.193	4	519	0.434	4	519	0.627
Total Rates:			9.448			9.449			18.897

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.048	4	519	0.048
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.048	4	519	0.048	4	519	0.096
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.000	4	519	0.000	4	519	0.000
18:00 - 19:00	4	519	0.000	4	519	0.000	4	519	0.000
19:00 - 20:00	4	519	0.000	4	519	0.000	4	519	0.000
20:00 - 21:00	4	519	0.000	4	519	0.000	4	519	0.000
21:00 - 22:00	4	519	0.000	4	519	0.000	4	519	0.000
22:00 - 23:00	4	519	0.000	4	519	0.000	4	519	0.000
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.048			0.096			0.144

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.000	4	519	0.000	4	519	0.000
18:00 - 19:00	4	519	0.000	4	519	0.000	4	519	0.000
19:00 - 20:00	4	519	0.000	4	519	0.000	4	519	0.000
20:00 - 21:00	4	519	0.000	4	519	0.000	4	519	0.000
21:00 - 22:00	4	519	0.000	4	519	0.000	4	519	0.000
22:00 - 23:00	4	519	0.000	4	519	0.000	4	519	0.000
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.048	4	519	0.048	4	519	0.096
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.096	4	519	0.096	4	519	0.192
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.096	4	519	0.000	4	519	0.096
16:00 - 17:00	4	519	0.145	4	519	0.096	4	519	0.241
17:00 - 18:00	4	519	0.096	4	519	0.241	4	519	0.337
18:00 - 19:00	4	519	0.000	4	519	0.000	4	519	0.000
19:00 - 20:00	4	519	0.000	4	519	0.000	4	519	0.000
20:00 - 21:00	4	519	0.048	4	519	0.000	4	519	0.048
21:00 - 22:00	4	519	0.000	4	519	0.000	4	519	0.000
22:00 - 23:00	4	519	0.000	4	519	0.000	4	519	0.000
23:00 - 24:00	4	519	0.000	4	519	0.048	4	519	0.048
Total Rates:			0.529			0.529			1.058

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	1.398	4	519	1.301	4	519	2.699
11:00 - 12:00	4	519	3.036	4	519	1.012	4	519	4.048
12:00 - 13:00	4	519	5.687	4	519	2.602	4	519	8.289
13:00 - 14:00	4	519	7.807	4	519	5.735	4	519	13.542
14:00 - 15:00	4	519	5.590	4	519	7.181	4	519	12.771
15:00 - 16:00	4	519	5.205	4	519	6.747	4	519	11.952
16:00 - 17:00	4	519	5.349	4	519	4.578	4	519	9.927
17:00 - 18:00	4	519	7.614	4	519	6.072	4	519	13.686
18:00 - 19:00	4	519	9.831	4	519	6.506	4	519	16.337
19:00 - 20:00	4	519	15.807	4	519	13.735	4	519	29.542
20:00 - 21:00	4	519	12.096	4	519	11.470	4	519	23.566
21:00 - 22:00	4	519	8.096	4	519	14.892	4	519	22.988
22:00 - 23:00	4	519	3.373	4	519	6.795	4	519	10.168
23:00 - 24:00	4	519	0.867	4	519	3.759	4	519	4.626
Total Rates:			91.756			92.385			184.141

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.337	4	519	0.096	4	519	0.433
11:00 - 12:00	4	519	0.434	4	519	0.193	4	519	0.627
12:00 - 13:00	4	519	0.578	4	519	0.048	4	519	0.626
13:00 - 14:00	4	519	0.867	4	519	0.916	4	519	1.783
14:00 - 15:00	4	519	0.337	4	519	0.627	4	519	0.964
15:00 - 16:00	4	519	1.157	4	519	0.627	4	519	1.784
16:00 - 17:00	4	519	0.193	4	519	0.386	4	519	0.579
17:00 - 18:00	4	519	1.542	4	519	0.434	4	519	1.976
18:00 - 19:00	4	519	0.867	4	519	0.386	4	519	1.253
19:00 - 20:00	4	519	2.747	4	519	1.687	4	519	4.434
20:00 - 21:00	4	519	3.663	4	519	1.349	4	519	5.012
21:00 - 22:00	4	519	1.928	4	519	2.554	4	519	4.482
22:00 - 23:00	4	519	1.253	4	519	2.988	4	519	4.241
23:00 - 24:00	4	519	0.193	4	519	3.614	4	519	3.807
Total Rates:			16.096			15.905			32.001

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.048	4	519	0.000	4	519	0.048
18:00 - 19:00	4	519	0.000	4	519	0.048	4	519	0.048
19:00 - 20:00	4	519	0.289	4	519	0.289	4	519	0.578
20:00 - 21:00	4	519	0.289	4	519	0.241	4	519	0.530
21:00 - 22:00	4	519	0.145	4	519	0.289	4	519	0.434
22:00 - 23:00	4	519	0.000	4	519	0.048	4	519	0.048
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.771			0.915			1.686

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.000	4	519	0.000	4	519	0.000
18:00 - 19:00	4	519	0.000	4	519	0.000	4	519	0.000
19:00 - 20:00	4	519	0.000	4	519	0.000	4	519	0.000
20:00 - 21:00	4	519	0.000	4	519	0.000	4	519	0.000
21:00 - 22:00	4	519	0.000	4	519	0.000	4	519	0.000
22:00 - 23:00	4	519	0.000	4	519	0.000	4	519	0.000
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.000	4	519	0.000	4	519	0.000
18:00 - 19:00	4	519	0.000	4	519	0.000	4	519	0.000
19:00 - 20:00	4	519	0.000	4	519	0.000	4	519	0.000
20:00 - 21:00	4	519	0.000	4	519	0.000	4	519	0.000
21:00 - 22:00	4	519	0.000	4	519	0.000	4	519	0.000
22:00 - 23:00	4	519	0.000	4	519	0.000	4	519	0.000
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	0.000	4	519	0.000	4	519	0.000
11:00 - 12:00	4	519	0.000	4	519	0.000	4	519	0.000
12:00 - 13:00	4	519	0.000	4	519	0.000	4	519	0.000
13:00 - 14:00	4	519	0.000	4	519	0.000	4	519	0.000
14:00 - 15:00	4	519	0.000	4	519	0.000	4	519	0.000
15:00 - 16:00	4	519	0.000	4	519	0.000	4	519	0.000
16:00 - 17:00	4	519	0.000	4	519	0.000	4	519	0.000
17:00 - 18:00	4	519	0.048	4	519	0.000	4	519	0.048
18:00 - 19:00	4	519	0.000	4	519	0.048	4	519	0.048
19:00 - 20:00	4	519	0.289	4	519	0.289	4	519	0.578
20:00 - 21:00	4	519	0.289	4	519	0.241	4	519	0.530
21:00 - 22:00	4	519	0.145	4	519	0.289	4	519	0.434
22:00 - 23:00	4	519	0.000	4	519	0.048	4	519	0.048
23:00 - 24:00	4	519	0.000	4	519	0.000	4	519	0.000
Total Rates:			0.771			0.915			1.686

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	4	519	1.735	4	519	1.398	4	519	3.133
11:00 - 12:00	4	519	3.518	4	519	1.253	4	519	4.771
12:00 - 13:00	4	519	6.265	4	519	2.651	4	519	8.916
13:00 - 14:00	4	519	8.771	4	519	6.747	4	519	15.518
14:00 - 15:00	4	519	5.928	4	519	7.807	4	519	13.735
15:00 - 16:00	4	519	6.458	4	519	7.373	4	519	13.831
16:00 - 17:00	4	519	5.687	4	519	5.060	4	519	10.747
17:00 - 18:00	4	519	9.301	4	519	6.747	4	519	16.048
18:00 - 19:00	4	519	10.699	4	519	6.940	4	519	17.639
19:00 - 20:00	4	519	18.843	4	519	15.711	4	519	34.554
20:00 - 21:00	4	519	16.096	4	519	13.060	4	519	29.156
21:00 - 22:00	4	519	10.169	4	519	17.735	4	519	27.904
22:00 - 23:00	4	519	4.627	4	519	9.831	4	519	14.458
23:00 - 24:00	4	519	1.060	4	519	7.422	4	519	8.482
Total Rates:			109.157			109.735			218.892

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	270 - 1000 (units: sqm)
Survey date date range:	01/01/07 - 25/05/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	4
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-355901-180115-0137

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
	SC	SURREY	1 days
	WN	WINDSOR & MAIDENHEAD	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
	DC	DORSET	2 days
	DV	DEVON	1 days
	GS	GLOUCESTERSHIRE	1 days
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NR	NORTHAMPTONSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	3 days
09	NORTH		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	800 to 11800 (units: sqm)
Range Selected by User:	800 to 12642 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 07/11/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Saturday	24 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	24 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	12
Edge of Town	12

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	1
Commercial Zone	2
Development Zone	1
Residential Zone	9
Retail Zone	3
Built-Up Zone	1
No Sub Category	7

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

A1	24 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	8 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	5 days
25,001 to 50,000	4 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	3 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
100,001 to 125,000	4 days
125,001 to 250,000	5 days
250,001 to 500,000	3 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	12 days
1.6 to 2.0	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

PFS is present at the site and is included in the count	15 days
PFS is present at the site but is excluded from the count	2 days
There is no PFS at the site	7 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Not Known	1 days
Yes	3 days
No	20 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CW-01-A-09 ASDA CORNWALL
KERNICK ROAD

PENRYN
Edge of Town
No Sub Category
Total Gross floor area: 8991 sqm
Survey date: SATURDAY 23/05/09 Survey Type: MANUAL

2 DC-01-A-19 TESCO EXTRA DORSET
RIVERSIDE AVENUE

BOURNEMOUTH
Edge of Town
No Sub Category
Total Gross floor area: 8500 sqm
Survey date: SATURDAY 22/03/14 Survey Type: MANUAL

3 DC-01-A-20 MORRISONS DORSET
DORCHESTER ROAD

WEYMOUTH
Edge of Town
No Sub Category
Total Gross floor area: 5500 sqm
Survey date: SATURDAY 29/03/14 Survey Type: MANUAL

4 DH-01-A-02 SAINSBURYS DURHAM
SUNDERLAND ROAD
GILESGATE
DURHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 800 sqm
Survey date: SATURDAY 25/10/08 Survey Type: MANUAL

5 DV-01-A-20 SAINSBURYS DEVON
HILL BARTON ROAD
WHIPTON
EXETER
Edge of Town
Residential Zone
Total Gross floor area: 6081 sqm
Survey date: SATURDAY 24/10/09 Survey Type: MANUAL

6 ES-01-A-15 SAINSBURYS EAST SUSSEX
LEWES ROAD

BRIGHTON
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 5900 sqm
Survey date: SATURDAY 24/11/07 Survey Type: MANUAL

7 ES-01-A-17 ASDA EAST SUSSEX
BATTLE ROAD
ST LEONARDS ON SEA
HASTINGS
Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area: 6920 sqm
Survey date: SATURDAY 01/03/14 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 EX-01-A-02 CO-OP ESSEX
PEARTREE ROAD
STANWAY
COLCHESTER
Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area: 3000 sqm
Survey date: SATURDAY 12/07/08 Survey Type: MANUAL

9 GS-01-A-04 SAINSBURYS GLOUCESTERSHIRE
PRIORS ROAD

CHELTENHAM
Edge of Town
Residential Zone
Total Gross floor area: 4250 sqm
Survey date: SATURDAY 24/04/10 Survey Type: MANUAL

10 HC-01-A-05 SAINSBURYS HAMPSHIRE
BADGER FARM ROAD

WINCHESTER
Edge of Town
Residential Zone
Total Gross floor area: 6800 sqm
Survey date: SATURDAY 17/11/07 Survey Type: MANUAL

11 HF-01-A-02 MORRISONS HERTFORDSHIRE
BLACK FAN ROAD
PANSHANGER
WELWYN GARDEN CITY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 4500 sqm
Survey date: SATURDAY 05/07/08 Survey Type: MANUAL

12 LN-01-A-06 SAINSBURYS LINCOLNSHIRE
TRITTON ROAD

LINCOLN
Edge of Town
Commercial Zone
Total Gross floor area: 6950 sqm
Survey date: SATURDAY 12/05/07 Survey Type: MANUAL

13 NE-01-A-02 SAINSBURYS NORTH EAST LINCOLNSHIRE
DONCASTER ROAD

SCUNTHORPE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 7200 sqm
Survey date: SATURDAY 10/05/14 Survey Type: MANUAL

14 NF-01-A-04 SAINSBURYS NORFOLK
QUEENS ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 5810 sqm
Survey date: SATURDAY 19/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 NR-01-A-04 SAINSBURY'S NORTHAMPTONSHIRE
A4500 WEEDON ROAD
SIXFIELDS
NORTHAMPTON
Suburban Area (PPS6 Out of Centre)
Development Zone
Total Gross floor area: 11800 sqm
Survey date: SATURDAY 18/10/14 Survey Type: MANUAL

16 NT-01-A-05 SAINSBURYS NOTTINGHAMSHIRE
CASTLE BRIDGE ROAD
CASTLE BOULEVARD
NOTTINGHAM
Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area: 8101 sqm
Survey date: SATURDAY 08/10/11 Survey Type: MANUAL

17 NY-01-A-03 MORRISONS NORTH YORKSHIRE
HARROGATE ROAD

RIPON
Edge of Town
Residential Zone
Total Gross floor area: 4237 sqm
Survey date: SATURDAY 20/09/08 Survey Type: MANUAL

18 NY-01-A-04 MORRISONS NORTH YORKSHIRE
WETHERBY ROAD

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Gross floor area: 6320 sqm
Survey date: SATURDAY 13/09/08 Survey Type: MANUAL

19 NY-01-A-05 SAINSBURY'S NORTH YORKSHIRE
HIGH STREET

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2300 sqm
Survey date: SATURDAY 26/09/09 Survey Type: MANUAL

20 SC-01-A-11 SAINSBURY'S SURREY
A331

CAMBERLEY
Edge of Town
No Sub Category
Total Gross floor area: 10250 sqm
Survey date: SATURDAY 24/11/12 Survey Type: MANUAL

21 SM-01-A-02 MORRISONS SOMERSET
VULCAN ROAD

MINEHEAD
Edge of Town
Commercial Zone
Total Gross floor area: 4575 sqm
Survey date: SATURDAY 14/07/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 TW-01-A-01 SAINSBURY'S TYNE & WEAR
ETHERSTONE AVENUE

NEWCASTLE UPON TYNE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 9300 sqm
Survey date: SATURDAY 05/10/13 Survey Type: MANUAL

23 WM-01-A-03 ASDA WEST MIDLANDS
COVENTRY ROAD
SMALL HEATH
BIRMINGHAM
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 10000 sqm
Survey date: SATURDAY 22/09/07 Survey Type: MANUAL

24 WN-01-A-01 SAINSBURYS WINDSOR & MAIDENHEAD
LAKE END ROAD
LENT RISE
SLOUGH
Edge of Town
Residential Zone
Total Gross floor area: 6065 sqm
Survey date: SATURDAY 08/10/11 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.508	2	7083	0.056	2	7083	0.564
07:00 - 08:00	24	6423	1.489	24	6423	0.921	24	6423	2.410
08:00 - 09:00	24	6423	3.225	24	6423	2.229	24	6423	5.454
09:00 - 10:00	24	6423	4.738	24	6423	3.671	24	6423	8.409
10:00 - 11:00	24	6423	6.067	24	6423	5.182	24	6423	11.249
11:00 - 12:00	24	6423	6.516	24	6423	6.110	24	6423	12.626
12:00 - 13:00	24	6423	6.180	24	6423	6.164	24	6423	12.344
13:00 - 14:00	24	6423	5.994	24	6423	6.056	24	6423	12.050
14:00 - 15:00	24	6423	5.936	24	6423	5.909	24	6423	11.845
15:00 - 16:00	24	6423	6.062	24	6423	6.175	24	6423	12.237
16:00 - 17:00	24	6423	5.898	24	6423	6.452	24	6423	12.350
17:00 - 18:00	24	6423	5.218	24	6423	6.075	24	6423	11.293
18:00 - 19:00	24	6423	4.061	24	6423	5.087	24	6423	9.148
19:00 - 20:00	24	6423	2.479	24	6423	3.318	24	6423	5.797
20:00 - 21:00	24	6423	1.490	24	6423	1.977	24	6423	3.467
21:00 - 22:00	22	6527	0.811	22	6527	1.081	22	6527	1.892
22:00 - 23:00	3	5489	0.024	3	5489	0.134	3	5489	0.158
23:00 - 24:00									
Total Rates:			66.696			66.597			133.293

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.018	24	6423	0.013	24	6423	0.031
08:00 - 09:00	24	6423	0.027	24	6423	0.020	24	6423	0.047
09:00 - 10:00	24	6423	0.041	24	6423	0.036	24	6423	0.077
10:00 - 11:00	24	6423	0.056	24	6423	0.060	24	6423	0.116
11:00 - 12:00	24	6423	0.058	24	6423	0.058	24	6423	0.116
12:00 - 13:00	24	6423	0.068	24	6423	0.064	24	6423	0.132
13:00 - 14:00	24	6423	0.053	24	6423	0.056	24	6423	0.109
14:00 - 15:00	24	6423	0.057	24	6423	0.056	24	6423	0.113
15:00 - 16:00	24	6423	0.063	24	6423	0.064	24	6423	0.127
16:00 - 17:00	24	6423	0.045	24	6423	0.049	24	6423	0.094
17:00 - 18:00	24	6423	0.051	24	6423	0.047	24	6423	0.098
18:00 - 19:00	24	6423	0.032	24	6423	0.037	24	6423	0.069
19:00 - 20:00	24	6423	0.018	24	6423	0.023	24	6423	0.041
20:00 - 21:00	24	6423	0.016	24	6423	0.019	24	6423	0.035
21:00 - 22:00	22	6527	0.008	22	6527	0.010	22	6527	0.018
22:00 - 23:00	3	5489	0.006	3	5489	0.006	3	5489	0.012
23:00 - 24:00									
Total Rates:			0.617			0.618			1.235

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.022	24	6423	0.020	24	6423	0.042
08:00 - 09:00	24	6423	0.017	24	6423	0.020	24	6423	0.037
09:00 - 10:00	24	6423	0.018	24	6423	0.021	24	6423	0.039
10:00 - 11:00	24	6423	0.016	24	6423	0.013	24	6423	0.029
11:00 - 12:00	24	6423	0.011	24	6423	0.010	24	6423	0.021
12:00 - 13:00	24	6423	0.017	24	6423	0.016	24	6423	0.033
13:00 - 14:00	24	6423	0.006	24	6423	0.012	24	6423	0.018
14:00 - 15:00	24	6423	0.010	24	6423	0.006	24	6423	0.016
15:00 - 16:00	24	6423	0.014	24	6423	0.012	24	6423	0.026
16:00 - 17:00	24	6423	0.013	24	6423	0.012	24	6423	0.025
17:00 - 18:00	24	6423	0.010	24	6423	0.013	24	6423	0.023
18:00 - 19:00	24	6423	0.006	24	6423	0.007	24	6423	0.013
19:00 - 20:00	24	6423	0.006	24	6423	0.006	24	6423	0.012
20:00 - 21:00	24	6423	0.003	24	6423	0.005	24	6423	0.008
21:00 - 22:00	22	6527	0.003	22	6527	0.004	22	6527	0.007
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			0.172			0.177			0.349

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
08:00 - 09:00	24	6423	0.004	24	6423	0.003	24	6423	0.007
09:00 - 10:00	24	6423	0.005	24	6423	0.005	24	6423	0.010
10:00 - 11:00	24	6423	0.005	24	6423	0.005	24	6423	0.010
11:00 - 12:00	24	6423	0.005	24	6423	0.005	24	6423	0.010
12:00 - 13:00	24	6423	0.003	24	6423	0.005	24	6423	0.008
13:00 - 14:00	24	6423	0.004	24	6423	0.005	24	6423	0.009
14:00 - 15:00	24	6423	0.006	24	6423	0.005	24	6423	0.011
15:00 - 16:00	24	6423	0.004	24	6423	0.006	24	6423	0.010
16:00 - 17:00	24	6423	0.005	24	6423	0.005	24	6423	0.010
17:00 - 18:00	24	6423	0.006	24	6423	0.005	24	6423	0.011
18:00 - 19:00	24	6423	0.003	24	6423	0.002	24	6423	0.005
19:00 - 20:00	24	6423	0.002	24	6423	0.003	24	6423	0.005
20:00 - 21:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
21:00 - 22:00	22	6527	0.000	22	6527	0.000	22	6527	0.000
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			0.054			0.056			0.110

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.021	2	7083	0.000	2	7083	0.021
07:00 - 08:00	24	6423	0.025	24	6423	0.021	24	6423	0.046
08:00 - 09:00	24	6423	0.035	24	6423	0.027	24	6423	0.062
09:00 - 10:00	24	6423	0.047	24	6423	0.037	24	6423	0.084
10:00 - 11:00	24	6423	0.047	24	6423	0.042	24	6423	0.089
11:00 - 12:00	24	6423	0.053	24	6423	0.051	24	6423	0.104
12:00 - 13:00	24	6423	0.062	24	6423	0.062	24	6423	0.124
13:00 - 14:00	24	6423	0.066	24	6423	0.060	24	6423	0.126
14:00 - 15:00	24	6423	0.080	24	6423	0.055	24	6423	0.135
15:00 - 16:00	24	6423	0.064	24	6423	0.093	24	6423	0.157
16:00 - 17:00	24	6423	0.083	24	6423	0.084	24	6423	0.167
17:00 - 18:00	24	6423	0.064	24	6423	0.072	24	6423	0.136
18:00 - 19:00	24	6423	0.053	24	6423	0.062	24	6423	0.115
19:00 - 20:00	24	6423	0.040	24	6423	0.047	24	6423	0.087
20:00 - 21:00	24	6423	0.027	24	6423	0.029	24	6423	0.056
21:00 - 22:00	22	6527	0.010	22	6527	0.022	22	6527	0.032
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			0.777			0.764			1.541

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.551	2	7083	0.056	2	7083	0.607
07:00 - 08:00	24	6423	1.816	24	6423	1.119	24	6423	2.935
08:00 - 09:00	24	6423	4.231	24	6423	2.825	24	6423	7.056
09:00 - 10:00	24	6423	6.834	24	6423	5.068	24	6423	11.902
10:00 - 11:00	24	6423	9.297	24	6423	7.657	24	6423	16.954
11:00 - 12:00	24	6423	10.341	24	6423	9.425	24	6423	19.766
12:00 - 13:00	24	6423	9.965	24	6423	9.734	24	6423	19.699
13:00 - 14:00	24	6423	9.803	24	6423	9.752	24	6423	19.555
14:00 - 15:00	24	6423	9.682	24	6423	9.717	24	6423	19.399
15:00 - 16:00	24	6423	9.973	24	6423	10.010	24	6423	19.983
16:00 - 17:00	24	6423	9.648	24	6423	10.494	24	6423	20.142
17:00 - 18:00	24	6423	8.470	24	6423	9.877	24	6423	18.347
18:00 - 19:00	24	6423	6.407	24	6423	8.029	24	6423	14.436
19:00 - 20:00	24	6423	3.923	24	6423	5.373	24	6423	9.296
20:00 - 21:00	24	6423	2.335	24	6423	3.139	24	6423	5.474
21:00 - 22:00	22	6527	1.243	22	6527	1.781	22	6527	3.024
22:00 - 23:00	3	5489	0.024	3	5489	0.140	3	5489	0.164
23:00 - 24:00									
Total Rates:			104.543			104.196			208.739

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.021	2	7083	0.014	2	7083	0.035
07:00 - 08:00	24	6423	0.189	24	6423	0.093	24	6423	0.282
08:00 - 09:00	24	6423	0.477	24	6423	0.391	24	6423	0.868
09:00 - 10:00	24	6423	0.594	24	6423	0.519	24	6423	1.113
10:00 - 11:00	24	6423	0.808	24	6423	0.716	24	6423	1.524
11:00 - 12:00	24	6423	0.935	24	6423	0.886	24	6423	1.821
12:00 - 13:00	24	6423	1.117	24	6423	1.023	24	6423	2.140
13:00 - 14:00	24	6423	1.009	24	6423	1.104	24	6423	2.113
14:00 - 15:00	24	6423	1.011	24	6423	0.892	24	6423	1.903
15:00 - 16:00	24	6423	1.039	24	6423	0.974	24	6423	2.013
16:00 - 17:00	24	6423	0.947	24	6423	0.964	24	6423	1.911
17:00 - 18:00	24	6423	0.861	24	6423	0.946	24	6423	1.807
18:00 - 19:00	24	6423	0.786	24	6423	0.861	24	6423	1.647
19:00 - 20:00	24	6423	0.514	24	6423	0.588	24	6423	1.102
20:00 - 21:00	24	6423	0.325	24	6423	0.390	24	6423	0.715
21:00 - 22:00	22	6527	0.192	22	6527	0.251	22	6527	0.443
22:00 - 23:00	3	5489	0.000	3	5489	0.024	3	5489	0.024
23:00 - 24:00									
Total Rates:			10.825			10.636			21.461

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.027	24	6423	0.014	24	6423	0.041
08:00 - 09:00	24	6423	0.088	24	6423	0.027	24	6423	0.115
09:00 - 10:00	24	6423	0.117	24	6423	0.086	24	6423	0.203
10:00 - 11:00	24	6423	0.175	24	6423	0.119	24	6423	0.294
11:00 - 12:00	24	6423	0.163	24	6423	0.116	24	6423	0.279
12:00 - 13:00	24	6423	0.217	24	6423	0.167	24	6423	0.384
13:00 - 14:00	24	6423	0.198	24	6423	0.200	24	6423	0.398
14:00 - 15:00	24	6423	0.152	24	6423	0.191	24	6423	0.343
15:00 - 16:00	24	6423	0.188	24	6423	0.215	24	6423	0.403
16:00 - 17:00	24	6423	0.158	24	6423	0.186	24	6423	0.344
17:00 - 18:00	24	6423	0.141	24	6423	0.158	24	6423	0.299
18:00 - 19:00	24	6423	0.110	24	6423	0.127	24	6423	0.237
19:00 - 20:00	24	6423	0.068	24	6423	0.101	24	6423	0.169
20:00 - 21:00	24	6423	0.027	24	6423	0.049	24	6423	0.076
21:00 - 22:00	22	6527	0.004	22	6527	0.019	22	6527	0.023
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			1.833			1.775			3.608

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
08:00 - 09:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
09:00 - 10:00	24	6423	0.001	24	6423	0.000	24	6423	0.001
10:00 - 11:00	24	6423	0.000	24	6423	0.001	24	6423	0.001
11:00 - 12:00	24	6423	0.006	24	6423	0.000	24	6423	0.006
12:00 - 13:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
13:00 - 14:00	24	6423	0.003	24	6423	0.000	24	6423	0.003
14:00 - 15:00	24	6423	0.002	24	6423	0.004	24	6423	0.006
15:00 - 16:00	24	6423	0.000	24	6423	0.001	24	6423	0.001
16:00 - 17:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
17:00 - 18:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
18:00 - 19:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
19:00 - 20:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
20:00 - 21:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
21:00 - 22:00	22	6527	0.000	22	6527	0.000	22	6527	0.000
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			0.013			0.007			0.020

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
08:00 - 09:00	24	6423	0.002	24	6423	0.002	24	6423	0.004
09:00 - 10:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
10:00 - 11:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
11:00 - 12:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
12:00 - 13:00	24	6423	0.003	24	6423	0.003	24	6423	0.006
13:00 - 14:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
14:00 - 15:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
15:00 - 16:00	24	6423	0.003	24	6423	0.002	24	6423	0.005
16:00 - 17:00	24	6423	0.001	24	6423	0.002	24	6423	0.003
17:00 - 18:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
18:00 - 19:00	24	6423	0.000	24	6423	0.001	24	6423	0.001
19:00 - 20:00	24	6423	0.000	24	6423	0.000	24	6423	0.000
20:00 - 21:00	24	6423	0.001	24	6423	0.001	24	6423	0.002
21:00 - 22:00	22	6527	0.000	22	6527	0.000	22	6527	0.000
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			0.015			0.016			0.031

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.000	2	7083	0.000	2	7083	0.000
07:00 - 08:00	24	6423	0.027	24	6423	0.014	24	6423	0.041
08:00 - 09:00	24	6423	0.090	24	6423	0.029	24	6423	0.119
09:00 - 10:00	24	6423	0.118	24	6423	0.086	24	6423	0.204
10:00 - 11:00	24	6423	0.176	24	6423	0.120	24	6423	0.296
11:00 - 12:00	24	6423	0.169	24	6423	0.117	24	6423	0.286
12:00 - 13:00	24	6423	0.221	24	6423	0.170	24	6423	0.391
13:00 - 14:00	24	6423	0.201	24	6423	0.200	24	6423	0.401
14:00 - 15:00	24	6423	0.154	24	6423	0.195	24	6423	0.349
15:00 - 16:00	24	6423	0.191	24	6423	0.217	24	6423	0.408
16:00 - 17:00	24	6423	0.159	24	6423	0.187	24	6423	0.346
17:00 - 18:00	24	6423	0.142	24	6423	0.160	24	6423	0.302
18:00 - 19:00	24	6423	0.110	24	6423	0.127	24	6423	0.237
19:00 - 20:00	24	6423	0.068	24	6423	0.101	24	6423	0.169
20:00 - 21:00	24	6423	0.028	24	6423	0.051	24	6423	0.079
21:00 - 22:00	22	6527	0.004	22	6527	0.019	22	6527	0.023
22:00 - 23:00	3	5489	0.000	3	5489	0.000	3	5489	0.000
23:00 - 24:00									
Total Rates:			1.858			1.793			3.651

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	800 - 11800 (units: sqm)
Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	7083	0.593	2	7083	0.071	2	7083	0.664
07:00 - 08:00	24	6423	2.058	24	6423	1.246	24	6423	3.304
08:00 - 09:00	24	6423	4.833	24	6423	3.271	24	6423	8.104
09:00 - 10:00	24	6423	7.592	24	6423	5.710	24	6423	13.302
10:00 - 11:00	24	6423	10.329	24	6423	8.535	24	6423	18.864
11:00 - 12:00	24	6423	11.498	24	6423	10.478	24	6423	21.976
12:00 - 13:00	24	6423	11.365	24	6423	10.989	24	6423	22.354
13:00 - 14:00	24	6423	11.079	24	6423	11.116	24	6423	22.195
14:00 - 15:00	24	6423	10.927	24	6423	10.860	24	6423	21.787
15:00 - 16:00	24	6423	11.266	24	6423	11.295	24	6423	22.561
16:00 - 17:00	24	6423	10.837	24	6423	11.729	24	6423	22.566
17:00 - 18:00	24	6423	9.536	24	6423	11.055	24	6423	20.591
18:00 - 19:00	24	6423	7.355	24	6423	9.080	24	6423	16.435
19:00 - 20:00	24	6423	4.546	24	6423	6.109	24	6423	10.655
20:00 - 21:00	24	6423	2.714	24	6423	3.608	24	6423	6.322
21:00 - 22:00	22	6527	1.449	22	6527	2.074	22	6527	3.523
22:00 - 23:00	3	5489	0.024	3	5489	0.164	3	5489	0.188
23:00 - 24:00									
Total Rates:			118.001			117.390			235.391

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Parameter summary

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Survey date date range:	01/01/07 - 07/11/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	24
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 50

HTp/1107/TN/20 – Traffic Growth (May 2017)

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Traffic Growth

(HTp/1107/TN/20)

May 2017

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Figures

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited further to Technical Note TN/07/Addendum on Traffic Growth (October 2016), to update the growth rates used for modelling the traffic impact of the proposed Peel Hall development in the future years of 2025 and 2030.

1.2 Previously TEMPRO 6 (version 6.2) was used. However, now that the modelling is being revised the opportunity has been taken to use TEMPRO 7. The latest version currently available is version 7.2, which has been used for this exercise.

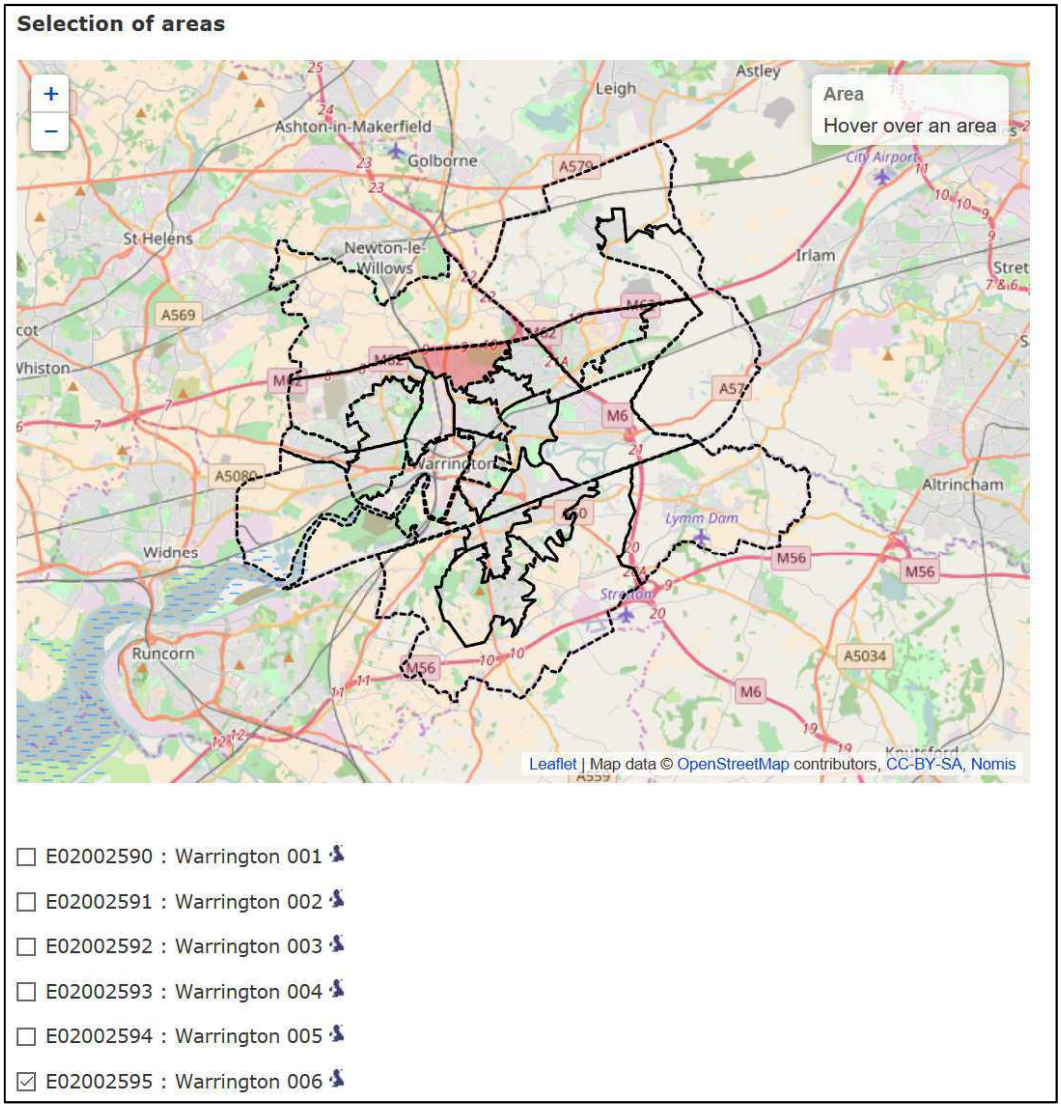
1.3 Technical Note TN/07 on Growth Rates dated May 2016 set out that there was an agreement to use Motorway growth rates for the modelling. It should be noted that this represents an over-estimate for the traffic growth over much of the model network because it is the highest growth factor from this dataset in the TEMPRO programme; it will nevertheless provide confidence in the modelling results as well as account for trips from the OMEGA development.

2.0 Growth Rates

2.1 The TEMPRO database version 7.2 has been reviewed for the appropriate growth factors to apply to the 2015 base model flows to forecast traffic in the future years of 2025 and 2030.

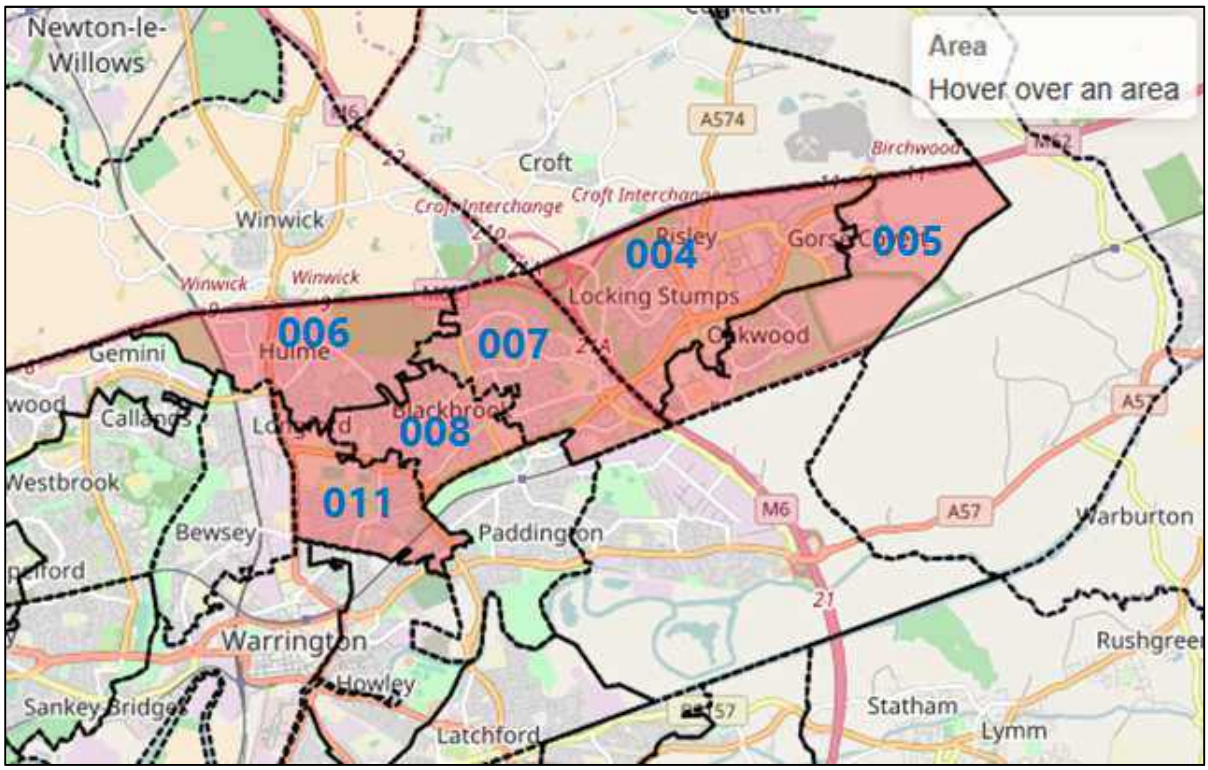
2.2 TEMPRO version 7 uses census 2011 Super Output Areas (mid layer) data. The Peel Hall site is located in the Hulme area, as indicated in **Figure 2.1** below, which is Warrington 006 (E02002595), see below.

Figure 2.1 – Census 2011 Data, Warrington 006



2.3 The other areas classified by the census data that are covered within the area-wide modelling for the Peel Hall site are illustratively shown in **Figure 2.2** below for ease of reference.

Figure 2.2 – Census 2011 Data, Warrington Super Output Areas



2.4 The census reference numbers for the areas shown above are as follows:

i. 007, E02002596
ii. 004, E02002593
iii. 005, E02002594
iv. 008, E02002597
v. 011, E02002600

2.5 Therefore the Warrington 006 are will be selected for calculating the growth rate for the Peel Hall assessments.

2.6 Using Urban Motorway roads to forecast 2025 and 2030 traffic growth the resultant growth factors are set out in **Table 2.1** below. The TEMPRO data is contained in **Appendix 1** for reference.

Table 2.1 – Growth rates

	AM	PM
2015-2025	1.1749	1.1652
2015-2030	1.2211	1.2098

2.7 For reference, the above growth rates are higher than any of the other areas also highlighted in **Figure 2.1** and **paragraph 2.4** above, as set out below for reference (for 2015-2030):

i. Selecting 004 gives growth rates of AM 1.1921, PM 1.1798.
ii. Selecting 005 gives growth rates of AM 1.1886, PM 1.1842.
iii. Selecting 007 gives growth rates of AM 1.1693, PM 1.1536.
iv. Selecting 008 gives growth rates of AM 1.2010, PM 1.1986.
v. Selecting 011 gives growth rates of AM 1.1882, PM 1.1857.
vi. Selecting Warrington (Authority) gives AM 1.1838, PM 1.1765.

2.8 Therefore it is considered that the use of the Warrington 006 growth rates are appropriate for the Peel Hall area-wide modelling.

Employment

2.9 As previously set out in Technical Note TN/07/Addendum on Traffic Growth (October 2016) and agreed with highway officers, two of the employment sites identified as committed developments; Calver Park (ref: 2015/26685 and 2013/22533) and Birchwood Park (ref: 2015/26044, 214/23358 and 2008/12744), are included in the Local Plan.

2.10 Therefore it can reasonably be assumed that an estimation of the volume of trips these developments would generate will have been provided by Warrington and feed into TEMPRO, and as such these committed developments have not been added again in the future years.

2.11 Furthermore, highway officers have confirmed that the Winwick B&Q proposals can be excluded from the list of committed developments as it is agreed that any additional traffic is insignificant.

2.12 In summary, the committed developments added to the Peel Hall modelling can be summarised as follows:

i. Land at Benson Road, Birchwood (ref: 2015/26220).
ii. Birchwood Shopping Centre (ref: 2015/25880).

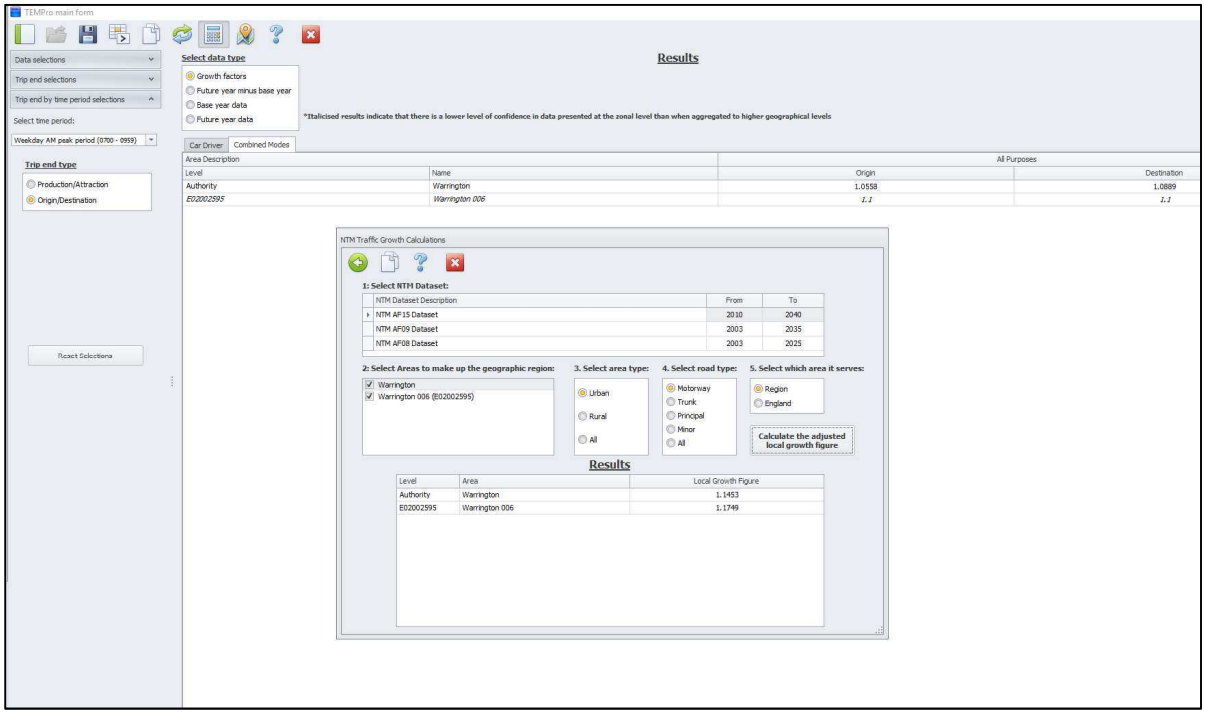
Appendix 1

TEMPRO Screen Capture

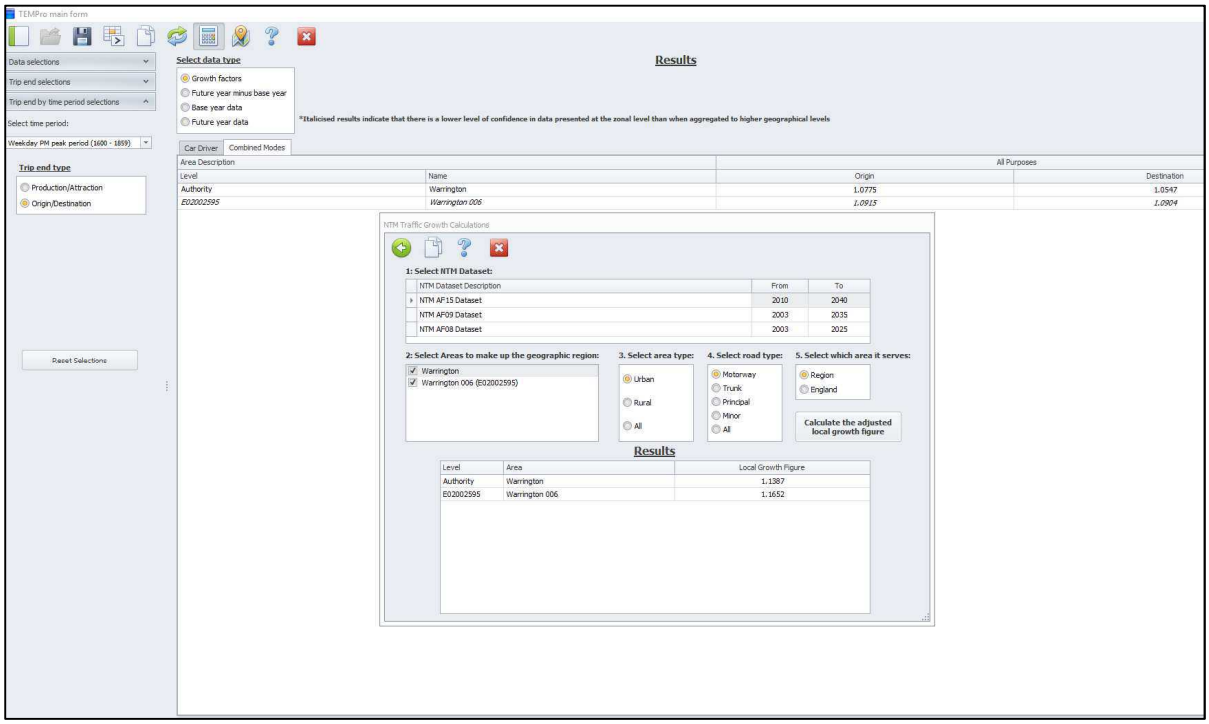
1107 Peel Hall
TEMPRO 7.2
2015-2025

Motorway Growth

Warrington 006 – AM Peak Hour

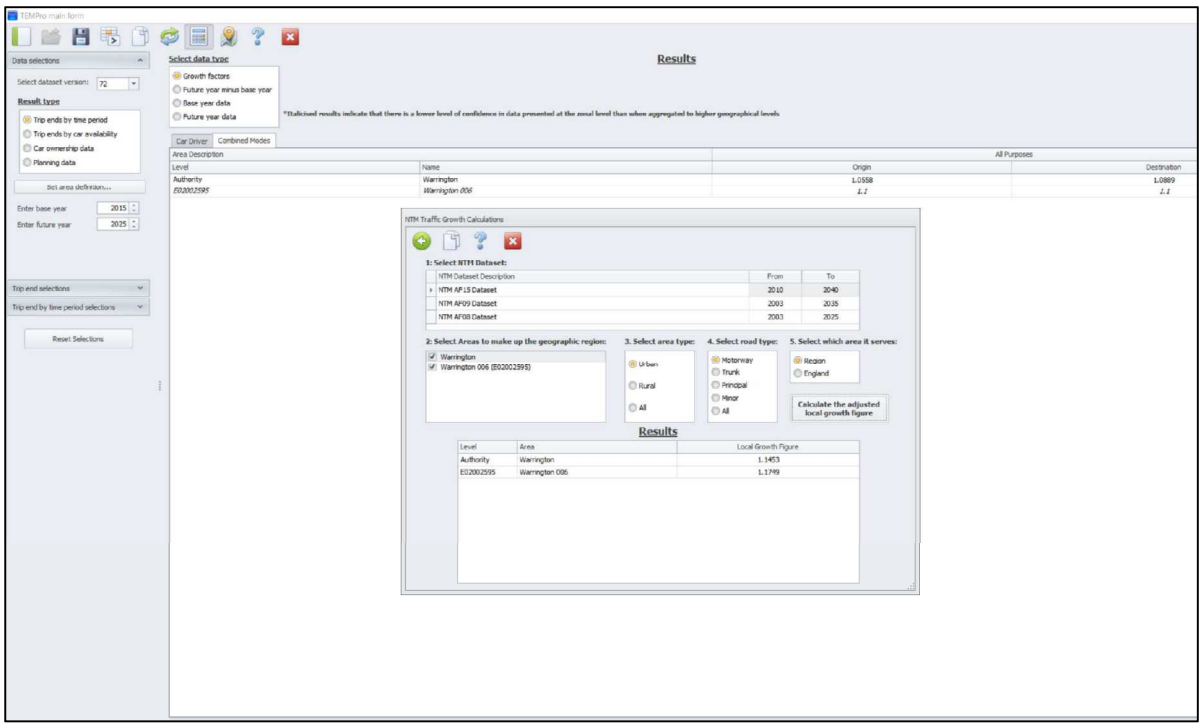


Warrington 006 – PM Peak Hour



1107 Peel Hall
TEMPRO 7.2
2015-2025

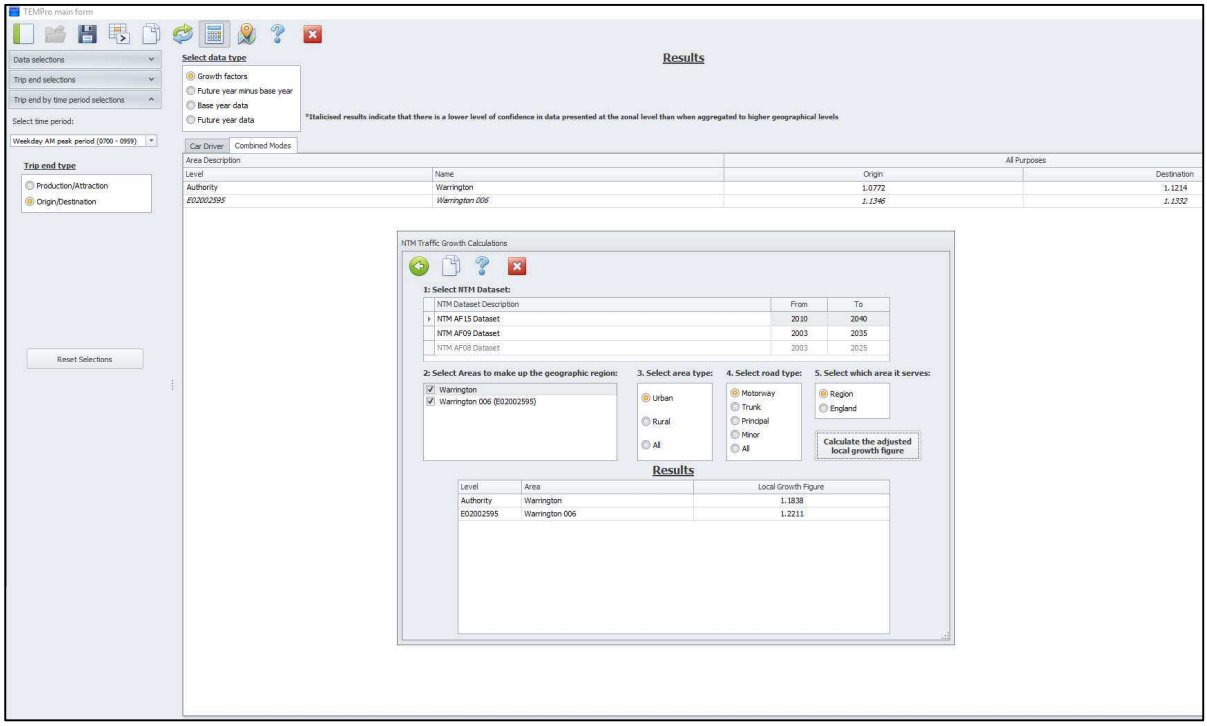
AM Peak Hour – displaying years of 2015-2025



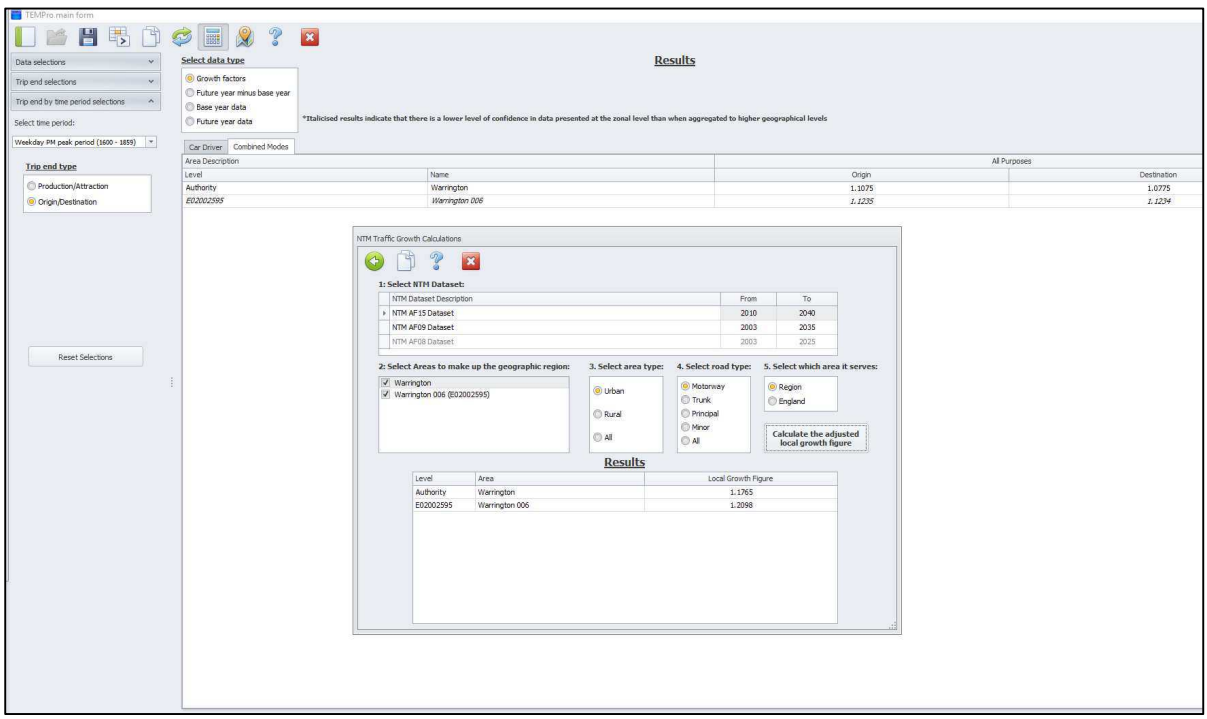
1107 Peel Hall
TEMPRO 7.2
2015-2030

Motorway Growth

Warrington 006 – AM Peak Hour

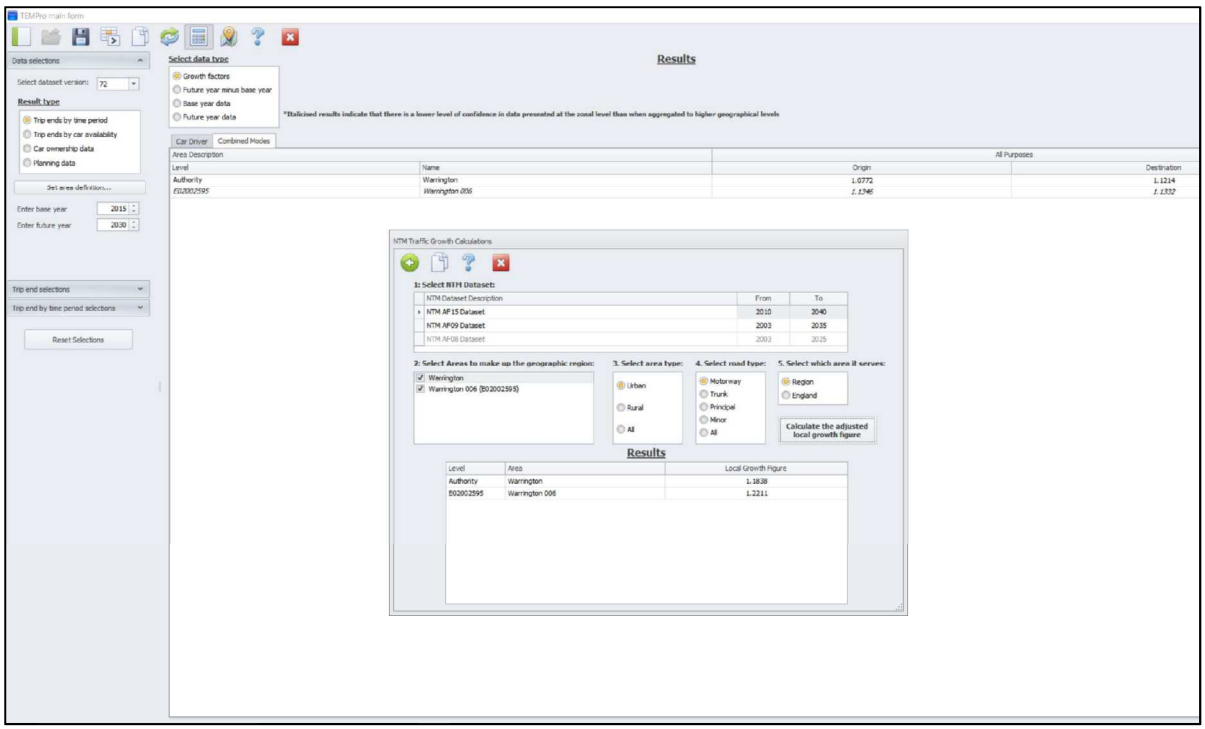


Warrington 006 – PM Peak Hour



1107 Peel Hall
TEMPRO 7.2
2015-2030

AM Peak Hour – displaying years of 2015-2030



Appendix 51

HTp/1107/TN/07 – Traffic Growth (May 2016)

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Traffic Growth

(HTp/1107/TN/07)

May 2016

Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited on behalf of Satnam Millennium Limited to identify the appropriate growth rates to be used in the traffic assessment work associated with the Peel Hall development.

1.2 The baseline traffic data in the VISSIM model is 2015. It has been agreed that the Peel Hall opening year to be modelled will be 2019 and that a test will be carried out for a design year of 2029.

1.3 It should be noted at this time that mitigation measures use in the 'Do Something' modelling scenarios will be those agreed to address issues highlighted from the 2019 VISSIM 'Do Minimum' modelling run, which will include for vehicle trips generated by the whole of the development profile i.e. not just the level of development expected to be operational in 2019. The 2029 modelling is for reference only.

1.4 The industry standard TEMPRO programme was used to calculate the growth rate figures for 2015 to 2019 and for 2015 to 2029.

1.5 It has been agreed with Warrington Borough Council highway officers that it is appropriate to apply the methodology agreed for use in the Omega Planning Application for the growth rates in the Peel Hall modelling.

1.6 Therefore it is proposed to use the Warrington (00EU1) urban growth rates for the Motorway road type and apply this to all traffic flows.

1.7 Whilst this will be an over-estimate for the traffic growth over much of the VISSIM modelling network set up to assess the impact of the development at Peel Hall, because it is the highest growth factor from this dataset in the TEMPRO programme (see **Section 2.0**), it will nevertheless provide even more confidence in the modelling results.

1.8 It is therefore concluded that the use of the Warrington (00EU1) urban dataset for Motorways is suitable for the Peel Hall modelling.

2.0 Growth Rates

2.1 The baseline traffic data in the VISSIM model is 2015 and it is agreed with WBC highway officers and Highways England that the Peel Hall opening year to be modelled will be 2019, with a further test carried out for a design year of 2029.

2.2 It has been agreed with Warrington BC highway officers that the same growth rate methodology that was used in the Omega application and modelling can be applied to the Peel Hall site.

2.3 Therefore the Warrington 00EU1 Urban growth rate data from TEMPRO for Motorway road types will be used in the VISSIM modelling. The resultant growth rates derived from TEMPRO are set out in **Table 2.1** below for the AM and PM peak hours.

Table 2.1 – TEMPRO growth rates

Years	Growth Factors	
	AM	PM
2015-2019	1.0672	1.0679
2015-2029	1.2460	1.2504

2.4 Screen shots of the TEMPRO programme for 2015 to 2019 and 2015- to 2029 growth rates are contained in **Appendix 1** and **Appendix 2** for reference respectively.

2.5 The use of the Motorway growth rates is higher than that of any other type of urban road. A summary of the AM peak growth factors for 2015-2019 is shown below in **Table 2.2** as an example.

Table 2.2 – TEMPRO AM growth rates range (2015-2019)

Road Type	Warrington (00EU1)
Motorway	1.0672
Trunk	1.0454
Principal	1.0503
Minor	1.0529
All	1.0529

2.6 It can be seen from the above table that the principal growth rates are lower than the minor/all growth rate factors, but higher than the trunk road growth rates. As there is limited scope for growth on A49 and the highway network is constrained in this area of Warrington it is therefore considered that the use of the Motorway road type for deriving growth rate factors is robust.

Committed Development

2.7 It should be noted that all committed development traffic set out in HTp Technical Note TN/10 will be added onto the network within VISSIM after the growth rates have been applied to the base traffic flows for all of the 2019 and 2029 modelling scenarios to ensure that committed development traffic flows are not growthed.

3.0 Summary and Conclusion

3.1 This Technical Note has been prepared by Highgate Transportation Limited to identify the appropriate growth rates to be used in the traffic assessment work associated with the Peel Hall development.

3.2 The baseline traffic data in the VISSIM model is 2015. It has been agreed that the Peel Hall opening year to be modelled will be 2019 and that a test will be carried out for a design year of 2029.

3.3 It has been agreed with Warrington Borough Council highway officers that it is appropriate to apply the same methodology as that used and agreed in the Omega Planning Application.

3.4 Therefore it is proposed to use the Warrington (00EU1) urban growth rates for the Motorway road type and apply this to all traffic flows within the VISSIM model.

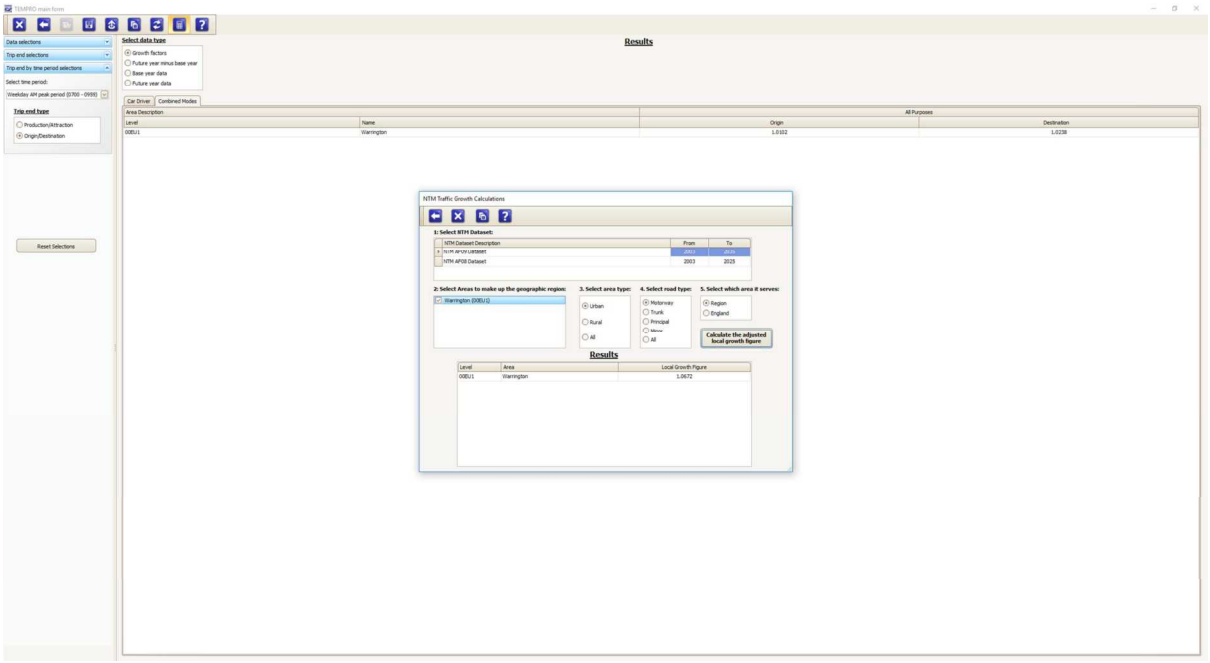
3.5 It is considered that the use of Motorway growth rates will provide an over-estimate of the actual traffic growth because it is the highest growth factor from the dataset and because the Motorway only accounts for a small proportion of the road network overall. Nevertheless, the use of the motorway factors will provide even more confidence in the modelling results.

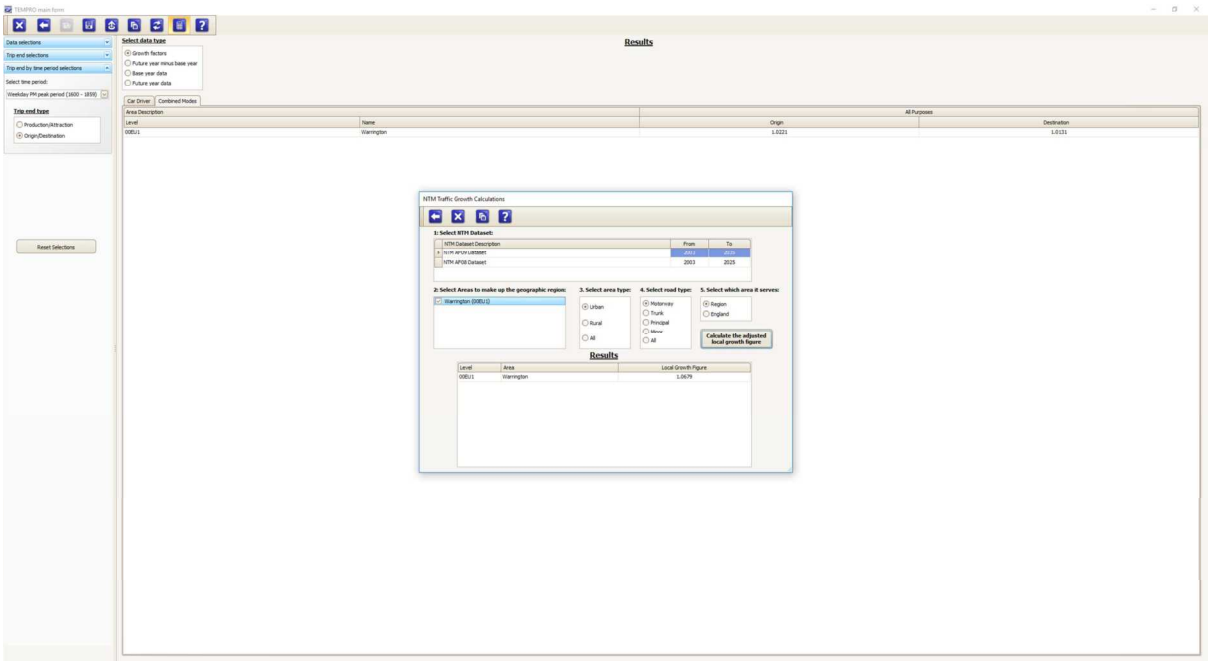
3.6 It is therefore concluded that the use of the Warrington (00EU1) urban dataset for Motorways is suitable for the Peel Hall modelling.

Appendix 1

2015-2019 TEMPRO Growth Rates

2015-2019

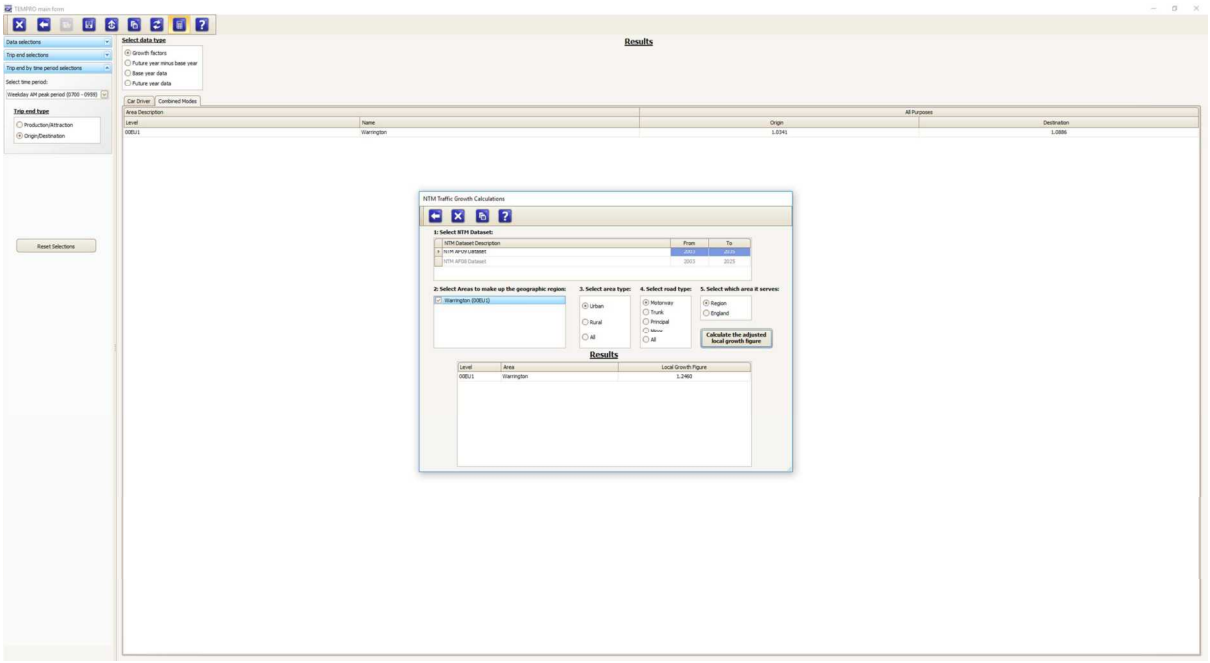

Results
NTM Traffic Growth Calculations
1: Select NTH Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Calculate the adjusted local growth figure
Results

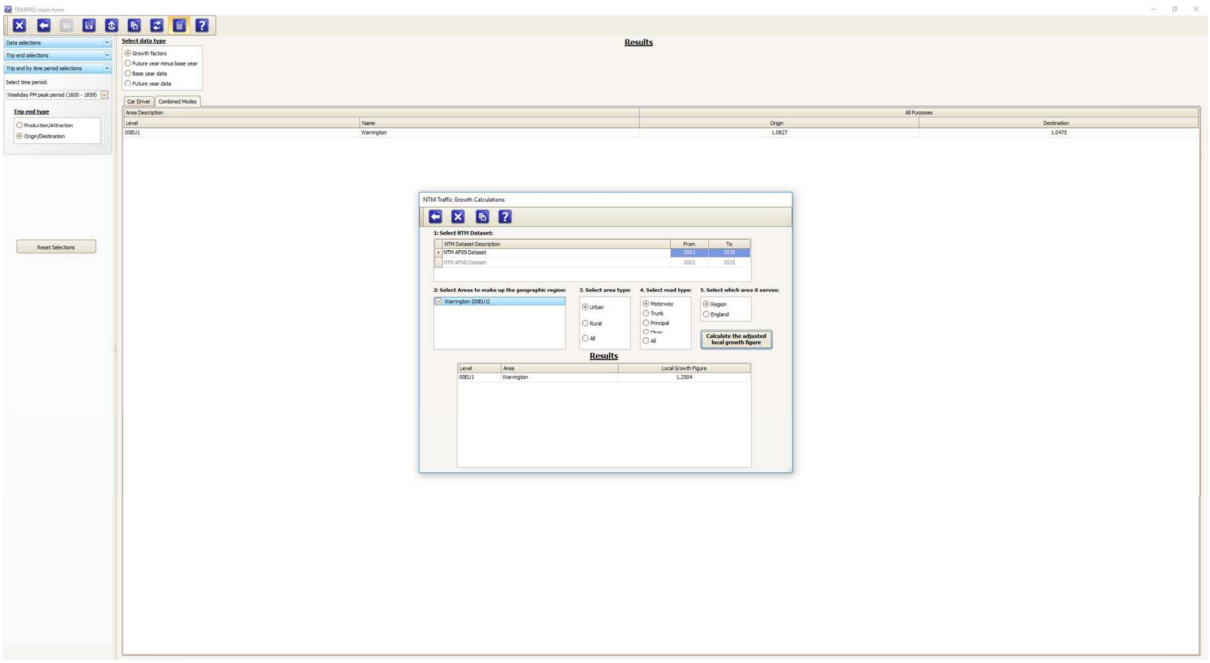

Results
NTM Traffic Growth Calculations
1: Select NTH Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Calculate the adjusted local growth figure
Results

Appendix 2

2015-2029 TEMPRO Growth Rates

2015-2029


Results
NTM Traffic Growth Calculations
1: Select NTH Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
00EU1
Warrington
1.2460


Results
NTM Traffic Growth Calculations
1: Select NTH Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
00EU1
Warrington
1.2504

Appendix 52

HTp/1107/TN/07/Addendum – Traffic Growth (October 2016)

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Traffic Growth

(HTp/1107/TN/07/Addendum)

October 2016

www.highgatetransportation.co.uk

Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited (HTp) on behalf of Satnam Millennium Limited further to discussions with Warrington Borough Council (WBC) and Highways England (HE) regarding the appropriateness of the previous growth rates used in the modelling for the Peel Hall site. It was agreed further to the joint meeting held on 12th September 2016 that the review would be carried out and issued to WBC and HE for comment.

1.2 HTp and AECOM have reviewed the TEMPRO data and assumptions in line with Warrington's Local Plan, to ascertain if there has been an element of double-counting trip growth in the forecasting, and the extent of this.

1.3 It is acknowledge that TEMPRO 6 (version 6.2) has recently been superseded by TEMPRO 7. However, at the time of Matrix construction and production of the Peel Hall Transport Assessment, TEMPRO 6.2 remained current. Therefore, to ensure a direct comparison between the growth rates used in the Transport Assessment and supportive VISSIM modelling, TEMPRO 6.2 growth rates have been used within this exercise.

1.4 HTp seek to agree the methodology outlined in this Technical Note with WBC and for WBC to confirm what has been used within the forecasting in TEMPRO by Warrington. HTp also seek to agree this approach with HE.

1.5 Technical Note TN/07 on Growth Rates dated May 2016 set out that there was an agreement to use Motorway growth rates for the VISSIM model for the Warrington (00EU1) dataset. It should be noted that this represents an over-estimate for the traffic growth over much of the VISSIM modelling network in any event because it is the highest growth factor from this dataset in the TEMPRO programme; it will nevertheless provide even more confidence in the modelling results and, as pointed out previously, will include for any trips from the OMEGA development (see **Section 3.0**).

2.0 Growth Rates

2.1 The AM and PM 2015 base flows, growth, growth plus committed flows and all plus the Peel Hall development flows, including a table of development flows are tabulated in **Appendix 1** for reference.

2.2 The originally agreed growth rates for base traffic on the Peel Hall VISSIM network from TEMPRO v6.2 are set out in **Table 2.1** below.

Table 2.1 – Original growth rates

	AM	PM
2015-2019	1.0672	1.0679
2015-2029	1.2460	1.2504

2.3 The review of the assumptions used in TEMPRO was carried out to ascertain the quantum of housing supply and future jobs included for within the programme. The table contained in **Appendix 2** sets out the current assumptions in TEMPRO v6.2; these were therefore accounted for in the Peel Hall VISSIM flows that have been run to date. An extract is shown as **Table 2.2** below for ease of reference.

Table 2.2 – Current TEMPRO assumptions 2015-2019

	Current Assumptions			
Area	Base HH	Base Jobs	Future HH	Future Jobs
NW (region)	3093300	3383313	3186664	3429987
Cheshire County	450923	566330	462657	578410
Warrington (Authority)	87184	116965	89160	119044
Rural (warrington) (00EU0)	5825	11082	6009	11291
Warington (00EU1)	36679	61689	37124	62748
Great Sankey (00EU2)	17585	17397	18100	17733
Stockton Health/Thelwall (00EU3)	12227	5587	12637	5696
Risley (00EU4)	5597	16544	5750	16818
Lymm (00EU5)	4620	2572	4746	2624
Culcheth (00EU6)	3212	1538	3319	1568
Burtonwood (00EU7)	1438	555	1474	566

2.4 From these figures it is evident that there is an element of double-counting associated with future jobs and potentially housing supply, because the Warrington Local Plan (see **Appendix 3** and **Appendix 4** for Housing Supply Evidence and Local Plan Employment Evidence respectively) already contains the developments of Peel Hall, Calver Park and Birchwood Park. As these sites are all contained within the adopted Plan, they should be accounted for within TEMPRO.

2.5 The information contained in **Appendix 3** sets out what Warrington have forecast in terms of the build out rates at Peel Hall included within the SHLAA and hence these values will more than likely have been fed into TEMPRO.

2.6 **Appendix 3** shows that, in terms of Peel Hall phasing, it has been estimated that 90 dwellings are assumed to be occupied by 2019, and 1,335 dwellings by 2029.

2.7 Therefore, the alternative assumptions facility within TEMPRO has been used to derive an alternative forecast of traffic growth based on Warrington's forecast build out rates for Peel Hall (see **Appendix 2**). **Table 2.3** is an extract from this table for ease of reference.

Table 2.3 – Alternative TEMPRO assumptions 2015-2019

	Alternative Assumptions			
Area	Base HH	Base Jobs	Future HH	Future Job
NW (region)	3093300	3383313	3186664	3429987
Cheshire County	450923	566330	462657	578410
Warrington (Authority)	87184	116965	89160	119044
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Culcheth (00EU6)	3212	1538	3319	1568
Burtonwood (00EU7)	1438	555	1474	566

2.8 As can be seen, this edit in the alternative assumption of TEMPRO only equates to a minor amount (90 dwellings) in 2019 in line with the SHLAA documentation (**paragraph 2.6**); see the Future Households column in **Table 2.2** for row Warrington (00EU1) and the deliverability section of the screen shot in **Appendix 3** for build-out rate up to 2019. However, as set out in **paragraph 2.6**, this is a noticeable volume in 2029, of 1,335 dwellings (see **Appendix 2**).

2.9 Two of the employment sites identified as committed developments; Calver Park (ref: 2015/26685 and 2013/22533) and Birchwood Park (ref: 2015/26044, 214/23358 and 2008/12744), are included in the Local Plan. Therefore it can reasonably be assumed that an estimation of the volume of trips these developments would generate will have been provided by Warrington and feed into TEMPRO. Evidence of this is provided in the Local Plan Employment extract from Warrington's website, contained in **Appendix 4**.

2.10 Hence there is an argument that these two developments should be removed from the committed development list included for within the Peel Hall VISSIM model as they will be captured within any future year forecasting in TEMPRO.

2.11 Consequently, it can be concluded that the future year trip volumes used within the existing modelling will have included more trips than is appropriate and thus double-counting of trips from these two employment developments and the actual Peel Hall site itself has occurred.

Summary

2.12 **Table 2.4** below sets out the proposed revised TEMPRO growth rates to be used in the Peel Hall VISSIM modelling, which removes the forecast build-out rate for the Peel Hall site which is included for within the SHLAA. The screen captures are contained in **Appendix 5** for reference. **Table 2.5** demonstrates the actual reduction in growth for reference.

Table 2.4 – Revised growth rates

	AM	PM
2015-2019	1.0662	1.0669
2015-2029	1.2294	1.2341

Table 2.5 – Summary reduction in growth rates

	AM	PM
2015-2019	-0.0010	-0.0010
2015-2029	-0.0166	-0.0163

2.13 The revised AM and PM data for the growthed 2015 base flows to 2019 and 2029, growthed plus committed flows and all plus the Peel Hall development flows are contained in **Appendix 6**. The resulting reduction of vehicle trips in real terms is set out in **Table 2.6** below for TEMPRO, **Table 2.7** for the removal of Calver Park from the committed developments currently accounted for in the VISSIM model, and **Table 2.8** for the removal of Birchwood Park from the committed developments list.

Table 2.6 – Number of vehicle trips to be removed from the VISSIM as a result of the reduction to growth rates

		Cars	LGVs	HGVs	Total Traffic
TEMPRO Growth 2015-2019 (all two-way trips)					
AM Peak	**0700-0800**	16	2	1	19
	0800-0900	18	2	1	22
	0900-0930	7	1	1	9
PM Peak	**1600-1700**	22	1	1	24
	1700-1800	22	1	1	24
	1800-1830	10	1	0	11
TEMPRO Growth 2015-2029 (all two-way trips)					
AM Peak	**0700-0800**	263	27	21	311
	0800-0900	304	34	22	360
	0900-0930	121	14	10	145
PM Peak	**1600-1700**	357	20	14	391
	1700-1800	358	19	12	390
	1800-1830	165	12	5	181

Table 2.7 – Number of vehicle trips to be removed from the VISSIM model as a result of not adding Calver Park into the committed developments list

		Arrival	Departure	Two-way
AM Peak	**0700 - 0800**	35	10	45
	0800 - 0900	56	47	103
	0900 - 0930	20	15	35
PM Peak	**1600 - 1700**	19	40	59
	1700 - 1800	15	39	54
	1800 - 1830	2	12	14

Table 2.8 – Number of vehicle trips to be removed from the VISSIM model as a result of not adding Birchwood Park into the committed developments list

		Arrival	Departure	Two-way
AM Peak	**0700 - 0800**	330	37	367
	0800 - 0900	745	89	834
	0900 - 0930	283	56	339
PM Peak	**1600 - 1700**	97	480	577
	1700 - 1800	79	648	727
	1800 - 1830	30	267	297

2.14 Therefore, if the above methodology can be agreed, then the volumes of trips removed off the network will be as set out in **Table 2.9** below.

Table 2.9 – Number of vehicle trips to be removed from the VISSIM network

Year	Time Period	Two way Trips		Time Period	Two way Trips	
2019	0700 - 0800	431	**1772**	1600 - 1700	660	**1787**
	0800 - 0900	959		1700 - 1800	805	
	0900 - 0930	383		1800 - 1830	322	
2029	0700 - 0800	723	**2539**	1600 - 1700	1027	**2690**
	0800 - 0900	1297		1700 - 1800	1171	
	0900 - 0930	383		1800 - 1830	492	

2.15 It is considered that this level of trip reduction is appropriate to apply to the Peel Hall VISSIM network, and that the methodology used has been robust. Furthermore, motorway growth rate data is also being used on the non-motorway links within the model, and in reality the Warrington road network is constrained in any event.

3.0 OMEGA Trips

3.1 A short summary is now provided regarding the quantum of trips that the agreed OMEGA VISSIM assessments assigned to the links that are included for within the Peel Hall VISSIM network.

3.2 It has previously been considered that the use of the Motorway trip rates for the whole VISSIM network will capture the OMEGA development trips across the network.

3.3 **Table 3.1** below sets out the actual traffic flow figures from the agreed OMEGA Zones 3-6 VISSIM model (residential/hotel/pub/care home/local centre with 2,000sqm food store) and the OMEGA Section 73 (the variation of prior planning permission at Zones 1 and 2), that travel to those links also included for within the Peel Hall model; M62 junction 9, A49 north and south of this, and Delph Lane as illustrated below in **Figure 3.1**.

Figure 3.1 – OMEGA VISSIM network (overlap with Peel Hall VISSIM highlighted in red)

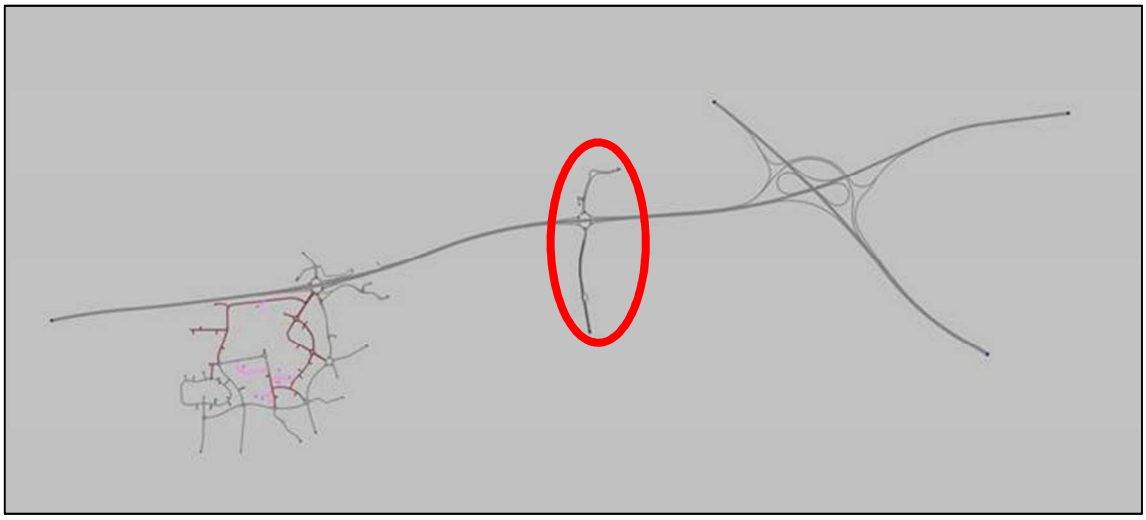


Table 3.1 – Trip distribution for the OMEGA Zones 3-6 and Zones 1-2 S.73 application

	OMEGA development trips	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)	
		Arrivals (to OMEGA)	Departures (from OMEGA)	Arrivals (to OMEGA)	Departures (from OMEGA)
OMEGA Zones 3-6	Delph Lane (M62 J9 North)	0	0	0	0
	A49 North (M62 J9)	3	7	7	4
	A49 South (M62 J9)	0.5	1.2	1.1	0.7
	Total	4	8	8	5
	M62 Junction 10 North	10	24	23	14
	M62 East (M62 J10)	52	120	119	72
	M62 J10 South	13	29	28	17
Total Trips (OMEGA Z3-6)		79	182	177	108
OMEGA Zones 1-2	Delph Lane (M62 J8 North)	0	0	0	0
	A49 North (M62 J9)	4	1	1	5
	A49 South (M62 J9)	6	2	2	3
	Total	10	3	3	8
	M62 Junction 10 North	10	4	3	11
	M62 East (M62 J10)	11	5	4	10
	M6 J10 South	14	6	4	12
*Total Trips (OMEGA Z1-2)**		45	19	14	41

*** This row includes for rounding of previous figures**

3.4 As can be seen from the table above, the level of trips from the OMEGA application proposed to travel onto the non-motorway links of the Peel Hall VISSIM network are so low as to be immaterial.

3.5 However, those trips associated with the OMEGA Zones 3-6 application that stay on the Motorway network through the extent of the Peel Hall model have been considered further in **Table 3.2** below.

Table 3.2 – Comparison of OMEGA motorway contained trips through Peel Hall model and the growth applied.

M62 Flows 2015 Base Model			M62 2019*	Total Increase in Trips 2015-2019	OMEGA Z1-6	OMEGA % Impact 2019
Eastbound	AM	9065	9665	600	188	2%
	PM	10107	10783	676	136	1%
Westbound	AM	10017	10680	663	110	1%
	PM	12138	12950	812	184	1%

*** This row includes for the new growth rate figures**

3.6 This table clearly shows that the OMEGA trips contained to the M62 are also more than accounted for within the motorway growth rates that have been applied to the Peel Hall VISSIM model.

Appendix 1

AM and PM Base Growth Rate and Trip Data

2015 AM Base

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3349	293	289	3931
0715-0730	3627	352	296	4275
0730-0745	4133	419	330	4882
0745-0800	4763	535	347	5645
0800-0815	4573	500	318	5391
0815-0830	4579	493	314	5386
0830-0845	4578	518	312	5408
0845-0900	4602	531	355	5488
0900-0915	3647	431	288	4366
0915-0930	3647	429	296	4372

0700 - 0800	15872	1599	1262	18733
0800 - 0900	18332	2042	1299	21673
0900 - 0930	7294	860	584	8738

Model Period	41498	4501	3145	49144

2019 AM Growth

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3574	313	308	4195
0715-0730	3871	376	316	4562
0730-0745	4411	447	352	5210
0745-0800	5083	571	370	6024
0800-0815	4880	534	339	5753
0815-0830	4887	526	335	5748
0830-0845	4886	553	333	5771
0845-0900	4911	567	379	5857
0900-0915	3892	460	307	4659
0915-0930	3892	458	316	4666

0700 - 0800	16939	1706	1347	19992
0800 - 0900	19564	2179	1386	23129
0900 - 0930	7784	918	623	9325

Model Period	44287	4803	3356	52446

2029 AM Growth

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	4173	365	360	4898
0715-0730	4519	439	369	5327
0730-0745	5150	522	411	6083
0745-0800	5935	667	432	7034
0800-0815	5698	623	396	6717
0815-0830	5705	614	391	6711
0830-0845	5704	645	389	6738
0845-0900	5734	662	442	6838
0900-0915	4544	537	359	5440
0915-0930	4544	535	369	5448

0700 - 0800	19777	1992	1572	23341
0800 - 0900	22842	2544	1619	27005
0900 - 0930	9088	1072	728	10888

Model Period	51707	5608	3919	61233

2019 AM Growth + Committed

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3679	313	308	4300
0715-0730	3957	376	316	4648
0730-0745	4522	447	352	5321
0745-0800	5215	571	370	6156
0800-0815	5154	534	339	6027
0815-0830	5120	526	335	5981
0830-0845	5110	553	333	5995
0845-0900	5169	567	379	6115
0900-0915	4183	460	307	4950
0915-0930	4074	458	316	4848

0700 - 0800	17373	1706	1347	20426
0800 - 0900	20553	2179	1386	24118
0900 - 0930	8257	918	623	9798

Model Period	46183	4803	3356	54342

2029 AM Growth + Committed

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	4278	365	360	5003
0715-0730	4605	439	369	5413
0730-0745	5261	522	411	6194
0745-0800	6067	667	432	7166
0800-0815	5972	623	396	6991
0815-0830	5938	614	391	6944
0830-0845	5928	645	389	6962
0845-0900	5992	662	442	7096
0900-0915	4835	537	359	5731
0915-0930	4726	535	369	5630

0700 - 0800	20211	1992	1572	23775
0800 - 0900	23831	2544	1619	27994
0900 - 0930	9561	1072	728	11361

Model Period	53603	5608	3919	63129

2019 AM Growth + Committed + Dev

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3859	313	308	4480
0715-0730	4134	376	316	4825
0730-0745	4708	447	352	5507
0745-0800	5412	571	370	6353
0800-0815	5406	534	339	6279
0815-0830	5371	526	335	6232
0830-0845	5358	553	333	6243
0845-0900	5426	567	379	6372
0900-0915	4439	460	307	5206
0915-0930	4176	458	316	4950

0700 - 0800	18113	1706	1347	21166
0800 - 0900	21561	2179	1386	25126
0900 - 0930	8615	918	623	10156

Model Period	48289	4803	3356	56448

2029 AM Growth + Committed + Dev

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	4458	365	360	5183
0715-0730	4782	439	369	5590
0730-0745	5447	522	411	6380
0745-0800	6264	667	432	7363
0800-0815	6224	623	396	7243
0815-0830	6189	614	391	7195
0830-0845	6176	645	389	7210
0845-0900	6249	662	442	7353
0900-0915	5091	537	359	5987
0915-0930	4828	535	369	5732

0700 - 0800	20951	1992	1572	24515
0800 - 0900	24839	2544	1619	29002
0900 - 0930	9919	1072	728	11719

Model Period	55709	5608	3919	65235

Development Trips
180
177
186
197
252
251
248
257
256
102
740
1008
358
2106

2015 PM Base

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5219	302	209	5730
1615-1630	5523	296	229	6048
1630-1645	5630	301	212	6143
1645-1700	5548	310	189	6047
1700-1715	5625	307	217	6149
1715-1730	5558	295	187	6040
1730-1745	5519	296	166	5981
1745-1800	5284	282	183	5749
1800-1815	5137	355	175	5667
1815-1830	4956	355	155	5466
1600 - 1700	21920	1209	839	23968
1700 - 1800	21984	1180	753	23917
1800 - 1830	10093	709	330	11133
Model Period	53997	3098	1922	59017

2019 PM Growth

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5573	323	223	6119
1615-1630	5898	316	245	6459
1630-1645	6012	321	226	6560
1645-1700	5925	331	202	6458
1700-1715	6006	328	232	6566
1715-1730	5935	315	200	6450
1730-1745	5893	316	177	6387
1745-1800	5642	301	195	6139
1800-1815	5486	379	187	6052
1815-1830	5293	379	166	5837
1600 - 1700	23408	1291	896	25595
1700 - 1800	23477	1260	804	25541
1800 - 1830	10779	758	353	11889
Model Period	57663	3309	2053	63025

2029 PM Growth

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	3575	410	738	1839
1615-1630	3623	412	703	1537
1630-1645	1292	413	735	1308
1645-1700	3641	400	743	1538
1700-1715	1244	409	718	1300
1715-1730	3696	436	749	1557
1730-1745	3622	412	720	1910
1745-1800	3323	454	776	1800
1800-1815	3979	994	786	1203
1815-1830	3861	994	869	3045
1600 - 1700	71920	8587	8296	76636
1700 - 1800	71906	8915	697	76623
1800 - 1830	87378	001	984	84678
Model Period	31580	4019	7924	14165

2019 PM Growth + Committed

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5733	323	223	6279
1615-1630	6085	316	245	6646
1630-1645	6250	321	226	6798
1645-1700	6188	331	202	6721
1700-1715	6266	328	232	6826
1715-1730	6176	315	200	6691
1730-1745	6127	316	177	6621
1745-1800	5915	301	195	6412
1800-1815	5769	379	187	6335
1815-1830	5474	379	166	6018
1600 - 1700	24256	1291	896	26443
1700 - 1800	24485	1260	804	26549
1800 - 1830	11243	758	353	12353
Model Period	59983	3309	2053	65345

2029 PM Growth + Committed

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	3305	378	261	7324
1615-1630	1264	370	286	7749
1630-1645	1710	376	265	7919
1645-1700	1722	388	236	7824
1700-1715	1764	384	271	7948
1715-1730	1862	369	234	7793
1730-1745	1849	370	208	7712
1745-1800	3016	353	229	7461
1800-1815	3121	443	219	7369
1815-1830	3410	443	194	7016
1600 - 1700	70753	1512	1049	30817
1700 - 1800	70961	1475	942	30914
1800 - 1830	84205	887	413	14385
Model Period	36040	3874	2403	76115

2019 PM Growth + Committed + Dev

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5992	323	223	6538
1615-1630	6333	316	245	6894
1630-1645	6499	321	226	7047
1645-1700	6434	331	202	6967
1700-1715	6550	328	232	7110
1715-1730	6451	315	200	6966
1730-1745	6405	316	177	6899
1745-1800	6199	301	195	6696
1800-1815	5997	379	187	6563
1815-1830	5706	379	166	6250
1600 - 1700	25258	1291	896	27445
1700 - 1800	25606	1260	804	27670
1800 - 1830	11703	758	353	12813
Model Period	62566	3309	2053	67928

2029 PM Growth + Committed + Dev

Time Period	Cars	LGV	HGV	All Traffic	Development Trips
1600-1615	3699	378	261	7583	259
1615-1630	1498	370	286	7997	248
1630-1645	1571	376	265	8168	249
1645-1700	1993	388	236	8070	246
1700-1715	1511	384	271	8232	284
1715-1730	1935	369	234	8068	275
1730-1745	1987	370	208	7990	278
1745-1800	1834	353	229	7745	284
1800-1815	3645	443	219	7597	228
1815-1830	3382	443	194	7248	232
1600 - 1700	76750	1512	1049	31819	1002
1700 - 1800	76380	1475	942	32035	1121
1800 - 1830	84595	887	413	14845	460
Model Period	17978	3874	2403	78698	2583

Appendix 2

Households and Jobs Data

Aready in TEMPRO

Revised TEMPRO based on updated housing supply values

2015-2019

	Current Assumptions				Alternative Assumptions				
Area	Base HH	Base Jobs	Future HH	Future Jobs	Base HH	Base Jobs	Future HH	Future Jobs	
NW (region)	3093300	3383313	3186664	3429987	3093300	3383313	3186664	3429987	
Cheshire County	450923	566330	462657	578410	450923	566330	462657	578410	
Warrington (Authority)	87184	116965	89160	119044	87184	116965	89160	119044	
Rural (warrington) (00EU0)	5825	11082	6009	11291	5825	11082	6009	11291	
Warington (00EU1)	36679	61689	37124	62748	36679	61689	37034	62748	Revised Assumptions Used
Great Sankey (00EU2)	17585	17397	18100	17733	17585	17397	18100	17733	
Stockton Health/Thelwall (00EU3)	12227	5587	12637	5696	12227	5587	12637	5696	
Risley (00EU4)	5597	16544	5750	16818	5597	16544	5750	16818	
Lymm (00EU5)	4620	2572	4746	2624	4620	2572	4746	2624	
Culcheth (00EU6)	3212	1538	3319	1568	3212	1538	3319	1568	
Burtonwood (00EU7)	1438	555	1474	566	1438	555	1474	566	

2015-2029

	Current Assumptions				Alternative Assumptions				
Area	Base HH	Base Jobs	Future HH	Future Jobs	Base HH	Base Jobs	Future HH	Future Jobs	
NW (region)	3093300	3383313	3397917	3487536	3093300	3383313	3397917	3487536	
Cheshire County	450923	566330	491043	599653	450923	566330	491043	599653	
Warrington (Authority)	87184	116965	94651	125120	87184	116965	94651	125120	
Rural (warrington) (00EU0)	5825	11082	6524	11893	5825	11082	6524	11893	
Warington (00EU1)	36679	61689	38329	65852	36679	61689	36994	65852	Revised Assumptions Used
Great Sankey (00EU2)	17585	17397	19537	18679	17585	17397	19537	18679	
Stockton Health/Thelwall (00EU3)	12227	5587	13792	6003	12227	5587	13792	6003	
Risley (00EU4)	5597	16544	6177	17680	5597	16544	6177	17680	
Lymm (00EU5)	4620	2572	5098	2764	4620	2572	5098	2764	
Culcheth (00EU6)	3212	1538	3619	1653	3212	1538	3619	1653	
Burtonwood (00EU7)	1438	555	1574	595	1438	555	1574	595	

Appendix 3

Housing Supply Evidence

Publication of Strategic Housing Land Availability Assessment (SHLAA) 2015

https://www.warrington.gov.uk/info/200564/planning_policy/1905/evidence_base

SHLAA Reference - 1506

Site Name: Peel Hall

Site Address: South of the M62 East of the A49

Ward: Poplars & Hulme

Existing Use: Vacant Land

Gross Site Area (Ha): 59.45	Net Developable Site Area (Ha): 44.5875	SHLAA Year: 2009

Planning Permission History: N/A

Green Belt: No

GF / PDL: GF

Flood Zone: 1

Contaminated Land Issues: Yes

Ground Conditions Issues: Yes - Capable of being resolved

Site Access Issues: Yes - Capable of being resolved

Surrounding Land Issues: Yes - Capable of being resolved

Infrastructure Issues: Yes - Further evidence required

Hazardous Installations Issues: Yes - Further evidence required

Amenity Issues: No

Ownership / Tenancy Issues: No

Concluding Comments:

Based on information provided by the landowner / developer, the site is considered constrained to be suitable, available and achievable and is of a sufficient scale to overcome existing constraints and infrastructure requirements, particularly if apppropriately phased.

Active Use: No

Site Developable Now: No

Promotion by Owner: Yes

Developer Interest: Yes

Known Demand for Housing: Yes

Similar Sites Developed Nearby in last 5 years: Yes

Suitable: Yes

Available: Yes

Available in the future: N/A

Achievable: Yes

Recommended Gross Capacity: 1480

Residual Net Capacity: 1480

Previous Completions on site: 0

Deliverable 2015-2020: 150

2015/16:

2016/17:

2017/18: 30

2018/19: 60

2019/20: 60

Developable 2020-2025: 635

2020/21: 120

2021/22: 235

2022/23: 180

2023/24: 75

2024/25: 25

Developable 2025-2030: 550

2025/26: 90

2026/27: 180

2027/28: 155

2028/29: 110

2029/30: 15

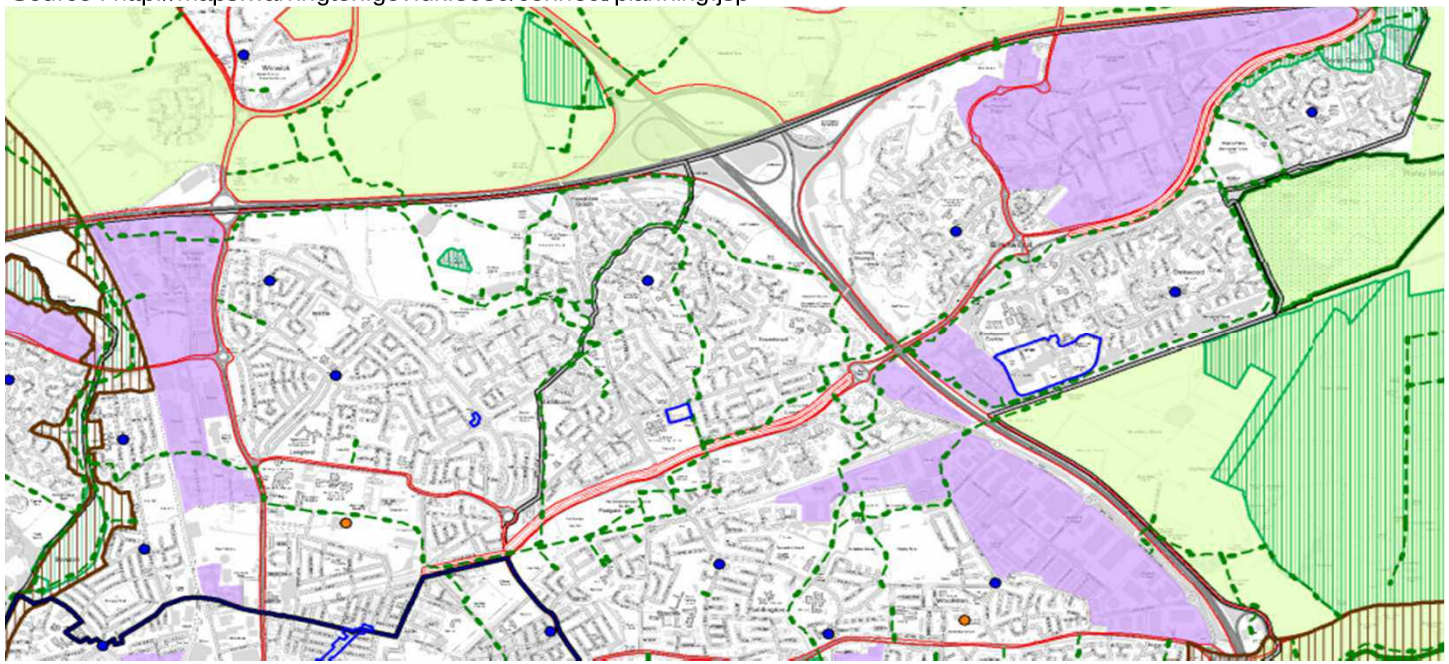
2030+: 145

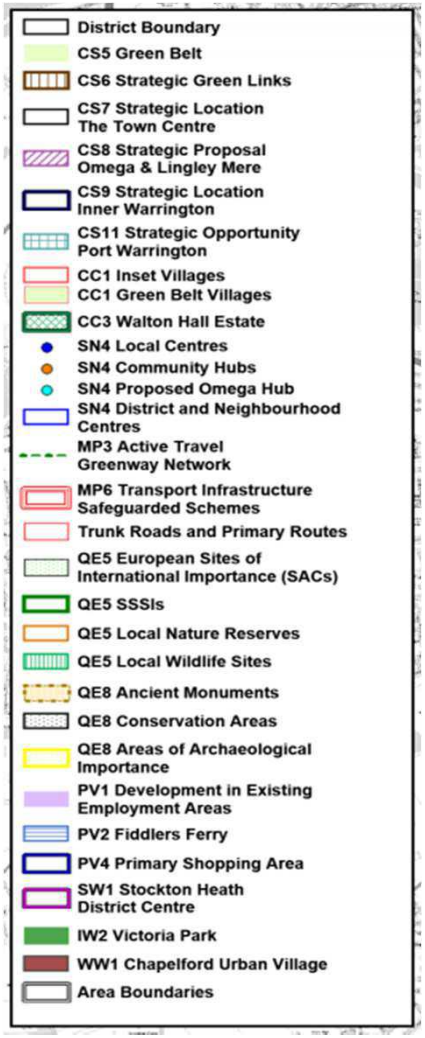
Concluding Recommendation: Suitable, available and achievable

Appendix 4

Local Plan Employment Evidence

Source : http://maps.warrington.gov.uk:8080/connect/planning.jsp

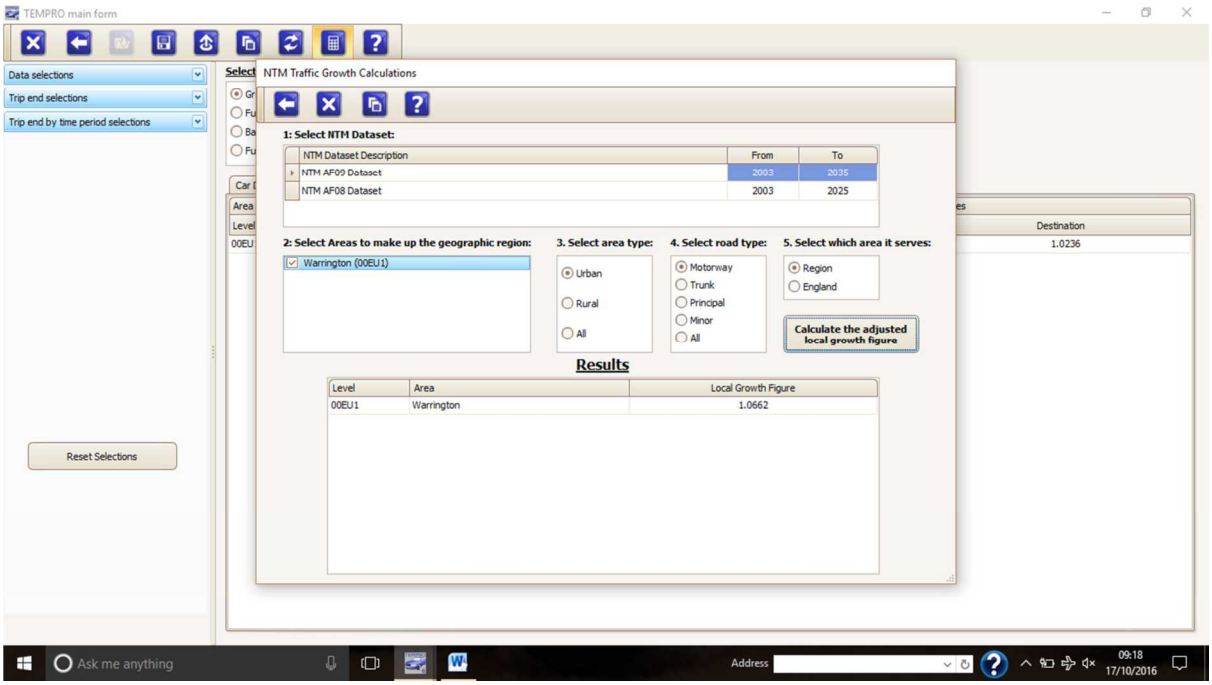




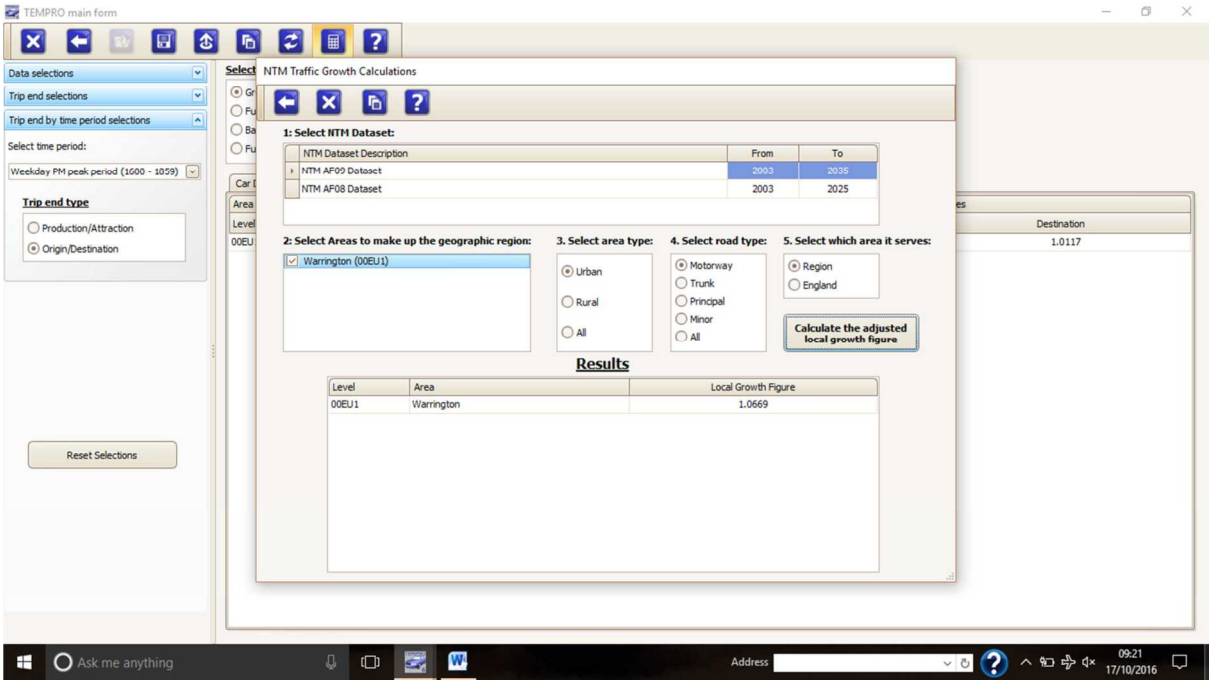
Appendix 5

TEMPRO Screen Capture

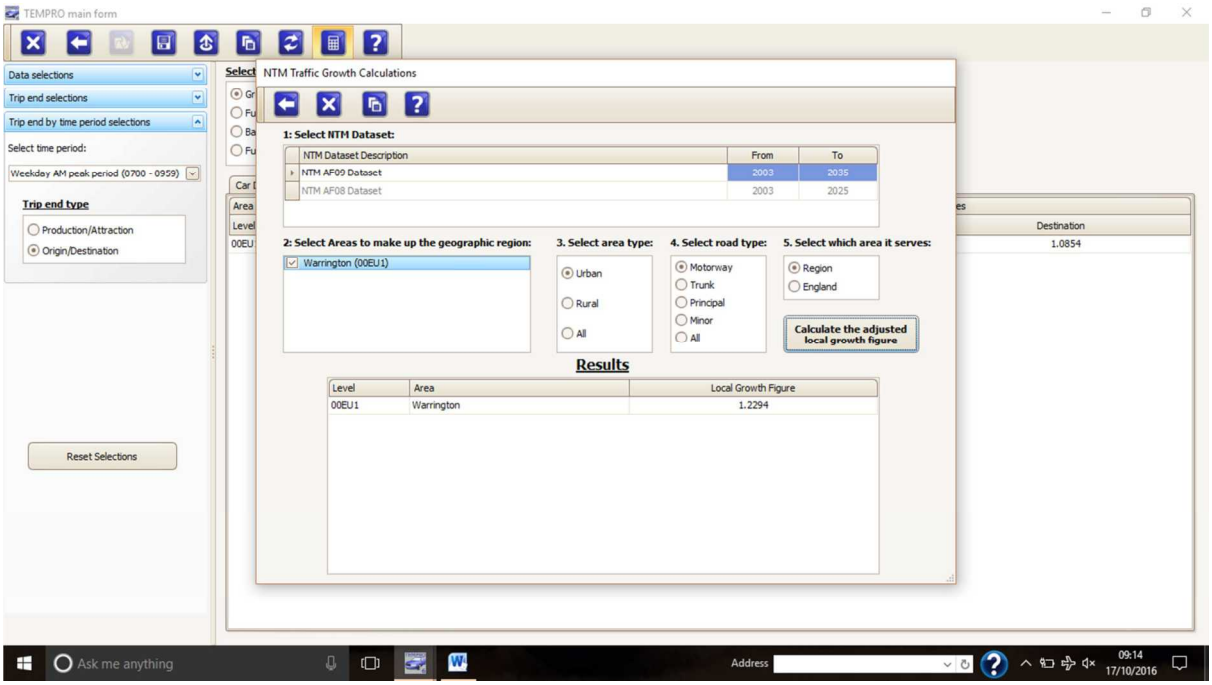
2015 to 2019 – AM Peak



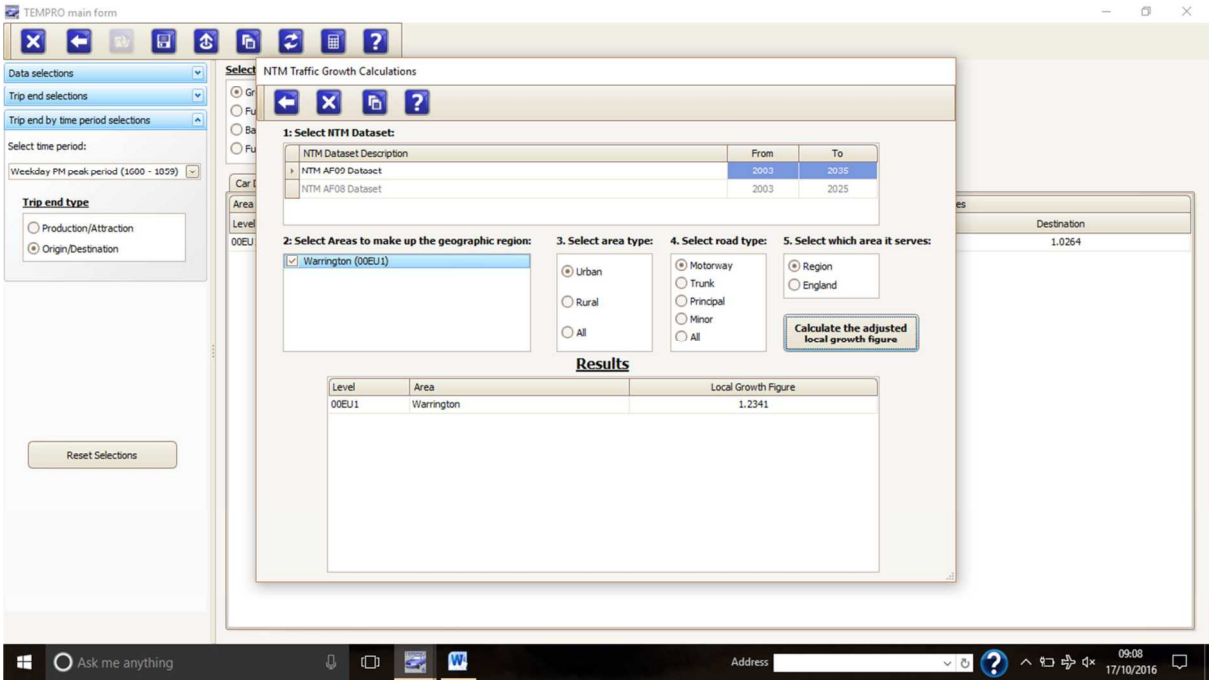
2015 to 2019 – PM Peak



2015 to 2029 – AM Peak



2015 to 2029 – PM Peak



Appendix 6

Revised AM and PM Growth Rate and Trip Data

Revised AM Peak

2015 AM Base

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3349	293	289	3931
0715-0730	3627	352	296	4275
0730-0745	4133	419	330	4882
0745-0800	4763	535	347	5645
0800-0815	4573	500	318	5391
0815-0830	4579	493	314	5386
0830-0845	4578	518	312	5408
0845-0900	4602	531	355	5488
0900-0915	3647	431	288	4366
0915-0930	3647	429	296	4372

0700 - 0800	15872	1599	1262	18733
0800 - 0900	18332	2042	1299	21673
0900 - 0930	7294	860	584	8738

Model Period	41498	4501	3145	49144

2019 AM Growth

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	3574	341	308	4191
0715-0730	3867	375	346	4558
0730-0745	9907	997	351	5205
0745-0800	5078	570	370	6019
0800-0815	9876	533	332	5748
0815-0830	9881	516	335	5743
0830-0845	9884	551	333	5766
0845-0900	9207	566	372	5851
0900-0915	3888	960	307	4655
0915-0930	3888	957	346	4661

0700 - 0800	46213	4705	4396	42273
0800 - 0900	42596	1477	4385	13408
0900 - 0930	7777	247	613	2346

Model Period	99195	9722	3353	51327

2029 AM Growth

Time Period	Cars	LGV	HGV	All Traffic
0700-0715	9447	360	355	4833
0715-0730	9952	933	369	5256
0730-0745	5084	545	906	6002
0745-0800	5856	658	917	6940
0800-0815	5611	645	324	6628
0815-0830	5612	606	386	6622
0830-0845	5618	637	389	6649
0845-0900	5658	653	936	6747
0900-0915	9989	530	359	5368
0915-0930	9989	517	369	5375

0700 - 0800	42543	4266	4551	13030
0800 - 0900	11537	1540	4527	16695
0900 - 0930	8267	4057	748	40791

Model Period	54048	5539	3866	60948

Revised PM Peak

2015 PM Base

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5219	302	209	5730
1615-1630	5523	296	229	6048
1630-1645	5630	301	212	6143
1645-1700	5548	310	189	6047
1700-1715	5625	307	217	6149
1715-1730	5558	295	187	6040
1730-1745	5519	296	166	5981
1745-1800	5284	282	183	5749
1800-1815	5137	355	175	5667
1815-1830	4956	355	155	5466

1600 - 1700	21920	1209	839	23968
1700 - 1800	21984	1180	753	23917
1800 - 1830	10093	709	330	11133

Model Period	53997	3098	1922	59017

2019 PM Growth

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	3357	411	114	6113
1615-1630	3761	425	100	6453
1630-1645	5889	412	115	6554
1645-1700	3626	442	181	6452
1700-1715	5882	417	141	6560
1715-1730	3616	423	188	6444
1730-1745	3777	425	299	6381
1745-1800	3549	482	263	6133
1800-1815	3072	497	279	6046
1815-1830	3177	497	253	5832

1600 - 1700	14475	2168	763	13392
1700 - 1800	14033	2136	784	13329
1800 - 1830	28956	939	431	22797

Model Period	39586	4485	1832	51655

2029 PM Growth

Time Period	Cars	LGV	HGV	All Traffic
1600-1615	5008	494	137	7071
1615-1630	5725	453	174	7464
1630-1645	5607	492	151	7581
1645-1700	5709	474	144	7463
1700-1715	5602	496	157	7588
1715-1730	5736	450	142	7453
1730-1745	5728	453	183	7381
1745-1800	5318	407	115	7094
1800-1815	5408	047	125	6994
1815-1830	5225	047	262	6746

1600 - 1700	19832	2061	2843	16397
1700 - 1800	19248	2035	616	16325
1800 - 1830	21035	793	089	24946

Model Period	55547	4710	1491	91744

Appendix 53

HTp/1107/TN/10 – Committed Developments

HighgateTransportation

Land at Peel Hall, Warrington

Technical Note on Committed Developments

(HTp/1107/TN/10)

April 2016

Contents

Figures

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited on behalf of Satnam Millennium Limited to identify the local committed developments within Warrington, as set out and agreed by Warrington Borough Council highway officers, that are to be accounted for within the traffic impact assessment work associated with the Peel Hall site.

1.2 These committed developments are as follows:

i. Land at Benson Road, Birchwood (ref: 2015/26220).

ii. Birchwood Shopping Centre (ref: 2015/25880).

iii. Birchwood Park (ref: 2015/26044, 2014/23358 and 2008/12744).

iv. Calver Park (ref: 2015/26685 and 2013/22533).

1.3 The corresponding vehicular trip numbers over the peak periods of 0700 to 0930 and 1600 to 1830, and subsequent trip loading locations for each site identified are set out in **Section 3.0** of this report for ease of inserting into the VISSIM model.

1.4 It should be noted that the application for the B&Q extension at Winwick (ref: 2015/26628) for a click-and-collect area and storeroom and relocation of the garden centre area, which was granted on 12/02/16, has not been included within the identified committed developments as there will be no net change to the store's overall GFA and it is therefore considered that there would be very little, if any, impact on the local highway network during peak hours as a result of this development.

1.5 It was agreed that due to the location of the Omega development from the Peel Hall site it would not need to be accounted for separately within the modelling, over and above the local growth rates that are to be applied (HTp Technical Note TN/07).

1.6 It is concluded that the identified committed developments, associated trip rates and subsequent trip loading provided in this Technical Note (HTp/1107/TN/10) are appropriate.

2.0 Committed Developments

2.1 The committed developments, planning application reference numbers, planning history and descriptions are provided in **Table 2.1** below.

2.2 The location of each site in relation to the proposed Peel Hall development is illustrated on **Figure 1**.

Table 2.1 – Committed Developments for Consideration

Development Planning Reference and Decision Date	Proposal Description	Location Description
Land at Benson Road, Birchwood (2015/26220) *Granted 01/12/15*	Proposed outline application with all matters reserved to create a new build two storey office block of up to 2,400 sqm, with supplemental parking and a link bridge to existing building.	Land at Benson Road, Birchwood, Warrington, WA3 7PQ
Birchwood Shopping Centre (2015/25880) *Granted 27/10/15*	Application for Outline Planning Permission with all matters reserved apart from access and layout, for the demolition of existing buildings and construction of proposed mixed use extensions to Birchwood Shopping Centre (Use Classes A1/A3/D1) with associated access, servicing, car parking, signage and associated works. Demolition of 2,565sqm B1, replaced with 4,907sqm A1, A3, A5, D1 (a variance of 2,342sqm) and 116 additional car parking spaces.	Birchwood Shopping Centre, Benson Road, Birchwood, Warrington, WA3 7PQ.
Birchwood Park (2015/26044) *Granted 29/10/15*	Outline planning application: Demolition of some existing buildings and erection of new buildings for a combination of offices (B1); light and general industrial (B1/B2); warehousing development (B8) and ancillary retail/financial and professional services/non-residential institutions/assembly and leisure (A1/A2/D1/D2) floor space. B1 91,235sqm, B2/B8 40,215sqm and A1/A2/D1/D2 1,000sqm proposed. Change from other applications: B1 -8,036sqm, B2/B8 +21,365sqm, A1/A2/D1/D2 -4,000sqm. Therefore an overall increase in floor area of 9,329sqm. Current total net floor space B1 48,413 sqm, B2/B8 7,365sqm.	Eastern edge of Birchwood Park plots 107, 300, 501-502, 611-612, 701-702 and Quadrant, Warrington, WA3 6AE.

(2014/23358) *Granted 12/08/14*	Full Planning (Major) – Proposed construction of seven units for general industry and/or warehouse/distribution (Use Classes B2 and/or B8). 12,225sqm proposed. B1 91,375sqm, B2/B8 6,625sqm, A1/A2/D1/D2 5,000sqm	The Quadrant (*plot 711-717*), Cavendish Avenue, Birchwood Park, Warrington.
(2012/19696) *Granted 24/07/12*	Application to extend time limit for implementation of permission 2006/07641 (offices, industrial and warehousing development)	Birchwood Business Park, Warrington, WA3 6BU.
(2008/12744) *Granted 04/07/08*	Outline application for the erection of an office building (use class B1), associated access and car parking (matters of appearance, landscaping, layout, and scale reserved). Shall not exceed 7,896sqm. (Previous floor space granted under permission A00/41159 of 1,428sqm shall not be implemented).	Site 1 (*plot 107*), Dalton Avenue, Birchwood Park, Warrington.
(2003) A01/43317 *Granted 05/09/03*	Outline application for offices, light and general. B1 84,500sqm, B2/B8 13,500sqm, A1/A2/D1/D2 5,000sqm	Birchwood Park, Birchwood, Warrington, WA3 6BU.
Calver Park (2015/26685) *Granted 03/02/16*	Variation of Condition (Major) – Proposed variation of Condition 14 (Increase the restriction on care sales floor space) on previously approved application 2013/22533. Increase in motor sales from 1,933sqm (2 car showrooms) to 4,200sqm (1 large car showroom). Therefore a reduction in B2/B8 floor space of 2,267sqm, down to 13,974sqm from 16,214sqm. Overall GFA remains at 18,147sqm.	Calver Park, Calver Park Road, Warrington, WA2 8TL.
(2013/22533) *Granted 07/08/14*	Outline Permission – outline application with all matters reserved excluding access for vehicle and ancillary uses (sui generis), light industry (use class B1(c)), general industrial (B2), storage/distribution (B8), including ancillary office and trade counter (up to 20% floor space for goods assembled or manufactured on the premises) and associated access, parking, fencing and landscaping. (The planning application is accompanied by an environmental statement). Motor vehicle sales of up to 1,933sqm and light industry (B1c), general industrial (B2) and storage and distribution (B8) of up to 18,147sqm (including ancillary office) overall.	Calver Park, Calver Park Road, Warrington.

2.3 In summary, the development proposals at Benson Road and Birchwood Park result in the provision of additional GFA and subsequent traffic generation above current operational levels. The trip rates and loading associated with these new developments are set out in **Section 3.0**, based on the 2015 Transport Assessments that accompanied the respective planning applications.

2.4 At Birchwood Shopping Centre the proposed changes to the development profile to replace 2,565sqm GFA of B1 land uses with 4,907sqm GFA A1, A3, A5 and D1 land uses results in lower forecast AM peak hour trips but higher PM trip rates during the weekday. This is supported by an associated increase in car parking provision. The net vehicle trips and loading for these changes are also set out in the following **Section 3.0**, based on the 2015 Transport Assessment.

2.5 At Calver Park, the proposed floor area also remains the same with the increase in motor sales GFA offset by a reduction in proposed B2/B8 GFA. The 2015 TA set out that the proposed increase in motor sales floor area would not create an increase in the level of weekday peak hour vehicle trips above the agreed motor sales floor area, which would have been for two car showrooms at a GFA of circa 967sqm each, due to the nature of both the more recent (2015) and previously proposed (2013) permissions. The trip rates and loading associated with the Calver Park site development will therefore be set out with reference to both the 2015 and 2013 Transport Assessment in **Section 3.0**, as it is understood that no element of this application has yet to be built/become operational.

3.0 Trip Rates and Loading

3.1 The Transport Statements/Transport Assessments that supported each of the planning applications for the committed developments highlighted for inclusion within the Peel Hall modelling have been reviewed, alongside the accompanying highway officer's consultation response and the resulting Decision Notice for each application.

3.2 The number of weekday peak hour vehicular trips associated with each of the committed developments is discussed in turn below, with the number of arrival and departure trips over the peak periods of 0700 to 0930 and 1600 to 1830 tabulated for ease of reference.

3.3 The trip rates are set out in the accompanying **Appendices 1** to **4** at the end of this report.

Land at Benson Road, Birchwood (2015/26220)

3.4 The number of peak period vehicular trips expected to arise from the proposed 2,400sqm GFA office extension are summarised in **Table 3.1** below and the TRICS trip rate report extract from the Optima Transport Statement (dated September 2015) is contained in **Appendix 1**.

Table 3.1 – Land at Benson Road Peak Period Vehicle Trips Summary

Hour	TRIPS	
	Arrival	Departure
0700-0800	15	2
0800-0900	37	6
0900-0930	12	3
1600-1700	6	23
1700-1800	4	29
1800-1830	1	6

3.5 The Optima Transport Statement set out that the number of trips arising from the proposed office extension, "Are not considered to be material and their impact onto access points onto the local road network will be further diluted by the fact that (there) are numerous access points onto the local highway network. It is therefore not considered necessary or appropriate to undertake highway capacity assessments. The approach has been agreed with Warrington Highways as set out in their consultation response in which they have confirmed that a Transport Assessment is not necessary but that a Transport Statement is sufficient to support the application" (paragraph 5.1.6). No traffic surveys were submitted as part of this application.

3.6 The vehicle trips for this committed development at Benson Road will need to be loaded onto the highway network by the AECOM gravity model as there is not enough information in the supporting Transport Statement to distribute the traffic manually. The following points should be noted for vehicles leaving the committed development site (and reversed for arrival trips):

i. Departure trips originate from the Benson Road junction with Dewhurst Road opposite the railway station.

ii. Vehicle trips with destinations to the west and south will all go through the Birchwood Interchange and take the A574 west along Birchwood Way.

iii. Vehicle trips with destinations to the north may go through the Birchwood Interchange and take the A574 north along Birchwood Park Avenue into Warrington Road, or take the A574 east to the M62 junction 11. However, the latter movements may be along Ordnance Way running parallel to Birchwood Way to avoid the Birchwood Interchange.

iv. Vehicle trips with destinations to the east may go through the Birchwood Interchange and take the A574 east along Birchwood Way, but are likely to travel along Ordnance Way as (iii) above, to avoid the Birchwood Interchange.

v. All trips travelling through Birchwood Interchange will arrive from the south via Oakwood Gate.

Birchwood Shopping Centre (2015/25880)

3.7 The number of accumulated peak period vehicular trips expected to arise from the Birchwood Shopping Centre proposals to demolish 2,565sqm of B1 office development and replace with 4,907sqm of A1, A3 A5 and D1 land uses and additional parking are summarised in **Table 3.2** below. The breakdown of the floor areas used in the calculations are as follows:

i. A1 non-food 1,958 GFA.

ii. A1 Food 899 GFA.

iii. A3 and A5 1,681 GFA.

iv. D1 369 GFA.

v. B1 -2,565 GFA.

3.8 The TRICS trip rate report extract from the TPS Transport Assessment (dated May 2015) is contained in **Appendix 2**.

Table 3.2 – Birchwood Shopping Centre Peak Period Vehicle Trips Summary

Hour	TRIPS	
	Arrival	Departure
0700-0800	-1	6
0800-0900	-17	17
0900-0930	33	29
1600-1700	104	82
1700-1800	124	73
1800-1830	73	75

3.9 The TPS Assessments sets out that the trip rates used are robust as, "Whilst it is proposed to increase the floor area of restaurant facilities, these facilities are principally ancillary to the shopping centre and it is not envisaged that these would generate trips in their own right. Consequently, the trip generation comparison, and resulting traffic generation, is a robust assessment. The robustness of the assessment is enhanced further given the propensity for linked trips between different retail opportunities on a large site such as Birchwood Shopping Centre; this is not taken into consideration at this stage" (paragraph 5.3).

3.10 The vehicle trips for this committed development at Birchwood Shopping Centre will need to be loaded onto the highway network by the AECOM gravity model, noting the points set out in **paragraph 3.6**.

Birchwood Park (2015/26044)

3.11 As set out in **Table 2.1** earlier in this report and the Vectos Transport Assessment (dated June 2015), Birchwood Park is an existing thriving business park. A proportion of the committed development land within the planning application consists of existing commercial and industrial buildings that are in use, vacant land that has been previously cleared of structures, and some planting and landscaped areas.

3.12 The number of peak period vehicular trips expected to arise from the Birchwood Park proposals of 91,235 square metres of B1 office development and 40,215 square metres of B2/B8 warehouse development (for the land parcels set out in **Table 2.1**) have been discounted based on the vehicle trip generation of the current operational land uses on site of 48,413 square metres GFA B1 and 7,365 square metres GFA B2/B8 i.e. what we can expect is already on the local highway network.

3.13 Therefore the resultant vehicular trips arising from the additional 42,822 square metres GFA B1 and 32,850 square metres GFA B2/B8 proposed are summarised in **Table 3.3** below and the TRICS trip rate report from the Vectos Transport Assessment is contained in **Appendix 3** for reference.

Table 3.3 – Birchwood Park Peak Period Vehicle Trips Summary

Hour	TRIPS	
	Arrival	Departure
0700-0800	330	37
0800-0900	745	89
0900-0930	283	56
1600-1700	97	480
1700-1800	79	648
1800-1830	30	267

3.14 It can be noted that the A1/A2/D1/D2 land uses have been considered as ancillary to the proposed development based on previously agreed traffic impact analysis by Warrington Borough Council (WBC). These trip rates have therefore not been taken into consideration.

3.15 In terms of accounting for HGV trips within the VISSIM model, the WBC highways consultation response to this application sets out that a maximum of 16 OGV trip movements may occur as a result of this development within any one hour during the day. It should be noted that the reference OGV in TRICS refers to a mix of HGV and other large commercial vehicles. As the majority of HGV movements are coordinated outside of peak hours by the Birchwood Park operators, it is therefore not considered that additional trip breakdowns will be needed for input of data into the VISSIM model in any event.

3.16 Given the spread in location of the units across the Birchwood Park set out in this approved planning application, and the route choice options available, it was concluded in the TA and agreed by WBC that the impact on any one junction would be minimal.

3.17 The vehicle trips for this committed development at Birchwood Shopping Centre will need to be loaded onto the local highway network appropriately and distributed by the AECOM gravity model.

Calver Park (2015/22533)

3.18 The 2013 application was for an overall site GFA of 18,147 square metres and included two car show rooms at circa 967 square metres GFA each. The variation of condition application was for a larger car showroom area totalling 4,200sqm GFA to be operated by a single known user, with the remaining proposed floor space GFA of 13,947 split between B2 and B8 land uses; a total reduction of 2,267 square metres GFA in these land uses from the original application.

3.19 The number of peak period vehicular trips expected to arise from the new car showroom are summarised in **Table 3.4** below, based on the TRICS report from the iprt Transport Planning Group Transport Statement (dated September 2015) for larger car showrooms, which is contained in **Appendix 4**.

Table 3.4 – Calver Park Car Showroom Peak Period Vehicle Trips Summary (4,200sqm)

Hour	TRIPS	
	Arrival	Departure
0700-0800	10	4
0800-0900	30	16
0900-0930	15	9
1600-1700	13	22
1700-1800	15	20
1800-1830	2	9

3.20 **Tables 3.5** and **3.6** below set out the reduction in B2 and B8 respectively to enable the total trip generation of the site to be calculated. The TRICS reports are also contained in **Appendix 4**.

Table 3.5 – Calver Park B2 Peak Period Vehicle Trips Summary (6,973.5sqm)

Hour	TRIPS	
	Arrival	Departure
0700-0800	33	4
0800-0900	38	10
0900-0930	10	6
1600-1700	12	39
1700-1800	4	40
1800-1830	0	5

Table 3.6 – Calver Park B8 Peak Period Vehicle Trips Summary (6,973.5sqm)

Hour	TRIPS	
	Arrival	Departure
0700-0800	15	9
0800-0900	25	52
0900-0930	8	10
1600-1700	12	18
1700-1800	10	18
1800-1830	1	8

3.21 **Table 3.7** sets out the total expected vehicular trip numbers resulting from the proposed land uses on the Calver Park site as a result of the variation of condition application, taken from **Table 3.4** to **3.6**.

Table 3.7 – Calver Park Peak Period Vehicle Trips Summary (All Trips)

Hour	TRIPS	
	Arrival	Departure
0700-0800	58	17
0800-0900	93	78
0900-0930	33	25
1600-1700	37	79
1700-1800	29	78
1800-1830	3	22

3.22 The vehicle trips for this committed development will need to be loaded onto the local highway network and distributed by the AECOM gravity model. However, it can be noted from the iprt Transport Statement (paragraph 3.10) that in the AM peak, "…at most 60% of the development trips travel towards Cromwell Avenue from the site access on Calver Park Road, with the remaining 40% travelling north" to Mill Lane and over the M62, with more of a 50:50 split in the PM peak hour.

4.0 Summary and Conclusion

4.1 This Technical Note has been prepared by Highgate Transportation and summarises the committed developments to be included within the modelling for the Peel Hall site. The location of these committed developments in respect of the Peel Hall site is illustrated on **Figure 1**.

4.2 The committed development sites agreed with Warrington Borough Council highway officers for inclusion in the modelling are as follows:

i. Land at Benson Road Birchwood (ref: 2015/26220).

Proposed outline application with all matters reserved to create a new build two storey office block of up to 2,400 sqm, with supplemental parking and a link bridge to existing building.

ii. Birchwood Shopping Centre (ref: 2015/25880).

Application for Outline Planning Permission with all matters reserved apart from access and layout, for the demolition of existing buildings and construction of proposed mixed use extensions to Birchwood Shopping Centre (Use Classes A1/A3/D1) with associated access, servicing, car parking, signage and associated works.

Demolition of 2,565sqm B1, replaced with 2,342sqm A1, A3, A5, D1 and 116 additional car parking spaces.

iii. Birchwood Park (ref: 2015/26044, 2014/23358 and 2008/12744).

Outline planning application: Demolition of some existing buildings and erection of new buildings for a combination of offices (B1); light and general industrial (B1/B2); warehousing development (B8) and ancillary retail/financial and professional services/non-residential institutions/assembly and leisure (A1/A2/D1/D2) floor space.

B1 91,235sqm, B2/B8 40,215sqm and A1/A2/D1/D2 1,000sqm proposed. Change from other applications: B1 -8,036sqm, B2/B8 21,365sqm, A1/A2/D1/D2 -4,000sqm; an increase in floor area of 9,329sqm (of B2/B8).

Current total net floor space B1 48,413 sqm, B2/B8 7,365sqm.

iv. Calver Park (ref: 2015/26685 and 2013/22533).

Variation of Condition (Major) – Proposed variation of Condition 14 (Increase the restriction on care sales floor space) on previously approved application 2013/22533.

Increase in motor sales from 1,933sqm (2 car showrooms) to 4,200sqm (1 large car showroom); a reduction in B2/B8 floor space of 2,267sqm, down to 13,974sqm from 16,214sqm. Overall GFA remains at 18,147sqm.

4.3 The peak hour trip rates for the proposed development profiles have been taken from the relevant Transport Assessment for each of the planning applications, taking into the account the associated highway officer consultation responses and Decision Notices. The expected level of vehicle trips for each development are summarised in the tables contained in **Section 3.0** for the peak periods of 0700-0930 and 1600-1830 to assist with the VISSIM modelling.

4.4 The loading and distribution of vehicle trips on the network associated with each of these four committed developments will be carried out by AECOM based on their gravity model.

4.5 It is concluded that the identified committed developments, associated trip rates and subsequent vehicle trips in this Technical Note are appropriate.

Figure 1

Location of Committed Developments

NOTES:
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ISSUE	REASON FOR REVISION	DATE

PROJECT:
PEEL HALL, WARRINGTON

CLIENT:
SATNAM MILLENNIUM LTD

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	FIGURE 1	NOT TO SCALE

HighgateTransportation
www.highgatetransportation.co.uk
Box 13, 42 Triangle West
Park Street, Bristol BS8 1ES
07973 375 937 / 07595 892 217
© Highgate Transportation Limited

TITLE:
LOCATION PLAN - COMMITTED DEVELOPMENTS

DATE:	DRAWN BY:	CHECKED:
20/04/16	FB	DT

Appendix 1

TRICS Data for Land at Benson Road, Birchwood

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	17	4703	0.189	17	4703	0.024	17	4703	0.213
07:30 - 08:00	17	4703	0.452	17	4703	0.056	17	4703	0.508
08:00 - 08:30	17	4703	0.749	17	4703	0.110	17	4703	0.859
08:30 - 09:00	**17**	**4703**	**0.798**	17	4703	0.151	**17**	**4703**	**0.949**
09:00 - 09:30	17	4703	0.480	17	4703	0.131	17	4703	0.611
09:30 - 10:00	17	4703	0.336	17	4703	0.156	17	4703	0.492
10:00 - 10:30	17	4703	0.211	17	4703	0.121	17	4703	0.332
10:30 - 11:00	17	4703	0.154	17	4703	0.143	17	4703	0.297
11:00 - 11:30	17	4703	0.144	17	4703	0.160	17	4703	0.304
11:30 - 12:00	17	4703	0.149	17	4703	0.138	17	4703	0.287
12:00 - 12:30	17	4703	0.124	17	4703	0.180	17	4703	0.304
12:30 - 13:00	17	4703	0.163	17	4703	0.188	17	4703	0.351
13:00 - 13:30	17	4703	0.151	17	4703	0.205	17	4703	0.356
13:30 - 14:00	17	4703	0.196	17	4703	0.170	17	4703	0.366
14:00 - 14:30	17	4703	0.130	17	4703	0.129	17	4703	0.259
14:30 - 15:00	17	4703	0.121	17	4703	0.161	17	4703	0.282
15:00 - 15:30	17	4703	0.103	17	4703	0.136	17	4703	0.239
15:30 - 16:00	17	4703	0.113	17	4703	0.185	17	4703	0.298
16:00 - 16:30	17	4703	0.130	17	4703	0.484	17	4703	0.614
16:30 - 17:00	17	4703	0.104	17	4703	0.472	17	4703	0.576
17:00 - 17:30	17	4703	0.116	**17**	**4703**	**0.777**	17	4703	0.893
17:30 - 18:00	17	4703	0.056	17	4703	0.438	17	4703	0.494
18:00 - 18:30	17	4703	0.028	17	4703	0.249	17	4703	0.277
18:30 - 19:00	17	4703	0.016	17	4703	0.135	17	4703	0.151
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			5.213			5.099			10.312

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix 2

TRICS Data for Birchwood Shopping Centre

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	714	0.140	1	714	0.000	1	714	0.140
08:00 - 09:00	4	2068	0.193	4	2068	0.036	4	2068	0.229
09:00 - 10:00	4	2068	1.692	4	2068	0.979	4	2068	2.671
10:00 - 11:00	4	2068	2.430	4	2068	1.910	4	2068	4.340
11:00 - 12:00	4	2068	2.671	4	2068	2.309	4	2068	4.980
12:00 - 13:00	4	2068	2.587	4	2068	2.514	4	2068	5.101
13:00 - 14:00	4	2068	3.046	4	2068	2.816	4	2068	5.862
14:00 - 15:00	4	2068	2.611	4	2068	2.744	4	2068	5.355
15:00 - 16:00	4	2068	2.212	4	2068	2.635	4	2068	4.847
16:00 - 17:00	4	2068	1.571	4	2068	2.019	4	2068	3.590
17:00 - 18:00	4	2068	1.680	4	2068	1.765	4	2068	3.445
18:00 - 19:00	4	2068	0.834	4	2068	1.088	4	2068	1.922
19:00 - 20:00	4	2068	0.399	4	2068	0.737	4	2068	1.136
20:00 - 21:00	3	1591	0.000	3	1591	0.126	3	1591	0.126
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			22.066			21.678			43.744

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	714 - 3500 (units: sqm)
Survey date date range:	01/01/06 - 22/10/11
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	3297	1.413	7	3297	0.966	7	3297	2.379
08:00 - 09:00	7	3297	3.605	7	3297	2.479	7	3297	6.084
09:00 - 10:00	7	3297	5.282	7	3297	4.130	7	3297	9.412
10:00 - 11:00	7	3297	6.101	7	3297	5.174	7	3297	11.275
11:00 - 12:00	7	3297	6.608	7	3297	6.474	7	3297	13.082
12:00 - 13:00	7	3297	6.478	7	3297	6.626	7	3297	13.104
13:00 - 14:00	7	3297	6.348	7	3297	6.244	7	3297	12.592
14:00 - 15:00	7	3297	6.227	7	3297	6.461	7	3297	12.688
15:00 - 16:00	7	3297	6.171	7	3297	6.504	7	3297	12.675
16:00 - 17:00	7	3297	6.695	7	3297	6.626	7	3297	13.321
17:00 - 18:00	7	3297	7.085	7	3297	7.475	7	3297	14.560
18:00 - 19:00	7	3297	5.451	7	3297	6.444	7	3297	11.895
19:00 - 20:00	7	3297	4.463	7	3297	4.914	7	3297	9.377
20:00 - 21:00	6	3300	2.420	6	3300	3.304	6	3300	5.724
21:00 - 22:00	6	3300	0.914	6	3300	1.672	6	3300	2.586
22:00 - 23:00	1	4212	0.024	1	4212	0.214	1	4212	0.238
23:00 - 24:00									
Total Rates:			75.285			75.707			150.992

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	1700 - 5000 (units: sqm)
Survey date date range:	01/01/06 - 19/07/13
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	865	0.000	1	865	0.000	1	865	0.000
08:00 - 09:00	1	865	0.000	1	865	0.000	1	865	0.000
09:00 - 10:00	1	865	0.809	1	865	0.000	1	865	0.809
10:00 - 11:00	12	700	0.417	12	700	0.179	12	700	0.596
11:00 - 12:00	14	684	0.533	14	684	0.324	14	684	0.857
12:00 - 13:00	15	672	1.449	15	672	0.496	15	672	1.945
13:00 - 14:00	15	672	1.658	15	672	1.350	15	672	3.008
14:00 - 15:00	15	672	1.092	15	672	1.668	15	672	2.760
15:00 - 16:00	15	672	1.112	15	672	1.291	15	672	2.403
16:00 - 17:00	16	648	1.003	16	648	0.868	16	648	1.871
17:00 - 18:00	16	648	1.745	16	648	1.041	16	648	2.786
18:00 - 19:00	16	648	2.044	16	648	1.600	16	648	3.644
19:00 - 20:00	16	648	2.420	16	648	2.227	16	648	4.647
20:00 - 21:00	16	648	1.697	16	648	2.034	16	648	3.731
21:00 - 22:00	16	648	1.089	16	648	1.841	16	648	2.930
22:00 - 23:00	15	634	0.642	15	634	1.557	15	634	2.199
23:00 - 24:00	14	615	0.151	14	615	0.604	14	615	0.755
Total Rates:			17.861			17.080			34.941

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	178 - 2400 (units: sqm)
Survey date date range:	01/01/07 - 19/10/14
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/E - CLINICS
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	17	5.882	1	17	5.882	1	17	11.764
07:00 - 08:00	6	756	0.397	6	756	0.022	6	756	0.419
08:00 - 09:00	8	603	2.426	8	603	0.912	8	603	3.338
09:00 - 10:00	8	603	3.649	8	603	3.069	8	603	6.718
10:00 - 11:00	8	603	2.944	8	603	3.276	8	603	6.220
11:00 - 12:00	8	603	2.136	8	603	2.281	8	603	4.417
12:00 - 13:00	8	603	2.115	8	603	1.783	8	603	3.898
13:00 - 14:00	8	603	1.410	8	603	1.555	8	603	2.965
14:00 - 15:00	7	678	2.275	7	678	2.106	7	678	4.381
15:00 - 16:00	7	678	2.443	7	678	2.422	7	678	4.865
16:00 - 17:00	7	678	1.516	7	678	2.696	7	678	4.212
17:00 - 18:00	7	678	0.821	7	678	1.790	7	678	2.611
18:00 - 19:00	7	678	0.084	7	678	0.295	7	678	0.379
19:00 - 20:00	2	114	0.441	2	114	0.441	2	114	0.882
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			28.539			28.530			57.069

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	17 - 4000 (units: sqm)
Survey date date range:	01/01/07 - 10/06/13
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	2485	0.218	7	2485	0.052	7	2485	0.270
07:30 - 08:00	7	2485	0.535	7	2485	0.080	7	2485	0.615
08:00 - 08:30	7	2485	1.196	7	2485	0.195	7	2485	1.391
08:30 - 09:00	7	2485	1.207	7	2485	0.167	7	2485	1.374
09:00 - 09:30	7	2485	0.868	7	2485	0.241	7	2485	1.109
09:30 - 10:00	7	2485	0.661	7	2485	0.282	7	2485	0.943
10:00 - 10:30	7	2485	0.351	7	2485	0.276	7	2485	0.627
10:30 - 11:00	7	2485	0.172	7	2485	0.184	7	2485	0.356
11:00 - 11:30	7	2485	0.195	7	2485	0.201	7	2485	0.396
11:30 - 12:00	7	2485	0.190	7	2485	0.213	7	2485	0.403
12:00 - 12:30	7	2485	0.305	7	2485	0.402	7	2485	0.707
12:30 - 13:00	7	2485	0.477	7	2485	0.374	7	2485	0.851
13:00 - 13:30	7	2485	0.437	7	2485	0.356	7	2485	0.793
13:30 - 14:00	7	2485	0.443	7	2485	0.253	7	2485	0.696
14:00 - 14:30	7	2485	0.322	7	2485	0.299	7	2485	0.621
14:30 - 15:00	7	2485	0.213	7	2485	0.362	7	2485	0.575
15:00 - 15:30	7	2485	0.213	7	2485	0.264	7	2485	0.477
15:30 - 16:00	7	2485	0.172	7	2485	0.259	7	2485	0.431
16:00 - 16:30	7	2485	0.201	7	2485	0.742	7	2485	0.943
16:30 - 17:00	7	2485	0.184	7	2485	0.949	7	2485	1.133
17:00 - 17:30	7	2485	0.144	7	2485	1.357	7	2485	1.501
17:30 - 18:00	7	2485	0.063	7	2485	0.730	7	2485	0.793
18:00 - 18:30	7	2485	0.034	7	2485	0.351	7	2485	0.385
18:30 - 19:00	7	2485	0.011	7	2485	0.287	7	2485	0.298
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.812			8.876			17.688

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix 3

TRICS Data for Birchwood Park

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	19974	0.000	1	19974	0.005	1	19974	0.005
05:30 - 06:00	1	19974	0.020	1	19974	0.005	1	19974	0.025
06:00 - 06:30	1	19974	0.070	1	19974	0.005	1	19974	0.075
06:30 - 07:00	1	19974	0.105	1	19974	0.025	1	19974	0.130
07:00 - 07:30	25	5803	0.233	25	5803	0.025	25	5803	0.258
07:30 - 08:00	25	5803	0.538	25	5803	0.061	25	5803	0.599
08:00 - 08:30	25	5803	0.863	25	5803	0.091	25	5803	0.954
08:30 - 09:00	25	5803	0.877	25	5803	0.116	25	5803	0.993
09:00 - 09:30	25	5803	0.661	25	5803	0.131	25	5803	0.792
09:30 - 10:00	25	5803	0.376	25	5803	0.141	25	5803	0.517
10:00 - 10:30	25	5803	0.247	25	5803	0.144	25	5803	0.391
10:30 - 11:00	25	5803	0.217	25	5803	0.130	25	5803	0.347
11:00 - 11:30	25	5803	0.172	25	5803	0.157	25	5803	0.329
11:30 - 12:00	25	5803	0.166	25	5803	0.168	25	5803	0.334
12:00 - 12:30	25	5803	0.144	25	5803	0.207	25	5803	0.351
12:30 - 13:00	25	5803	0.192	25	5803	0.219	25	5803	0.411
13:00 - 13:30	25	5803	0.231	25	5803	0.209	25	5803	0.440
13:30 - 14:00	25	5803	0.225	25	5803	0.161	25	5803	0.386
14:00 - 14:30	25	5803	0.197	25	5803	0.159	25	5803	0.356
14:30 - 15:00	25	5803	0.159	25	5803	0.201	25	5803	0.360
15:00 - 15:30	25	5803	0.125	25	5803	0.236	25	5803	0.361
15:30 - 16:00	25	5803	0.139	25	5803	0.280	25	5803	0.419
16:00 - 16:30	25	5803	0.128	25	5803	0.523	25	5803	0.651
16:30 - 17:00	25	5803	0.099	25	5803	0.616	25	5803	0.715
17:00 - 17:30	25	5803	0.114	25	5803	0.891	25	5803	1.005
17:30 - 18:00	25	5803	0.070	25	5803	0.623	25	5803	0.693
18:00 - 18:30	25	5803	0.041	25	5803	0.363	25	5803	0.404
18:30 - 19:00	25	5803	0.017	25	5803	0.183	25	5803	0.200
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.426			6.075			12.501

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	645 - 19974 (units: sqm)
Survey date date range:	01/01/05 - 24/09/13
Number of weekdays (Monday-Friday):	25
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30	1	11375	0.000	1	11375	0.000	1	11375	0.000
06:30 - 07:00	1	11375	0.018	1	11375	0.000	1	11375	0.018
07:00 - 07:30	15	12655	0.073	15	12655	0.042	15	12655	0.115
07:30 - 08:00	15	12655	0.185	15	12655	0.040	15	12655	0.225
08:00 - 08:30	15	12655	0.241	15	12655	0.037	15	12655	0.278
08:30 - 09:00	15	12655	0.172	15	12655	0.036	15	12655	0.208
09:00 - 09:30	15	12655	0.081	15	12655	0.036	15	12655	0.117
09:30 - 10:00	15	12655	0.055	15	12655	0.037	15	12655	0.092
10:00 - 10:30	15	12655	0.043	15	12655	0.043	15	12655	0.086
10:30 - 11:00	15	12655	0.040	15	12655	0.033	15	12655	0.073
11:00 - 11:30	15	12655	0.039	15	12655	0.028	15	12655	0.067
11:30 - 12:00	15	12655	0.044	15	12655	0.040	15	12655	0.084
12:00 - 12:30	15	12655	0.043	15	12655	0.066	15	12655	0.109
12:30 - 13:00	15	12655	0.050	15	12655	0.058	15	12655	0.108
13:00 - 13:30	15	12655	0.087	15	12655	0.072	15	12655	0.159
13:30 - 14:00	15	12655	0.131	15	12655	0.057	15	12655	0.188
14:00 - 14:30	15	12655	0.070	15	12655	0.170	15	12655	0.240
14:30 - 15:00	15	12655	0.075	15	12655	0.067	15	12655	0.142
15:00 - 15:30	15	12655	0.048	15	12655	0.089	15	12655	0.137
15:30 - 16:00	15	12655	0.043	15	12655	0.077	15	12655	0.120
16:00 - 16:30	15	12655	0.031	15	12655	0.073	15	12655	0.104
16:30 - 17:00	15	12655	0.043	15	12655	0.150	15	12655	0.193
17:00 - 17:30	15	12655	0.025	15	12655	0.127	15	12655	0.152
17:30 - 18:00	15	12655	0.023	15	12655	0.205	15	12655	0.228
18:00 - 18:30	15	12655	0.025	15	12655	0.095	15	12655	0.120
18:30 - 19:00	15	12655	0.024	15	12655	0.062	15	12655	0.086
19:00 - 19:30	1	11375	0.000	1	11375	0.062	1	11375	0.062
19:30 - 20:00	1	11375	0.018	1	11375	0.062	1	11375	0.080
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.727			1.864			3.591

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	645 - 43325 (units: sqm)
Survey date date range:	01/01/05 - 12/07/13
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 4

TRICS Data for Calver Park

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	4141	0.258	3	4141	0.089	3	4141	0.347
08:00 - 09:00	3	4141	0.708	3	4141	0.370	3	4141	1.078
09:00 - 10:00	3	4141	0.700	3	4141	0.419	3	4141	1.119
10:00 - 11:00	3	4141	0.427	3	4141	0.346	3	4141	0.773
11:00 - 12:00	3	4141	0.427	3	4141	0.410	3	4141	0.837
12:00 - 13:00	3	4141	0.475	3	4141	0.499	3	4141	0.974
13:00 - 14:00	3	4141	0.435	3	4141	0.435	3	4141	0.870
14:00 - 15:00	3	4141	0.443	3	4141	0.459	3	4141	0.902
15:00 - 16:00	3	4141	0.467	3	4141	0.459	3	4141	0.926
16:00 - 17:00	3	4141	0.314	3	4141	0.531	3	4141	0.845
17:00 - 18:00	3	4141	0.346	3	4141	0.467	3	4141	0.813
18:00 - 19:00	3	4141	0.080	3	4141	0.435	3	4141	0.515
19:00 - 20:00	1	3324	0.000	1	3324	0.602	1	3324	0.602
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.080			5.521			10.601

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	3324 - 5700 (units: sqm)
Survey date date range:	01/01/07 - 24/09/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	1961	0.119	12	1961	0.030	12	1961	0.149
07:30 - 08:00	12	1961	0.348	12	1961	0.025	12	1961	0.373
08:00 - 08:30	12	1961	0.259	12	1961	0.047	12	1961	0.306
08:30 - 09:00	12	1961	0.280	12	1961	0.098	12	1961	0.378
09:00 - 09:30	12	1961	0.136	12	1961	0.089	12	1961	0.225
09:30 - 10:00	12	1961	0.153	12	1961	0.106	12	1961	0.259
10:00 - 10:30	12	1961	0.115	12	1961	0.123	12	1961	0.238
10:30 - 11:00	12	1961	0.102	12	1961	0.085	12	1961	0.187
11:00 - 11:30	12	1961	0.102	12	1961	0.076	12	1961	0.178
11:30 - 12:00	12	1961	0.076	12	1961	0.076	12	1961	0.152
12:00 - 12:30	12	1961	0.076	12	1961	0.127	12	1961	0.203
12:30 - 13:00	12	1961	0.110	12	1961	0.149	12	1961	0.259
13:00 - 13:30	12	1961	0.132	12	1961	0.115	12	1961	0.247
13:30 - 14:00	12	1961	0.144	12	1961	0.089	12	1961	0.233
14:00 - 14:30	12	1961	0.136	12	1961	0.102	12	1961	0.238
14:30 - 15:00	12	1961	0.136	12	1961	0.132	12	1961	0.268
15:00 - 15:30	12	1961	0.081	12	1961	0.127	12	1961	0.208
15:30 - 16:00	12	1961	0.123	12	1961	0.157	12	1961	0.280
16:00 - 16:30	12	1961	0.106	12	1961	0.204	12	1961	0.310
16:30 - 17:00	12	1961	0.059	12	1961	0.348	12	1961	0.407
17:00 - 17:30	12	1961	0.025	12	1961	0.353	12	1961	0.378
17:30 - 18:00	12	1961	0.025	12	1961	0.221	12	1961	0.246
18:00 - 18:30	11	1694	0.000	11	1694	0.075	11	1694	0.075
18:30 - 19:00	11	1694	0.005	11	1694	0.043	11	1694	0.048
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.848			2.997			5.845

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	7	2405	0.071	7	2405	0.048	7	2405	0.119
07:30 - 08:00	8	2198	0.148	8	2198	0.080	8	2198	0.228
08:00 - 08:30	8	2198	0.165	8	2198	0.051	8	2198	0.216
08:30 - 09:00	8	2198	0.188	8	2198	0.097	8	2198	0.285
09:00 - 09:30	8	2198	0.108	8	2198	0.148	8	2198	0.256
09:30 - 10:00	8	2198	0.074	8	2198	0.091	8	2198	0.165
10:00 - 10:30	8	2198	0.080	8	2198	0.063	8	2198	0.143
10:30 - 11:00	8	2198	0.074	8	2198	0.085	8	2198	0.159
11:00 - 11:30	8	2198	0.080	8	2198	0.074	8	2198	0.154
11:30 - 12:00	8	2198	0.097	8	2198	0.057	8	2198	0.154
12:00 - 12:30	8	2198	0.114	8	2198	0.125	8	2198	0.239
12:30 - 13:00	8	2198	0.125	8	2198	0.057	8	2198	0.182
13:00 - 13:30	8	2198	0.119	8	2198	0.131	8	2198	0.250
13:30 - 14:00	8	2198	0.097	8	2198	0.080	8	2198	0.177
14:00 - 14:30	8	2198	0.114	8	2198	0.136	8	2198	0.250
14:30 - 15:00	8	2198	0.125	8	2198	0.097	8	2198	0.222
15:00 - 15:30	8	2198	0.080	8	2198	0.142	8	2198	0.222
15:30 - 16:00	8	2198	0.119	8	2198	0.108	8	2198	0.227
16:00 - 16:30	8	2198	0.091	8	2198	0.125	8	2198	0.216
16:30 - 17:00	8	2198	0.080	8	2198	0.131	8	2198	0.211
17:00 - 17:30	8	2198	0.091	8	2198	0.148	8	2198	0.239
17:30 - 18:00	8	2198	0.045	8	2198	0.114	8	2198	0.159
18:00 - 18:30	8	2198	0.017	8	2198	0.108	8	2198	0.125
18:30 - 19:00	8	2198	0.000	8	2198	0.040	8	2198	0.040
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.302			2.336			4.638

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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Appendix 54

WBC Confirmation on Exclusion of Winwick B+Q and Exclusion of Omega Zone 7

fiona.bennett@highgatetransportation.co.uk

From: Flood, Richard <x-rflood@warrington.gov.uk>
Sent: 26 September 2016 16:34
To: dave.tighe@highgatetransportation.co.uk
Cc: fiona.bennett@highgatetransportation.co.uk; Oates, Andy; Coupe, Gavin D
Subject: Peel Hall - Committed Developments: B&Q Winwick

Hi Dave

Following on from our discussion around committed developments, we have checked the details and subsequent assessment for the Winwick B&Q. We agree that any additional traffic is insignificant and so B&Q can be excluded from the list of committed developments.

For the record, we should point out that report TN10 states that: "there will be no net change to the store's overall GFA and it is therefore considered that there would be very little, if any, impact on the local highway network during peak hours as a result of this development." However, the Planning Officer's report for the B&Q application states that there would be a net increase of 188sqm - which would equate to an additional 10-trips to/from the B&Q store.

We accept that this number is low enough to be discounted.

Regards
Richard

Richard Flood
Consultant - Transport for Warrington
Economic Regeneration, Growth and Environment Directorate

Warrington Borough Council, New Town House, Buttermarket Street, Warrington, WA1 2NH
Tel - 01925 442521
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fiona.bennett@highgatetransportation.co.uk

From: Zenner, Michelle <mzenner@warrington.gov.uk>
Sent: 10 February 2016 12:15
To: fiona.bennett@highgatetransportation.co.uk
Cc: Flood, Richard; Davies, Michael (Planning)
Subject: FW: Peel Hall, Warrington - Committed Developments

Hi Fiona,

Following on from Mikes email,

Omega Zone 7 is too far from the modelled network to make an impact, The Genesis Centre app was refused according to our APAS system but yes, Calver Park should be included as this site has yet to be built out. There are further permissions on this site and these can be found by using the Councils interactive planning system on the Councils website.

Regards

Michelle Zenner
Transport Development Control Team Leader

Warrington Borough Council
Environment & Regeneration Directorate
3rd Floor New Town House
Buttermarket Street
Warrington, WA1 2NH.
Tel: 01925 443540
Fax: 01925 443255

Email: mzenner@warrington.gov.uk
Web: www.warrington.gov.uk

From: Davies, Michael (Planning)
Sent: 09 February 2016 17:46
To: 'fiona.bennett@highgatetransportation.co.uk'
Cc: Zenner, Michelle
Subject: RE: Peel Hall, Warrington - Committed Developments

Fiona –

Sorry for the delay.

Major sites with planning permission which may be worth considering as committed development for the modelling would include:-

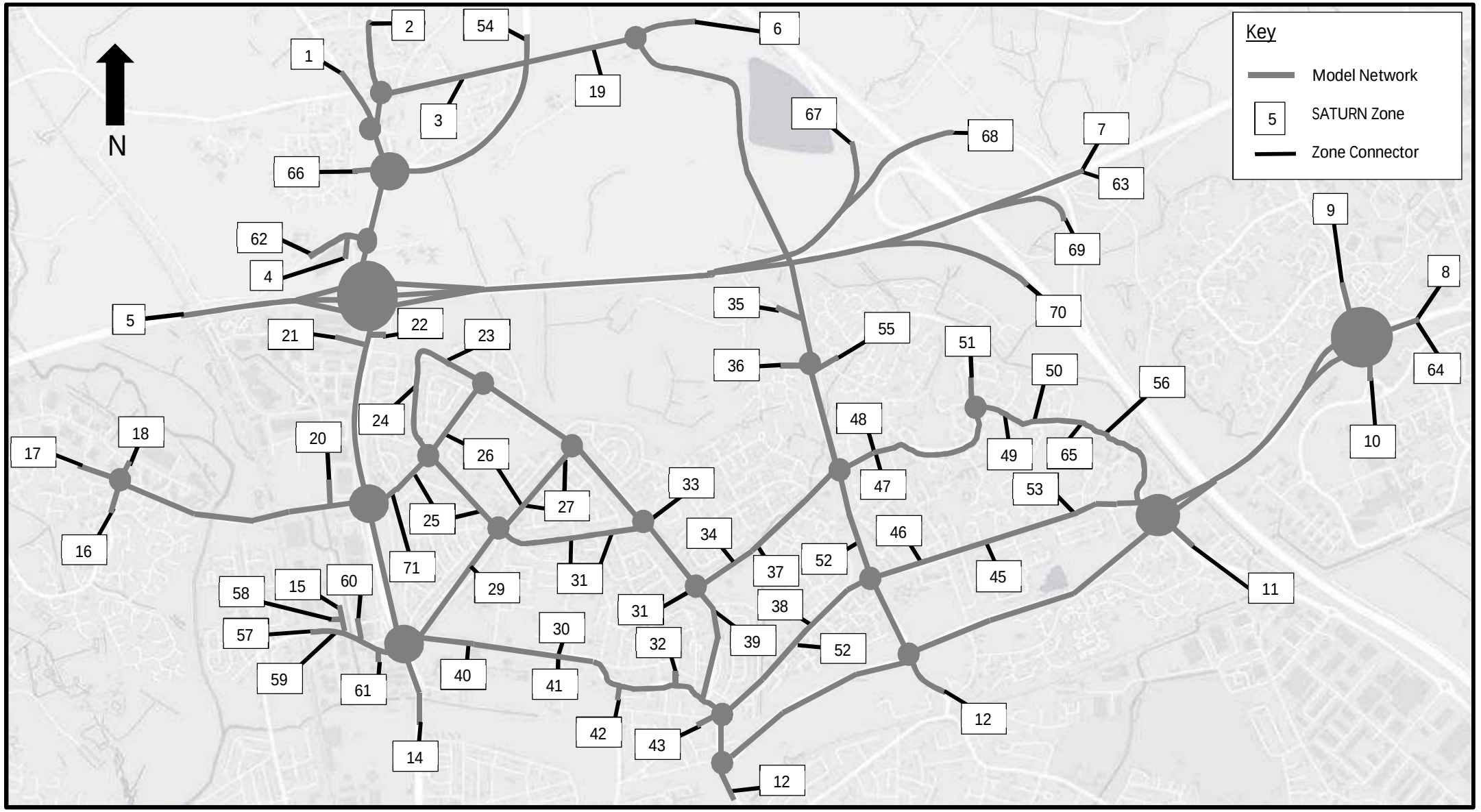
- Befred office HQ site, Birchwood – 2015/26220
- Birchwood Shopping Centre expansion – 2015/25880
- Birchwood Park office development (for Patrizia) – 2015/26044

Possibly the following also – Michelle may be able to confirm whether these are eligible for inclusion too:

- Omega, Zone 7 – 2014/23290
- Genesis Centre – 2014/23569
- Calver Park – 2015/26685

Appendix 55

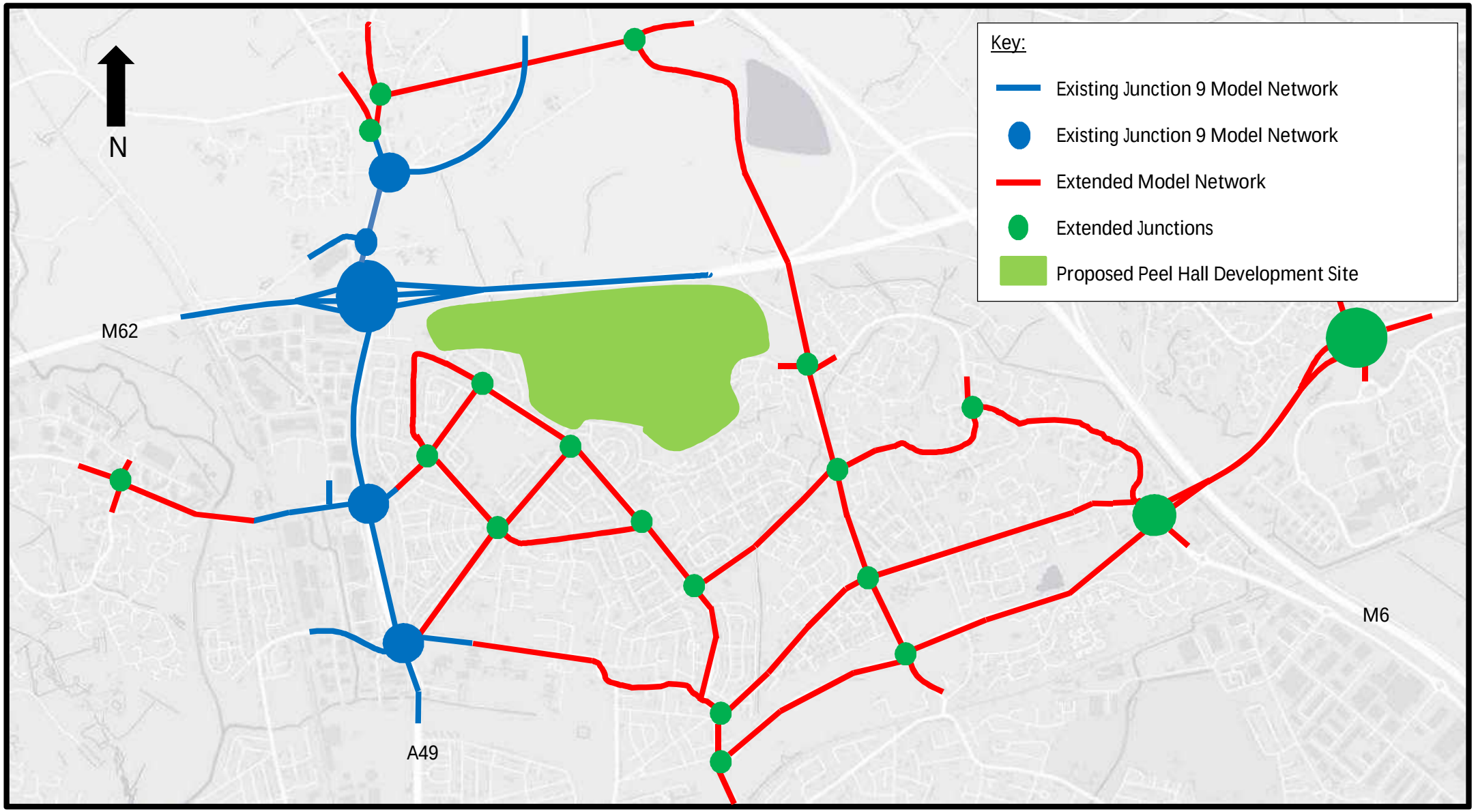
SATURN Network



Appendix B – SATURN Zone Structure

Appendix 56

VISSIM Network



Appendix A, Figure 2 – Model Study Area

AECOM

Appendix 57

SATURN LMVR

Peel Hall SATURN

Local Model Validation Report

Satnam Millennium Ltd
(Under the instruction of Highgate Transportation)

September 2017

Quality information

Prepared by	Checked by	Approved by
		
Christopher Peachey Consultant	Alistair Johnson Principal Consultant	Catherine Zoeftig Associate Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
A	28/09/2017	Final Report		Catherine Zoeftig	Associate Director

Distribution List

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N/A	Yes	Fiona Bennet, David Tighe (Highgate Transportation)

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Figures

Tables

1. Introduction

1.1 Introduction and Background

Following the production of the extended M62 Junction 9 VISSIM model, AECOM have been commissioned by SATNAM Millennium (SM) (Under the instruction of Highgate Transportation (HTp)) to produce a SATURN model for the same modelled area.

This Local Model Validation Report (LMVR) describes the methodology undertaken to update and validate the SATURN base model on behalf of Highgate Transportation / SATNAM Millennium in order to provide a suitable tool for which an assessment of the proposed housing development at Peel Hall can be completed.

Given the existing levels of queueing across the study area, in particular along the A49, it is important any traffic model used to assess the proposed Peel Hall development can replicate the impact of blocking back of queue traffic across certain strategically important junctions. The base model is reflective of a typical neutral day in the month of May 2015.

1.2 Model Area

Figure 1.1 below provides an overview of the extent of the modelled network in SATURN, and the location of the proposed Peel Hall Development.

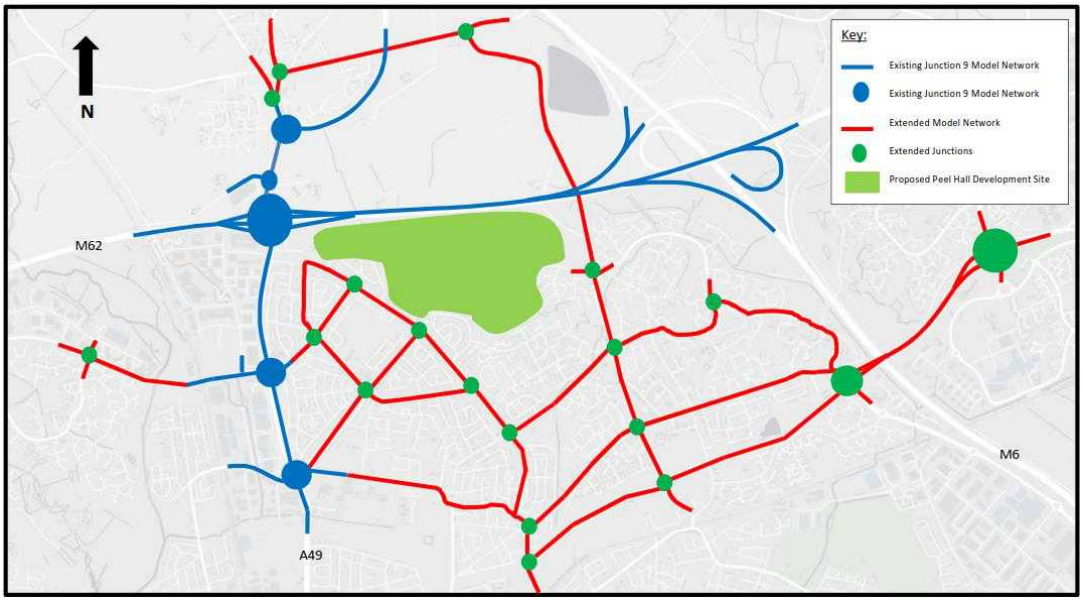


Figure 1.1: Extent of Modelled Network

A copy of the Peel Hall Master Plan is contained within **Appendix A**, **Figure 1.1** as well as a larger copy of the **Figure 1.1** above.

1.3 Structure of this Report

This introductory chapter is followed by four further chapters which are identified as follows:

- **Chapter 2 – Summary of Data Collection –** This chapter summaries all elements of data collected to inform the construction of the base model, this includes the locations of traffic counts, origin destination data, traffic signal data, journey time data, and other Data (Including information from Site Visits);
- **Chapter 3 – Base Model Development –** This chapter of the report presents the model description & specification including all elements of the model development such as, the Network, Matrices, and Assignment Process;
- **Chapter 4 – Base Model Calibration/Validation –** This chapter of the report presents the details of the calibration / validation process of the base model, and
- **Chapter 5 - Summary and Conclusion –** The report concludes with a summary and conclusions drawn from the results.

2. Summary of Data Collection

2.1 Traffic Count Data

The SATURN model has been developed utilising classified turning count data provided by Highgate Transportation. A significant proportion of the total traffic counts were collected on the 8th July 2014 for the periods 07:00 – 10:00 and 16:00 – 17:00.

A full summary list of the locations where junction traffic counts were completed, including dates undertaken, are presented below in **Table 1**.

13th May 2014
Junction 9 of the M62
8th July 2014
Southworth Lane / Delph Lane / Myddleton Lane
Newton Road / A49 / Winwick Park Avenue
A49 Newton Road / Delph Lane
A49 / Birch Avenue
A49 / Sandy Lane West / A574
Cotswold Road / Cleveland Road / Sandy Lane / Sandy Lane West
Poplars Avenue / Cleveland Road
Poplars Avenue / Howson Road
Mill Lane / Enfield Park Road / Blackbrook Avenue / Ballater Drive
Blackbrook Avenue / Enfield Park Road / Capesthorne Road
Poplars Avenue / Capesthorne Road
A49 / Long Lane / Hawleys Lane
Blackbrook Avenue / Insall Road / Hilden Road
A50 / Hilden Road / Orford Road / Smith Drive
Blackbrook Avenue / A574
A50 / A574
Crab Lane / A574 / Woolston Grange Avenue
9th July 2014
Europa Boulevard / A574 / Callands Road
Calver Road / A574
9th February 2016
A49 / Golborne Road

Table 1: Summary of Junction Count Data

The sites above form the key traffic count inputs into the model build and calibration process. A plan detailing the location of each of the aforementioned counts is contained within **Appendix B** of this report.

2.2 Origin Destination Data

Since the count data did not provide any information on trip patterns (origins and destinations (OD)) another source was required. The Warrington Multi Modal Transport Model (WMMTM) was utilised as the best available source of OD data.

The aforementioned model is a VISUM model developed in 2008 by Warrington Borough Council (WBC) in partnership with Highways England, the North West Development Agency (NWDA), Homes and Communities Agency (HCA) and Peel Holdings to provide an evidence base to support and aid decision making regarding

spatial development, transport infrastructure and services within the Warrington area. The model uses the forecast future growth in employment, population and trends in travel choices to assess where people will work, live and what mode of transport they are likely to use in future to make their journeys. The model was constructed and validated in accordance with WebTAG guidance produced by the Department for Transport (DfT).

The use of the model to provide OD data was agreed with Highgate Transportation prior to beginning the modelling process. As highlighted it has been used to inform and provide traffic flows for a number of transport studies within the Warrington area over a number of years and so formed the most appropriate source of OD data.

A cordon of the study area was extracted from the model and a matrix of the OD movements for the AM and PM peak hours was obtained.

2.3 Traffic Signal Data

Traffic signal specifications were obtained from WBC traffic signals team for the following junctions;

- Junction 9 of the M62;
- A49 Newton Road / A49 / Winwick Park Avenue;
- A49 / Sandy Lane West / A574;
- A49 / Long Lane / Hawleys Lane;
- Blackbrook Avenue / Insall Road / Hilden Road;
- Calver Road / A574;
- A50 Orford Road / A574 Birchwood Way;
- A49 Newton Road / Delph Lane; and
- A50 Orford Green / Hallfields Road.

In addition to receiving the signal specifications several site visits were completed to observe the operation of traffic within the vicinity of the signalised junctions. In addition to general observations, green times and how many times certain stages were called, were also recorded.

2.4 Journey Time Data

Given the size of the SATURN model, to ensure the model is reflective of the key routes across the study area, a number of journey times have been obtained.

Utilising basemaps.co.uk analyst software, journey time data was extracted for an average of three neutral week days, these were the 12th, 13th, 14th, May 2015. The routes are shown overleaf in **Figure 2.1** and a large plan is provided in **Appendix C**. The data extracted was for both directions of travel and for both AM and PM peak hour periods.

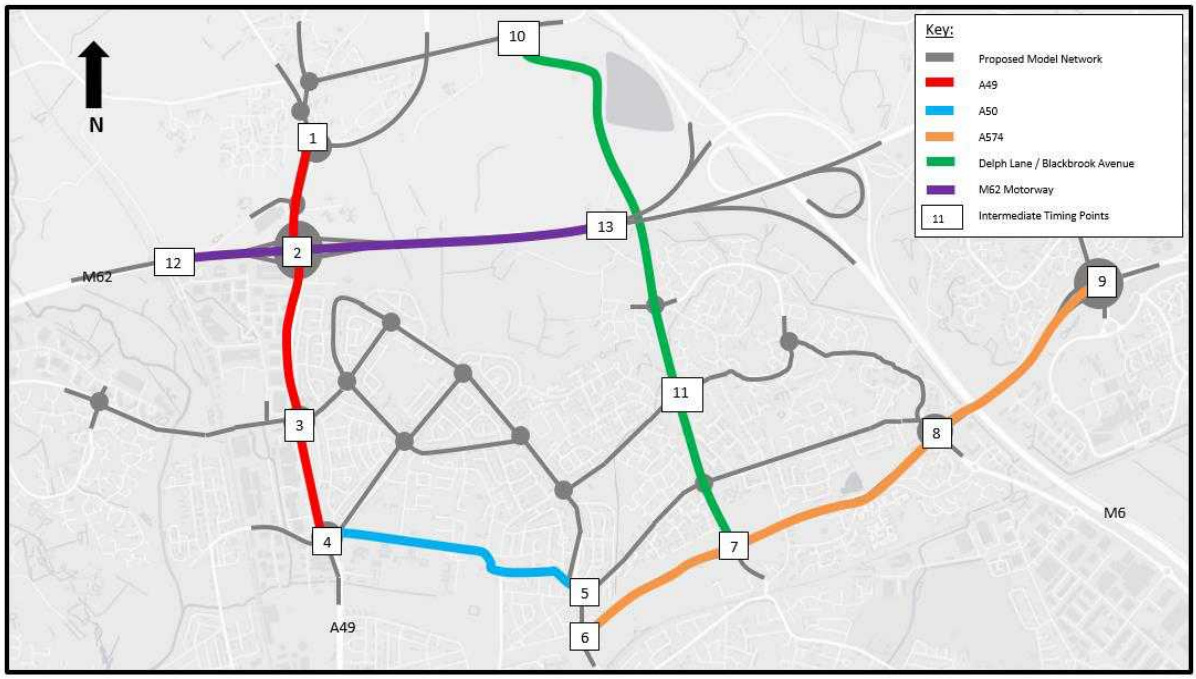


Figure 2.1: Proposed Journey Time Routes for Validation

The journey time routes shown in **Figure 2.1** are all two way and are summarised below:

- **Journey Time Route 1: (1 to 4)** - A49 north and southbound with intermediate points of 2 & 3;
- **Journey Time Route 2: (4 to 5)** – A50 between A49 to Hilden Road east and westbound;
- **Journey Time Route 3: (6 to 9)** – A574 Birchwood Way between A50 and Birchwood Park Ave with the intermediate points of 7 and 8;
- **Journey Time Route 4: (10 to 7)** – Delph Lane / Blackbrook Avenue between Delph Lane and Birchwood Way with the intermediate point of 11; and
- **Journey Time Route 5: (12 to 13)** – M62 through Junction 9.

In order to be able to understand if the model is reflective of journey times in shorter sections of the network, as well as obtaining two way end to end journey times, a number of intermediate points were also identified. These are identified in **Figure 2.1** above and enable checks on specific sections of the network to be completed.

2.5 Bus Timetables

Checks on bus services which operate within the study area where completed during site visits. Bus timetable information was been obtained from Network Warrington for the study area. Services identified as operating within the study area are presented in **Table 2** overleaf.

Route Services	Service Number	Peak Hour Frequency
Oakwood / Birchwood / Fearnhead / Warrington / Old Hall / Westbrook / Callends / Gemmi	17 – 17a – 17c – 18 – 18e	30 Minutes (2ph)
Leigh / Culcheth / Croft / Birchwood / Longbarn / Warrington	19 – 28 - 28a – 28e	30 Minutes (2ph)
Logford / Populars Avenue / Orford / Warrington	20 – 20a – 21 – 21a – 21e	15 Minutes (4ph)
Vulcan Village / Earlston / Newton-Le-Willows / Warrington	22 – 22e	60 minutes (1ph)
Orange Grove / Cinnamon Brow / Orford / Padgate / Warrington	23 – 23a – 25a – 26 – 26e – 27 – 27e	30 Minutes (2ph)
Gorse Covert / Birchwood / Fearnhead / Greenwood Cresent / Hilden Road / Warrington	25 – 25a – 25b – 26 – 27	30 Minutes (2ph)

Table 2: Bus Services for Inclusion within the SATURN Model

The timetables for each service are presented in **Appendix D** of this report.

2.6 Other Data (including Site Visits)

To gain an understanding of driver behaviour and network conditions a number of site visits were completed during both the AM and PM peak periods during May and June 2016. Throughout all site visits photographs and notes on queue lengths, lane usage and estimations of vehicle speeds were taken. Lane usage, driver aggression, routing and how vehicles interact in response to highway features and other vehicles were all recorded.

The model area can suffer from significant congestion during either peak period particularly if an incident has occurred on the M62. Therefore the site visits and information collected provided a valuable resource in calibrating the SATURN base models.

3. Base Model Development

3.1 Model Description and Specification

As agreed with Highgate Transportation, the existing VISSIM model has been replicated within the SATURN software suite.

At the time of development of the models, SATURN version 11.3.12F was utilised, since this was the most recent version of the software.

SATURN is a suitable piece of software for completing large scale strategic modelling at a regional level all the way down to smaller model areas and the assessment of individual junctions at the simulation level. Operating as a simulation modelling tool, SATURN is capable of analysing relatively minor changes in the network such as traffic the addition of a new development, additional road infrastructure and changes in signal timings. SATURN is an industry respected well used and tested assignment modelling tool used extensively for the assessment of highways schemes and provides robust analysis of small to large infrastructure developments.

Model Periods
As agreed with Highgate Transportation the Peel Hall SATURN model covers the following weekday periods;

- 08:00 – 09:00; and
- 17:00 – 18:00

User Classes
In order to replicate the impact of different users and vehicle types within the study area the SATURN model has been constructed with five user classes. The user classes are split as per **Table 3** below.

User Class	Vehicle Type	Purpose
1	Cars	Commuting
2	Cars	Work
3	Cars	Other
4	LGVs	-
5	HGVs	-

Table 3: User Classes Coded into the SATURN Model

Passenger Car Unit Values
SATURN operates with traffic flows converted to Passenger Car Unit Values (PCUs). The PCU value is a way of assessing different vehicle types in a consistent manner, subject to the impact and space a vehicle will take on a typical road. The PCU factors used within the SATURN modelling are detailed in **Table 4** below. A PCU factor of 2.3 has been used in this instance in accordance with Transport for London (TfL) industry modelling guidelines.[1]

Vehicle Type	Description	PCU Value
Light Vehicles	Cars & LGVs	1
HGVs	Rigid vehicles over 3.5t with 2 or 3 axles	2.3

Table 4: PCU factors

3.2 Network Coding

All model coding has been completed utilising CAD overlays of the study area, aerial images and notes taken during site visits.

Given the relatively small study area for a SATURN model, and to ensure an assessment of impact can be completed for all junctions, the model is coded entirely in simulation network.

[1] http://content.tfl.gov.uk/traffic-modelling-guidelines.pdf (page 62)

Initially an audit of the existing Junction 9 model was completed to ensure it remained reflective of reality. The additional elements of the network were then added to the model so it was reflective of the key roads within the agreed study area.

During busy periods, particularly 17:00 – 18:00, drivers were observed completing extremely aggressive manoeuvres on the approach to certain junctions. The Northway approach to the A50 Long Lane priority junction and the Birchwood Way approach to the Oakwood Gate roundabout were both observed to experience vehicles approaching three abreast when queues occurred, as a direct a result of aggressive drivers. The model has not been calibrated to replicate this behaviour as it was not consistently observed throughout the peak periods but is worthy of note moving forward.

Free flow Speeds

A review of local speed limits identified all locations where speed limits changed and are signed. These locations were then coded into the model. However, a significant feature within the study area is the extensive traffic calming measures located on the majority of the minor road network. Observations during site visits suggested the traffic calming has varying success in slowing drivers. Therefore to reflect the reduced speeds that drivers travel over the traffic calming measures, for each link where a traffic calming feature is located the free flow speeds of the link have been adjusted accordingly. Examples of the traffic calming features located within the study area are identified below in **Figure 3.1**.

Figure 3.1: Examples of Traffic Calming across the Study Area

Speed Flow Curves

In urban areas where junctions are closely spaced and delays are as a result of capacity constraints, SATURN can sufficiently model the impacts of the interaction of traffic volumes and network features. However, on long links such as motorways there are fewer network features and as such speed flow curves are required by SATURN to replicate delays to traffic. This is true of the sections of the M62 which run through the model study area. In order to fully reflect the speed and delays to vehicles on the M62, standard Rural Motorway and Suburban road class speed flow curves, as defined in DMRB Volume 13 have been coded into the SATURN model.

The following links have benefited from Speed Flow Curves:

- M62; and
- A574 Birchwood Way

Figure 3.2 below highlights the locations whereby speed flow curves have been applied within the SATURN models.

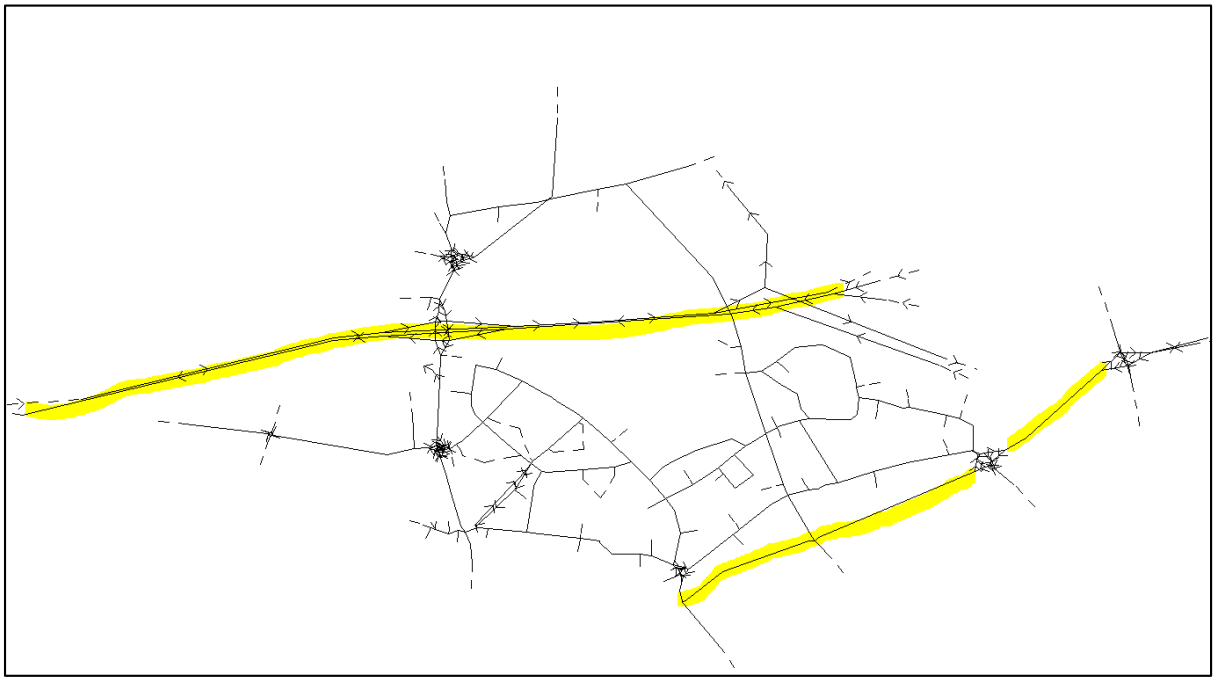


Figure 3.2 Speed Flow Curve Locations

Signal Timings

Stage arrangements at all junctions have been coded as per the signal specifications provided by WBC for the junctions identified in Section 2.3 of this report. Site visits have been completed at all junctions to obtain typical cycle times and an understanding of any offsets and the number of times demand dependant stages are called.

Despite some junctions operating on MOVA or Scoot due to the consistent volumes of traffic, particularly on the A49, cycle times and green times remained fairly consistent over the course of the modelled peak hours. Therefore, all signalised junctions have been modelled as operating on a fixed time basis using SATURN's signal staging arrangements within P1X.

Bus Stops and Routes

As identified in **Table 2** a number of bus routes run through the study area. To ensure these remain linked as the buses cross the study area a number of bus only links have been coded into the model. Buses have been coded on fixed routes. All routes have been coded as per those identified by Network Warrington. Timing points have been coded into the model where by the time it takes to get from one stop to another in accordance with timetabled services.

3.3 Matrices

AM and PM peak prior matrices were extracted from the previous Peel Hall VISSIM model. The zone structure of the wider strategic model is shown in **Figure 3.3** below; a larger version of the plan is presented within **Appendix E** of this report.

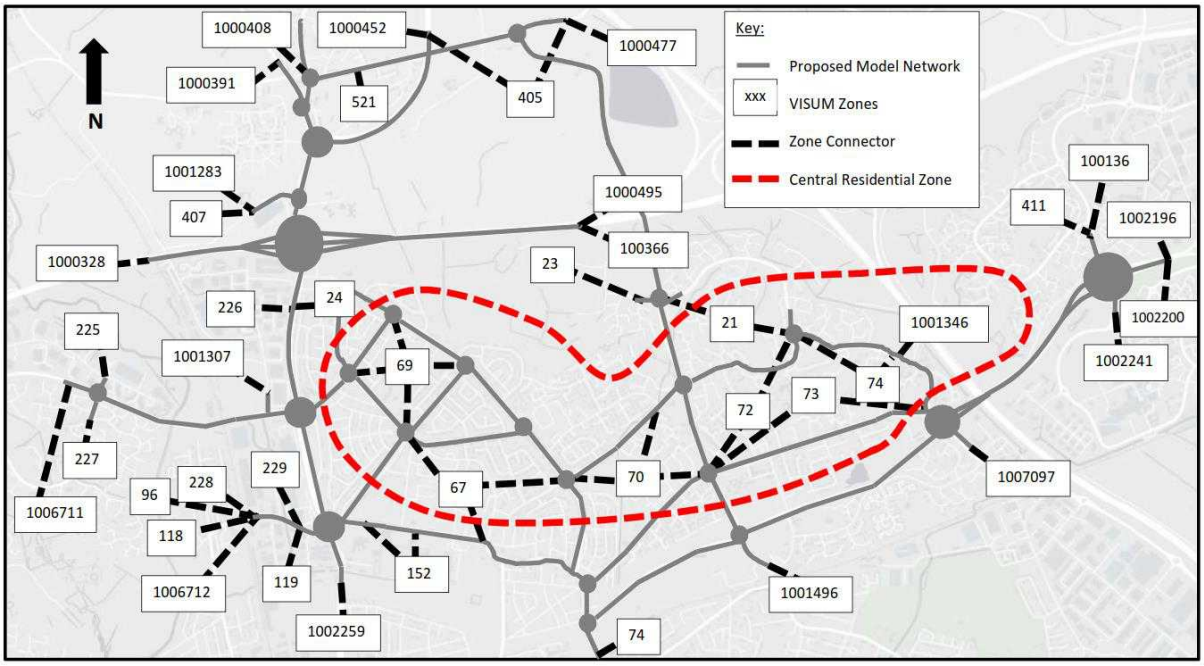


Figure 3.3: SATURN Model Zone Structure

The prior matrix extracted from the larger WMMTM provided a strategic representation of vehicle movements across the study area. Generally all zones matched the key loading points within the model network. However, a number of the areas of residential and education land uses at the heart of model were represented by a single zone with multiple loading points. Whilst this zone structure can be replicated within VISSIM it would be hard to validate a model as movements would not be constant. For this reason zones located within the central residential and education land use area (within the red line boundary in **Figure 3.3** above) have been split out by area size and where each loading point feeds. Corresponding loading points to the VISUM model have been coded in the SATURN model network. Checks on trip volumes were completed to ensure matrix totals remained as per the prior matrix.

The adjusted prior matrix and the extended and amended VISSIM network was input into VISUM, where VISUM's matrix estimation tool TFlow Fuzzy was run. Again checks on matrix volumes and overall OD movements were completed to ensure they remain consistent and reasonable compared to the prior matrix. Any unreasonable changes were addressed manually, these remained small adjustments, predominately minor movements across the model.

The VISSIM matrix was input into SATURN and a check on the level of calibration was completed. Due to the different nature of the software's used, it was necessary to run the VISSIM matrix through SATURN'S matrix estimation module SATME2. Again checks on matrix volumes and overall OD movements were completed to ensure they remain consistent and reasonable compared to the prior matrix. Any unreasonable changes were addressed manually, these remained small adjustments, predominately minor movements across the model.

3.4 Assignment Convergence

As per guidance set out in Table 4.1, Design Manual for Roads and Bridges (DMRB) Volume 12 Section Chapter 4, for four consecutive iterations (runs), 90% of links should experience a flow change of less than 5%, with a Delta value of less than 1%.

To ensure the base model was fully reflective of reality, for both the AM and PM base models, the above criteria was amended from 90% to 98.5%.

Table 5 below presents the base mode levels of convergence and the number of iterations needed to achieve this.

Model Period	DMRB Guidelines	Convergence Level Achieved	# Iterations Required to Achieve Convergence
AM Peak	4 consecutive model runs with flows changes for 90% of links of less than 5% and Delta values of less than 1%	4 consecutive model runs with flows changes for 98.5% of links of less than 1% and Delta values of less than 1%	20 Iterations.
PM Peak			30 Iterations.

Table 5: Levels of Convergence

The corresponding convergence files are available on request.

4. Base Model Calibration / Validation

4.1 Introduction

To ensure the SATURN model was fully representative of the base year it was necessary to test the models calibration against link flows, screen lines and some turn counts, and ultimately validate it against journey time data, this is in accordance with the guidance and criteria set out in Volume 12a of DMRB.

Due to the relatively small study area within this particular SATURN model, calibration checks were completed on both turn counts and link counts to ensure the model was fully reflective of movements within it.

4.2 Calibration

As previously detailed in Section 2 of this report, an extensive number of traffic counts were collected for calibrating the model against. The traffic counts were factored to a common year of 2015 using the TEMpro, NTEM Dataset v6.2 growth factors for the output area of 00EU1 within Warrington. The background traffic growth factors for all vehicle trips were supplied by HTp as identified in their Technical Note HTp/1107/TN/20.

As the study area contains a mixture of principle and minor roads an average of the growth factors for both road types was applied.

The GEH statistic is used as the main indicator of the 'goodness of fit' of a model when comparing against observed traffic flows, this is as described in the guidance, 'Traffic Appraisal in Urban Areas' – Chapter 4(DMRB Vol. 12a). In line with the aforementioned criteria **Table 6** below provides a summary of the GEH calibration statistics by vehicle type for both the AM and PM peak SATURN models when comparing the modelled with observed turning movements at a number of junctions across the study area.

	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
GEH	**Cars**	**LGV**	**HGV**	**Cars**	**LGV**	**HGV**
<5	144	148	143	149	150	159
<5	85%	92%	85%	88%	93%	94%
<10	165	161	169	166	161	168
<10	98%	100%	100%	98%	100%	99%
>10	4	0	0	3	0	1
>10	2%	0%	0%	2%	0%	1%
<20	169	161**	169	169	161**	169
<20	100%	100%	100%	100%	100%	100%

** Lower number due to motorway counts combining Car and LGV volumes to match Highways England Traffic Counts

Table 6: Summary of Calibration Statistics for Comparison between the Observed and Modelled Traffic Flows

Table 6 above demonstrates for each vehicle type 85% or greater of the model turn counts calibrate against the observed turn count data. The full flow comparisons outputs are provided in **Appendix F** of this report.

	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
GEH	Cars	LGV	HGV	Cars	LGV	HGV
<5	117	107	124	115	112	127
<5	88%	86%	93%	86%	90%	95%
<10	132	124	134	131	125	131
<10	99%	99%	100%	98%	100%	98%
>10	133	125	134	133	0	133
>10	100%	100%	100%	100%	0%	100%
<20	133	125**	134	133	125**	133
<20	100%	100%	100%	100%	100%	100%

Table 7: Summary of Calibration Statistics between Observed and Modelled Link Counts

Table 7 above demonstrates for each vehicle type 85% or greater of the model turn counts calibrate against the observed link count data.

4.3 Validation

Volume 12a of the DMRB states 85% of journey times must be within 15% or 60 seconds if higher, of the observed journey time data. A summary of the journey time validation is presented in **Table 7** overleaf.

Time Period	Description	Direction of Travel	Reference	Observed Journey Time	Model Journey Time	Absolute Difference	Validation Achieved	Validation Achieved
08:00-09:00	A49	NB	4 to 1	283	272	-11	-4%	YES
		SB	1 to 4	571	655	84	15%	YES
	A574	EB	6 to 9	502	224	-278	-55%	NO
		WB	9 to 6	232	223	-9	-4%	YES
	A50	EB	4 to 5	213	189	-24	-11%	YES
		WB	5 to 4	305	275	-30	-10%	YES
	Delph Lane/ Blackbrook Avenue	NB	7 to 10	332	300	-32	-10%	YES
		SB	10 to 7	319	310	-9	-3%	YES
	M62	EB	12 to 13	162	150	-12	-7%	YES
		WB	13 to 12	101	89	-12	-12%	YES
17:00-18:00	A49	NB	4 to 1	409	434	25	6%	YES
		SB	1 to 4	484	468	-16	-3%	YES
	A574	EB	6 to 9	221	230	9	4%	YES
		WB	9 to 6	316	268	-48	-15%	YES
	A50	EB	4 to 5	184	200	16	9%	YES
		WB	5 to 4	392	295	-97	-25%	NO
	Delph Lane/ Blackbrook Avenue	NB	7 to 10	308	298	-10	-3%	YES
		SB	10 to 7	310	290	-20	-6%	YES
	M62	EB	12 to 13	103	91	-12	-12%	YES
		WB	13 to 12	93	90	-3	-3%	YES

Table 8: Summary of Journey Time Validation Results

Table 8 above demonstrates that 90% of the agreed journey times, within the SATURN model, validate within 15% of the observed data, satisfying DMRB criteria. Therefore both the AM and PM base models are considered to replicate a 2015 base year, and are appropriate for future year scenario testing.

A full breakdown of journey times with intermediate points is provided in **Appendix G** of this report.

5. Summary and Conclusion

5.1 Summary

AECOM has developed a SATURN model of the Peel Hall development study area, on behalf of SM (Under the instruction of HTp), in order to provide a suitable tool for assessing the proposed development.

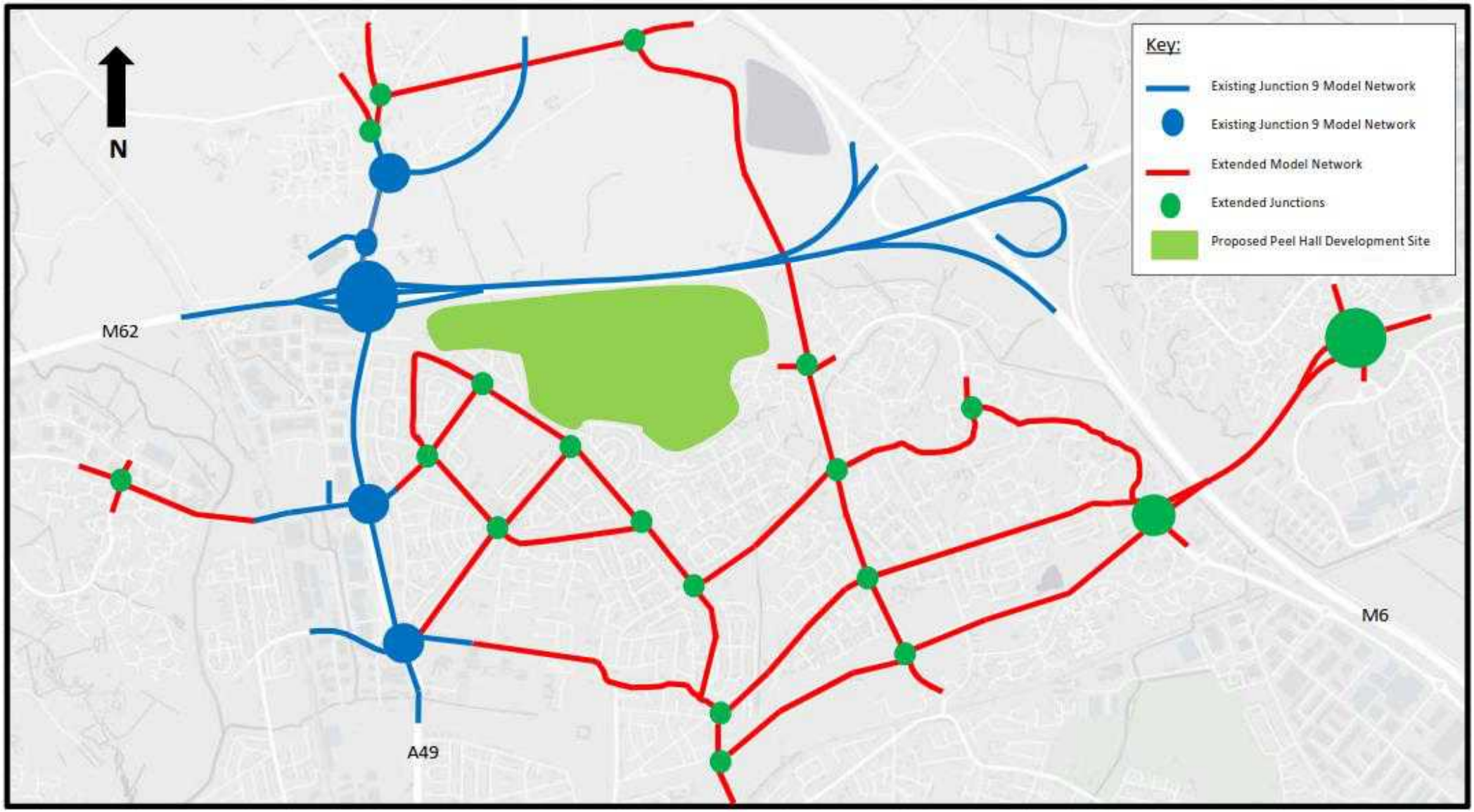
Traffic counts, journey time surveys, and extensive site observations have been used to inform the update of the base model which has been validated to a base year of 2015.

This LMVR identifies that the base model calibrates and validates to a high standard, meeting and exceeding all DMRB validation criteria set out in Volume 12a of the Design Manual for Roads and Bridges (DMRB).

5.2 Conclusion

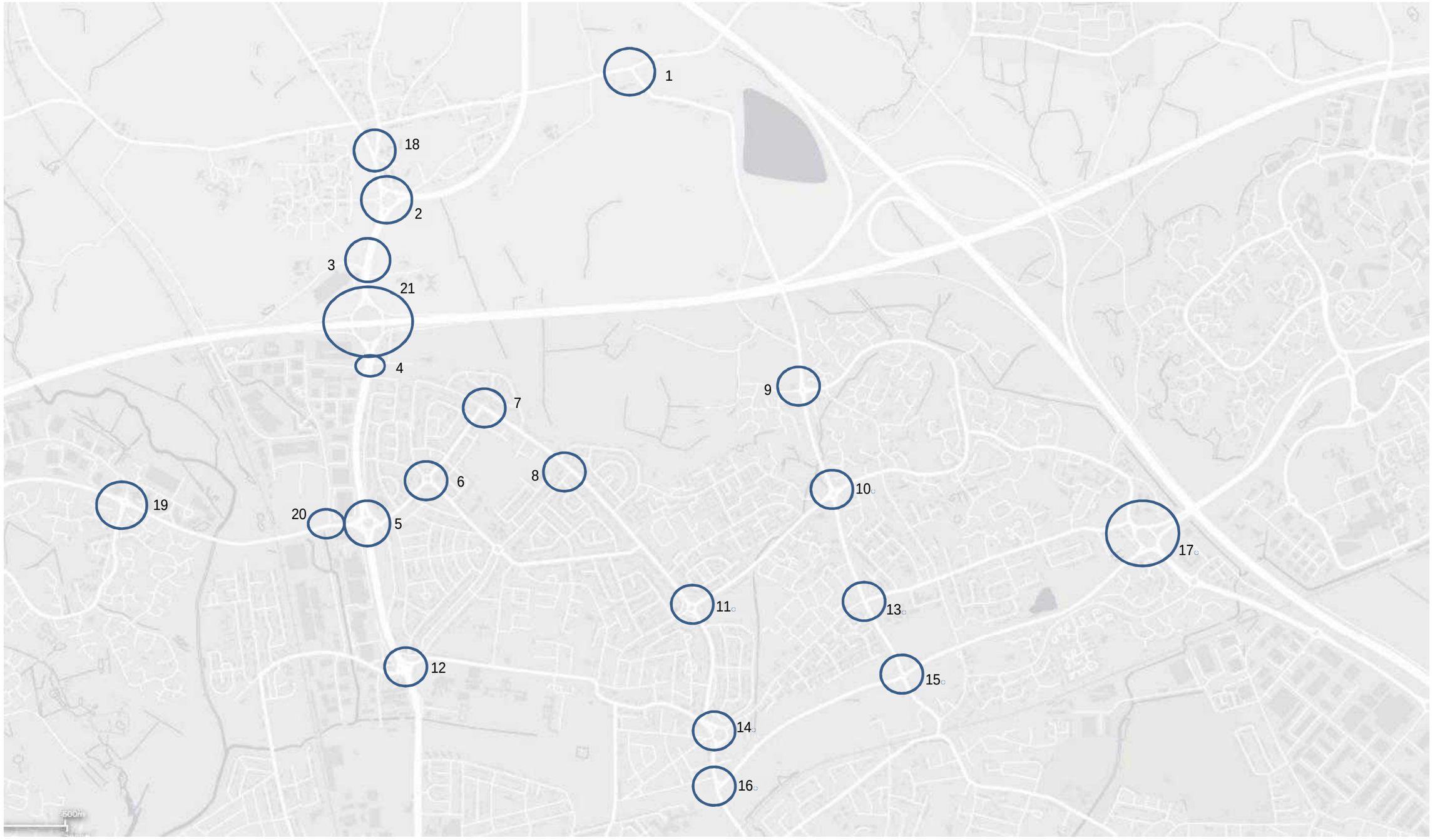
It is the conclusion of this LMVR that both the AM and PM peak period SATURN models are fit for the purpose of being taking forward to forecasting in order to understand the likely impact of the proposed Peel Hall Development.

Appendix A : Study Area / Masterplan / Modelled Network



Appendix F, Figure 6.1 – 2025 AM Do Minimum Do Something Delay Comparison

Appendix B : Plan of Traffic Counts



1. Southworth Lane / Delph Lane / Myddleton Lane
2. Newton Road / A49 / Winwick Park Avenue
3. A49 / Delph Lane
4. A49 / Birch Avenue
5. A49 / Sandy Lane West / A574
6. Cotswold Road / Cleveland Road / Sandy Lane / Sandy Lane West
7. Poplars Avenue / Cleveland Road
8. Poplars Avenue / Howson Road
9. Mill Lane / Enfield Park Road / Blackbrook Avenue / Ballater Drive
10. Blackbrook Avenue / Enfield Park Road / Capesthorne Road
11. Poplars Avenue / Capesthorne Road

12. A49 / Long Lane / Hawleys Lane

13. Blackbrook Avenue / Insall Road / Hilden Road

14. A50 / Hilden Road / Orford Road / Smith Drive

15. Blackbrook Avenue / A574

16. A50 / A574

17. Crab Lane / A574 / Woolston Grange Avenue

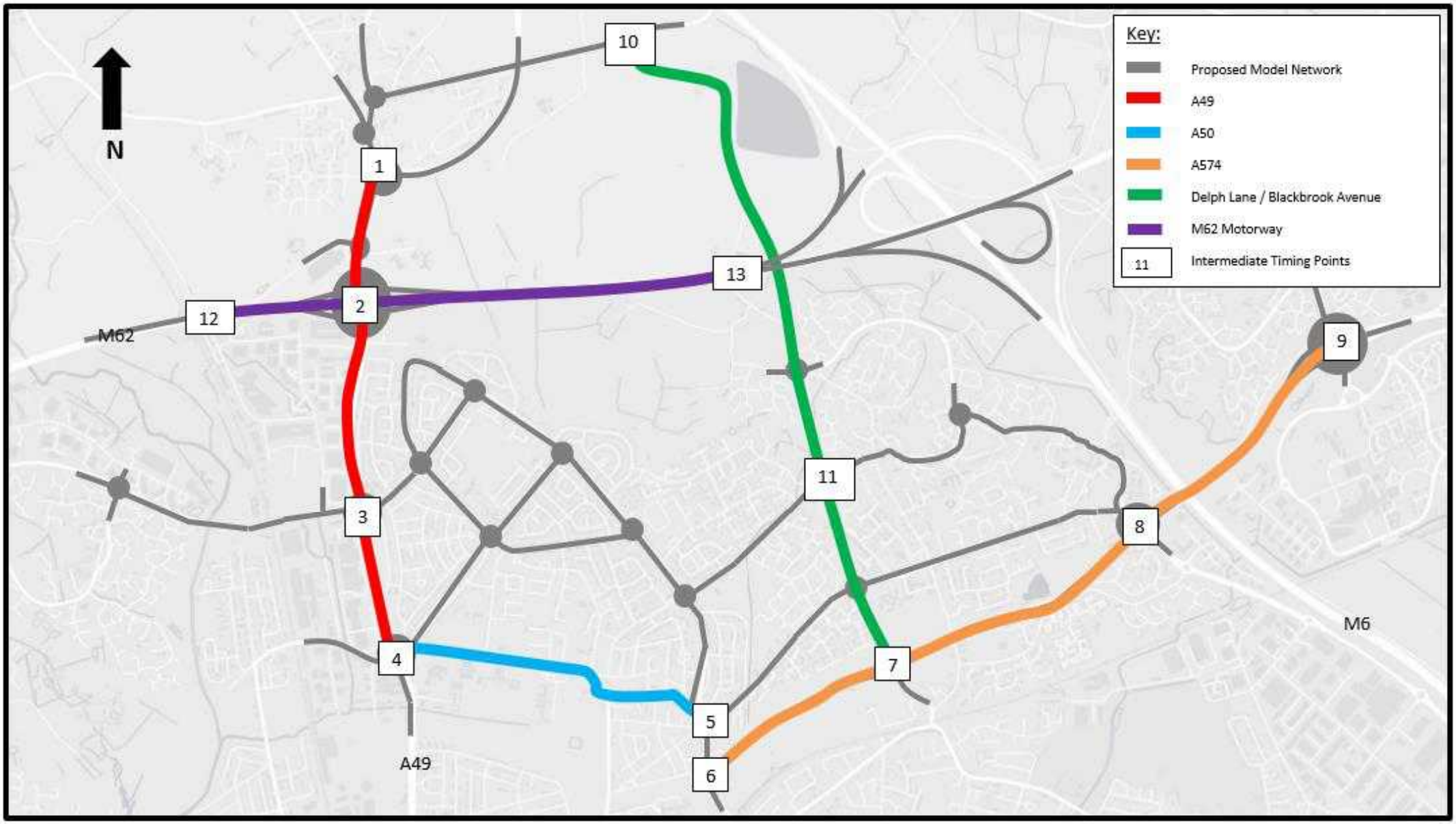
18. A49 / Golborne Road

19. Europa Boulevard / A574 / Callands Road

20. Calver Road / A574

21. M62 West

Appendix C : Journey Time Route Maps

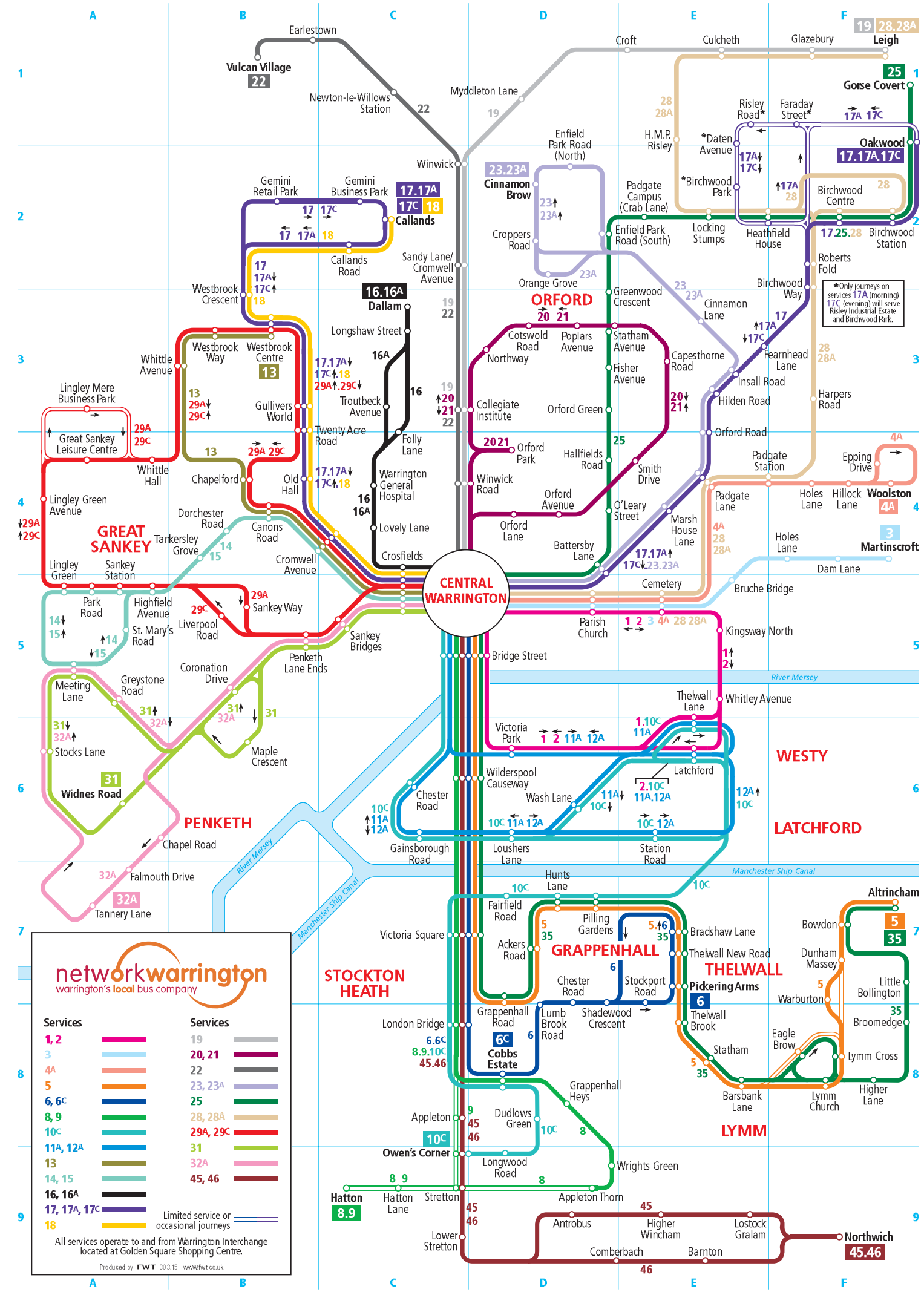


Appendix C – Model Validation Journey Time Routes

AECOM

Appendix D : Warrington Bus Timetables

This map shows services that operate on Monday to Saturday between 7am and 7pm. We operate a number of other services not shown, these are either infrequent or run only during the mornings, evenings or on Sundays.



networkwarrington
warrington's local bus company

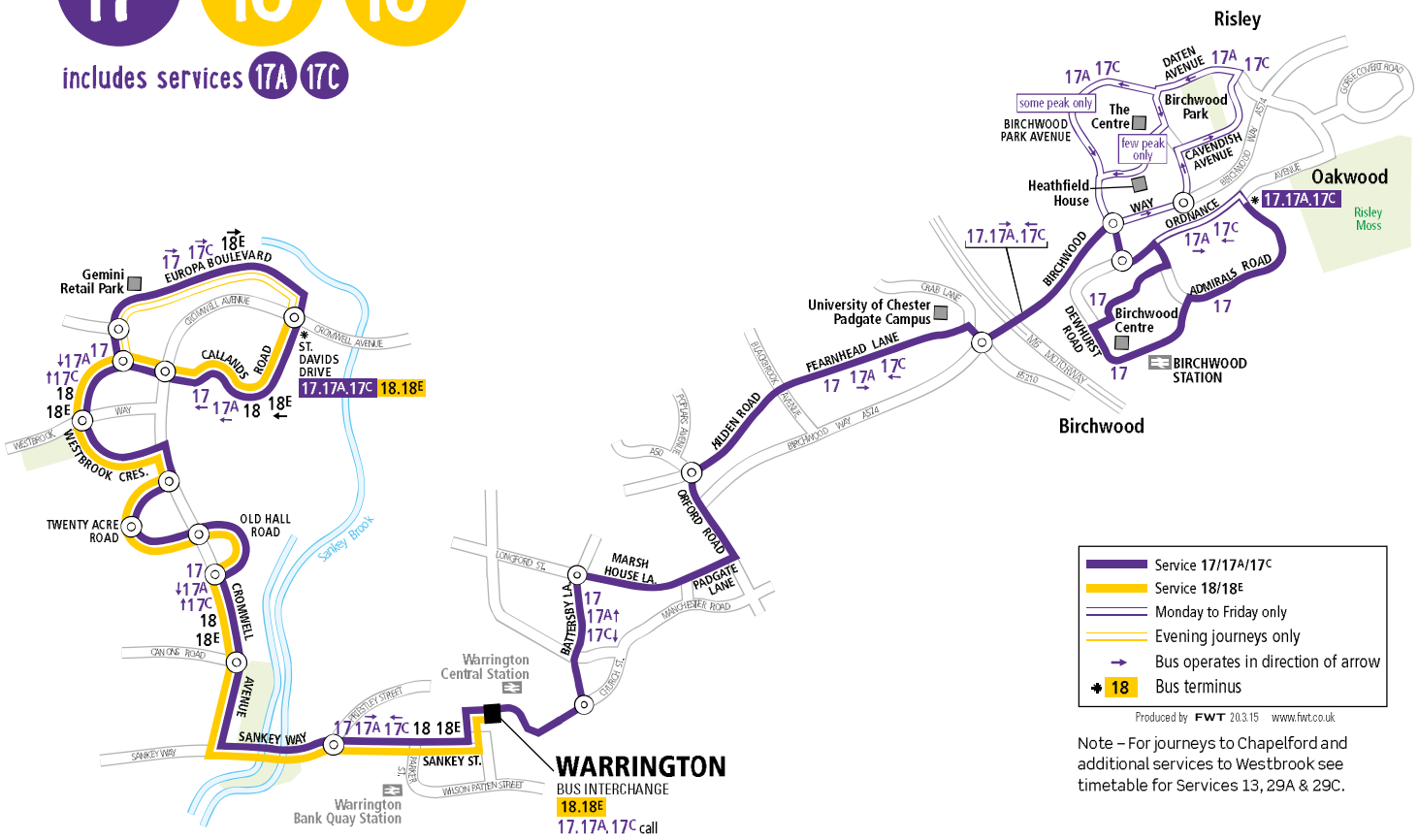
Services		Services	
1, 2		19	
3		20, 21	
4A		22	
5		23, 23A	
6, 6C		25	
8, 9		28, 28A	
10C		29A, 29C	
11A, 12A		31	
13		32A	
14, 15		45, 46	
16, 16A			
17, 17A, 17C		Limited service or occasional journeys	
18			

All services operate to and from Warrington Interchange located at Golden Square Shopping Centre.

Produced by FWT 30.3.15 www.fwt.co.uk

17 18 18E

includes services 17A 17C



- Service 17/17A/17C
- Service 18/18E
- Monday to Friday only
- Evening journeys only
- Bus operates in direction of arrow
- 18 Bus terminus

Produced by FWT 20.3.15 www.fwt.co.uk

Note – For journeys to Chapelford and additional services to Westbrook see timetable for Services 13, 29A & 29C.

WARRINGTON'S LOCAL BUS COMPANY

It's easy to get in touch with us...

W: networkwarrington.co.uk **T:** 01925 634296

Pop in to our **travel centre** at Warrington Interchange

networkwarrington
warrington's local bus company

17 18 18E

includes services 17A 17C

- OAKWOOD
- BIRCHWOOD
- FEARNHEAD
- WARRINGTON
- OLD HALL
- WESTBROOK
- CALLANDS
- GEMINI

Bus times

Map

from 20 April 2015

networkwarrington
warrington's local bus company

Edition 6 – 20.4.15

17 CALLANDS - WARRINGTON - PADGATE - BIRCHWOOD VIA WESTBROOK - HILDEN ROAD

17A CALLANDS - WARRINGTON - PADGATE - BIRCHWOOD PARK - BIRCHWOOD VIA WESTBROOK - HILDEN ROAD

18, 18E CALLANDS - WARRINGTON VIA WESTBROOK - OLD HALL

MONDAY TO FRIDAY [excluding Public Holidays]

R

	17A	18	17A	18	17A	18	17A	18	17A	18	17A	18	17A	18	17	18	17	18	17	18	17	18	17	18
Callands, St David's Drive	-	0610	0621	0636	0649	0704	0717	0730	0743	0758	0813	0830	0845	0900	0913	0928	0943	0953	1008	1023	1038	1053	1108	1123
Westbrook Centre, Asda	-	0615	0627	0642	0655	0710	0723	0736	0750	0805	0820	0837	0852	0906	0919	0934	0949	0959	1014	1029	1044	1059	1114	1129
Old Hall, Ross Close	-	0619	0631	0646	0659	0714	0727	0740	0754	0809	0824	0841	0856	0910	0923	0938	0953	1003	1018	1033	1048	1103	1118	1133
Warrington, Interchange (arr)	-	0628	0643	0658	0713	0728	0743	0758	0813	0828	0843	0858	0910	0922	0933	0948	1003	1013	1028	1043	1058	1113	1128	1143
Warrington, Interchange [12] (dep)	0618	-	0645	-	0718	-	0748	-	0818	-	0848	-	0915	-	0938	-	1008	-	1033	-	1103	-	1133	-
Padgate Stores	0631	-	0658	-	0731	-	0801	-	0831	-	0901	-	0928	-	0951	-	1021	-	1046	-	1116	-	1146	-
Insall Rd, Valiant Cl	0635	-	0702	-	0735	-	0805	-	0835	-	0905	-	0932	-	0955	-	1025	-	1050	-	1120	-	1150	-
Uni of Chester, Fearnhead Ln	0637	-	0704	-	0737	-	0807	-	0837	-	0907	-	0934	-	0957	-	1027	-	1052	-	1122	-	1152	-
Thomson House	0643	-	0710	-	0743	-	0813	-	0843	-	0912	-	0940	-	|	-	|	-	|	-	|	-	|	-
Daten Avenue, Leacroft Road	0646	-	0713	-	0746	-	0816	-	0846	-	0914	-	0943	-	|	-	|	-	|	-	|	-	|	-
Risley, Kelvin Close	0651	-	0718	-	0751	-	0821	-	0851	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-
Heathfield House	|	-	|	-	|	-	|	-	|	-	0917	-	0948	-	|	-	|	-	|	-	|	-	|	-
Birchwood Centre	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1004	-	1034	-	1059	-	1129	-	1159	-
Birchwood, Railway Station	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1005	-	1035	-	1100	-	1130	-	1200	-
Oakwood, Keyes Close	0701	-	0728	-	0801	-	0831	-	0901	-	0927	-	0958	-	1009	-	1039	-	1104	-	1134	-	1204	-

Notes: R Continues to Birchwood Railway Station arrive 1002.

MONDAY TO FRIDAY [excluding Public Holidays]

	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18
Callands, St David's Drive	1138	1153	1208	1223	1238	1253	1308	1323	1338	1353	1408	1423	1438	1453	1508	1526	1546	1601	1616	1631	1646	1701	1716	1731
Westbrook Centre, Asda	1144	1159	1214	1229	1244	1259	1314	1329	1344	1359	1414	1429	1444	1459	1514	1532	1552	1607	1622	1637	1652	1707	1722	1737
Old Hall, Ross Close	1148	1203	1218	1233	1248	1303	1318	1333	1348	1403	1418	1433	1448	1503	1518	1536	1556	1611	1626	1641	1656	1711	1726	1741
Warrington, Interchange (arr)	1158	1213	1228	1243	1258	1313	1328	1343	1358	1413	1428	1443	1458	1513	1528	1546	1608	1623	1638	1653	1708	1723	1738	1753
Warrington, Interchange [12] (dep)	1203	-	1233	-	1303	-	1333	-	1403	-	1433	-	1503	-	1533	-	1613	-	1643	-	1713	-	1743	-
Padgate Stores	1216	-	1246	-	1316	-	1346	-	1416	-	1446	-	1516	-	1546	-	1626	-	1656	-	1726	-	1756	-
Insall Rd, Valiant Cl	1220	-	1250	-	1320	-	1350	-	1420	-	1450	-	1520	-	1551	-	1631	-	1701	-	1731	-	1801	-
Uni of Chester, Fearnhead Ln	1222	-	1252	-	1322	-	1352	-	1422	-	1452	-	1522	-	1554	-	1634	-	1704	-	1734	-	1804	-
Birchwood Centre	1229	-	1259	-	1329	-	1359	-	1429	-	1459	-	1529	-	1605	-	1645	-	1715	-	1745	-	1815	-
Birchwood, Railway Station	1230	-	1300	-	1330	-	1400	-	1430	-	1500	-	1530	-	1607	-	1647	-	1717	-	1747	-	1817	-
Oakwood, Keyes Close	1234	-	1304	-	1334	-	1404	-	1434	-	1504	-	1534	-	1612	-	1652	-	1722	-	1752	-	1822	-

MONDAY TO FRIDAY [excluding Public Holidays]

	17	18	17	18	18	18	18	18E	18E	18E	18E	18E
Callands, St David's Drive	1746	1801	1816	1830	1845	1855	1910	1930	2030	2130	2230	2330
Westbrook Centre, Asda	1752	1807	1822	1836	1851	1900	1916	1935	2035	2135	2235	2335
Old Hall, Ross Close	1756	1811	1826	1840	1854	1904	1919	1939	2039	2139	2239	2339
Garven Place Alighting Only	|	|	|	|	|	|	|	|	|	|	|	2344
Warrington, Interchange (arr)	1808	1823	1838	1852	1903	1911	1928	1946	2046	2146	2246	-
Warrington, Interchange [12] (dep)	1813	-	1843	-	-	-	-	-	-	-	-	-
Padgate Stores	1826	-	1855	-	-	-	-	-	-	-	-	-
Insall Rd, Valiant Cl	1831	-	1859	-	-	-	-	-	-	-	-	-
Uni of Chester, Fearnhead Ln	1834	-	1901	-	-	-	-	-	-	-	-	-
Birchwood Centre	1843	-	1908	-	-	-	-	-	-	-	-	-
Birchwood, Railway Station	1845	-	1909	-	-	-	-	-	-	-	-	-
Oakwood, Keyes Close	1850	-	1913	-	-	-	-	-	-	-	-	-

17 BIRCHWOOD - PADGATE - WARRINGTON - CALLANDS VIA HILDEN ROAD - WESTBROOK - GEMINI

17C BIRCHWOOD - BIRCHWOOD PARK - PADGATE - WARRINGTON - CALLANDS VIA HILDEN ROAD - WESTBROOK - GEMINI

18 WARRINGTON - CALLANDS VIA OLD HALL - WESTBROOK

18E WARRINGTON - CALLANDS VIA OLD HALL - WESTBROOK - GEMINI

MONDAY TO FRIDAY [excluding Public Holidays]

	18	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18
Oakwood, Keyes Close	-	-	-	-	-	-	0703	-	0733	-	0803	-	0837	-	0907	-	0939	-	1009	-	1039	-	1109	-
Birchwood, Railway Station	-	-	-	-	-	-	0708	-	0738	-	0808	-	0842	-	0912	-	0943	-	1013	-	1043	-	1113	-
Birchwood Centre	-	-	-	-	-	-	0710	-	0740	-	0810	-	0844	-	0914	-	0944	-	1014	-	1044	-	1114	-
Uni of Chester, Fearnhead Ln	-	-	-	-	0649	-	0718	-	0748	-	0818	-	0852	-	0921	-	0951	-	1021	-	1051	-	1121	-
Insall Rd, Valiant Cl	-	-	-	-	0652	-	0721	-	0751	-	0821	-	0855	-	0923	-	0953	-	1023	-	1053	-	1123	-
Padgate Stores	-	-	-	-	0700	-	0729	-	0759	-	0829	-	0903	-	0930	-	1000	-	1030	-	1100	-	1130	-
Warrington, Interchange (arr)	-	-	-	-	0713	-	0742	-	0814	-	0844	-	0916	-	0941	-	1011	-	1041	-	1111	-	1141	-
Warrington, Interchange [18] (dep)	0604	0646	0653	0707	0717	0735	0747	0806	0819	0837	0849	0906	0921	0931	0946	1001	1016	1031	1046	1101	1116	1131	1146	1201
Old Hall, Ross Close	0611	0653	0702	0716	0726	0744	0756	0815	0828	0846	0858	0915	0930	0940	0955	1010	1025	1040	1055	1110	1125	1140	1155	1210
Westbrook Centre, Asda	0615	0657	0706	0720	0730	0748	0800	0819	0832	0850	0902	0919	0934	0945	0959	1015	1029	1045	1059	1115	1129	1145	1159	1215
Gemini Retail Park, M & S	|	|	0712	|	0736	|	0806	|	0838	|	0908	|	0938	|	1003	|	1033	|	1103	|	1133	|	1203	|
Callands, St David's Drive	0620	0702	0716	0728	0740	0756	0810	0827	0842	0858	0912	0927	0942	0952	1007	1022	1037	1052	1107	1122	1137	1152	1207	1222

MONDAY TO FRIDAY [excluding Public Holidays]

T

	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17	18	17C	18	17C	18	17C	18
Oakwood, Keyes Close	1139	-	1209	-	1239	-	1309	-	1339	-	1409	-	1439	-	1509	-	1539	-	1558	-	1628	-	1658	-
Birchwood, Railway Station	1143	-	1213	-	1243	-	1313	-	1343	-	1413	-	1443	-	1513	-	1543	-	|	-	|	-	|	-
Birchwood Centre	1144	-	1214	-	1244	-	1314	-	1344	-	1414	-	1444	-	1514	-	1544	-	|	-	|	-	|	-
Thomson House	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1608	-	1638	-	1708	-
Daten Avenue, Leacroft Road	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1611	-	1641	-	1711	-
Heathfield House	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1614	-	|	-	|	-
Risley, Kelvin Close	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	|	-	1644	-	1714	-
Uni of Chester, Fearnhead Ln	1151	-	1221	-	1251	-	1321	-	1351	-	1421	-	1452	-	1522	-	1552	-	1622	-	1652	-	1722	-
Insall Rd, Valiant Cl	1153	-	1223	-	1253	-	1323	-	1353	-	1423	-	1455	-	1525	-	1555	-	1625	-	1655	-	1725	-
Padgate Stores	1200	-	1230	-	1300	-	1330	-	1400	-	1430	-	1503	-	1533	-	1603	-	1633	-	1703	-	1733	-
Warrington, Interchange (arr)	1211	-	1241	-	1311	-	1341	-	1411	-	1441	-	1516	-	1546	-	1616	-	1646	-	1716	-	1746	-
Warrington, Interchange [18] (dep)	1216	1231	1246	1301	1316	1331	1346	1401	1416	1431	1446	1501	1521	1536	1551	1606	1621	1636	1651	1706	1721	1736	1751	1806
Old Hall, Ross Close	1225	1240	1255	1310	1325	1340	1355	1410	1425	1440	1455	1512	1532	1547	1602	1617	1632	1647	1702	1717	1732	1747	1802	1817
Westbrook Centre, Asda	1229	1245	1259	1315	1329	1345	1359	1415	1429	1445	1459	1517	1536	1552	1606	1622	1636	1652	1706	1722	1736	1752	1807	1822
Gemini Retail Park, M & S	1233	|	1303	|	1333	|	1403	|	1433	|	1503	|	1540	|	1610	|	1640	|	1710	|	1740	|	1810	|
Callands, St David's Drive	1237	1252	1307	1322	1337	1352	1407	1422	1437	1452	1507	1524	1544	1559	1614	1629	1644	1659	1714	1729	1744	1759	1814	1828

Notes: T Starts at Birchwood Railway Station at 1554.

MONDAY TO FRIDAY [excluding Public Holidays]

	17C	18	17C	17C	18E	17C	18E	18E	18E	18E
Oakwood, Keyes Close	1728	-	1758	1828	-	1858	-	-	-	-
Thomson House	1738	-	1808	1838	-	1908	-	-	-	-
Daten Avenue, Leacroft Road	1741	-	1811	1840	-	1910	-	-	-	-
Heathfield House	|	-	1814	1843	-	1913	-	-	-	-
Risley, Kelvin Close	1744	-	|	|	-	|	-	-	-	-
Uni of Chester, Fearnhead Ln	1752	-	1822	1848	-	1918	-	-	-	-
Insall Rd, Valiant Cl	1755	-	1825	1850	-	1920	-	-	-	-
Padgate Stores	1803	-	1833	1856	-	1926	-	-	-	-
Warrington, Interchange (arr)	1816	-	1844	1906	-	1936	-	-	-	-
Warrington, Interchange [18] (dep)	1821	1836	1849	-	1911	-	2011	2111	2211	2311
Old Hall, Ross Close	1830	1845	1858	-	1918	-	2018	2118	2218	2318
Westbrook Centre, Asda	1834	1849	1902	-	1922	-	2022	2122	2222	2322
Gemini Retail Park, M & S	1838	|	1906	-	1926	-	2026	2126	2226	2326
Callands, St David's Drive	1842	1854	1909	-	1929	-	2029	2129	2229	2329

17 CALLANDS - WARRINGTON - PADGATE - BIRCHWOOD VIA WESTBROOK - HILDEN ROAD

18, 18E CALLANDS - WARRINGTON VIA WESTBROOK - OLD HALL

SATURDAY

	17	17	17	18	17	18	17		18	17	18	17		18	17	18	17	18	18	18	18	18E	18E
Callands, St David's Drive	-	0718	0738	0753	0808	0823	0838		53	08	23	38		1653	1708	1723	1738	1753	1808	1820	1830	1900	1930	2030
Westbrook Centre, Asda	-	0724	0744	0759	0814	0829	0844		59	14	29	44		1659	1714	1729	1744	1759	1814	1825	1835	1905	1935	2035
Old Hall, Ross Close	-	0728	0748	0803	0818	0833	0848		03	18	33	48		1703	1718	1733	1748	1803	1817	1829	1839	1909	1939	2039
Warrington, Interchange (arr)	-	0737	0758	0813	0828	0843	0858		13	28	43	58		1713	1728	1743	1758	1813	1826	1836	1846	1916	1946	2046
Warrington, Interchange [12] (dep)	0709	0740	0803	-	0833	-	0903		-	33	-	03		-	1733	-	1803	-	-	-	-	-	-	-
Padgate Stores	0721	0752	0816	-	0846	-	0916		-	46	-	16		-	1746	-	1816	-	-	-	-	-	-	-
Insall Rd, Valiant Cl	0724	0755	0820	-	0850	-	0920		-	50	-	20		-	1750	-	1820	-	-	-	-	-	-	-
Uni of Chester, Fearnhead Ln	0726	0757	0822	-	0852	-	0922		-	52	-	22		-	1752	-	1822	-	-	-	-	-	-	-
Birchwood Centre	0731	0802	0829	-	0859	-	0929		-	59	-	29		-	1758	-	1828	-	-	-	-	-	-	-
Birchwood, Railway Station	0732	0803	0830	-	0900	-	0930		-	00	-	30		-	1759	-	1829	-	-	-	-	-	-	-
Oakwood, Keyes Close	0736	0807	0834	-	0904	-	0934		-	04	-	34		-	1803	-	1833	-	-	-	-	-	-	-

and then at these mins

past each hour until

SATURDAY

	18E	18E	18E
Callands, St David's Drive	2130	2230	2330
Westbrook Centre, Asda	2135	2235	2335
Old Hall, Ross Close	2139	2239	2339
Garven Place Alighting Only	|	|	2344
Warrington, Interchange (arr)	2146	2246	-

17 BIRCHWOOD - PADGATE - WARRINGTON - CALLANDS VIA HILDEN ROAD - WESTBROOK - GEMINI

18 WARRINGTON - CALLANDS VIA OLD HALL - WESTBROOK

18E WARRINGTON - CALLANDS VIA OLD HALL - WESTBROOK - GEMINI

SATURDAY

	17	18	17	18	17	18	17	18		17	18	17	18		17	18	17	18	17	17	17	18E	18E	18E
Oakwood, Keyes Close	-	-	-	-	0739	-	0809	-		39	-	09	-		1639	-	1709	-	1739	1805	1835	-	-	-
Birchwood, Railway Station	-	-	-	-	0743	-	0813	-		43	-	13	-		1643	-	1713	-	1743	1809	1839	-	-	-
Birchwood Centre	-	-	-	-	0744	-	0814	-		44	-	14	-		1644	-	1714	-	1744	1810	1840	-	-	-
Uni of Chester, Fearnhead Ln	-	-	0723	-	0751	-	0821	-		51	-	21	-		1651	-	1721	-	1750	1816	1846	-	-	-
Insall Rd, Valiant Cl	-	-	0725	-	0753	-	0823	-		53	-	23	-		1653	-	1723	-	1752	1818	1848	-	-	-
Padgate Stores	-	-	0731	-	0800	-	0830	-		00	-	30	-		1700	-	1730	-	1758	1824	1854	-	-	-
Warrington, Interchange (arr)	-	-	0741	-	0811	-	0841	-		11	-	41	-		1711	-	1741	-	1808	1834	1904	-	-	-
Warrington, Interchange [18] (dep)	0717	0731	0746	0801	0816	0831	0846	0901		16	31	46	01		1716	1731	1746	1801	1811	1841	-	1911	2011	2111
Old Hall, Ross Close	0726	0740	0755	0810	0825	0840	0855	0910		25	40	55	10		1725	1740	1755	1808	1820	1850	-	1918	2018	2118
Westbrook Centre, Asda	0729	0745	0758	0815	0829	0845	0859	0915		29	45	59	15		1729	1745	1759	1812	1823	1853	-	1922	2022	2122
Gemini Retail Park, M & S	0733	|	0802	|	0833	|	0903	|	33	|	03	|		1733	|	1803	|	1827	1857	-	1926	2026	2126
Callands, St David's Drive	0737	0752	0806	0822	0837	0852	0907	0922		37	52	07	22		1737	1752	1807	1818	1830	1900	-	1929	2029	2129

and then at these mins

past each hour until

SATURDAY

	18E	18E
Warrington, Interchange [18] (dep)	2211	2311
Old Hall, Ross Close	2218	2318
Westbrook Centre, Asda	2222	2322
Gemini Retail Park, M & S	2226	2326
Callands, St David's Drive	2229	2329

17 CALLANDS - WARRINGTON VIA WESTBROOK

SUNDAY & PUBLIC HOLIDAYS

Callands, St David's Drive	0923	1018	and then every hour until	1618	1731
Westbrook Centre, Asda	0928	1023		1623	1736
Old Hall, Ross Close	0931	1026		1626	1739
Warrington, Interchange	0941	1036		1636	1748

17 WARRINGTON - CALLANDS VIA WESTBROOK - GEMINI

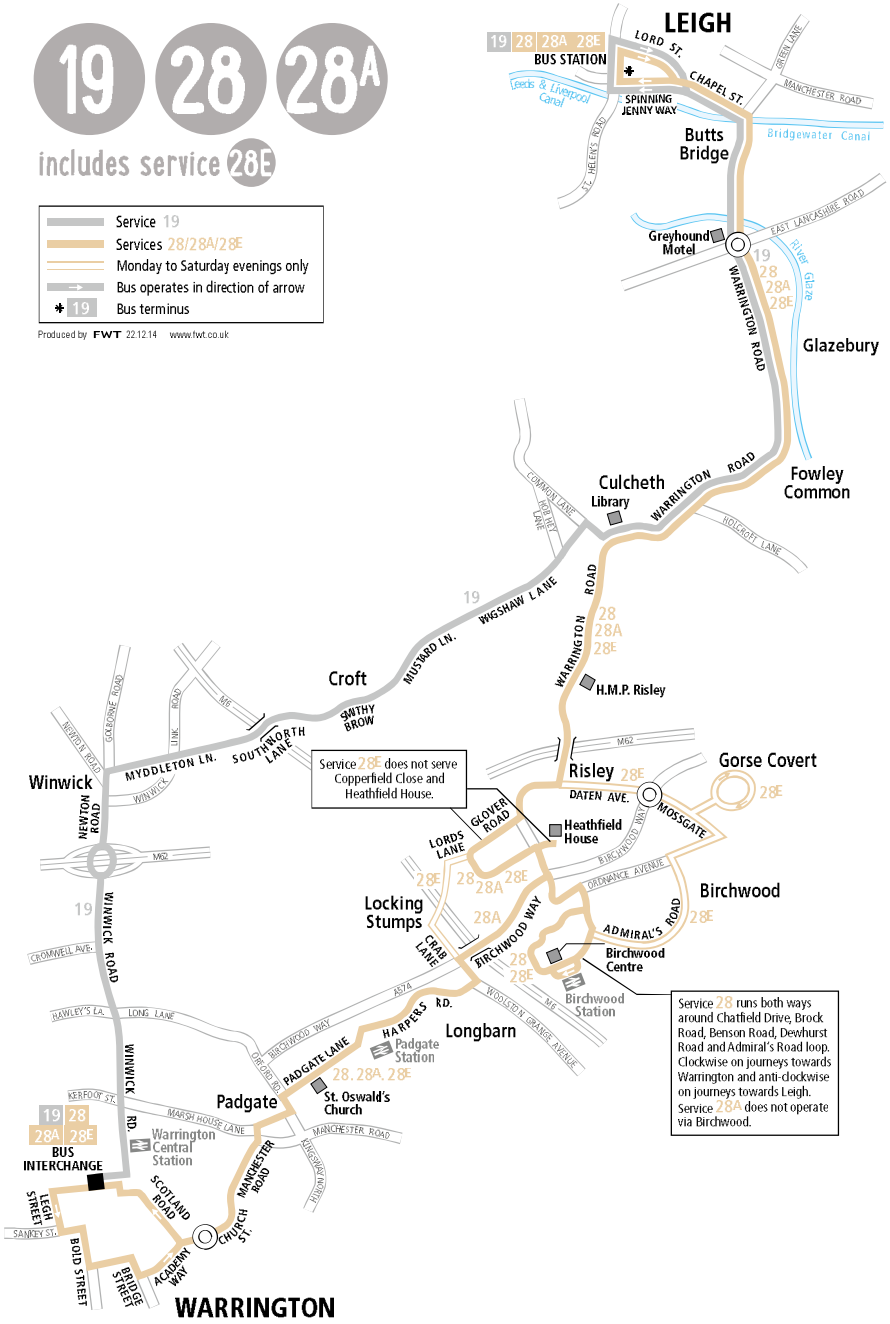
SUNDAY & PUBLIC HOLIDAYS

Warrington, Interchange [18] (dep)	0900	0955	and then every hour until	1555	1710
Old Hall, Ross Close	0909	1004		1604	1719
Westbrook Centre, Asda	0913	1008		1608	1723
Gemini Retail Park, M & S	0917	1012		1612	1727
Callands, St David's Drive	0921	1016		1616	1731

NO SUNDAY SERVICE ON SERVICE 17 BETWEEN WARRINGTON AND OAKWOOD, PLEASE SEE SERVICES 26/27 AND 28A WHICH SERVE PARTS OF THE ROUTE

19 28 28A

includes service 28E



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W: networkwarrington.co.uk **T:** 01925 634296

Pop in to our **travel centre** at Warrington Interchange

networkwarrington
warrington's local bus company

19 28 28A

includes service 28E

- LEIGH
- CULCHETH
- CROFT
- BIRCHWOOD
- LONGBARN
- WARRINGTON

Bus times

Map

from 26 January 2015

networkwarrington
warrington's local bus company

Edition 14 – 26.1.15

19 LEIGH - CULCHETH - WINWICK - WARRINGTON

28 LEIGH - CULCHETH - BIRCHWOOD - PADGATE - WARRINGTON

28A LEIGH - CULCHETH - PADGATE - WARRINGTON

28E LEIGH - WARRINGTON VIA CULCHETH - GORSE COVERT - BIRCHWOOD - PADGATE

MONDAY TO FRIDAY [excluding Public Holidays]

	19	28A	19	28	19	28A	19	28	19	28A	19		28	19		28	19	19	28	19	28A
Leigh, Bus Station [J]	0650	0710	0720	0740	0800	0820	0840	0900	0920	0935	0954		24	54		1424	-	1454	1514	1534	1554
Butts Bridge, Central Avenue	0655	0716	0726	0746	0806	0826	0846	0906	0926	0941	1000		30	00		1430	-	1500	1520	1540	1600
Warrington Rd, Greyhound Hotel	0702	0720	0734	0752	0810	0830	0850	0910	0930	0945	1004		34	04		1434	-	1504	1524	1544	1604
Culcheth, BP Garage	|	|	|	|	|	|	|	|	|	|	|		|	|		|	1509	|	|	|	|
Culcheth, Library (arr)	0708	0727	0741	0759	0817	0837	0857	0917	0937	0952	1011		41	11		1441	1511	1512	1531	1552	1611
Culcheth, Library (dep)	0712	0731	0744	0802	0821	0839	0900	0919	0939	0954	1013		43	13		1443	1515	1516	1533	1556	1613
Risley, H.M. Prison	|	0736	|	0808	|	0843	|	0923	|	0958	|	47	|	1447	|	|	1537	|	1617
Locking Stumps, Copperfield Cl	|	0739	|	0811	|	0846	|	0926	|	1001	|	50	|	1450	|	|	1540	|	1620
Glover Road, Turf & Feather	|	0740	|	0812	|	0847	|	0927	|	1002	|	51	|	1451	|	|	1541	|	1621
Heathfield House	|	0741	|	0813	|	0848	|	0929	|	1004	|	53	|	1453	|	|	1543	|	1623
Gorse Covert, Spar Store	|	|	|	|	|	|	|	|	|	|	|		|	|		|	|	|	|	|	|
Gorse Covert, Ashdown Lane	|	|	|	|	|	|	|	|	|	|	|		|	|		|	|	|	|	|	|
Oakwood, Keyes Close	|	|	|	|	|	|	|	|	|	|	|	and	|	|	mins	|	|	|	|	|	|
Birchwood, Railway Station	|	|	|	0820	|	|	|	0936	|	|	|	then	00	|	past	1500	|	|	1550	|	|
Birchwood Centre	|	|	|	0822	|	|	|	0937	|	|	|	at	01	|	each	1501	|	|	1551	|	|
Glover Road, Turf & Feather	|	|	|	|	|	|	|	|	|	|	|	these	|	|	hour	|	|	|	|	|	|
Crab Lane, Locking Stumps Lane	|	|	|	|	|	|	|	|	|	|	|		|	|	until	|	|	|	|	|	|
Longbarn, Blackburne Close	|	0750	|	0830	|	0857	|	0944	|	1010	|		08	|		1509	|	|	1559	|	1629
Padgate, Railway Station	|	0754	|	0834	|	0901	|	0948	|	1014	|		12	|		1513	|	|	1603	|	1633
Padgate Ln, St Oswald's Church	|	0758	|	0836	|	0905	|	0950	|	1016	|		14	|		1515	|	|	1605	|	1635
Croft, Horseshoe	0718	|	0752	|	0827	|	0907	|	0945	|	1019		|	19		|	1521	1522	|	1602	|
Winwick, Post Office	0724	|	0759	|	0833	|	0913	|	0951	|	1025		|	25		|	1527	1528	|	1608	|
Winwick, B&Q	0728	|	0804	|	0839	|	0917	|	0954	|	1028		|	28		|	1530	1531	|	1611	|
Winwick Road, Collegiate Inst	0734	|	0813	|	0848	|	0923	|	0959	|	1033		|	33		|	1536	1537	|	1617	|
Winwick Road, McDonalds	0737	|	0817	|	0852	|	0927	|	1001	|	1035		|	35		|	1538	1539	|	1619	|
Warrington, Central Station	0741	|	0820	|	0854	|	0929	|	1005	|	1039		|	39		|	1543	1544	|	1624	|
Warrington, Scotland Road	|	0810	|	0846	|	0915	|	1000	|	1026	|		24	|		1526	|	|	1616	|	1646
Warrington, Interchange	0744	0812	0824	0848	0858	0917	0932	1002	1007	1028	1041		26	41		1528	1545	1546	1618	1626	1648

	19	28	19	28A	19	28	19	28	19	28	B 28E	B 19	B 28E	B 28E	B 28E	B 28E
Leigh, Bus Station [J]	1614	1629	1649	1709	1729	1749	1804	1824	1837	-	1900	1930	2000	2100	2200	2300
Butts Bridge, Central Avenue	1620	1635	1655	1715	1735	1755	1810	1829	1843	-	1904	1936	2004	2104	2204	2304
Warrington Rd, Greyhound Hotel	1624	1639	1659	1719	1739	1759	1813	1831	1846	-	1906	1939	2006	2106	2206	2306
Culcheth, Library (arr)	1632	1646	1706	1726	1746	1806	1821	1837	1854	-	1913	1947	2013	2113	2213	2313
Culcheth, Library (dep)	1634	1648	1708	1728	1748	1808	1823	1839	1856	1900	1913	1949	2013	2113	2213	2313
Risley, H.M. Prison	|	1652	|	1732	|	1812	|	1843	|	1904	1917	|	2017	2117	2217	2317
Locking Stumps, Copperfield Cl	|	1655	|	1735	|	1815	|	1846	|	1907	|	|	|	|	|	|
Glover Road, Turf & Feather	|	1656	|	1736	|	1816	|	1847	|	1908	|	|	|	|	|	|
Heathfield House	|	1658	|	1738	|	1818	|	1848	|	1909	|	|	|	|	|	|
Gorse Covert, Spar Store	|	|	|	|	|	|	|	|	|	|	1922	|	2022	2122	2222	2322
Gorse Covert, Ashdown Lane	|	|	|	|	|	|	|	|	|	|	1924	|	2024	2124	2224	2324
Oakwood, Keyes Close	|	|	|	|	|	|	|	|	|	|	1927	|	2027	2127	2227	2327
Birchwood, Railway Station	|	1705	|	|	|	1825	|	1852	|	1913	1931	|	2031	2131	2231	2331
Birchwood Centre	|	1706	|	|	|	1826	|	1854	|	1915	1933	|	2033	2133	2233	2333
Glover Road, Turf & Feather	|	|	|	|	|	|	|	|	|	|	1938	|	2038	2138	2238	2338
Crab Lane, Locking Stumps Lane	|	|	|	|	|	|	|	|	|	|	1941	|	2041	2141	2241	2341
Longbarn, Blackburne Close	|	1715	|	1744	|	1833	|	1859	|	1920	1944	|	2044	2144	2244	2344
Padgate, Railway Station	|	1719	|	1748	|	1837	|	1902	|	1923	1947	|	2047	2147	2247	2347
Padgate Ln, St Oswald's Church	|	1721	|	1750	|	1839	|	1904	|	1925	1949	|	2049	2149	2249	2349
Croft, Horseshoe	1640	|	1713	|	1753	|	1828	|	1901	|	|	1954	|	|	|	|
Winwick, Post Office	1647	|	1720	|	1800	|	1834	|	1907	|	|	2000	|	|	|	|
Winwick, B&Q	1650	|	1723	|	1803	|	1836	|	1909	|	|	2002	|	|	|	|
Winwick Road, Collegiate Inst	1655	|	1729	|	1808	|	1841	|	1914	|	|	2007	|	|	|	|
Winwick Road, McDonalds	1659	|	1731	|	1810	|	1843	|	1916	|	|	2009	|	|	|	|
Warrington, Central Station	1704	|	1736	|	1815	|	1846	|	1919	|	|	2012	|	|	|	|
Warrington, Scotland Road	|	1733	|	1801	|	1849	|	1910	|	1931	1954	|	2054	2154	2254	|
Warrington, Interchange	1706	1735	1738	1803	1817	1851	1848	1912	1921	1933	1956	2014	2056	2156	2256	|
Wilderspool, St James Church	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2354

B departs from Stand B on Leigh Bus Station

19 WARRINGTON – WINWICK – CULCHETH – LEIGH

28 WARRINGTON – PADGATE – BIRCHWOOD – CULCHETH – LEIGH

28A WARRINGTON – PADGATE – CULCHETH – LEIGH

28E WARRINGTON – LEIGH VIA PADGATE – BIRCHWOOD – GORSE COVERT – CULCHETH

MONDAY TO FRIDAY [excluding Public Holidays]

	19	28	19	28A	19	28	19	28	19	28	19	28A	19		28	19		28	19	28	19
Warrington, Interchange [13]	0608	0614	0635	0649	0710	0712	0744	0746	0827	0828	0902	0928	1002		18	02		1318	1402	1408	1436
Warrington, Academy Way	|	0616	|	0651	|	0714	|	0748	|	0830	|	0930	|		20	|		1320	|	1410	|
Warrington, Central Station	0609	|	0636	|	0711	|	0745	|	0828	|	0903	|	1003		|	03		|	1403	|	1437
Winwick Road, McDonalds	0611	|	0638	|	0713	|	0747	|	0831	|	0906	|	1006		|	06		|	1406	|	1440
Winwick Road, Collegiate Inst	0614	|	0641	|	0716	|	0751	|	0833	|	0908	|	1008		|	08		|	1408	|	1442
Winwick, B&Q	0618	|	0645	|	0721	|	0757	|	0839	|	0914	|	1014		|	14		|	1414	|	1448
Winwick, Post Office	0620	|	0647	|	0723	|	0801	|	0841	|	0916	|	1016		|	16		|	1416	|	1450
Croft, Horseshoe	0624	|	0651	|	0728	|	0808	|	0848	|	0923	|	1023		|	23		|	1423	|	1457
Padgate Ln, St Oswald's Church	|	0623	|	0658	|	0723	|	0800	|	0841	|	0941	|		31	|		1331	|	1421	|
Padgate, Railway Station	|	0625	|	0700	|	0725	|	0802	|	0843	|	0943	|		33	|		1333	|	1423	|
Longbarn, Blackburne Close	|	0628	|	0703	|	0728	|	0805	|	0846	|	0946	|	and	36	|	mins	1336	|	1426	|
Crab Lane, Locking Stumps Lane	|	|	|	|	|	|	|	|	|	|	|	|	|	then	|	|	past	|	|	|	|
Glover Road, Turf & Feather	|	|	|	|	|	|	|	|	|	|	|	|	|	at	|	|	each	|	|	|	|
Birchwood Centre	|	0633	|	|	|	0735	|	0814	|	0853	|	|	|	these	43	|	hour	1343	|	1433	|
Birchwood, Railway Station	|	0634	|	|	|	0737	|	0816	|	0855	|	|	|		45	|	until	1345	|	1435	|
Heathfield House	|	0638	|	0707	|	0743	|	0823	|	0900	|	0950	|		50	|		1350	|	1440	|
Oakwood, Keyes Close	|	|	|	|	|	|	|	|	|	|	|	|	|		|	|		|	|	|	|
Gorse Covert, Spar Store	|	|	|	|	|	|	|	|	|	|	|	|	|		|	|		|	|	|	|
Gorse Covert, Ashdown Lane	|	|	|	|	|	|	|	|	|	|	|	|	|		|	|		|	|	|	|
Glover Road, Turf & Feather	|	0639	|	0708	|	0744	|	0824	|	0901	|	0951	|		51	|		1351	|	1441	|
Locking Stumps, Copperfield Cl	|	0640	|	0709	|	0746	|	0826	|	0903	|	0953	|		53	|		1353	|	1443	|
Risley, H.M. Prison	|	0644	|	0714	|	0751	|	0831	|	0906	|	0956	|		56	|		1356	|	1446	|
Culcheth, Library (arr)	0630	0648	0657	0718	0734	0755	0815	0835	0855	0910	0929	1000	1029		00	29		1400	1429	1450	1503
Culcheth, Library (dep)	0631	0650	0700	0720	0737	0757	0817	0837	0857	0912	0932	1002	1032		02	32		1402	1432	1452	1506
Warrington Rd, Greyhound Hotel	0637	0656	0706	0726	0743	0805	0825	0845	0905	0920	0940	1010	1040		10	40		1410	1440	1500	1518
Butts Bridge, Central Avenue	0639	0659	0709	0729	0746	0807	0828	0847	0907	0922	0942	1012	1042		12	42		1412	1442	1502	1520
Leigh, Bus Station	0645	0705	0715	0735	0755	0815	0835	0855	0915	0930	0950	1020	1050		20	50		1420	1450	1510	1530

	28	19	28A	28	19	19	28A	19	28	19	28A	28A	19	28E	28E	@@ 28E	@@ 28E	@@ 28E
Warrington, Interchange [13]	1446	1517	1531	1549	1550	1632	1640	1702	1711	1743	1751	1821	1840	1900	2000	2100	2200	2300
Warrington, Academy Way	1448	|	1533	1551	|	|	1642	|	1713	|	1753	1823	|	1902	2002	|	|	|
Warrington, Central Station	|	1518	|	|	1551	1633	|	1703	|	1744	|	|	1841	|	|	|	|	|
Winwick Road, McDonalds	|	1522	|	|	1555	1637	|	1707	|	1748	|	|	1844	|	|	|	|	|
Winwick Road, Collegiate Inst	|	1524	|	|	1559	1640	|	1713	|	1751	|	|	1846	|	|	|	|	|
Winwick, B&Q	|	1529	|	|	1606	1647	|	1720	|	1757	|	|	1852	|	|	|	|	|
Winwick, Post Office	|	1532	|	|	1609	1650	|	1723	|	1800	|	|	1854	|	|	|	|	|
Croft, Horseshoe	|	1538	|	|	1615	1656	|	1729	|	1806	|	|	1859	|	|	|	|	|
Padgate Ln, St Oswald's Church	1500	|	1545	1604	|	|	1655	|	1726	|	1806	1834	|	1909	2009	2109	2209	2309
Padgate, Railway Station	1502	|	1547	1606	|	|	1657	|	1728	|	1808	1836	|	1911	2011	2111	2211	2311
Longbarn, Blackburne Close	1505	|	1550	1609	|	|	1700	|	1731	|	1811	1839	|	1914	2014	2114	2214	2314
Crab Lane, Locking Stumps Lane	|	|	|	|	|	|	|	|	|	|	|	|	|	1916	2016	2116	2216	2316
Glover Road, Turf & Feather	|	|	|	|	|	|	|	|	|	|	|	|	|	1919	2019	2119	2219	2319
Birchwood Centre	1512	|	|	1617	|	|	|	|	1739	|	|	|	|	1924	2024	2124	2224	2324
Birchwood, Railway Station	1514	|	|	1619	|	|	|	|	1741	|	|	|	|	1926	2026	2126	2226	2326
Heathfield House	1519	|	1554	1625	|	|	1705	|	1747	|	1815	1844	|	|	|	|	|	|
Oakwood, Keyes Close	|	|	|	|	|	|	|	|	|	|	|	|	|	1929	2029	2129	2229	2329
Gorse Covert, Spar Store	|	|	|	|	|	|	|	|	|	|	|	|	|	1932	2032	2132	2232	2332
Gorse Covert, Ashdown Lane	|	|	|	|	|	|	|	|	|	|	|	|	|	1934	2034	2134	2234	2334
Glover Road, Turf & Feather	1520	|	1555	1626	|	|	1706	|	1748	|	1816	1845	|	|	|	|	|	-
Locking Stumps, Copperfield Cl	1522	|	1557	1628	|	|	1708	|	1750	|	1818	1847	|	|	|	|	|	-
Risley, H.M. Prison	1525	|	1600	1636	|	|	1718	|	1756	|	1823	1852	|	1939	2039	2139	2239	-
Culcheth, Library (arr)	1529	1544	1604	1640	1621	1702	1722	1735	1800	1812	1827	1856	1905	1943	2043	2143	2243	-
Culcheth, Library (dep)	1531	1547	1606	1642	1624	1704	1724	1737	1802	1814	1829	-	1906	1943	2043	2143	2243	-
Warrington Rd, Greyhound Hotel	1539	1557	1614	1652	1632	1712	1732	1745	1810	1822	1837	-	1914	1949	2049	2149	2249	-
Butts Bridge, Central Avenue	1541	1559	1616	1654	1634	1714	1734	1747	1812	1824	1839	-	1916	1951	2051	2151	2251	-
Leigh, Bus Station	1549	1609	1626	1704	1644	1724	1744	1755	1820	1832	1847	-	1924	1956	2056	2156	2256	-

@@ Does not stop at Rylands Street and Academy Way.

19 LEIGH - CULCHETH - WINWICK - WARRINGTON

28 LEIGH - CULCHETH - BIRCHWOOD - PADGATE - WARRINGTON

28A LEIGH - CULCHETH - PADGATE - WARRINGTON

28E LEIGH - CULCHETH - GORSE COVERT - BIRCHWOOD - PADGATE - WARRINGTON

SATURDAY

	19	28	19	28	19		28	19		28	19	28	19	28	19	28	28	B 28E	B 28E	B 28E	B 28E	B 28E
Leigh, Bus Station [J]	-	0724	0754	0824	0854		24	54		1524	1554	1630	1700	1730	1800	1830	-	1900	2000	2100	2200	2300
Butts Bridge, Central Avenue	-	0729	0800	0830	0900		30	00		1530	1600	1636	1706	1735	1806	1835	-	1904	2004	2104	2204	2304
Warrington Rd, Greyhound Hotel	-	0733	0804	0834	0904		34	04		1534	1604	1640	1710	1739	1810	1837	-	1906	2006	2106	2206	2306
Culcheth, Library (arr)	-	0740	0811	0841	0911		41	11		1541	1611	1647	1717	1746	1817	1843	-	1913	2013	2113	2213	2313
Culcheth, Library (dep)	0733	0742	0813	0843	0913		43	13		1543	1613	1649	1719	1748	1819	1845	1900	1913	2013	2113	2213	2313
Risley, H.M. Prison	|	0746	|	0847	|		47	|		1547	|	1653	|	1752	|	1849	1904	1917	2017	2117	2217	2317
Locking Stumps, Copperfield Cl	|	0749	|	0850	|		50	|		1550	|	1656	|	1755	|	1852	1907	|	|	|	|	|
Glover Road, Turf & Feather	|	0750	|	0851	|		51	|		1551	|	1657	|	1756	|	1853	1908	|	|	|	|	|
Heathfield House	|	0751	|	0853	|		53	|		1553	|	1659	|	1757	|	1854	1909	|	|	|	|	|
Gorse Covert, Spar Store	|	|	|	|	|		|	|		|	|	|	|	|	|	|	1922	2022	2122	2222	2322
Gorse Covert, Ashdown Lane	|	|	|	|	|		|	|		|	|	|	|	|	|	|	1924	2024	2124	2224	2324
Oakwood, Keyes Close	|	|	|	|	|		|	|		|	|	|	|	|	|	|	1927	2027	2127	2227	2327
Birchwood, Railway Station	|	0757	|	0900	|	and	00	|	mins	1600	|	1706	|	1803	|	1858	1913	1931	2031	2131	2231	2331
Birchwood Centre	|	0758	|	0901	|	then	01	|	past	1601	|	1707	|	1804	|	1900	1915	1933	2033	2133	2233	2333
Glover Road, Turf & Feather	|	|	|	|	|	at	|	|	each	|	|	|	|	|	|	|	|	1938	2038	2138	2238	2338
Crab Lane, Locking Stumps Ln	|	|	|	|	|	these	|	|	hour	|	|	|	|	|	|	|	|	1941	2041	2141	2241	2341
Longbarn, Blackburne Close	|	0805	|	0908	|		08	|	until	1608	|	1714	|	1811	|	1905	1920	1944	2044	2144	2244	2344
Padgate, Railway Station	|	0808	|	0912	|		12	|		1612	|	1718	|	1814	|	1908	1923	1947	2047	2147	2247	2347
Padgate Ln, St Oswald's Church	|	0810	|	0914	|		14	|		1614	|	1720	|	1816	|	1910	1925	1949	2049	2149	2249	2349
Croft, Horseshoe	0738	|	0819	|	0919		|	19		|	1619	|	1725	|	1825	|	|	|	|	|	|	|
Winwick, Post Office	0744	|	0825	|	0925		|	25		|	1625	|	1731	|	1831	|	|	|	|	|	|	|
Winwick, B&Q	0746	|	0828	|	0928		|	28		|	1628	|	1734	|	1834	|	|	|	|	|	|	|
Winwick Road, Collegiate Inst	0750	|	0833	|	0933		|	33		|	1633	|	1739	|	1839	|	|	|	|	|	|	|
Winwick Road, McDonalds	0752	|	0835	|	0935		|	35		|	1635	|	1741	|	1841	|	|	|	|	|	|	|
Warrington, Central Station	0755	|	0839	|	0939		|	39		|	1639	|	1745	|	1845	|	|	|	|	|	|	|
Warrington, Scotland Road	|	0818	|	0924	|		24	|		1624	|	1730	|	1824	|	1916	1931	1954	2054	2154	2254	|
Warrington, Interchange	0757	0820	0841	0926	0941		26	41		1626	1641	1732	1747	1826	1847	1918	1933	1956	2056	2156	2256	|
Wilderspool, St James Church	-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	-	-	-	2354

B departs from Stand B on Leigh Bus Station

19 WARRINGTON - WINWICK - CULCHETH - LEIGH
28 WARRINGTON - PADGATE - BIRCHWOOD - CULCHETH - LEIGH
28A WARRINGTON - PADGATE - CULCHETH - LEIGH
28E WARRINGTON - PADGATE - BIRCHWOOD - GORSE COVERT - CULCHETH - LEIGH

SATURDAY

	28	28	19	28	19		28	19		28	19	28	19	28	19	28	19	28A	28E @@	28E @@	28E @@	28E @@	28E @@
Warrington, Interchange [13]	0629	0655	0706	0723	0802		18	02		1418	1502	1518	1605	1618	1705	1725	1805	1825	1900	2000	2100	2200	2300
Warrington, Academy Way	0631	0657	|	0725	|		20	|		1420	|	1520	|	1620	|	1727	|	1827	1902	2002	|	|	|
Warrington, Central Station	|	|	0707	|	0803		|	03		|	1503	|	1606	|	1706	|	1806	|	|	|	|	|	|
Winwick Road, McDonalds	|	|	0710	|	0806		|	06		|	1506	|	1609	|	1709	|	1809	|	|	|	|	|	|
Winwick Road, Collegiate Inst	|	|	0712	|	0808		|	08		|	1508	|	1611	|	1711	|	1811	|	|	|	|	|	|
Winwick, B&Q	|	|	0718	|	0814		|	14		|	1514	|	1617	|	1717	|	1817	|	|	|	|	|	|
Winwick, Post Office	|	|	0720	|	0816		|	16		|	1516	|	1619	|	1719	|	1819	|	|	|	|	|	|
Croft, Horseshoe	|	|	0725	|	0823		|	23		|	1523	|	1626	|	1726	|	1824	|	|	|	|	|	|
Padgate Ln, St Oswald's Church	0637	0703	|	0735	|		31	|		1431	|	1531	|	1631	|	1737	|	1837	1909	2009	2109	2209	2309
Padgate, Railway Station	0639	0705	|	0737	|		33	|		1433	|	1533	|	1633	|	1739	|	1839	1911	2011	2111	2211	2311
Longbarn, Blackburne Close	0642	0708	|	0740	|		36	|		1436	|	1536	|	1636	|	1742	|	1842	1914	2014	2114	2214	2314
Crab Lane, Locking Stumps Ln	|	|	|	|	|		|	|		|	|	|	|	|	|	|	|	|	1916	2016	2116	2216	2316
Glover Road, Turf & Feather	|	|	|	|	|	and	|	|	mins	|	|	|	|	|	|	|	|	|	1919	2019	2119	2219	2319
Birchwood Centre	0649	0715	|	0747	|	then	43	|	past	1443	|	1543	|	1643	|	1749	|	|	1924	2024	2124	2224	2324
Birchwood, Railway Station	0651	0717	|	0749	|	at	45	|	each	1445	|	1545	|	1645	|	1751	|	|	1926	2026	2126	2226	2326
Oakwood, Keyes Close	|	|	|	|	|	these	|	|	hour	|	|	|	|	|	|	|	|	|	1929	2029	2129	2229	2329
Gorse Covert, Spar Store	|	|	|	|	|		|	|	until	|	|	|	|	|	|	|	|	|	1932	2032	2132	2232	2332
Gorse Covert, Ashdown Lane	|	|	|	|	|		|	|		|	|	|	|	|	|	|	|	|	1934	2034	2134	2234	2334
Heathfield House	0656	0722	|	0754	|		50	|		1450	|	1550	|	1650	|	1756	|	1846	|	|	|	|	-
Glover Road, Turf & Feather	0657	0723	|	0755	|		51	|		1451	|	1551	|	1651	|	1757	|	1847	|	|	|	|	-
Locking Stumps, Copperfield Cl	0659	0725	|	0757	|		53	|		1453	|	1553	|	1653	|	1759	|	1849	|	|	|	|	-
Risley, H.M. Prison	0702	0728	|	0800	|		56	|		1456	|	1556	|	1656	|	1802	|	1852	1939	2039	2139	2239	-
Culcheth, Library (arr)	0704	0730	0731	0803	0829		00	29		1500	1529	1600	1632	1700	1732	1805	1830	1855	1943	2043	2143	2243	-
Culcheth, Library (dep)	0706	-	0732	0805	0832		02	32		1502	1532	1602	1635	1702	1735	1807	1832	-	1943	2043	2143	2243	-
Warrington Rd, Greyhound Hotel	0712	-	0740	0812	0840		10	40		1510	1540	1610	1643	1710	1743	1814	1839	-	1949	2049	2149	2249	-
Butts Bridge, Central Avenue	0714	-	0742	0814	0842		12	42		1512	1542	1612	1645	1712	1745	1816	1841	-	1951	2051	2151	2251	-
Leigh, Bus Station	0720	-	0750	0820	0850		20	50		1520	1550	1620	1653	1720	1753	1822	1847	-	1956	2056	2156	2256	-

@@ Does not stop at Rylands Street and Academy Way.

19 CULCHETH - WINWICK - WARRINGTON
28A LEIGH - CULCHETH - PADGATE - WARRINGTON

SUNDAY & PUBLIC HOLIDAYS

	19	28A		19	28A		19	28A	19	28A
Leigh, Bus Station [B]	-	1000		-	00		-	1700	-	-
Butts Bridge, Central Avenue	-	1006		-	06		-	1706	-	-
Warrington Rd, Greyhound Hotel	-	1008		-	08		-	1708	-	-
Culcheth, Library (arr)	-	1016		-	16		-	1716	-	-
Culcheth, Library (dep)	0930	1018		30	18		1630	1718	1725	1741
Risley, H.M. Prison	|	1023		|	23	|	1723	|	1746
Locking Stumps, Copperfield Cl	|	1026		|	26	|	1726	|	1749
Glover Road, Turf & Feather	|	1027		|	27	|	1727	|	1750
Heathfield House	|	1028	and	|	28	mins	|	1728	|	1751
Longbarn, Blackburne Close	|	1032	then	|	32	past	|	1732	|	1755
Padgate, Railway Station	|	1036	at	|	36	each	|	1736	|	1759
Padgate Ln, St Oswald's Church	|	1038	these	|	38	hour	|	1738	|	1801
Croft, Horseshoe	0936	|		36	|	until	1636	|	1731	|
Winwick, Post Office	0943	|		43	|		1643	|	1738	|
Winwick, B&Q	0946	|		46	|		1646	|	1741	|
Winwick Road, Collegiate Inst	0950	|		50	|		1650	|	1745	|
Winwick Road, McDonalds	0952	|		52	|		1652	|	1747	|
Warrington, Central Station	0956	|		56	|		1656	|	1751	|
Warrington, Scotland Road	|	1045		|	45		|	1745	|	1808
Warrington, Interchange	0958	1047		58	47		1658	1747	1753	1810

19 WARRINGTON - WINWICK - CULCHETH

28A WARRINGTON - PADGATE - CULCHETH - LEIGH

SUNDAY & PUBLIC HOLIDAYS

	19	28A	19		28A	19		28A	19	28A
Warrington, Interchange [13]	0852	0907	0952		07	52		1607	1652	1707
Warrington, Academy Way	|	0909	|		09	|		1609	|	1709
Warrington, Central Station	0853	|	0953		|	53		|	1653	|
Winwick Road, McDonalds	0856	|	0956		|	56		|	1656	|
Winwick Road, Collegiate Inst	0858	|	0958		|	58		|	1658	|
Winwick, B&Q	0902	|	1002		|	02		|	1702	|
Winwick, Post Office	0906	|	1006		|	06		|	1706	|
Croft, Horseshoe	0914	|	1014		|	14		|	1714	|
Padgate Ln, St Oswald's Church	|	0918	|	and	18	|	mins	1618	|	1718
Padgate, Railway Station	|	0920	|	then	20	|	past	1620	|	1720
Longbarn, Blackburne Close	|	0924	|	at	24	|	each	1624	|	1724
Heathfield House	|	0928	|	these	28	|	hour	1628	|	1728
Glover Road, Turf & Feather	|	0929	|		29	|	until	1629	|	1729
Locking Stumps, Copperfield Cl	|	0930	|		30	|		1630	|	1730
Risley, H.M. Prison	|	0933	|		33	|		1633	|	1733
Culcheth, Library (arr)	0922	0938	1022		38	22		1638	1722	1738
Culcheth, Library (dep)	-	0940	-		40	-		1640	-	-
Warrington Rd, Greyhound Hotel	-	0948	-		48	-		1648	-	-
Butts Bridge, Central Avenue	-	0950	-		50	-		1650	-	-
Leigh, Bus Station	-	0956	-		56	-		1656	-	-

20 21

including services 20A 21A & 21E

- Services 20/20A
- Services 21/21A/21E
- early mornings and Sundays only
- Monday to Saturday evenings only
- Bus operates in direction of arrow
- 20.20A Bus terminus

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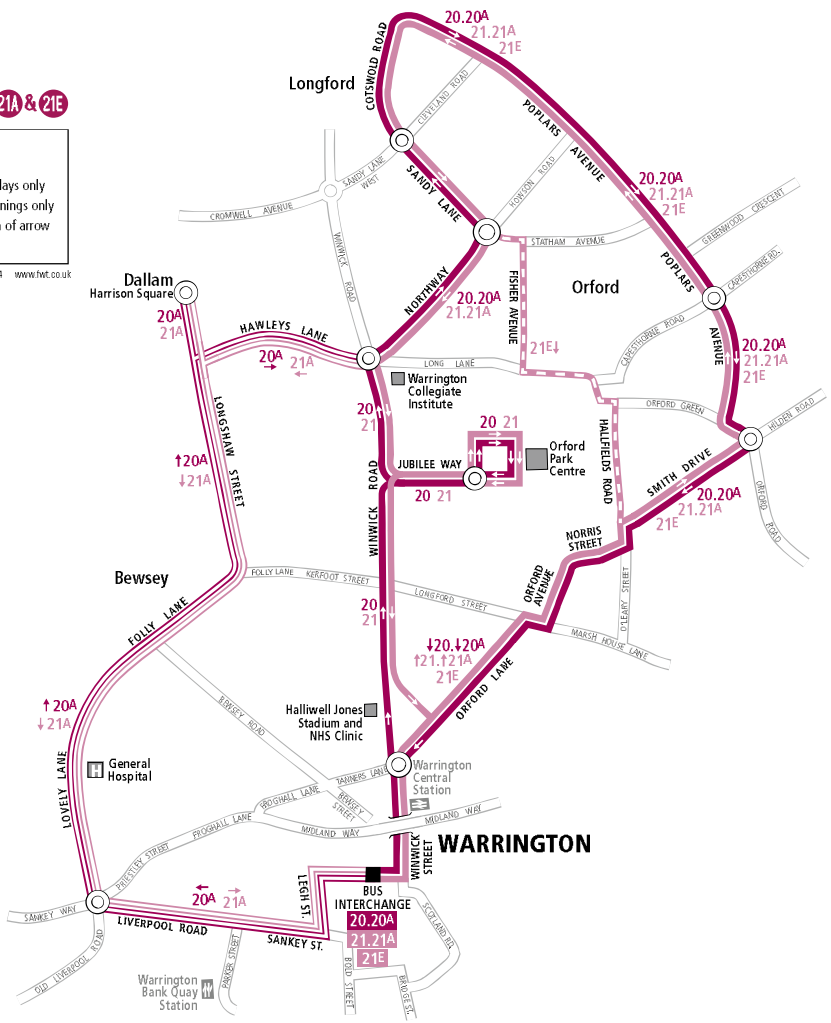

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Pop in to our **travel centre** at Warrington Interchange

networkwarrington
warrington's **local** bus company

20 21

including services 20A 21A & 21E

- LONGFORD
- POPLARS AVENUE
- ORFORD
- WARRINGTON

Bus times

Map

from 26 January 2015

networkwarrington
warrington's **local** bus company

Edition 10 – 26.01.15

20 WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA ORFORD PARK CENTRE
20A WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA WARRINGTON HOSPITAL - DALLAM

MONDAY TO FRIDAY [excluding Public Holidays]

	20A	20A	20	20	20	20	20	20	20	20	20		20	20	20	20	20		20	20	20
Warrington, Interchange [4]	0617	0645	0709	0724	0739	0754	0809	0824	0839	0854	0906		18	30	42	54	06		1418	1430	1442
Warrington, Central Station			0710	0725	0740	0755	0810	0825	0840	0855	0907		19	31	43	55	07		1419	1431	1443
Winwick Road, McDonalds			0712	0727	0742	0757	0812	0827	0842	0857	0909		21	33	45	57	09		1421	1433	1445
Orford Park Centre			0717	0732	0747	0802	0817	0832	0847	0902	0914		26	38	50	02	14		1426	1438	1450
Winwick Road, Collegiate Inst			0719	0734	0749	0804	0819	0834	0849	0904	0916		28	40	52	04	16		1428	1440	1452
General Hospital	0622	0650																			
Folly Lane, Tyrol House	0624	0652																			
Dallam, Harrison Square	0627	0655																			
Longford, Cotswold Road	0633	0701	0725	0740	0755	0810	0825	0840	0855	0910	0922		34	46	58	10	22		1434	1446	1458
Poplars Avenue, Cleveland Road	0635	0703	0727	0742	0757	0812	0827	0842	0857	0912	0924		36	48	00	12	24		1436	1448	1500
Orford Avenue	0641	0709	0734	0749	0804	0819	0834	0849	0904	0919	0931		43	55	07	19	31		1443	1455	1507
Warrington, Central Station	0650	0718	0745	0800	0815	0830	0845	0900	0915	0926	0938		50	02	14	26	38		1450	1502	1516
Warrington, Interchange	0651	0719	0746	0801	0816	0831	0846	0901	0916	0927	0939		51	03	15	27	39		1451	1503	1517

and then at these — minutes past each hour until

	20	20	20	20	20	20	20	20	20	20	20
Warrington, Interchange [4]	1455	1510	1525	40	55	10	25	1740	1755	1815	1845
Warrington, Central Station	1456	1511	1526	41	56	11	26	1741	1756	1816	1846
Winwick Road, McDonalds	1458	1514	1529	44	59	14	29	1744	1759	1818	1848
Orford Park Centre	1503	1520	1535	50	05	20	35	1750	1805	1821	1851
Winwick Road, Collegiate Inst	1505	1522	1537	52	07	22	37	1752	1807	1823	1853
Longford, Cotswold Road	1511	1528	1543	58	13	28	43	1758	1813	1828	1858
Poplars Avenue, Cleveland Road	1513	1530	1545	00	15	30	45	1800	1815	1830	1900
Orford Avenue	1520	1537	1552	07	22	37	52	1807	1822	1836	1906
Warrington, Central Station	1529	1546	1601	16	31	46	01	1816	1829	1841	1911
Warrington, Interchange	1530	1547	1602	17	32	47	02	1817	1830	1842	1912

and then at these — minutes past each hour *until*

20 WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA ORFORD PARK CENTRE
20A WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA WARRINGTON HOSPITAL - DALLAM

SATURDAY

	20A	20	20	20	20	20		20	20	20	20	20		20	20	20	20	20	20
Warrington, Interchange [4]	0645	0730	0800	0824	0848	0906		18	30	42	54	06		1718	1730	1742	1754	1815	1845
Warrington, Central Station		0731	0801	0825	0849	0907		19	31	43	55	07		1719	1731	1743	1755	1816	1846
Winwick Road, McDonalds		0733	0803	0827	0851	0909		21	33	45	57	09		1721	1733	1745	1757	1818	1848
Orford Park Centre		0736	0808	0832	0856	0914		26	38	50	02	14		1726	1738	1750	1802	1821	1851
Winwick Road, Collegiate Inst		0738	0810	0834	0858	0916		28	40	52	04	16		1728	1740	1752	1804	1823	1853
General Hospital	0652																		
Folly Lane, Tyrol House	0654																		
Dallam, Harrison Square	0657																		
Longford, Cotswold Road	0703	0743	0816	0840	0904	0922		34	46	58	10	22		1734	1746	1758	1809	1828	1858
Poplars Avenue, Cleveland Road	0705	0745	0818	0842	0906	0924		36	48	00	12	24		1736	1748	1800	1811	1830	1900
Orford Avenue	0711	0751	0825	0849	0913	0931		43	55	07	19	31		1743	1755	1806	1817	1836	1906
Warrington, Central Station	0716	0756	0832	0856	0920	0938		50	02	14	26	38		1750	1802	1811	1822	1841	1911
Warrington, Interchange	0717	0757	0833	0857	0921	0939		51	03	15	27	39		1751	1803	1812	1823	1842	1912

and then at these — minutes past each hour until

20 WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA ORFORD PARK CENTRE

20A WARRINGTON - LONGFORD/ORFORD (CIRCULAR) VIA WARRINGTON HOSPITAL - DALLAM

SUNDAY & PUBLIC HOLIDAYS

	20A	20		20A	20		20A
Warrington, Interchange [4]	0915	0945		15	45		1715
Warrington, Central Station	|	0946		|	46		|
Winwick Road, McDonalds	|	0948		|	48		|
Orford Park Centre	|	0952		|	52		|
Winwick Road, Collegiate Inst	|	0954		|	54		|
General Hospital	0922	|	and then at these	22	|	minutes past each hour until	1722
Folly Lane, Tyrol House	0924	|		24	|		1724
Dallam, Harrison Square	0927	|		27	|		1727
Longford, Cotswold Road	0933	1000		33	00		1733
Poplars Avenue, Cleveland Road	0935	1002		35	02		1735
Orford Avenue	0942	1009		42	09		1742
Warrington, Central Station	0948	1015		48	15		1748
Warrington, Interchange	0949	1016		49	16		1749

21 WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA ORFORD PARK CENTRE

21A WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA DALLAM - WARRINGTON HOSPITAL

21E WARRINGTON - ORFORD/LONGFORD (CIRCULAR)

MONDAY TO FRIDAY [excluding Public Holidays]

	21A	21A	21A	21A	21	21	21	21	21	21	21	21	21	21		21	21	21	21	21
Warrington, Interchange [3]	0510	0540	0610	0640	0700	0715	0730	0745	0800	0815	0830	0845	0900	0912		24	36	48	00	12
Warrington, Central Station	0511	0541	0611	0641	0701	0716	0731	0746	0801	0816	0831	0846	0901	0913		25	37	49	01	13
Orford Avenue	0516	0546	0616	0646	0707	0722	0737	0752	0807	0822	0837	0852	0907	0919		31	43	55	07	19
Poplars Avenue, Cleveland Road	0523	0553	0623	0653	0714	0729	0744	0759	0814	0829	0844	0859	0914	0926		38	50	02	14	26
Longford, Cotswold Road	0525	0555	0625	0655	0716	0731	0746	0801	0816	0831	0846	0901	0916	0928		40	52	04	16	28
Winwick Road, Collegiate Inst	|	|	|	|	0722	0737	0752	0807	0822	0837	0852	0907	0922	0934	and then at these	46	58	10	22	34
Orford Park Centre	|	|	|	|	0725	0740	0755	0810	0825	0840	0855	0909	0924	0936		48	00	12	24	36
Winwick Road, McDonalds	|	|	|	|	0731	0746	0801	0816	0831	0846	0901	0914	0929	0941		53	05	17	29	41
Warrington, Central Station	|	|	|	|	0734	0749	0804	0819	0834	0849	0904	0917	0932	0944		56	08	20	32	44
Dallam, Harrison Square	0531	0601	0631	0701	|	|	|	|	|	|	|	|	|	|		|	|	|	|	|
Folly Lane, Tyrol House	0532	0602	0632	0702	|	|	|	|	|	|	|	|	|	|		|	|	|	|	|
General Hospital	0534	0604	0634	0704	|	|	|	|	|	|	|	|	|	|		|	|	|	|	|
Warrington, Interchange	0544	0614	0644	0714	0735	0750	0805	0820	0835	0850	0905	0918	0933	0945		57	09	21	33	45

	21	21	21	21	21		21	21	21	21		21	21	21	21	21E	21E	21E	21E	21E
Warrington, Interchange [3]	1424	1436	1448	1500	1515		30	45	00	15		1730	1745	1800	1830	1900	2000	2100	2200	2300
Warrington, Central Station	1425	1437	1449	1501	1516		31	46	01	16		1731	1746	1801	1831	1901	2001	2101	2201	2301
Orford Avenue	1431	1443	1455	1508	1523		38	53	08	23		1738	1753	1808	1838	1906	2006	2106	2206	2306
Poplars Avenue, Cleveland Road	1438	1450	1502	1516	1531		46	01	16	31		1746	1801	1816	1846	1912	2012	2112	2212	2312
Longford, Cotswold Road	1440	1452	1504	1518	1533		48	03	18	33		1748	1803	1818	1848	1913	2013	2113	2213	2313
Winwick Road, Collegiate Inst	1446	1458	1510	1524	1539		54	09	24	39		1754	1809	1824	1854	|	|	|	|	|
Orford Park Centre	1448	1500	1512	1526	1541		56	11	26	41		1756	1811	1826	1856	|	|	|	|	|
Winwick Road, McDonalds	1453	1505	1517	1531	1546		01	16	31	46		1801	1816	1831	1901	|	|	|	|	|
O'Leary Street	|	|	|	|	|		|	|	|		|	|	|	|	1919	2019	2119	2219	2319
Warrington, Central Station	1456	1508	1520	1534	1549		04	19	34	49		1804	1819	1833	1903	1924	2024	2124	2224	2324
Warrington, Interchange	1457	1509	1521	1535	1550		05	20	35	50		1805	1820	1834	1904	1925	2025	2125	2225	2325

21 WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA ORFORD PARK CENTRE
21A WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA DALLAM - WARRINGTON HOSPITAL
21E WARRINGTON - ORFORD/LONGFORD (CIRCULAR)

SATURDAY

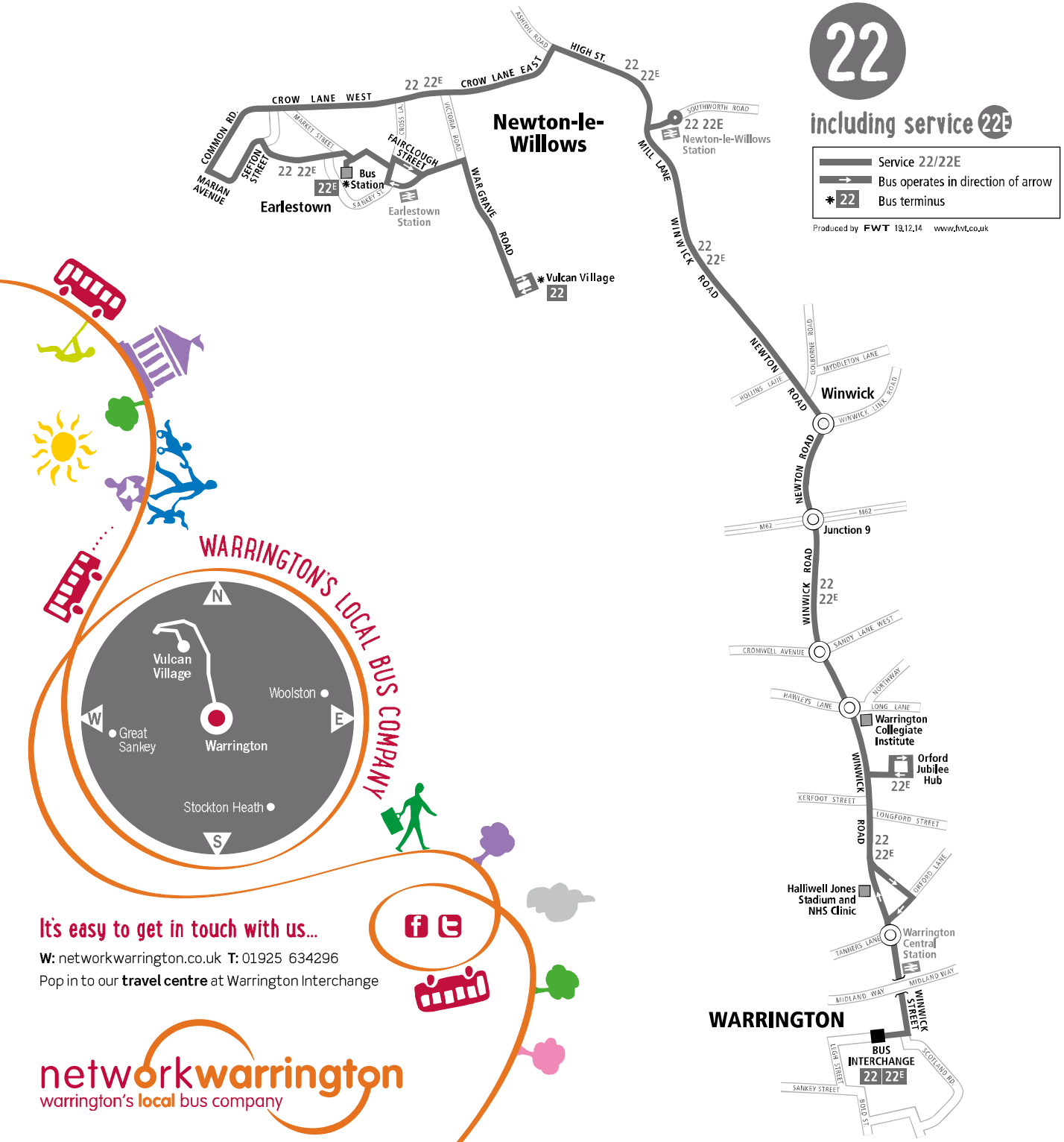
	21A	21	21	21	21	21	21		21	21	21	21	21		21	21	21	21	21	21E	21E
Warrington, Interchange [3]	0613	0715	0745	0812	0836	0900	0912		24	36	48	00	12		1724	1736	1748	1800	1830	1900	2000
Warrington, Central Station	0614	0716	0746	0813	0837	0901	0913		25	37	49	01	13		1725	1737	1749	1801	1831	1901	2001
Orford Avenue	0620	0721	0751	0819	0843	0907	0919		31	43	55	07	19		1731	1743	1755	1806	1836	1906	2006
Poplars Avenue, Cleveland Road	0627	0727	0757	0826	0850	0914	0926		38	50	02	14	26		1738	1750	1802	1812	1842	1912	2012
Longford, Cotswold Road	0629	0729	0759	0828	0852	0916	0928		40	52	04	16	28	min-	1740	1752	1804	1814	1844	1913	2013
Winwick Road, Collegiate Inst	|	0734	0804	0834	0858	0922	0934	and	46	58	10	22	34	utes	1746	1758	1809	1819	1849	|	|
Orford Park Centre	|	0736	0806	0836	0900	0924	0936	then	48	00	12	24	36	past	1748	1800	1811	1821	1851	|	|
Winwick Road, McDonalds	|	0739	0811	0841	0905	0929	0941	at	53	05	17	29	41	each	1753	1803	1814	1824	1854	|	|
O'Leary Street	|	|	|	|	|	|	|	these	|	|	|	|	|	hour	|	|	|	|	1919	2019
Warrington, Central Station	|	0741	0814	0844	0908	0932	0944		56	08	20	32	44	until	1756	1805	1816	1826	1856	1924	2024
Dallam, Harrison Square	0635	|	|	|	|	|	|		|	|	|	|	|		|	|	|	|	|	|
Folly Lane, Tyrol House	0636	|	|	|	|	|	|		|	|	|	|	|		|	|	|	|	|	|
General Hospital	0638	|	|	|	|	|	|		|	|	|	|	|		|	|	|	|	|	|
Warrington, Interchange	0647	0742	0815	0845	0909	0933	0945		57	09	21	33	45		1757	1806	1817	1827	1857	1925	2025

	21E	21E	21E
Warrington, Interchange [3]	2100	2200	2300
Warrington, Central Station	2101	2201	2301
Orford Avenue	2106	2206	2306
Poplars Avenue, Cleveland Road	2112	2212	2312
Longford, Cotswold Road	2113	2213	2313
O'Leary Street	2119	2219	2319
Warrington, Central Station	2124	2224	2324
Warrington, Interchange	2125	2225	2325

21 WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA ORFORD PARK CENTRE
21A WARRINGTON - ORFORD/LONGFORD (CIRCULAR) VIA DALLAM - WARRINGTON HOSPITAL

SUNDAY & PUBLIC HOLIDAYS

	21A	21		21A	21		21A	21
Warrington, Interchange [3]	0900	0930		00	30		1700	1730
Warrington, Central Station	0901	0931		01	31		1701	1731
Orford Avenue	0907	0937		07	37		1707	1737
Poplars Avenue, Cleveland Road	0914	0944		14	44		1714	1744
Longford, Cotswold Road	0916	0946		16	46	min-	1716	1746
Winwick Road, Collegiate Inst	|	0952	and	|	52	utes	|	1752
Orford Park Centre	|	0954	then	|	54	past	|	1754
Winwick Road, McDonalds	|	0958	at	|	58	each	|	1758
Warrington, Central Station	|	1000	these	|	00	hour	|	1800
Dallam, Harrison Square	0922	|		22	|	until	1722	|
Folly Lane, Tyrol House	0925	|		25	|		1725	|
General Hospital	0927	|		27	|		1727	|
Warrington, Interchange	0934	1001		34	01		1734	1801



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22
including service 22E

- VULCAN VILLAGE
- EARLESTOWN
- NEWTON-LE-WILLOWS
- WARRINGTON

Bus times

Map

from 26 January 2015

networkwarrington
warrington's local bus company

Edition 9 – 26.01.15

22E EARLESTOWN - WARRINGTON VIA NEWTON-LE-WILLOWS - WINWICK
22 VULCAN - WARRINGTON VIA EARLESTOWN - NEWTON-LE-WILLOWS - WINWICK

MONDAY TO FRIDAY [excluding Public Holidays]

	22	22	22	22	22	22	22	22	22	22	22	22	22E	22E	22E	22E	22E
Vulcan, Manchester Row	-	-	0930	1032	1132	1232	1332	1434	1542	1653	1806	1838	-	-	-	-	-
Wargrave, School	-	-	0931	1033	1133	1233	1333	1435	1543	1654	1807	1839	-	-	-	-	-
Earlestown, Bus Stn (Stand 2) [2]	0710	0807	0938	1040	1140	1240	1340	1442	1550	1701	1812	1844	1855	1938	2038	2138	2238
Sefton Street, Valentine Road	0714	0812	0942	1044	1144	1244	1344	1446	1554	1705	1816	1847	1857	1940	2040	2140	2240
Crow Lane West, Vista Road	0717	0816	0945	1047	1147	1247	1347	1449	1557	1708	1819	1850	1900	1943	2043	2143	2243
Newton-le-Willows, Railway Stn [C]	0726	0826	0955	1055	1155	1255	1355	1457	1606	1718	1826	1857	1906	1949	2049	2148	2248
Newton, Old Colliery Entrance	0728	0828	0957	1057	1157	1257	1357	1459	1608	1721	1828	1859	1908	1951	2051	2150	2250
Winwick, Church	0731	0833	1000	1100	1200	1300	1400	1502	1612	1726	1831	1901	1910	1953	2053	2152	2252
Winwick, B&Q	0734	0837	1002	1102	1202	1302	1402	1504	1615	1729	1833	1903	1912	1955	2055	2154	2254
Winwick Road, Collegiate Inst	0740	0847	1007	1107	1207	1307	1407	1509	1621	1735	1837	1907	1916	1959	2059	2158	2258
Orford Park Centre	|	|	|	|	|	|	|	|	|	|	|	|	1917	2000	2100	2159	2259
Winwick Road, McDonalds	0742	0850	1009	1109	1209	1309	1409	1511	1623	1737	1839	1909	1919	2002	2102	2201	2301
Warrington, Central Station	0747	0855	1013	1113	1213	1313	1413	1516	1628	1742	1842	1912	1922	2005	2105	2204	2304
Warrington, Interchange	0749	0857	1015	1115	1215	1315	1415	1518	1630	1744	1844	1914	1923	2006	2106	2205	2305

22 WARRINGTON - VULCAN VIA WINWICK - NEWTON-LE-WILLOWS - EARLESTOWN
22E WARRINGTON - EARLESTOWN VIA WINWICK - NEWTON-LE-WILLOWS

MONDAY TO FRIDAY [excluding Public Holidays]

NE

	22	22	22	22	22	22	22	22	22	22	22	22	22E	22E	22E	22E	22E
Warrington, Interchange [5]	0725	0843	0948	1048	1148	1248	1348	1448	1600	1710	1750	1820	1910	2010	2110	2210	2310
Warrington, Central Station	0726	0844	0949	1049	1149	1249	1349	1449	1601	1711	1751	1821	1911	2011	2111	2211	2311
Winwick Road, McDonalds	0729	0847	0952	1052	1152	1252	1352	1453	1605	1715	1755	1824	1914	2014	2114	2214	2314
Orford Park Centre	|	|	|	|	|	|	|	|	|	|	|	|	1916	2016	2116	2216	2316
Winwick Road, Collegiate Inst	0731	0849	0954	1054	1154	1254	1354	1455	1607	1721	1757	1826	1917	2017	2117	2217	2317
Winwick, B&Q	0737	0855	1000	1100	1200	1300	1400	1502	1614	1728	1803	1832	1921	2021	2121	2221	2321
Winwick, Church	0740	0858	1002	1102	1202	1302	1402	1505	1617	1730	1805	1834	1922	2022	2122	2222	2322
Newton, Old Colliery Entrance	0742	0900	1004	1104	1204	1304	1404	1507	1619	1732	1807	1836	1924	2024	2124	2224	2324
Newton-le-Willows, Railway Stn [D]	0746	0904	1007	1107	1207	1307	1407	1511	1623	1737	1812	1838	1926	2026	2126	2226	2326
Crow Lane West, Vista Road	0753	0911	1014	1114	1214	1314	1415	1520	1631	1745	1820	1845	1932	2032	2132	2232	-
Sefton Street, Valentine Road	0757	0914	1017	1117	1217	1317	1418	1523	1635	1749	1823	1847	1934	2034	2134	2234	-
Earlestown, Bus Stn (Stand 2) [2]	0803	|	|	|	|	|	|	|	|	|	|	1850	1937	2037	2137	2237	-
Earlestown, Bus Stn (Stand 1) [1]	-	0920	1022	1122	1222	1322	1424	1529	1641	1755	1828	-	-	-	-	-	-
Wargrave, School	-	0924	1026	1126	1226	1326	1428	1535	1645	1759	1832	-	-	-	-	-	-
Vulcan, Manchester Row	-	0927	1029	1129	1229	1329	1431	1538	1649	1803	1835	-	-	-	-	-	-

22E EARLESTOWN - WARRINGTON VIA NEWTON-LE-WILLOWS - WINWICK
22 VULCAN - WARRINGTON VIA EARLESTOWN - NEWTON-LE-WILLOWS - WINWICK

SATURDAY

	22	22	22	22	22	22	22	22	22	22	22	22E	22E	22E	22E	22E
Vulcan, Manchester Row	-	0928	1028	1132	1232	1332	1432	1535	1647	1759	1832	-	-	-	-	-
Wargrave, School	-	0929	1029	1133	1233	1333	1433	1536	1648	1800	1833	-	-	-	-	-
Earlestown, Bus Stn (Stand 2) [2]	0818	0936	1036	1140	1240	1340	1440	1543	1655	1806	1838	1903	1938	2038	2138	2238
Sefton Street, Valentine Road	0821	0940	1040	1144	1244	1344	1444	1547	1659	1808	1840	1905	1940	2040	2140	2240
Crow Lane West, Vista Road	0824	0944	1044	1147	1247	1347	1447	1550	1702	1811	1843	1908	1943	2043	2143	2243
Newton-le-Willows, Railway Stn [C]	0831	0953	1053	1155	1255	1355	1455	1558	1710	1818	1849	1914	1949	2049	2148	2248
Newton, Old Colliery Entrance	0833	0955	1055	1157	1257	1357	1457	1600	1712	1820	1851	1916	1951	2051	2150	2250
Winwick, Church	0835	0958	1058	1200	1300	1400	1500	1603	1715	1822	1853	1918	1953	2053	2152	2252
Winwick, B&Q	0836	1000	1100	1202	1302	1402	1502	1605	1717	1824	1855	1920	1955	2055	2154	2254
Winwick Road, Collegiate Inst	0841	1006	1106	1207	1307	1407	1507	1610	1722	1829	1900	1924	1959	2059	2158	2258
Orford Park Centre	|	|	|	|	|	|	|	|	|	|	|	1925	|	|	|	|
Winwick Road, McDonalds	0843	1008	1108	1209	1309	1409	1509	1612	1724	1831	1902	1927	2001	2101	2200	2300
Warrington, Central Station	0846	1013	1113	1213	1313	1413	1513	1616	1728	1834	1905	1930	2004	2104	2203	2303
Warrington, Interchange	0848	1015	1115	1215	1315	1415	1515	1618	1730	1836	1906	1931	2005	2105	2204	2304

22 WARRINGTON – VULCAN VIA WINWICK – NEWTON-LE-WILLOWS – EARLESTOWN

22E WARRINGTON – EARLESTOWN VIA WINWICK – NEWTON-LE-WILLOWS

SATURDAY

																	NE
	22	22	22	22	22	22	22	22	22	22	22	22	22E	22E	22E	22E	22E
Warrington, Interchange [5]	0743	0846	0946	1048	1148	1248	1348	1448	1600	1712	1748	1830	1910	2010	2110	2210	2310
Warrington, Central Station	0744	0847	0947	1049	1149	1249	1349	1449	1601	1713	1749	1831	1911	2011	2111	2211	2311
Winwick Road, McDonalds	0746	0849	0949	1052	1152	1252	1352	1452	1604	1716	1752	1834	1914	2014	2114	2214	2314
Orford Park Centre	|	|	|	|	|	|	|	|	|	|	|	|	1916	|	|	|	|
Winwick Road, Collegiate Inst	0748	0851	0951	1054	1154	1254	1354	1455	1607	1719	1754	1836	1917	2016	2116	2216	2316
Winwick, B&Q	0753	0856	0956	1100	1200	1300	1400	1501	1613	1725	1800	1842	1921	2020	2120	2220	2320
Winwick, Church	0755	0858	0958	1102	1202	1302	1402	1503	1615	1727	1802	1844	1922	2021	2121	2221	2321
Newton, Old Colliery Entrance	0757	0900	1000	1104	1204	1304	1404	1505	1617	1729	1804	1846	1924	2023	2123	2223	2323
Newton-le-Willows, Railway Stn [D]	0800	0903	1003	1107	1207	1307	1407	1508	1620	1732	1807	1848	1926	2025	2125	2225	2325
Crow Lane West, Vista Road	0806	0909	1009	1114	1214	1314	1414	1515	1627	1739	1814	1854	1932	2031	2131	2231	-
Sefton Street, Valentine Road	0809	0912	1012	1117	1217	1317	1417	1518	1630	1742	1817	1857	1934	2033	2133	2233	-
Earlestown, Bus Stn (Stand 2)	0814	|	|	|	|	|	|	|	|	|	|	1900	1937	2036	2136	2236	-
Earlestown, Bus Stn (Stand 1) [1]	-	0917	1017	1122	1222	1322	1422	1524	1636	1748	1822	-	-	-	-	-	-
Wargrave, School	-	0921	1021	1126	1226	1326	1426	1528	1640	1752	1826	-	-	-	-	-	-
Vulcan, Manchester Row	-	0924	1024	1129	1229	1329	1429	1531	1643	1755	1829	-	-	-	-	-	-

NE **Runs from Newton to Earlestown on request only**

22 EARLESTOWN – WARRINGTON VIA NEWTON & WINWICK

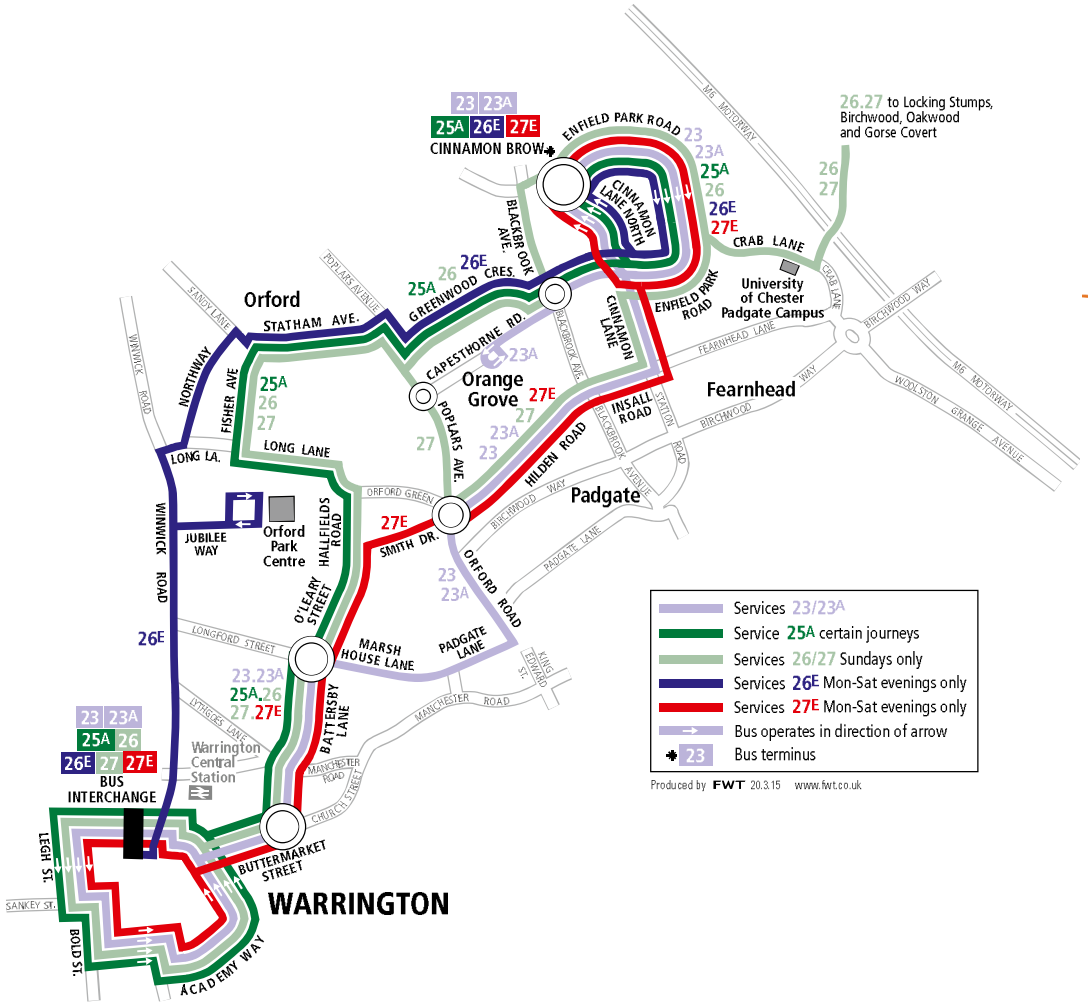
SUNDAY & PUBLIC HOLIDAYS

Earlestown, Bus Stn (Stand 2) [2]	0911	0951		1751
Sefton Street, Valentine Road	0914	0954		1754
Crow Lane West, Vista Road	0917	0957		1757
Newton-le-Willows, Railway Stn [C]	0924	1004	and	1804
Newton, Old Colliery Entrance	0926	1006	then	1806
Winwick, Church	0928	1008	every	1808
Winwick, B&Q	0930	1010	hour	1810
Winwick Road, Collegiate Inst	0934	1014	until	1814
Winwick Road, McDonalds	0936	1016		1816
Warrington, Central Station	0940	1020		1820
Warrington, Interchange	0942	1022		1822

22 WARRINGTON – EARLESTOWN VIA WINWICK & NEWTON

SUNDAY & PUBLIC HOLIDAYS

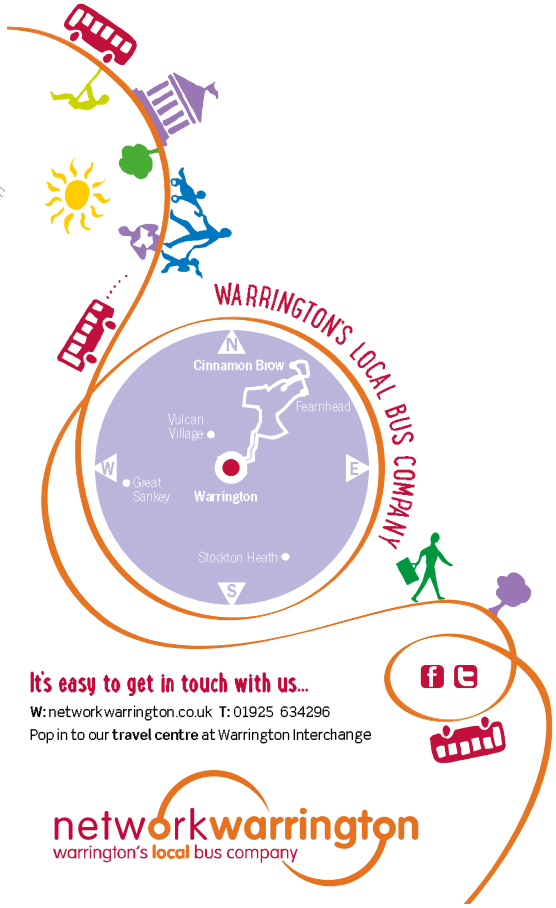
Warrington, Interchange [5]	0840	0920		1720
Warrington, Central Station	0841	0921		1721
Winwick Road, McDonalds	0844	0924		1724
Winwick Road, Collegiate Inst	0846	0926	and	1726
Winwick, B&Q	0850	0930	then	1730
Winwick, Church	0852	0932	every	1732
Newton, Old Colliery Entrance	0854	0934	hour	1734
Newton-le-Willows, Railway Stn [D]	0856	0936	until	1736
Crow Lane West, Vista Road	0902	0942		1742
Sefton Street, Valentine Road	0904	0944		1744
Earlestown, Bus Stn (Stand 2) [2]	0909	0949		1749



23 23A 25A

includes services 26 26E 27 27E

Note – see Service 17 timetable for services from Cinnamon Brow to Birchwood.



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warrington's local bus company

23 23A 25A

includes services 26 26E 27 27E

- ORANGE GROVE
- CINNAMON BROW
- ORFORD
- PADGATE
- WARRINGTON

Bus times

Map

from 20 April 2015

networkwarrington
warrington's local bus company

Edition 12 – 20.4.15

23 CINNAMON BROW - WARRINGTON VIA PADGATE
23A ORANGE GROVE - CINNAMON BROW - WARRINGTON VIA PADGATE

MONDAY TO FRIDAY [excluding Public Holidays]

	23	23	23	23	23A	23		23A	23		23A	23	23A	23	23	23	23	23	23
Orange Grove, Avery Close	-	-	-	-	0932	-		28	-		1428	-	1530	-	-	-	-	-	-
Cinnamon Lane North	0715	0749	0826	0859	0935	0958		31	01		1431	1501	1533	1603	1633	1708	1738	1808	1831
Cinnamon Brow, Millhouse Rdbt	0716	0750	0827	0900	0936	0959	and	32	02	mins	1432	1502	1534	1604	1634	1709	1739	1809	1832
Enfield Park Rd, Stirrup Cl	0718	0752	0829	0902	0938	1001	then	34	04	past	1434	1504	1536	1606	1636	1711	1741	1811	1834
Insall Road, Valiant Close	0721	0755	0832	0905	0941	1004	at	37	07	each	1437	1507	1539	1609	1639	1714	1744	1814	1837
Padgate Stores	0727	0801	0838	0911	0948	1011	these	43	13	hour	1443	1513	1545	1615	1645	1720	1750	1820	1843
Warrington, Interchange	0738	0816	0853	0922	1001	1024		54	24	until	1454	1526	1558	1628	1658	1733	1803	1833	1854

23 WARRINGTON - CINNAMON BROW VIA PADGATE
23A WARRINGTON - CINNAMON BROW VIA PADGATE - ORANGE GROVE

MONDAY TO FRIDAY [excluding Public Holidays]

	23	23	23	23	23A	23	23A		23	23A		23	23A	23	23	23	23	23	23
Warrington, Interchange [13]	0655	0728	0805	0838	0910	0937	1006		40	06		1440	1506	1540	1610	1645	1715	1745	1810
Padgate Stores	0706	0740	0817	0850	0922	0949	1018		52	18		1452	1520	1554	1624	1659	1729	1759	1822
Insall Road, Valiant Close	0712	0746	0823	0856	0928	0955	1024	and	58	24	mins	1458	1526	1600	1630	1705	1735	1805	1828
Orange Grove, Avery Close	|	|	|	|	0932	|	1028	then	|	28	past	|	1530	|	|	|	|	|	|
Cinnamon Lane North	0715	0749	0826	0859	0935	0958	1031	at	01	31	each	1501	1533	1603	1633	1708	1738	1808	1831
Cinnamon Brow, Millhouse Rdbt	0716	0750	0827	0900	0936	0959	1032	every	02	32	hour	1502	1534	1604	1634	1709	1739	1809	1832
Enfield Park Rd, Stirrup Cl	0718	0752	0829	0902	0938	1001	1034		04	34	until	1504	1536	1606	1636	1711	1741	1811	1834

23 CINNAMON BROW - WARRINGTON
23A ORANGE GROVE - CINNAMON BROW - WARRINGTON VIA PADGATE

SATURDAY

	23	23	23	23A		23	23A		23	23A	23	23	23	23	23	23
Orange Grove, Avery Close	-	-	-	0928		-	28		-	1528	-	-	-	-	-	-
Cinnamon Lane North	0802	0831	0901	0931		01	31		1501	1531	1557	1627	1657	1727	1756	1824
Cinnamon Brow, Millhouse Rdbt	0803	0832	0902	0932	and	02	32	mins	1502	1532	1558	1628	1658	1728	1757	1825
Enfield Park Rd, Stirrup Cl	0805	0834	0904	0934	then	04	34	past	1504	1534	1600	1630	1700	1730	1759	1827
Insall Road, Valiant Close	0808	0837	0907	0937	at	07	37	each	1507	1537	1603	1633	1703	1733	1802	1830
Padgate Stores	0813	0843	0913	0943	every	13	43	hour	1513	1543	1609	1639	1709	1739	1807	1835
Warrington, Interchange	0824	0854	0924	0954		24	54	until	1524	1554	1620	1650	1720	1750	1817	1845

23 WARRINGTON - CINNAMON BROW VIA PADGATE
23A WARRINGTON - CINNAMON BROW VIA PADGATE - ORANGE GROVE

SATURDAY

	23	23	23	23A		23	23A		23	23A	23	23	23	23	23	23
Warrington, Interchange [13]	0743	0810	0840	0906		40	06		1440	1506	1536	1606	1636	1706	1735	1805
Padgate Stores	0754	0822	0852	0918		52	18		1452	1518	1548	1618	1648	1718	1747	1816
Insall Road, Valiant Close	0759	0828	0858	0924	and	58	24	mins	1458	1524	1554	1624	1654	1724	1753	1821
Orange Grove, Avery Close	|	|	|	0928	then	|	28	past	|	1528	|	|	|	|	|	|
Cinnamon Lane North	0802	0831	0901	0931	at	01	31	each	1501	1531	1557	1627	1657	1727	1756	1824
Cinnamon Brow, Millhouse Rdbt	0803	0832	0902	0932	these	02	32	hour	1502	1532	1558	1628	1658	1728	1757	1825
Enfield Park Rd, Stirrup Cl	0805	0834	0904	0934		04	34	until	1504	1534	1600	1630	1700	1730	1759	1827

26E CINNAMON BROW - WARRINGTON VIA WINWICK ROAD
27E CINNAMON BROW - WARRINGTON VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

	27E	27E	26E	27E	26E	27E	26E	27E	26E
Cinnamon Brow, Millhouse Rdbt	1911	1941	2010	2041	2110	2143	2213	2243	2313
Enfield Park Rd, Stirrup Cl	1913	1943	2012	2043	2112	2145	2215	2245	2315
Insall Road, Valiant Close	1915	1945	|	2045	|	2147	|	2247	|
Greenwood Crescent, Merrick Cl	|	|	2013	|	2113	|	2216	|	2316
Statham Avenue, Kirkstone Av	|	|	2016	|	2116	|	2219	|	2319
Winwick Road, Collegiate Inst	|	|	2018	|	2118	|	2221	|	2321
Orford Park Centre	|	|	2019	|	2119	|	2222	|	2322
O'Leary Street	1919	1949	|	2049	|	2151	|	2251	-
Warrington, Interchange	1926	1956	2027	2056	2127	2156	2228	2256	-

26E WARRINGTON - CINNAMON BROW VIA WINWICK ROAD
27E WARRINGTON - CINNAMON BROW VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

					@@		@@		@@
	27E	26E	27E	26E	27E	26E	27E	26E	27E
Warrington, Interchange	1854	1923	1954	2023	2054	2127	2159	2227	2259
Orford Park Centre	|	1929	|	2029	|	2133	|	2233	|
Winwick Road, Collegiate Inst	|	1930	|	2030	|	2134	|	2234	|
O'Leary Street	1901	|	2001	|	2101	|	2206	|	2306
Insall Rd, Valiant Cl	1906	|	2006	|	2106	|	2210	|	2310
Statham Avenue, Kirkstone Av	|	1933	|	2033	|	2136	|	2236	|
Greenwood Crescent, Merrick Cl	|	1937	|	2038	|	2140	|	2240	|
Cinnamon Brow, Millhouse Rdbt	1911	1941	2010	2041	2110	2143	2213	2243	2313

@@ Does NOT operate via Rylands Street or Academy Way.

26E CINNAMON BROW - WARRINGTON VIA WINWICK ROAD
27E CINNAMON BROW - WARRINGTON VIA ORFORD

SATURDAY

	27E	27E	26E	27E	26E	27E	26E	27E	26E
Cinnamon Brow, Millhouse Rdbt	1911	1941	2010	2041	2110	2143	2213	2243	2313
Enfield Park Rd, Stirrup Cl	1913	1943	2012	2043	2112	2145	2215	2245	2315
Insall Road, Valiant Close	1915	1945	|	2045	|	2147	|	2247	|
Greenwood Crescent, Merrick Cl	|	|	2013	|	2113	|	2216	|	2316
Statham Avenue, Kirkstone Av	|	|	2016	|	2116	|	2219	|	2319
O'Leary Street	1919	1949	|	2049	|	2151	|	2251	|
Winwick Road, Collegiate Inst	|	|	2018	|	2118	|	2221	|	2321
Orford Park Centre	|	|	2019	|	|	|	|	|	|
Warrington, Interchange	1926	1956	2027	2056	2126	2156	2227	2256	-

26E WARRINGTON - CINNAMON BROW VIA WINWICK ROAD
27E WARRINGTON - CINNAMON BROW VIA ORFORD

SATURDAY

					@@		@@		@@
	27E	26E	27E	26E	27E	26E	27E	26E	27E
Warrington, Interchange [14]	1854	1923	1954	2023	2054	2129	2159	2229	2259
Orford Park Centre	|	1929	|	|	|	|	|	|	|
Winwick Road, Collegiate Inst	|	1930	|	2028	|	2134	|	2234	|
O'Leary Street	1901	|	2001	|	2101	|	2206	|	2306
Statham Avenue, Kirkstone Av	|	1933	|	2031	|	2136	|	2236	|
Greenwood Crescent, Merrick Cl	|	1937	|	2036	|	2140	|	2240	|
Insall Rd, Valiant Cl	1906	|	2006	|	2106	|	2210	|	2310
Cinnamon Brow, Millhouse Rdbt	1911	1941	2010	2041	2110	2143	2213	2243	2313

26 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – CINNAMON BROW – ORFORD
27 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – FEARNHEAD – ORFORD

SUNDAY & PUBLIC HOLIDAYS

	27	26	27	26	27	26	27	26	27	26
Gorse Covert, Spar Store	0908	1026	1124	1226	1324	1426	1524	1626	1724	1826
Oakwood, Keyes Close	0914	1032	1130	1232	1330	1432	1530	1632	1730	1832
Birchwood, Railway Station	0919	1037	1135	1237	1335	1437	1535	1637	1735	1837
Birchwood Centre	0920	1038	1136	1238	1336	1438	1536	1638	1736	1838
Heathfield House	0925	1043	1141	1243	1341	1443	1541	1643	1741	1843
Locking Stumps, Copperfield Cl	0928	1046	1144	1246	1344	1446	1544	1646	1744	1846
Crab Lane, Uni of Chester	0932	1050	1148	1250	1348	1450	1548	1650	1748	1850
Enfield Park Rd, Shetland Cl	|	1053	|	1253	|	1453	|	1653	|	1853
Greenwood Crescent, Merrick Cl	|	1055	|	1255	|	1455	|	1655	|	1855
Enfield Park Rd, Stirrup Cl	0934	|	1150	|	1350	|	1550	|	1750	|
Insall Road, Valiant Close	0937	|	1153	|	1353	|	1553	|	1753	|
Statham Avenue, Kirkstone Av	0942	1058	1158	1258	1358	1458	1558	1658	1758	1858
O'Leary Street	0948	1104	1204	1304	1404	1504	1604	1704	1804	1904
Warrington, Interchange	0954	1110	1210	1310	1410	1510	1610	1710	1810	1910

26 WARRINGTON – GORSE COVERT VIA ORFORD – CINNAMON BROW – LOCKING STUMPS – BIRCHWOOD
27 WARRINGTON – GORSE COVERT VIA ORFORD – FEARNHEAD – LOCKING STUMPS – BIRCHWOOD

SUNDAY & PUBLIC HOLIDAYS

	26	27	26	27	26	27	26	27	26	27
Warrington, Interchange [14]	0825	0941	1041	1141	1241	1341	1441	1541	1641	1741
O'Leary Street	0833	0949	1049	1149	1249	1349	1449	1549	1649	1749
Statham Avenue, Kirkstone Av	0839	0955	1055	1155	1255	1355	1455	1555	1655	1755
Greenwood Crescent, Merrick Cl	0842	|	1058	|	1258	|	1458	|	1658	|
Enfield Park Rd, Shetland Cl	0844	|	1100	|	1300	|	1500	|	1700	|
Insall Road, Valiant Close	|	1000	|	1200	|	1400	|	1600	|	1800
Enfield Park Rd, Stirrup Cl	|	1003	|	1203	|	1403	|	1603	|	1803
Crab Lane, Uni of Chester	0847	1005	1103	1205	1303	1405	1503	1605	1703	1805
Locking Stumps, Copperfield Cl	0851	1009	1107	1209	1307	1409	1507	1609	1707	1809
Heathfield House	0854	1012	1110	1212	1310	1412	1510	1612	1710	1812
Birchwood Centre	0859	1017	1115	1217	1315	1417	1515	1617	1715	1817
Birchwood, Railway Station	0901	1019	1117	1219	1317	1419	1517	1619	1717	1819
Oakwood, Keyes Close	0905	1023	1121	1223	1321	1423	1521	1623	1721	1823
Gorse Covert, Spar Store	0908	1026	1124	1226	1324	1426	1524	1626	1724	1826

25A CINNAMON BROW – WARRINGTON VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

Cinnamon Brow, Millhouse Rdbt	0525	0625
Enfield Park Road, Stirrup Cl	0527	0627
Greenwood Crescent, Merrick Cl	0529	0629
Statham Avenue, Kirkstone Av	0531	0631
O'Leary Street	0536	0636
Warrington, Interchange	0542	0642

25A WARRINGTON – CINNAMON BROW VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

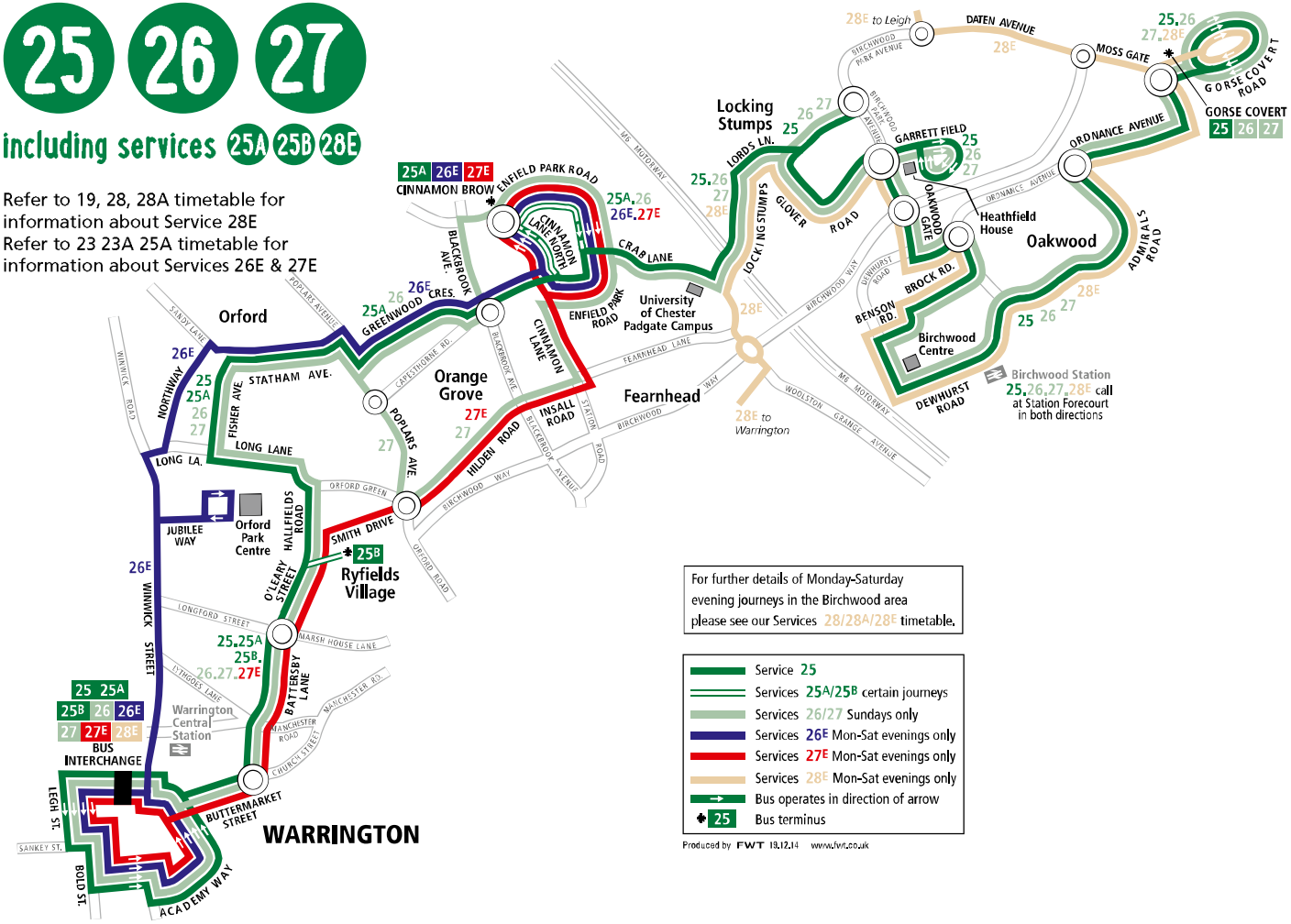
	D	
Warrington, Interchange [14]	-	0607
Wilderspool, St James Church	0509	|
O'Leary Street	0514	0614
Statham Avenue, Kirkstone Avenue	0520	0620
Greenwood Crescent, Merrick Close	0522	0622
Cinnamon Lane North	0524	0624
Cinnamon Brow, Enfield Pk Rd, Shetland Cl	0525	0625

D **From Wilderspool, St James Church (at 0509) via Warrington Bridge and Mersey Street to Fennel Street.**

25 26 27

including services 25A 25B 28E

Refer to 19, 28, 28A timetable for information about Service 28E
Refer to 23 23A 25A timetable for information about Services 26E & 27E



For further details of Monday-Saturday evening journeys in the Birchwood area please see our Services 28/28A/28E timetable.

- Service 25
- Services 25A/25B certain journeys
- Services 26/27 Sundays only
- Services 26E Mon-Sat evenings only
- Services 27E Mon-Sat evenings only
- Services 28E Mon-Sat evenings only
- Bus operates in direction of arrow
- 25 Bus terminus

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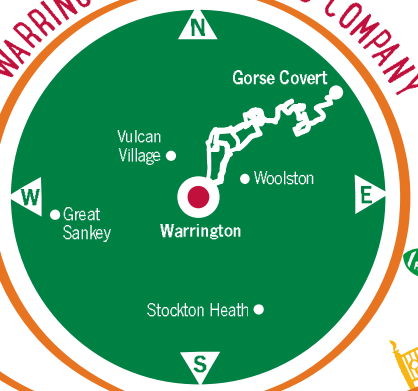
WARRINGTON'S LOCAL BUS COMPANY



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warrington's local bus company

25 26 27

including services 25A 25B 28E

- GORSE COVERT
- BIRCHWOOD
- FEARNHEAD
- GREENWOOD CRESCENT
- HILDEN ROAD
- WARRINGTON

Bus times

Map

from 26 January 2015

networkwarrington
warrington's local bus company

Edition 6 – 26.01.15

25 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

Gorse Covert, Spar Store	0629	0646	0707	0723	0739	0759	0817	0844	0914	0944		14	44		1414	1444	1520	1550	1617
Gorse Covert, Ashdown Lane	0631	0648	0709	0725	0741	0801	0819	0846	0916	0946		16	46		1416	1446	1522	1552	1619
Oakwood, Keyes Close	0635	0652	0713	0729	0745	0805	0824	0851	0920	0950		20	50		1420	1450	1527	1556	1623
Birchwood, Railway Station	0639	0657	0717	0733	0750	0810	0830	0856	0924	0954		24	54		1424	1454	1532	1601	1628
Birchwood Centre	0640	0658	0718	0734	0751	0811	0831	0857	0925	0955		25	55		1425	1455	1533	1602	1629
Heathfield House	0646	0704	0724	0741	0758	0818	0838	0904	0932	1002		32	02		1432	1502	1542	1610	1636
Glover Road, Turf & Feather	0647	0705	0725	0742	0759	0819	0839	0905	0933	1003	and	33	03	min-	1433	1503	1543	1611	1637
Locking Stumps, Copperfield Cl	0650	0708	0728	0745	0803	0823	0843	0908	0936	1006	then	36	06	utes	1436	1506	1547	1615	1640
Crab Lane, Uni of Chester	0653	0711	0731	0748	0807	0827	0847	0912	0940	1009	at	39	09	past	1440	1510	1551	1619	1644
Enfield Park Rd, Stirrup Cl	0655	0713	0733	0750	0809	0829	0849	0914	0942	1011	these	41	11	each	1442	1512	1553	1621	1646
Greenwood Crescent, Merrick Cl	0657	0715	0735	0753	0812	0832	0852	0916	0944	1013		43	13	hour	1444	1515	1556	1624	1648
Statham Avenue, Kirkstone Av	0701	0719	0739	0757	0817	0837	0857	0920	0948	1017		47	17	until	1448	1519	1601	1628	1652
O'Leary Street	0706	0725	0745	0805	0825	0845	0905	0926	0954	1023		53	23		1454	1525	1609	1635	1659
Warrington, Scotland Road	0713	0733	0753	0813	0833	0853	0913	0933	1001	1029		59	29		1500	1532	1617	1643	1707
Warrington, Interchange	0715	0735	0755	0815	0835	0855	0915	0935	1003	1031		01	31		1502	1534	1619	1645	1709

Gorse Covert, Spar Store	1647	1723	1743	1800	1820	1836	1901	1931
Gorse Covert, Ashdown Lane	1649	1725	1745	1802	1822	1838	1903	1933
Oakwood, Keyes Close	1653	1729	1749	1806	1825	1841	1906	1936
Birchwood, Railway Station	1658	1734	1754	1810	1829	1844	1909	1939
Birchwood Centre	1659	1735	1755	1811	1830	1845	1910	1940
Heathfield House	1706	1742	1802	1818	1836	1851	1916	1946
Glover Road, Turf & Feather	1707	1743	1803	1819	1837	1852	1917	1947
Locking Stumps, Copperfield Cl	1710	1746	1806	1822	1840	1855	1920	1950
Crab Lane, Uni of Chester	1714	1750	1809	1825	1843	1858	1923	1953
Enfield Park Rd, Stirrup Cl	1716	1752	1811	1827	1845	1900	1925	1955
Greenwood Crescent, Merrick Cl	1718	1754	1813	1829	1847	1902	1927	1957
Statham Avenue, Kirkstone Av	1722	1758	1817	1833	1850	1905	1930	2000
O'Leary Street	1730	1806	1824	1838	1855	1910	1935	2005
Warrington, Scotland Road	1738	1813	1831	1844	1900	1915	1940	2010
Warrington, Interchange	1740	1815	1833	1846	1902	1917	1942	2012

25 WARRINGTON – GORSE COVERT VIA ORFORD – LOCKING STUMPS – BIRCHWOOD

MONDAY TO FRIDAY [excluding Public Holidays]

Warrington, Interchange	0545	0621	0638	0652	0709	0722	0745	0819	0855	0925		55	25		1355	1420	1450	1520	1550
Warrington, Academy Way	0546	0622	0639	0653	0710	0724	0747	0821	0857	0927		57	27		1357	1422	1452	1522	1552
O'Leary Street	0553	0629	0646	0700	0718	0732	0755	0829	0905	0935		05	35		1405	1430	1500	1531	1601
Statham Avenue, Kirkstone Av	0558	0634	0651	0705	0723	0738	0802	0836	0911	0941		11	41		1411	1436	1506	1537	1607
Greenwood Crescent, Merrick Cl	0602	0638	0655	0709	0727	0743	0807	0841	0915	0945		15	45	min-	1415	1441	1511	1542	1612
Enfield Park Rd, Stirrup Cl	0603	0639	0657	0711	0729	0745	0809	0843	0917	0947	and	17	47	utes	1417	1443	1513	1544	1614
Crab Lane, Uni of Chester	0605	0641	0659	0713	0731	0748	0812	0846	0919	0949	then	19	49	past	1419	1446	1516	1547	1617
Locking Stumps, Copperfield Cl	0609	0645	0703	0717	0735	0753	0817	0851	0923	0953	at	23	53	each	1423	1450	1520	1551	1621
Glover Road, Turf & Feather	0611	0647	0705	0719	0737	0755	0819	0853	0925	0955	these	25	55	hour	1425	1452	1522	1553	1623
Heathfield House	0612	0648	0706	0720	0738	0756	0820	0854	0926	0956		26	56	until	1426	1453	1523	1554	1624
Birchwood Centre	0617	0653	0712	0726	0744	0803	0827	0901	0932	1002		32	02		1432	1503	1533	1601	1631
Birchwood, Railway Station	0618	0654	0713	0727	0746	0805	0829	0903	0934	1004		34	04		1434	1505	1535	1604	1634
Oakwood, Keyes Close	0621	0657	0716	0730	0750	0809	0833	0907	0937	1007		37	07		1437	1509	1539	1608	1638
Gorse Covert, Spar Store	0625	0701	0720	0734	0754	0813	0837	0911	0941	1011		41	11		1441	1514	1544	1612	1642

Warrington, Interchange	1625	1645	1705	1725	1745	1815	1845
Warrington, Academy Way	1627	1647	1707	1727	1747	1817	1847
O'Leary Street	1636	1656	1717	1737	1756	1824	1854
Statham Avenue, Kirkstone Av	1642	1702	1723	1743	1802	1830	1900
Greenwood Crescent, Merrick Cl	1647	1707	1728	1748	1806	1833	1903
Enfield Park Rd, Stirrup Cl	1649	1709	1730	1750	1808	1835	1905
Crab Lane, Uni of Chester	1652	1712	1732	1752	1810	1837	1907
Locking Stumps, Copperfield Cl	1656	1717	1736	1756	1814	1841	1911
Glover Road, Turf & Feather	1658	1719	1738	1758	1816	1843	1913
Heathfield House	1659	1720	1739	1759	1817	1844	1914
Birchwood Centre	1706	1727	1746	1806	1823	1850	1920
Birchwood, Railway Station	1709	1730	1748	1808	1824	1851	1921
Oakwood, Keyes Close	1713	1734	1752	1812	1827	1854	1924
Gorse Covert, Spar Store	1717	1738	1756	1816	1831	1858	1928

25 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – ORFORD

SATURDAY

Gorse Covert, Spar Store	0719	0749	0814	0844		14	44		1714	1744	1814	1842	1912
Gorse Covert, Ashdown Lane	0721	0751	0816	0846		16	46		1716	1746	1816	1844	1914
Oakwood, Keyes Close	0724	0754	0820	0850		20	50		1720	1749	1819	1847	1917
Birchwood, Railway Station	0728	0758	0824	0854		24	54		1724	1753	1823	1850	1920
Birchwood Centre	0729	0759	0825	0855	and	25	55	min-	1725	1754	1824	1851	1921
Heathfield House	0735	0805	0832	0902	then	32	02	utes	1732	1800	1830	1857	1927
Glover Road, Turf & Feather	0736	0806	0833	0903	at	33	03	past	1733	1801	1831	1858	1928
Locking Stumps, Copperfield Cl	0739	0809	0836	0906	these	36	06	each	1736	1804	1834	1901	1931
Crab Lane, Uni of Chester	0742	0812	0839	0909		39	09	hour	1739	1807	1837	1904	1934
Enfield Park Rd, Stirrup Cl	0744	0814	0841	0911		41	11	until	1741	1809	1839	1906	1936
Greenwood Crescent, Merrick Cl	0746	0816	0843	0913		43	13		1743	1811	1841	1908	1938
Statham Avenue, Kirkstone Av	0749	0819	0847	0917		47	17		1747	1814	1844	1911	1941
O'Leary Street	0754	0824	0853	0923		53	23		1753	1819	1849	1916	1946
Warrington, Scotland Road	0759	0829	0859	0929		59	29		1759	1824	1854	1919	1951
Warrington, Interchange	0801	0831	0901	0931		01	31		1801	1826	1856	1921	1953

25 WARRINGTON – GORSE COVERT VIA ORFORD – LOCKING STUMPS – BIRCHWOOD

SATURDAY

Warrington, Interchange [14]	0634	0704	0729	0755	0825	0855		25	55		1725	1755	1825
Warrington, Academy Way	0636	0706	0731	0757	0827	0857		27	57		1727	1757	1827
O'Leary Street	0642	0712	0737	0805	0835	0905		35	05		1735	1803	1833
Statham Avenue, Kirkstone Av	0648	0718	0743	0811	0841	0911		41	11		1741	1809	1839
Greenwood Crescent, Merrick Cl	0651	0721	0746	0815	0845	0915		45	15	min-	1745	1812	1842
Enfield Park Rd, Stirrup Cl	0653	0723	0748	0817	0847	0917	and	47	17	utes	1747	1814	1844
Crab Lane, Uni of Chester	0655	0725	0750	0819	0849	0919	then	49	19	past	1749	1816	1846
Locking Stumps, Copperfield Cl	0659	0729	0754	0823	0853	0923	at	53	23	each	1753	1820	1850
Glover Road, Turf & Feather	0701	0731	0756	0825	0855	0925	these	55	25	hour	1755	1822	1852
Heathfield House	0702	0732	0757	0826	0856	0926		56	26	until	1756	1823	1853
Birchwood Centre	0707	0737	0802	0832	0902	0932		02	32		1802	1829	1859
Birchwood, Railway Station	0708	0738	0804	0834	0904	0934		04	34		1804	1830	1900
Oakwood, Keyes Close	0711	0741	0807	0837	0907	0937		07	37		1807	1833	1903
Gorse Covert, Spar Store	0715	0745	0811	0841	0911	0941		11	41		1811	1837	1907

25A CINNAMON BROW – WARRINGTON VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

Cinnamon Brow, Millhouse Rdbt	0525	0625
Enfield Park Road, Stirrup Cl	0527	0627
Greenwood Crescent, Merrick Cl	0529	0629
Statham Avenue, Kirkstone Av	0531	0631
O'Leary Street	0536	0636
Warrington, Scotland Road	0540	0640
Warrington, Interchange	0542	0642

25A WARRINGTON – CINNAMON BROW VIA ORFORD

MONDAY TO FRIDAY [excluding Public Holidays]

	D	
Warrington, Interchange [14]	-	0607
Warrington, Academy Way	-	0609
Wilderspool, St James Church	0509	|
O'Leary Street	0514	0614
Statham Avenue, Kirkstone Av	0520	0620
Greenwood Crescent, Merrick Cl	0522	0622
Cinnamon Lane North	0524	0624
Cinnamon Brow, Millhouse Rdbt	0525	0625

D From Wilderspool, St James Church (at 0509) via Warrington Bridge and Mersey Street to Fennel Street.

25B RYFIELDS VILLAGE – WARRINGTON

MONDAY TO FRIDAY [excluding Public Holidays]

Ryfields Village	0940
O'Leary Street	0942
Warrington, Scotland Road	0946
Warrington, Interchange	0948

25B WARRINGTON – RYFIELDS VILLAGE

MONDAY TO FRIDAY [excluding Public Holidays]

Warrington, Interchange [14]	1150
Warrington, Academy Way	1152
O'Leary Street	1158
Ryfields Village	1200

26 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – CINNAMON BROW – ORFORD
27 GORSE COVERT – WARRINGTON VIA BIRCHWOOD – LOCKING STUMPS – FEARNHEAD – ORFORD

SUNDAY & PUBLIC HOLIDAYS

	27	26	27	26	27	26	27	26	27	26
Gorse Covert, Spar Store	0908	1026	1124	1226	1324	1426	1524	1626	1724	1826
Gorse Covert, Ashdown Lane	0911	1029	1127	1229	1327	1429	1527	1629	1727	1829
Oakwood, Keyes Close	0914	1032	1130	1232	1330	1432	1530	1632	1730	1832
Birchwood, Railway Station	0919	1037	1135	1237	1335	1437	1535	1637	1735	1837
Birchwood Centre	0920	1038	1136	1238	1336	1438	1536	1638	1736	1838
Heathfield House	0925	1043	1141	1243	1341	1443	1541	1643	1741	1843
Glover Road, Turf & Feather	0926	1044	1142	1244	1342	1444	1542	1644	1742	1844
Locking Stumps, Copperfield Cl	0928	1046	1144	1246	1344	1446	1544	1646	1744	1846
Crab Lane, Uni of Chester	0932	1050	1148	1250	1348	1450	1548	1650	1748	1850
Enfield Park Rd, Shetland Cl	|	1053	|	1253	|	1453	|	1653	|	1853
Greenwood Crescent, Merrick Cl	|	1055	|	1255	|	1455	|	1655	|	1855
Enfield Park Rd, Stirrup Cl	0934	|	1150	|	1350	|	1550	|	1750	|
Insall Road, Valiant Close	0937	|	1153	|	1353	|	1553	|	1753	|
Statham Avenue, Kirkstone Av	0942	1058	1158	1258	1358	1458	1558	1658	1758	1858
O'Leary Street	0948	1104	1204	1304	1404	1504	1604	1704	1804	1904
Warrington, Scotland Road	0952	1108	1208	1308	1408	1508	1608	1708	1808	1908
Warrington, Interchange	0954	1110	1210	1310	1410	1510	1610	1710	1810	1910

26 WARRINGTON – GORSE COVERT VIA ORFORD – CINNAMON BROW – LOCKING STUMPS – BIRCHWOOD
27 WARRINGTON – GORSE COVERT VIA ORFORD – FEARNHEAD – LOCKING STUMPS – BIRCHWOOD

SUNDAY & PUBLIC HOLIDAYS

	26	27	26	27	26	27	26	27	26	27
Warrington, Interchange [14]	0825	0941	1041	1141	1241	1341	1441	1541	1641	1741
Warrington, Academy Way	0827	0943	1043	1143	1243	1343	1443	1543	1643	1743
O'Leary Street	0833	0949	1049	1149	1249	1349	1449	1549	1649	1749
Statham Avenue, Kirkstone Av	0839	0955	1055	1155	1255	1355	1455	1555	1655	1755
Greenwood Crescent, Merrick Cl	0842	|	1058	|	1258	|	1458	|	1658	|
Enfield Park Rd, Shetland Cl	0844	|	1100	|	1300	|	1500	|	1700	|
Insall Road, Valiant Close	|	1000	|	1200	|	1400	|	1600	|	1800
Enfield Park Rd, Stirrup Cl	|	1003	|	1203	|	1403	|	1603	|	1803
Crab Lane, Uni of Chester	0847	1005	1103	1205	1303	1405	1503	1605	1703	1805
Locking Stumps, Copperfield Cl	0851	1009	1107	1209	1307	1409	1507	1609	1707	1809
Glover Road, Turf & Feather	0853	1011	1109	1211	1309	1411	1509	1611	1709	1811
Heathfield House	0854	1012	1110	1212	1310	1412	1510	1612	1710	1812
Birchwood Centre	0859	1017	1115	1217	1315	1417	1515	1617	1715	1817
Birchwood, Railway Station	0901	1019	1117	1219	1317	1419	1517	1619	1717	1819
Oakwood, Keyes Close	0905	1023	1121	1223	1321	1423	1521	1623	1721	1823
Gorse Covert, Spar Store	0908	1026	1124	1226	1324	1426	1524	1626	1724	1826

28E LEIGH – WARRINGTON VIA GORSE COVERT & BIRCHWOOD

MONDAY TO FRIDAY [excluding Public Holidays]

Leigh, Bus Station [B]	1900	2000	2100	2200	2300
Culcheth, Library (dep)	1913	2013	2113	2213	2313
Risley, H.M. Prison	1917	2017	2117	2217	2317
Gorse Covert, Spar Store	1922	2022	2122	2222	2322
Gorse Covert, Ashdown Lane	1924	2024	2124	2224	2324
Oakwood, Keyes Close	1927	2027	2127	2227	2327
Birchwood, Railway Station	1931	2031	2131	2231	2331
Birchwood Centre	1933	2033	2133	2233	2333
Glover Road, Turf & Feather	1938	2038	2138	2238	2338
Crab Lane, Locking Stumps Lane	1941	2041	2141	2241	2341
Longbarn, Blackburne Close	1944	2044	2144	2244	2344
Warrington, Interchange	1956	2056	2156	2256	|
Wilderspool, St James Church	-	-	-	-	2354

28E WARRINGTON – LEIGH VIA BIRCHWOOD & GORSE COVERT

MONDAY TO FRIDAY [excluding Public Holidays]

			NRA	NRA	NRA
Warrington, Interchange [13]	1900	2000	2100	2200	2300
Longbarn, Blackburne Close	1914	2014	2114	2214	2314
Crab Lane, Locking Stumps Lane	1916	2016	2116	2216	2316
Glover Road, Turf & Feather	1919	2019	2119	2219	2319
Birchwood Centre	1924	2024	2124	2224	2324
Birchwood, Railway Station	1926	2026	2126	2226	2326
Oakwood, Keyes Close	1929	2029	2129	2229	2329
Gorse Covert, Spar Store	1932	2032	2132	2232	2332
Gorse Covert, Ashdown Lane	1934	2034	2134	2234	2334
Risley, H.M. Prison	1939	2039	2139	2239	-
Culcheth, Library (arr)	1943	2043	2143	2243	-
Leigh, Bus Station	1956	2056	2156	2256	-

For more details of Service 28E, please see the leaflet for Services 19, 28, 28A

28E LEIGH – WARRINGTON VIA GORSE COVERT & BIRCHWOOD

SATURDAY

Leigh, Bus Station [B]	1900	2000	2100	2200	2300
Culcheth, Library (dep)	1913	2013	2113	2213	2313
Risley, H.M. Prison	1917	2017	2117	2217	2317
Gorse Covert, Spar Store	1922	2022	2122	2222	2322
Gorse Covert, Ashdown Lane	1924	2024	2124	2224	2324
Oakwood, Keyes Close	1927	2027	2127	2227	2327
Birchwood, Railway Station	1931	2031	2131	2231	2331
Birchwood Centre	1933	2033	2133	2233	2333
Glover Road, Turf & Feather	1938	2038	2138	2238	2338
Crab Lane, Locking Stumps Lane	1941	2041	2141	2241	2341
Longbarn, Blackburne Close	1944	2044	2144	2244	2344
Warrington, Interchange	1956	2056	2156	2256	|
Wilderspool, St James Church	-	-	-	-	2354

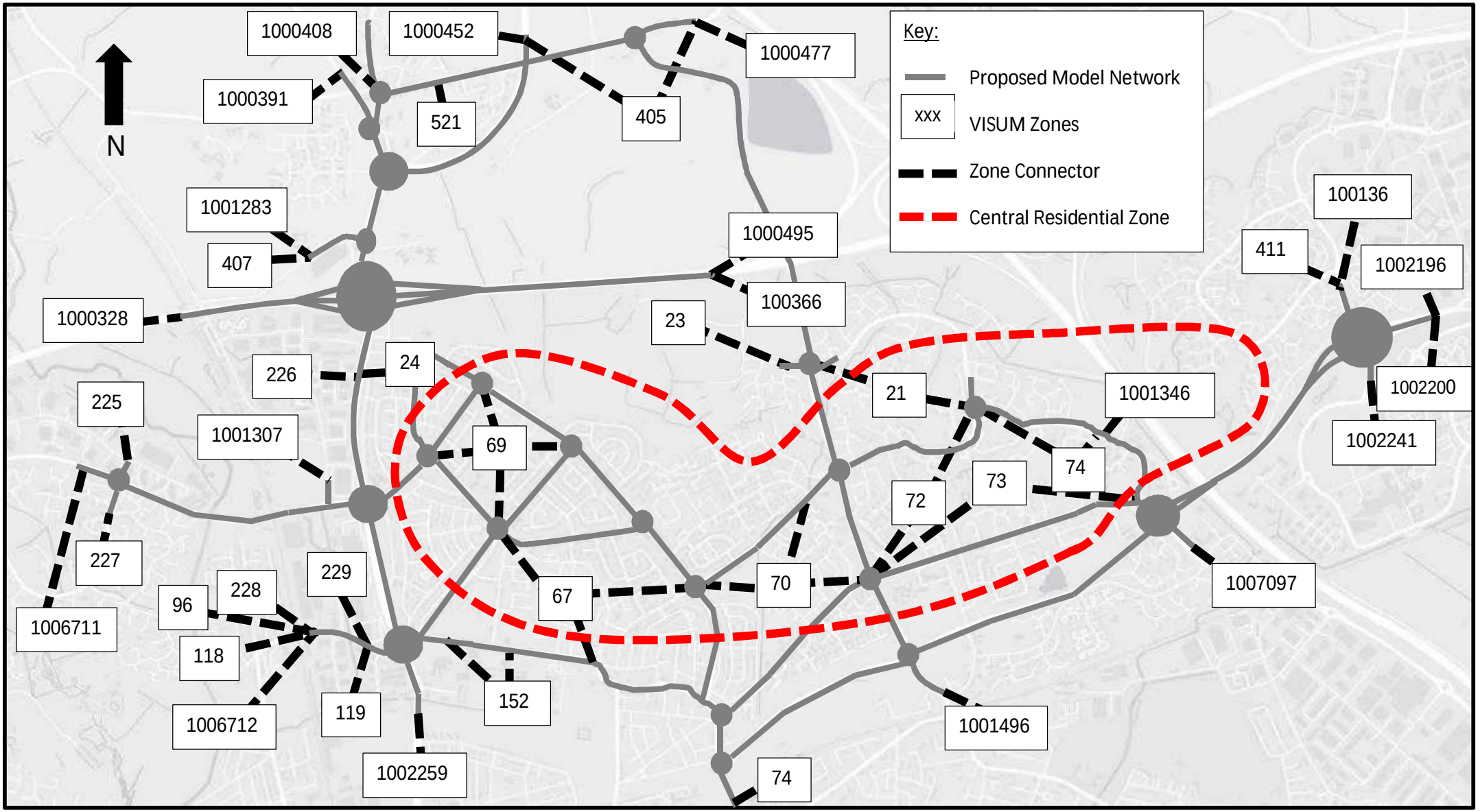
NRA Does NOT operate via Rylands Street or Academy Way.

28E WARRINGTON – LEIGH VIA BIRCHWOOD & GORSE COVERT

SATURDAY

			NRA	NRA	NRA
Warrington, Interchange [13]	1900	2000	2100	2200	2300
Longbarn, Blackburne Close	1914	2014	2114	2214	2314
Crab Lane, Locking Stumps Lane	1916	2016	2116	2216	2316
Glover Road, Turf & Feather	1919	2019	2119	2219	2319
Birchwood Centre	1924	2024	2124	2224	2324
Birchwood, Railway Station	1926	2026	2126	2226	2326
Oakwood, Keyes Close	1929	2029	2129	2229	2329
Gorse Covert, Spar Store	1932	2032	2132	2232	2332
Gorse Covert, Ashdown Lane	1934	2034	2134	2234	2334
Risley, H.M. Prison	1939	2039	2139	2239	-
Culcheth, Library (arr)	1943	2043	2143	2243	-
Leigh, Bus Station	1956	2056	2156	2256	-

Appendix E : VISUM Matrix Zones



Appendix F – WMMTM VISUM Zone Structure

AECOM

Appendix F : Turning Count Flow Comparisons

Peel Hall

Am Peak Calibration

Time Period 0800 - 0900

Turn Counts
Calbration Statistics

GEH	Cars	LGV	HGV
<5	144	148	143
<5	85%	92%	85%
<10	21	13	26
<10	12%	8%	15%
>10	4	0	0
>10	2%	0%	0%
<20	0	0	0
>20	0%	0%	0%

TOTAL 169

Turn Counts

Junction	Road	Movement	Model				Observed				Difference				Percentage Difference				GEH		
			Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV
Southworth Lane / Delph Lane / Myddleton Lane	Southworth Lane	Left to Delph Lane	79	3	3	85	80	4	5	89	-1	-1	-2	-4	-0.01	-0.28	-0.40	-0.04	0.07	0.60	0.97
	Southworth Lane	W/B to Myddleton Lane	142	14	5	161	142	14	14	170	0	0	-9	-9	0.00	0.00	-0.64	-0.05	0.00	0.00	2.92
	Delph Lane	Left to Myddleton Lane	183	0	0	183	177	19	12	208	6	-19	-12	-25	0.03	-1.00	-1.00	-0.12	0.44	6.16	4.90
	Delph Lane	E/B to Southworth Lane	28	0	0	28	58	3	0	61	-30	-3	0	-33	-0.52	-1.00	0.00	-0.54	4.58	2.45	0.00
	Myddleton Lane	E/B to Southworth Lane	335	26	18	379	335	17	16	368	0	9	2	11	0.00	0.56	0.10	0.03	0.01	2.03	0.38
	Myddleton Lane	Right to Delph Lane	375	26	13	413	328	29	12	369	47	-3	1	44	0.14	-0.11	0.06	0.12	2.48	0.63	0.20
Newton Road / A49 / Winwick Park Avenue	Newton Road	Entry to Roundabout	657	85	52	794	743	97	88	928	-86	-12	-37	-135	-0.12	-0.13	-0.41	-0.14	3.24	1.29	4.37
	A49 (East)	Entry to Roundabout	526	101	131	759	527	118	132	777	-1	-17	-1	-18	0.00	-0.14	-0.01	-0.02	0.03	1.58	0.06
	A49 (South)	Entry to Roundabout	852	143	183	1178	864	178	228	1270	-12	-35	-45	-92	-0.01	-0.20	-0.20	-0.07	0.40	2.77	3.15
	A49 (South)	Left turn to Winwick Park Avenue	13	0	0	13															
	Winwick Park Avenue	Left to Newton Road	70	0	5	75	70	2	2	74	0	-2	3	1	0.00	-1.00	1.50	0.01	0.01	2.00	1.60
	Winwick Park Avenue	E/B Entry to Roundabout	82	0	0	82	76	0	0	76	6	0	0	6	0.07	0.00	0.00	0.07	0.63	0.00	0.00
A49 / Delph Lane	A49 (North)	S/B to A49 (South)	977	162	182	1322	996	163	175	1334	-19	-1	7	-12	-0.02	0.00	0.04	-0.01	0.60	0.05	0.53
	A49 (North)	Right to Delph Lane	59	6	0	64	67	15	5	87	-8	-9	-5	-23	-0.13	-0.60	-1.00	-0.26	1.07	2.78	3.16
	A49 (South)	Left to Delph Lane	178	30	0	208	130	41	7	178	48	-11	-7	30	0.37	-0.27	-1.00	0.17	3.90	1.84	3.74
	A49 (South)	N/B to A49 (North)	793	143	178	1114	802	143	224	1169	-9	0	-46	-55	-0.01	0.00	-0.21	-0.05	0.31	0.02	3.26
	Delph Lane	Left to A49 (North)	59	0	5	64	62	34	5	101	-3	-34	0	-37	-0.05	-1.00	0.00	-0.37	0.37	8.25	0.00
	Delph Lane	Right to A49 (South)	138	51	0	188	108	59	14	181	30	-8	-14	7	0.27	-0.14	-1.00	0.04	2.67	1.13	5.29
A49 / Birch Avenue	A49 (North)	Left to Birch Avenue	15	5	0	20	15	5	0	20	0	0	0	0	-0.01	-0.01	0.00	-0.01	0.03	0.02	0.00
	A49 (North)	S/B to A49 (South)	1442	191	261	1894	1483	192	265	1940	-41	-1	-4	-46	-0.03	0.00	-0.02	-0.02	1.06	0.07	0.28
	Birch Avenue	Left to A49 (South)	19	3	0	22	19	4	0	23	0	-1	0	-1	0.00	-0.22	0.00	-0.04	0.01	0.46	0.00
A49 / Sandy Lane West / A574	A49 (North)	Left to Sandy Lane West	100	13	8	121	153	25	7	185	-53	-12	1	-64	-0.35	-0.46	0.11	-0.34	4.70	2.65	0.28
	A49 (North)	Entry to roundabout	1361	181	253	1795	1348	176	258	1782	13	5	-5	13	0.01	0.03	-0.02	0.01	0.36	0.36	0.33
	Sandy Lane West	Left to A49 (South)	29	4	19	51	45	8	5	58	-16	-4	14	-7	-0.36	-0.48	2.72	-0.11	2.70	1.56	3.95
	Sandy Lane West	Entry to roundabout	329	25	6	360	351	40	16	407	-22	-15	-10	-47	-0.06	-0.38	-0.65	-0.12	1.17	2.68	3.14
	A49 (South)	Left to A574	240	38	45	323	339	38	46	423	-99	0	-1	-100	-0.29	0.00	-0.02	-0.24	5.83	0.00	0.16
	A49 (South)	Entry to roundabout	595	130	238	963	497	129	224	850	98	1	14	113	0.20	0.00	0.06	0.13	4.19	0.05	0.93
	A574	Left to A49 (North)	243	46	96	385	244	32	120	396	-1	14	-24	-11	0.00	0.45	-0.20	-0.03	0.07	2.30	2.35
	A574	Entry to Roundabout	714	70	66	850	759	83	78	920	-45	-13	-12	-70	-0.06	-0.15	-0.15	-0.08	1.66	1.46	1.39
Cotswold Road / Cleveland Road / Sandy Lane / Sandy Lane West	Cotswold Road	Left to Cleveland Road	21	0	0	21	4	1	0	5	17	-1	0	16	4.37	-1.00	0.00	3.29	4.90	1.41	0.00
	Cotswold Road	S/B to Sandy Lane	43	0	0	43	49	5	12	66	-6	-5	-12	-23	-0.13	-1.00	-1.00	-0.35	0.92	3.16	4.90
	Cotswold Road	Right to Sandy Lane West	43	2	10	55	37	4	2	43	6	-2	8	12	0.17	-0.50	3.98	0.28	0.97	1.15	3.26
	Cleveland Road	Left to Sandy Lane	0	0	0	0	21	3	2	26	-21	-3	-2	-26	-1.00	-1.00	-1.00	-1.00	6.48	2.45	2.00
	Cleveland Road	W/B to Sandy Lane West	176	20	9	205	138	15	7	160	38	5	2	45	0.27	0.34	0.33	0.28	3.03	1.22	0.80
	Cleveland Road	Right to Cotswold Road	0	0	0	0	3	0	0	3	-3	0	0	-3	-1.00	0.00	0.00	-1.00	2.45	0.00	0.00
	Sandy Lane	Left to Sandy Lane West	74	0	0	74	107	15	5	127	-33	-15	-5	-53	-0.31	-1.00	-1.00	-0.42	3.47	5.48	3.16
	Sandy Lane	N/B to Cotswold Road	9	0	0	9	25	3	9	37	-16	-3	-9	-28	-0.64	-1.00	-1.00	-0.76	3.89	2.45	4.24
	Sandy Lane	Right to Cleveland Road	0	0	0	0	3	1	5	9	-3	-1	-5	-9	-1.00	-1.00	-1.00	-1.00	2.45	1.41	3.16
	Sandy Lane West	Left to Cotswold Road	14	0	1	16	28	1	0	29	-14	-1	1	-13	-0.49	-1.00	0.00	-0.46	2.98	1.41	1.69
	Sandy Lane West	E/B to Cleveland Road	247	15	9	272	154	21	5	180	93	-6	4	92	0.61	-0.27	0.80	0.51	6.59	1.32	1.51
	Sandy Lane West	Right to Sandy Lane	39	1	0	40	136	24	7	167	-97	-23	-7	-127	-0.71	-0.94	-1.00	-0.76	10.38	6.32	3.74
Poplars Avenue / Cleveland Road	Poplars Avenue (East)	Left to Cleveland Road	138	16	1	155	137	13	7	157	1	3	-6	-2	0.01	0.24	-0.91	-0.01	0.09	0.81	3.24
	Poplars Avenue (East)	W/B to Poplars Avenue (West)	40	0	0	40	28	5	9	42	12	-5	-9	-2	0.43	-1.00	-1.00	-0.05	2.06	3.16	4.24
	Cleveland Road	Left to Poplars Avenue (West)	0	0	0	0	2	1	2	5	-2	-1	-2	-5	-1.00	-1.00	-1.00	-1.00	2.00	1.41	2.00
	Cleveland Road	Right to Poplars Avenue (East)	214	15	7	236	196	19	5	220	18	-4	2	16	0.09	-0.19	0.34	0.07	1.24	0.88	0.70
	Poplars Avenue (West)	E/B to Poplars Avenue (East)	31	10	0	41	47	3	12	62	-16	7	-12	-21	-0.34	2.33	-1.00	-0.34	2.54	2.74	4.90
	Poplars Avenue (West)	Right to Cleveland Road	8	0	2	10	8	0	2	10	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplars Avenue / Howson Road	Poplars Avenue (East)	Left to Howson Road	25	3	7	36	40	10	7	57	-15	-7	0	-22	-0.37	-0.67	0.00	-0.38	2.58	2.62	0.00
	Poplars Avenue (East)	W/B to Poplars Avenue (West)	158	16	1	175	124	19	9	152	34	-3	-8	23	0.28	-0.15	-0.93	0.15	2.88	0.70	3.79
	Howson Road	Left to Poplars Avenue (West)	20	0	0	20	24	4	0	28	-4	-4	0	-8	-0.17	-1.00	0.00	-0.29	0.87	2.83	0.00
	Howson Road	Right to Poplars Avenue (East)	74	11	0	85	48	11	0	59	26	0	0	26	0.55	0.00	0.00	0.45	3.37	0.00	0.00
	Poplars Avenue (West)	E/B to Poplars Avenue (East)	245	15	7	267	257	27	21	305	-12	-12	-14	-38	-0.05	-0.43	-0.68	-0.12	0.76	2.52	3.84
	Poplars Avenue (West)	Right to Howson Road	0	10	0	10	52	6	0	58	-52	4	0	-48	-1.00	0.66	0.00	-0.83	10.20	1.40	0.00
Mill Lane / Enfield Park Road / Blackbrook Avenue / Ballater Drive	Mill Lane	Left to Enfield Park Road	164	0	5	169	164	10	0	174	0	-10	5	-5	0.00	-1.00	0.00	-0.03	0.01	4.47	3.16
	Mill Lane	S/B to Blackbrook Avenue	337	39	10	387	287	37	9	333	50	2	1	54	0.17	0.07	0.16	0.16	2.81	0.40	0.47
	Mill Lane	Right to Ballater Drive	0	0	0	0	2	0	0	2	-2	0	0	-2	-1.00	0.00	0.00	-1.00	2.00	0.00	0.00
	Enfield Park Road	Left to Blackbrook Avenue	88	11	0	99	88	5	0	93	0	6	0	6	0.00	1.19	0.00	0.06	0.00	2.10	0.00
	Enfield Park Road	W/B to Ballater Drive	7	0	0	7	7	2	0	9	0	-2	0	-2	0.00	-1.00	0.00	-0.22	0.00	2.00	0.00
	Enfield Park Road	Right to Mill Lane	67	0	0	67	78	4	2	84	-11	-4	-2	-17	-0.14	-1.00	-1.00	-0.20	1.24	2.83	2.00
	Blackbrook Avenue	Left to Ballater Drive	13	0	0	13	9	4	2	15	4	-4	-2	-2	0.48	-1.00	-1.00	-0.11	1.29	2.83	2.00
	Blackbrook Avenue	N/B to Mill Lane	119	0	0	119	151	20	12	183	-32	-20	-12	-64	-0.21	-1.00	-1.00	-0.35	2.79	6.32	4.90
	Blackbrook Avenue	Right to Enfield Park Road	26	0	0	26	20	3	2	25	6	-3	-2	1	0.28	-1.00	-1.00	0.02	1.17	2.45	2.00
	Ballater Drive	Left to Mill Lane	35	0	0	35	22	4	0	26	13	-4	0	9	0.61	-1.00	0.00	0.36	2.50	2.83	0.00
	Ballater Drive	E/B to Enfield Park Road	22	0	0	22	22	0	0	22	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ballater Drive	Right to Blackbrook Avenue	26	0	0	26	26	3	0	29	0	-3	0	-3	0.00	-1.00	0.00	-0.10	0.00	2.45	0.00
Blackbrook Avenue / Enfield Park Road / Capesthorne Road	Blackbrook Avenue (North)	Left to Enfield Park Road	39	16	0	55	18	2	2	22	21	14	-2	33	1.14	7.21	-1.00	1.50	3.86	4.75	2.00
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	216	15	8	238	244	29	7	280	-28	-14	1	-42	-0.12	-0.49	0.11	-0.15	1.86	3.03	0.27
	Blackbrook Avenue (North)	Right to Capesthorne Road	196	19	3	218	139	14	0	153	57	5	3	65	0.41	0.37	0.00	0.43	4.42	1.28	2.35
	Enfield Park Road	Left to Blackbrook Avenue (South)	60	8	0	68	124	8	2	134	-64	0	-2	-66	-0.51	0.00	-1.00	-0.49	6.63	0.00	2.00
	Enfield Park Road	W/B to Capesthorne Road	199	4	0	204	188	16	16	220	11	-12	-16	-16	0.06	-0.74	-1.00	-0.07	0.82	3.75	5.66
	Enfield Park Road	Right to Blackbrook Avenue (North)	19	0	0	19	28	3	2	33	-9	-3	-2	-14	-0.32	-1.00	-1.00	-0.42	1.85	2.45	2.00
	Blackbrook Avenue (South)	Left to Capesthorne Road	71	12	0	83	82	12	2	96	-11	0	-2	-13	-0.14	0.00	-1.00	-0.14	1.31	0.00	2.00
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	102	0	0	102	102	22	9	133	0	-22	-9	-31	0.00	-1.00	-1.00	-0.23	0.00	6.63	4.24
	Blackbrook Avenue (South)	Right to Enfield Park Road	26	0	0	26	77	7	2	86	-51	-7	-2	-60	-0.66	-1.00	-1.00	-0.70	7.14	3.74	2.00
	Capesthorne Road	Left to Blackbrook Avenue (North)	36	0	0	36	49	2	5	56	-13	-2	-5	-20	-0.26	-1.00	-1.00	-0.35	1.92	2.00	3.16
	Capesthorne Road	E/B to Enfield Park Road	252	22	0	274	254	22	9	285	-2	0	-9	-11	-0.01	0.00	-1.00	-0.04	0.10	0.01	4.24
	Capesthorne Road	Right to Blackbrook Avenue (South)	36	5	0	41	82	10	5	97	-46	-5	-5	-56	-0.57	-0.50	-1.00	-0.58	6.05	1.83	3.16
Poplars Avenue / Capesthorne Road	Poplars Avenue (North)	Left to Capesthorne Road (East)	77	16	0	93	57	3	2	62	20	13	-2	31	0.35	4.46	-1.00	0.50	2.43	4.30	2.00
	Poplars Avenue (North)	S/B to Poplars Avenue (South)	166	23	7	196	154	9	2	165	12	14	5	31	0.08	1.53	2.36	0.19	0.97	3.45	2.26
	Poplars Avenue (North)	Right to Capesthorne Road (West)	29	0	0	29	50	2	0	52	-21	-2	0	-23	-0.41	-1.00	0.00	-0.44	3.28	2.00	0.00
	Capesthorne Road (East)	Left to Poplars Avenue (South)	137	24	3	164	42	7	2	51	95	17	1	113	2.27	2.46	0.38	2.22	10.07	4.35	0.49
	Capesthorne Road (East)	W/B to Capesthorne Road (West)	188	0	0	188	185	21	18	224	3	-21	-18	-36	0.02	-1.00	-1.00	-0.16	0.25	6.48	6.00
	Capesthorne Road (East)	Right to Poplars Avenue (North)	42	3	0	45	32	1	0	33	10	2	0	12	0.30	1.79	0.00	0.35	1.60	1.30	0.00
	Poplars Avenue (South)	Left to Capesthorne Road (West)	11	0	0	11	12	0	2	14	-1	0	-2	-3	-0.05	0.00	-1.00	-0.19	0.19	0.00	2.00
	Poplars Avenue (South)	N/B to Poplars Avenue (North)	70	14	1	84	45	6	5	56	25	8	-4	28	0.55	1.27	-0.87	0.50	3.25	2.43	2.58
	Poplars Avenue (South)	Right to Capesthorne Road (East)	74	2	0	76	43	2	2	47	31	0	-2	29	0.73	0.00	-1.00	0.63	4.10	0.00	2.00
	Capesthorne Road (West)	Left to Poplars Avenue (North)	9	0	0	9	20	5	0	25	-11	-5	0	-16	-0.56	-1.00	0.00	-0.65	2.97	3.16	0.00
	Capesthorne Road (West)	E/B to Capesthorne Road (East)	183	0	0	183	221	26	16	263	-38	-26	-16	-80	-0.17	-1.00	-1.00	-0.30	2.69	7.21	5.66
	Capesthorne Road (West)	Right to Poplars Avenue (South)	100	3	0	103	95	7	7	109	5	-4	-7	-6	0.05	-0.56	-1.00	-0.06	0.46	1.74	3.74
A49 / Long Lane / Hawleys Lane	A49 (North)	Left to Long Lane	68	8	0	76	146	23	18	187	-78	-15	-18	-111	-0.53	-0.66	-1.00	-0.59	7.53	3.85	6.00
	A49 (North)	S/B to A49 (South)	1229	191	223	1644	1290	148	217	1655	-61	43	6	-11	-0.05	0.29	0.03	-0.01	1.71	3.32	0.43
	A49 (North)	Right to Hawleys Lane	171	0	41	212	181	33	46	260	-10	-33	-5	-48	-0.05	-1.00	-0.11	-0.18	0.73	8.12	0.76
	Long Lane	Left to A49 (South)	340	24	14	378	345	29	32	406	-5	-5	-18	-28	-0.01	-0.16	-0.58	-0.07	0.25	0.90	3.87
	Long Lane	W/B to Hawleys Lane	125	0	3	128	124	20	14	158	1	-20	-11	-30	0.01	-1.00	-0.81	-0.19	0.13	6.32	3.90
	Long Lane	Right to A49 (North)	71	3	36	109	159	23	18	200	-88	-20	18	-91	-0.55	-0.89	0.99	-0.45	8.22	5.71	3.42
	A49 (South)	Left to Hawleys Lane	40	6	0	46	40	22	30	92	0	-16	-30	-46	0.00	-0.73	-1.00	-0.50	0.00	4.28	7.75
	A49 (South)	N/B to A49 (North)	608	127	178	913	512	106	178	796	96	21	0	117	0.19	0.20	0.00	0.15	4.05	1.95	0.02
	A49 (South)	Right to Long Lane	183	21	3	207	179	22	30	231	4	-1	-27	-24	0.02	-0.05	-0.89	-0.10	0.28	0.23	6.49
	Hawleys Lane	Left to A49 (North)	156	38	69	263	156	38	69	263	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hawleys Lane	E/B to Long Lane	43	3	0	46	73	20	9	102	-30	-17	-9	-56	-0.42	-0.85	-1.00	-0.55	4.00	4.98	4.24
	Hawleys Lane	Right to A49 (South)	37	11	0	48	25	11	25	61	12	0	-25	-13	0.49	0.00	-1.00	-0.21	2.21	0.00	7.07
Blackbrook Avenue / Insall Road / Hilden Road	Blackbrook Avenue (North)	Left to Insall Road	0	0	0	0	42	5	0	47	-42	-5	0	-47	-1.00	-1.00	0.00	-1.00	9.17	3.16	0.00
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	289	28	8	325	326	38	14	378	-37	-10	-6	-53	-0.11	-0.27	-0.45	-0.14	2.09	1.78	1.90
	Blackbrook Avenue (North)	Right to Hilden Road	17	0	0	17	77	6	0	83	-60	-6	0	-66	-0.78	-1.00	0.00	-0.80	8.83	3.46	0.00
	Insall Road	Left to Blackbrook Avenue (South)	128	9	0	137	128	8	12	148	0	1	-12	-11	0.00	0.10	-1.00	-0.07	0.02	0.28	4.90
	Insall Road	W/B to Hilden Road	158	0	0	158	106	9	9	124	52	-9	-9	34	0.49	-1.00	-1.00	0.27	4.52	4.24	4.24
	Insall Road	Right to Blackbrook Avenue (North)	0	0	0	0	20	4	2	26	-20	-4	-2	-26	-1.00	-1.00	-1.00	-1.00	6.32	2.83	2.00
	Blackbrook Avenue (South)	Left to Hilden Road	46	7	0	53	29	7	2	38	17	0	-2	15	0.59	0.00	-1.00	0.39	2.78	0.00	2.00
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	151	17	0	168	188	30	7	225	-37	-13	-7	-57	-0.20	-0.42	-1.00	-0.25	2.86	2.57	3.74
	Blackbrook Avenue (South)	Right to Insall Road	20	0	0	20	110	6	9	125	-90	-6	-9	-105	-0.81	-1.00	-1.00	-0.84	11.09	3.46	4.24
	Hilden Road	Left to Blackbrook Avenue (North)	14	0	0	14	56	7	7	70	-42	-7	-7	-56	-0.75	-1.00	-1.00	-0.80	7.12	3.74	3.74
	Hilden Road	E/B to Insall Road	149	0	0	149	138	15	21	174	11	-15	-21	-25	0.08	-1.00	-1.00	-0.15	0.89	5.48	6.48
	Hilden Road	Right to Blackbrook Avenue (South)	15	0	0	15	42	6	5	53	-27	-6	-5	-38	-0.64	-1.00	-1.00	-0.72	5.05	3.46	3.16
A50 / Hilden Road / Orford Road / Smith Drive	A50	Entry to Roundabout	740	92	9	841	637	80	44	761	103	12	-35	80	0.16	0.14	-0.79	0.11	3.94	1.25	6.70
	Hilden Road	Entry to Roundabout	234	12	0	246	265	22	16	303	-31	-10	-16	-57	-0.12	-0.47	-1.00	-0.19	1.93	2.53	5.66
	Orford Road	Entry to Roundabout	577	50	18	645	504	50	51	605	73	0	-33	40	0.14	-0.01	-0.64	0.07	3.13	0.06	5.54
	Smith Drive	Entry to Roundabout	208	0	0	208	208	28	9	245	0	-28	-9	-37	0.00	-1.00	-1.00	-0.15	0.01	7.48	4.24
Blackbrook Avenue / A574	Blackbrook Avenue (North)	Left to A574 (East)	0	0	0	0	22	3	2	27	-22	-3	-2	-27	-1.00	-1.00	-1.00	-1.00	6.63	2.45	2.00
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	398	34	8	440	397	41	23	461	1	-7	-15	-21	0.00	-0.18	-0.66	-0.05	0.06	1.18	3.89
	Blackbrook Avenue (North)	Right to A574 (West)	35	3	0	37	77	8	5	90	-42	-5	-5	-53	-0.55	-0.65	-1.00	-0.58	5.68	2.24	3.16
	A574 (East)	Left to Blackbrook Avenue (South)	209	25	16	251	128	12	16	156	81	13	0	95	0.63	1.12	0.00	0.61	6.25	3.11	0.00
	A574 (East)	W/B to A574 (West)	280	37	12	329	332	37	28	397	-52	0	-16	-68	-0.16	0.00	-0.58	-0.17	2.97	0.00	3.65
	A574 (East)	Right to Blackbrook Avenue (North)	21	8	0	29	21	3	5	29	0	5	-5	0	0.00	1.70	-1.00	0.00	0.00	2.17	3.16
	Blackbrook Avenue (South)	Left to A574 (West)	165	4	4	173	155	13	0	168	10	-9	4	5	0.07	-0.72	0.00	0.03	0.82	3.23	2.82
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	196	16	0	213	279	36	9	324	-83	-20	-9	-112	-0.30	-0.55	-1.00	-0.34	5.38	3.84	4.24
	Blackbrook Avenue (South)	Right to A574 (East)	233	16	14	263	201	16	14	231	32	0	0	32	0.16	0.00	0.00	0.14	2.17	0.00	0.00
	A574 (West)	Left to Blackbrook Avenue (North)	0	0	0	0	27	4	5	36	-27	-4	-5	-36	-1.00	-1.00	-1.00	-1.00	7.35	2.83	3.16
	A574 (West)	E/B to A574 (East)	438	33	25	496	442	32	32	506	-4	1	-7	-10	-0.01	0.04	-0.22	-0.02	0.20	0.24	1.31
	A574 (West)	Right to Blackbrook Avenue (South)	163	24	5	192	164	19	5	188	-1	5	0	4	-0.01	0.27	0.00	0.02	0.09	1.10	0.01
A50 / A574	A50 (North)	Left to A574	281	33	5	319	321	33	12	366	-40	0	-7	-47	-0.12	0.00	-0.58	-0.13	2.30	0.00	2.40
	A50 (North)	S/B to A50 (South)	308	46	2	356	276	41	25	342	32	5	-23	14	0.11	0.13	-0.93	0.04	1.85	0.81	6.38
	A574	Left to A50 (South)	165	30	12	206	149	29	42	220	16	1	-30	-14	0.10	0.03	-0.72	-0.06	1.24	0.14	5.84
	A574	Right to A50 (North)	315	14	4	333	330	28	7	365	-15	-14	-3	-32	-0.04	-0.51	-0.43	-0.09	0.81	3.13	1.29
	A50 (South)	N/B to A50 (North)	261	36	14	312	302	39	44	385	-41	-3	-30	-73	-0.13	-0.08	-0.67	-0.19	2.42	0.51	5.48
	A50 (South)	Right to A574	319	24	25	369	312	24	25	361	7	0	0	8	0.02	0.02	0.00	0.02	0.42	0.09	0.01
Crab Lane / A574 / Woolston Grange Avenue	Crab Lane	Entry to Roundabout	306	48	0	354	396	51	28	475	-90	-3	-28	-121	-0.23	-0.06	-1.00	-0.26	4.83	0.40	7.48
	A574 (East)	Entry to Roundabout	928	101	85	1114	928	101	85	1114	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Woolston Grange Avenue	Entry to Roundabout	1100	78	55	1233	1100	78	81	1259	0	0	-26	-26	0.00	0.00	-0.32	-0.02	0.00	0.00	3.13
	A574 (West)	Entry to Roundabout	671	49	39	759	647	50	48	745	24	-1	-9	14	0.04	-0.01	-0.19	0.02	0.92	0.09	1.37
A49 / Golborne Road	A49 (North)	Left to Golborne Road	91	4	0	95	59	4	0	63	32	0	0	32	0.55	0.00	0.00	0.51	3.74	0.00	0.00
	A49 (North)	Ahead to A49 (South)	369	45	24	438	312	35	14	361	57	10	10	77	0.18	0.28	0.71	0.21	3.11	1.57	2.29
	Golborne Road	Left to A49 (South)	288	40	28	355	285	31	11	327	3	9	17	28	0.01	0.28	1.50	0.09	0.17	1.48	3.76
	Golborne Road	Right to A49 (North)	44	0	0	44	44	4	0	48	0	-4	0	-4	0.00	-1.00	0.00	-0.08	0.00	2.83	0.00
	A49 (South)	Ahead to A49 (North)	298	35	0	333	299	35	34	368	-1	0	-34	-35	0.00	0.00	-1.00	-0.09	0.05	0.01	8.25
	A49 (South)	Right to Golborne Road	263	38	51	351	263	38	14	315	0	0	37	36	0.00	0.00	2.63	0.12	0.03	0.01	6.47
Europa Boulevard / A574 / Callands Road	Europa Boulevard	Entry to Roundabout	198	33	32	263	198	33	32	263	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A574 (East)	Entry to Roundabout	513	66	64	643	581	62	65	708	-68	4	-1	-65	-0.12	0.07	-0.02	-0.09	2.91	0.50	0.15
	Callands Road	Entry to Roundabout	361	22	12	395	361	22	12	395	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	A574 (West)	Entry to Roundabout	440	42	59	541	420	42	23	485	20	0	36	56	0.05	0.00	1.56	0.12	0.96	0.00	5.61
Calver Road / A574	Calver Road	Left to A574 (East)	298	65	66	429	298	65	115	478	0	0	-49	-49	0.00	0.00	-0.42	-0.10	0.00	0.00	5.11
	A574 (East)	W/B to A574 (West)	513	66	64	643	502	62	65	629	11	4	-1	14	0.02	0.07	-0.02	0.02	0.49	0.50	0.15
	A574 (East)	Right to Calver Road	202	19	45	266	206	46	88	340	-4	-27	-43	-74	-0.02	-0.59	-0.48	-0.22	0.27	4.76	5.22
	A574 (West)	Left to Calver Road	76	11	7	94	86	19	7	112	-10	-8	0	-18	-0.11	-0.44	0.00	-0.16	1.09	2.15	0.01
	A574 (West)	E/B to A574 (East)	659	52	95	806	569	41	28	638	90	11	67	168	0.16	0.26	2.41	0.26	3.62	1.58	8.59
A49 North		left turn to M62 east	95	28	22	145	95	28	37	160	0	0	-15	-15	0.00	0.00	-0.40	-0.09	0.00	0.00	2.73
		Stright on to A49 South	1020	185	160	1365	1141	185	189	1515	-121	0	-29	-150	-0.11	0.00	-0.15	-0.10	3.69	0.01	2.19
M62 East		left turn to A49 south	508	81	130	720	455	81	157	693	53	0	-27	27	0.12	0.00	-0.17	0.04	2.42	0.00	2.21
		right turn to A49 north	150	34	3	187	150	12	23	185	0	22	-20	2	0.00	1.79	-0.85	0.01	0.03	4.51	5.38
A49 South		left turn to M62 west	209	39	90	338	264	39	90	393	-55	0	0	-55	-0.21	0.00	0.00	-0.14	3.57	0.02	0.04
		straight on to A49 north	710	113	240	1063	674	103	212	989	36	10	28	74	0.05	0.09	0.13	0.07	1.38	0.93	1.84
M62 West		left turn to A49 north	483	78	42	603	489	79	67	635	-6	-1	-25	-32	-0.01	-0.01	-0.37	-0.05	0.28	0.09	3.35
		right turn to A49 south	303	29	17	349	265	44	46	355	38	-15	-29	-6	0.14	-0.34	-0.63	-0.02	2.28	2.50	5.20
Junction 9		East bound Internal	2955		1036	3991	2847		886	3733	108		150	258	0.04		0.17	0.07	2.00		4.84
		Westbound Internal	3647		1024	4672	3336		1024	4360	311		0	312	0.09		0.00	0.07	5.27		0.00
Junction 10		Eastbound Mainline towards Manchester	1451		650	2101	1446		766	2212	5		-116	-111	0.00		-0.15	-0.05	0.13		4.36
		Eastbound On Slip	2034		511	2546	1611		736	2347	423		-225	199	0.26		-0.31	0.08	9.92		8.99
		Westbound On Slip M6 Northbound	1729		543	2271	1573		543	2116	156		0	155	0.10		0.00	0.07	3.83		0.00
		Westbound Main Line before M6 Northbound merge	2692		615	3307	2431		545	2976	261		70	331	0.11		0.13	0.11	5.16		2.91
		Westbound On Slip M6 Southbound	481		98	578	393		25	418	88		73	160	0.22		2.90	0.38	4.19		9.27
		Westbound Junction Start	2211		517	2729	2038		520	2558	173		-3	171	0.09		-0.01	0.07	3.76		0.11

Peel Hall

PM Peak Calibration

Time Period 1700-1800

Turn Counts

Calbration Statistics

GEH	Cars	LGV	HGV
<5 <5	148 88%	150 93%	159 94%
<10 <10	17.00 10%	11.00 7%	7.00 4%
>10 >10	3.00 2%	0.00 0%	1.00 1%
<20 >20	0 0%	0 0%	1 1%

TOTAL 169

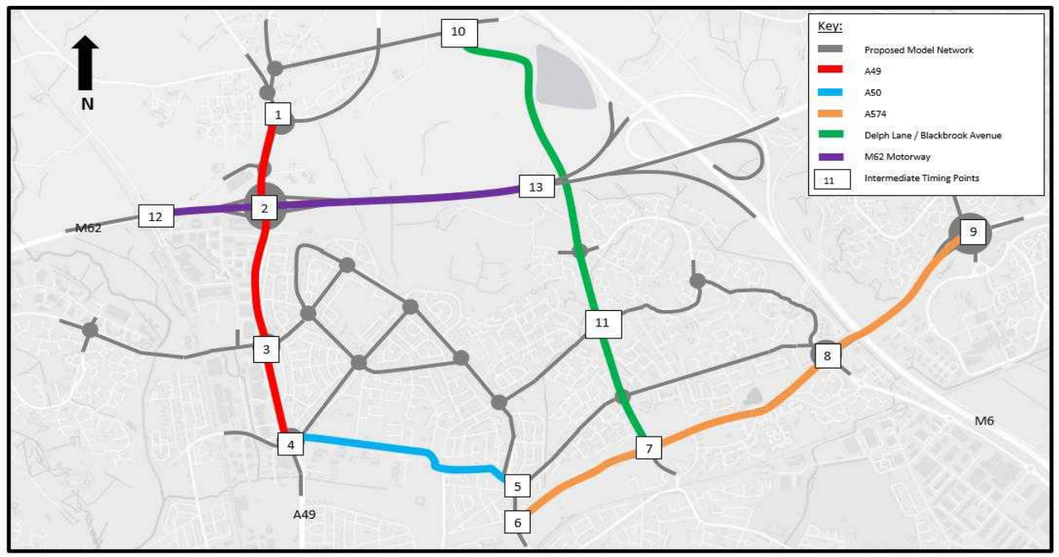
Turn Counts

Junction	Road	Movement	Model				Observed				Difference				Percentage Difference				GEH		
			Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV	All Traffic	Cars	LGV	HGV
Southworth Lane / Delph Lane / Myddleton Lane	Southworth Lane	Left to Delph Lane	56	4	0	61	48	4	0	52	8	0	0	9	0.17	0.08	0.00	0.17	1.15	0.16	0.00
	Southworth Lane	W/B to Myddleton Lane	382	24	3	409	390	24	6	420	-8	0	-3	-11	-0.02	0.00	-0.52	-0.03	0.43	0.00	1.47
	Delph Lane	Left to Myddleton Lane	323	31	14	368	291	32	1	324	32	-1	13	44	0.11	-0.04	13.28	0.14	1.83	0.21	4.80
	Delph Lane	E/B to Southworth Lane	23	0	0	23	23	4	0	27	0	-4	0	-4	0.00	-1.00	0.00	-0.15	0.01	2.83	0.00
	Myddleton Lane	E/B to Southworth Lane	159	17	0	176	157	17	3	177	2	0	-3	-1	0.01	0.01	-1.00	0.00	0.17	0.05	2.45
	Myddleton Lane	Right to Delph Lane	231	16	0	247	302	32	2	336	-71	-16	-2	-89	-0.23	-0.51	-1.00	-0.27	4.34	3.35	2.00
Newton Road / A49 / Winwick Park Avenue	Newton Road	Entry to Roundabout	712	49	13	773	746	46	17	809	-34	3	-4	-36	-0.05	0.06	-0.25	-0.04	1.27	0.43	1.11
	A49 (East)	Entry to Roundabout	721	90	38	848	723	90	38	851	-2	0	0	-3	0.00	0.00	-0.01	0.00	0.09	0.00	0.05
	A49 (South)	Entry to Roundabout	1630	143	37	1810	1611	144	36	1791	19	-1	1	19	0.01	-0.01	0.03	0.01	0.47	0.08	0.17
	A49 (South)	Left turn to Winwick Park Avenue	89	6	0	95															
	Winwick Park Avenue	Left to Newton Road	33	4	2	39	33	4	1	38	0	0	1	1	0.00	0.00	1.30	0.03	0.01	0.00	1.01
	Winwick Park Avenue	E/B Entry to Roundabout	29	5	0	34	27	5	1	33	2	0	-1	1	0.07	0.07	-1.00	0.04	0.38	0.16	1.41
A49 / Delph Lane	A49 (North)	S/B to A49 (South)	1104	95	50	1249	1099	98	40	1237	5	-3	10	12	0.00	-0.03	0.25	0.01	0.15	0.33	1.47
	A49 (North)	Right to Delph Lane	113	11	0	124	230	49	8	287	-117	-38	-8	-163	-0.51	-0.78	-1.00	-0.57	8.94	6.99	4.00
	A49 (South)	Left to Delph Lane	155	42	0	197	151	41	9	201	4	1	-9	-4	0.03	0.03	-1.00	-0.02	0.34	0.18	4.24
	A49 (South)	N/B to A49 (North)	1491	126	27	1644	1472	127	35	1634	19	-1	-8	10	0.01	-0.01	-0.22	0.01	0.48	0.07	1.39
	Delph Lane	Left to A49 (North)	139	17	10	166	139	17	1	157	0	0	9	9	0.00	0.00	9.14	0.06	0.01	0.00	3.87
	Delph Lane	Right to A49 (South)	169	17	0	187	128	9	1	138	41	8	-1	49	0.32	0.92	-1.00	0.35	3.39	2.29	1.41
A49 / Birch Avenue	A49 (North)	Left to Birch Avenue	19	0	0	19	19	2	0	21	0	-2	0	-2	0.00	-1.00	0.00	-0.09	0.02	2.00	0.00
	A49 (North)	S/B to A49 (South)	1198	132	83	1412	1207	135	86	1428	-9	-3	-3	-16	-0.01	-0.02	-0.04	-0.01	0.27	0.29	0.37
	Birch Avenue	Left to A49 (South)	12	2	0	14	18	2	0	20	-6	0	0	-6	-0.31	0.00	0.00	-0.28	1.42	0.00	0.00
A49 / Sandy Lane West / A574	A49 (North)	Left to Sandy Lane West	221	24	5	250	231	29	5	265	-10	-5	0	-15	-0.04	-0.18	0.00	-0.06	0.68	1.01	0.00
	A49 (North)	Entry to roundabout	989	110	78	1177	922	110	78	1110	67	0	0	67	0.07	0.00	0.00	0.06	2.18	0.01	0.04
	Sandy Lane West	Left to A49 (South)	52	0	0	52	53	2	1	56	-1	-2	-1	-4	-0.03	-1.00	-1.00	-0.08	0.18	2.00	1.41
	Sandy Lane West	Entry to roundabout	457	25	12	494	468	32	3	503	-11	-7	9	-9	-0.02	-0.20	3.07	-0.02	0.53	1.21	3.34
	A49 (South)	Left to A574	434	4	3	441	512	50	11	573	-78	-46	-8	-132	-0.15	-0.92	-0.71	-0.23	3.59	8.87	2.94
	A49 (South)	Entry to roundabout	1269	130	63	1461	1214	115	51	1380	55	15	12	81	0.05	0.13	0.23	0.06	1.55	1.35	1.54
	A574	Left to A49 (North)	369	17	15	401	363	17	14	394	6	0	1	7	0.02	0.00	0.05	0.02	0.33	0.00	0.20
	A574	Entry to Roundabout	627	46	0	673	756	56	17	829	-129	-10	-17	-156	-0.17	-0.17	-1.00	-0.19	4.92	1.37	5.83
Cotswold Road / Cleveland Road / Sandy Lane / Sandy Lane West	Cotswold Road	Left to Cleveland Road	12	0	0	12	6	0	1	7	6	0	-1	5	0.96	0.00	-1.00	0.68	1.94	0.00	1.41
	Cotswold Road	S/B to Sandy Lane	30	0	0	30	30	1	4	35	0	-1	-4	-5	0.00	-1.00	-1.00	-0.14	0.00	1.41	2.83
	Cotswold Road	Right to Sandy Lane West	34	0	3	37	37	6	1	44	-3	-6	2	-7	-0.07	-1.00	1.61	-0.16	0.45	3.46	1.20
	Cleveland Road	Left to Sandy Lane	0	0	0	0	13	0	0	13	-13	0	0	-13	-1.00	0.00	0.00	-1.00	5.10	0.00	0.00
	Cleveland Road	W/B to Sandy Lane West	250	25	8	283	184	18	2	204	66	7	6	79	0.36	0.41	3.08	0.39	4.45	1.60	2.73
	Cleveland Road	Right to Cotswold Road	5	4	0	10	1	0	0	1	4	4	0	9	4.39	0.00	0.00	8.88	2.46	3.00	0.00
	Sandy Lane	Left to Sandy Lane West	135	0	1	136	160	11	1	172	-25	-11	0	-36	-0.16	-1.00	0.44	-0.21	2.09	4.69	0.40
	Sandy Lane	N/B to Cotswold Road	32	0	0	32	30	7	4	41	2	-7	-4	-9	0.08	-1.00	-1.00	-0.21	0.42	3.74	2.83
	Sandy Lane	Right to Cleveland Road	0	0	0	0	3	1	2	6	-3	-1	-2	-6	-1.00	-1.00	-1.00	-1.00	2.45	1.41	2.00
	Sandy Lane West	Left to Cotswold Road	63	0	0	63	65	6	3	74	-2	-6	-3	-11	-0.03	-1.00	-1.00	-0.15	0.23	3.46	2.45
	Sandy Lane West	E/B to Cleveland Road	192	24	0	216	184	24	4	212	8	0	-4	4	0.05	0.00	-1.00	0.02	0.61	0.01	2.83
	Sandy Lane West	Right to Sandy Lane	44	0	0	44	158	20	1	179	-114	-20	-1	-135	-0.72	-1.00	-1.00	-0.75	11.35	6.32	1.41
Poplars Avenue / Cleveland Road	Poplars Avenue (East)	Left to Cleveland Road	213	30	5	248	198	19	1	218	15	11	4	30	0.08	0.57	3.82	0.14	1.07	2.21	2.24
	Poplars Avenue (East)	W/B to Poplars Avenue (West)	61	0	0	61	61	5	6	72	0	-5	-6	-11	0.00	-1.00	-1.00	-0.15	0.01	3.16	3.46
	Cleveland Road	Left to Poplars Avenue (West)	0	0	0	0	4	1	0	5	-4	-1	0	-5	-1.00	-1.00	0.00	-1.00	2.83	1.41	0.00
	Cleveland Road	Right to Poplars Avenue (East)	187	24	0	211	199	26	3	228	-12	-2	-3	-17	-0.06	-0.07	-1.00	-0.07	0.87	0.39	2.45
	Poplars Avenue (West)	E/B to Poplars Avenue (East)	48	0	0	48	48	1	5	54	0	-1	-5	-6	0.00	-1.00	-1.00	-0.11	0.01	1.41	3.16
	Poplars Avenue (West)	Right to Cleveland Road	4	0	0	4	8	1	1	10	-4	-1	-1	-6	-0.50	-1.00	-1.00	-0.60	1.65	1.41	1.41
Poplars Avenue / Howson Road	Poplars Avenue (East)	Left to Howson Road	44	5	0	49	32	5	0	37	12	0	0	12	0.38	0.00	0.00	0.33	1.97	0.00	0.00
	Poplars Avenue (East)	W/B to Poplars Avenue (West)	274	30	5	309	267	26	5	298	7	4	0	11	0.03	0.15	-0.04	0.04	0.45	0.74	0.08
	Howson Road	Left to Poplars Avenue (West)	0	0	0	0	32	2	1	35	-32	-2	-1	-35	-1.00	-1.00	-1.00	-1.00	8.00	2.00	1.41
	Howson Road	Right to Poplars Avenue (East)	40	7	0	47	40	7	2	49	0	0	-2	-2	-0.01	0.01	-1.00	-0.04	0.04	0.04	2.00
	Poplars Avenue (West)	E/B to Poplars Avenue (East)	213	24	0	237	217	24	9	250	-4	0	-9	-13	-0.02	0.01	-1.00	-0.05	0.26	0.03	4.24
	Poplars Avenue (West)	Right to Howson Road	22	0	0	22	38	2	0	40	-16	-2	0	-18	-0.43	-1.00	0.00	-0.46	2.97	2.00	0.00
Mill Lane / Enfield Park Road / Blackbrook Avenue / Ballater Drive	Mill Lane	Left to Enfield Park Road	60	0	0	60	129	8	0	137	-69	-8	0	-77	-0.53	-1.00	0.00	-0.56	7.07	4.00	0.00
	Mill Lane	S/B to Blackbrook Avenue	211	20	0	231	200	29	2	231	11	-9	-2	0	0.06	-0.31	-1.00	0.00	0.78	1.82	2.00
	Mill Lane	Right to Ballater Drive	17	0	0	17	17	0	0	17	0	0	0	0	0.01	0.00	0.00	0.01	0.04	0.00	0.00
	Enfield Park Road	Left to Blackbrook Avenue	45	6	0	51	50	6	0	56	-5	0	0	-5	-0.11	0.00	0.00	-0.10	0.79	0.00	0.00
	Enfield Park Road	W/B to Ballater Drive	30	6	0	36	30	6	1	37	0	0	-1	-1	0.00	0.00	-1.00	-0.03	0.00	0.00	1.41
	Enfield Park Road	Right to Mill Lane	153	9	0	162	158	11	1	170	-5	-2	-1	-8	-0.03	-0.18	-1.00	-0.05	0.39	0.64	1.41
	Blackbrook Avenue	Left to Ballater Drive	45	0	0	45	45	6	0	51	0	-6	0	-6	0.00	-1.00	0.00	-0.12	0.01	3.46	0.00
	Blackbrook Avenue	N/B to Mill Lane	209	22	14	245	175	23	0	198	34	-1	14	47	0.20	-0.05	0.00	0.24	2.47	0.24	5.34
	Blackbrook Avenue	Right to Enfield Park Road	92	0	0	92	83	6	1	90	9	-6	-1	2	0.10	-1.00	-1.00	0.02	0.93	3.46	1.41
	Ballater Drive	Left to Mill Lane	0	0	0	0	8	2	0	10	-8	-2	0	-10	-1.00	-1.00	0.00	-1.00	4.00	2.00	0.00
	Ballater Drive	E/B to Enfield Park Road	0	0	0	0	10	3	0	13	-10	-3	0	-13	-1.00	-1.00	0.00	-1.00	4.47	2.45	0.00
	Ballater Drive	Right to Blackbrook Avenue	21	0	0	21	21	4	1	26	0	-4	-1	-5	0.00	-1.00	-1.00	-0.19	0.00	2.83	1.41
Blackbrook Avenue / Enfield Park Road / Capesthorne Road	Blackbrook Avenue (North)	Left to Enfield Park Road	15	0	0	15	29	3	0	32	-14	-3	0	-17	-0.50	-1.00	0.00	-0.54	3.07	2.45	0.00
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	152	26	0	178	177	26	1	204	-25	0	-1	-26	-0.14	0.00	-1.00	-0.13	1.94	0.00	1.41
	Blackbrook Avenue (North)	Right to Capesthorne Road	110	0	0	110	65	10	2	77	45	-10	-2	33	0.69	-1.00	-1.00	0.43	4.80	4.47	2.00
	Enfield Park Road	Left to Blackbrook Avenue (South)	34	0	0	34	85	5	0	90	-51	-5	0	-56	-0.60	-1.00	0.00	-0.62	6.58	3.16	0.00
	Enfield Park Road	W/B to Capesthorne Road	312	8	0	320	293	24	3	320	19	-16	-3	0	0.07	-0.65	-1.00	0.00	1.10	3.90	2.45
	Enfield Park Road	Right to Blackbrook Avenue (North)	14	3	12	29	24	1	0	25	-10	2	12	4	-0.43	1.72	0.00	0.15	2.36	1.26	4.93
	Blackbrook Avenue (South)	Left to Capesthorne Road	89	0	0	89	112	17	3	132	-23	-17	-3	-43	-0.20	-1.00	-1.00	-0.32	2.26	5.83	2.45
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	178	7	2	187	207	19	1	227	-29	-12	1	-40	-0.14	-0.63	1.04	-0.18	2.10	3.31	0.84
	Blackbrook Avenue (South)	Right to Enfield Park Road	28	0	0	28	81	3	0	84	-54	-3	0	-57	-0.66	-1.00	0.00	-0.67	7.26	2.45	0.00
	Capesthorne Road	Left to Blackbrook Avenue (North)	154	12	0	167	72	15	0	87	82	-3	0	80	1.15	-0.19	0.00	0.91	7.75	0.79	0.00
	Capesthorne Road	E/B to Enfield Park Road	155	25	0	180	143	16	4	163	12	9	-4	17	0.09	0.56	-1.00	0.11	1.00	1.99	2.83
	Capesthorne Road	Right to Blackbrook Avenue (South)	54	7	0	61	92	12	1	105	-38	-5	-1	-44	-0.41	-0.41	-1.00	-0.42	4.41	1.60	1.41
Poplars Avenue / Capesthorne Road	Poplars Avenue (North)	Left to Capesthorne Road (East)	59	12	0	71	28	5	0	33	31	7	0	38	1.12	1.39	0.00	1.16	4.75	2.39	0.00
	Poplars Avenue (North)	S/B to Poplars Avenue (South)	73	7	0	80	73	10	1	84	0	-3	-1	-4	0.00	-0.29	-1.00	-0.04	0.03	1.00	1.41
	Poplars Avenue (North)	Right to Capesthorne Road (West)	65	0	0	65	65	4	0	69	0	-4	0	-4	0.01	-1.00	0.00	-0.05	0.06	2.83	0.00
	Capesthorne Road (East)	Left to Poplars Avenue (South)	69	0	0	69	34	7	0	41	35	-7	0	28	1.03	-1.00	0.00	0.68	4.88	3.74	0.00
	Capesthorne Road (East)	W/B to Capesthorne Road (West)	309	0	0	309	330	28	6	364	-21	-28	-6	-55	-0.06	-1.00	-1.00	-0.15	1.15	7.48	3.46
	Capesthorne Road (East)	Right to Poplars Avenue (North)	76	8	0	84	30	5	1	36	46	3	-1	48	1.53	0.66	-1.00	1.34	6.31	1.28	1.41
	Poplars Avenue (South)	Left to Capesthorne Road (West)	38	8	0	46	17	2	0	19	21	6	0	27	1.23	3.22	0.00	1.44	3.98	2.82	0.00
	Poplars Avenue (South)	N/B to Poplars Avenue (North)	109	25	3	136	53	2	1	56	56	23	2	80	1.05	11.26	1.94	1.43	6.21	6.18	1.38
	Poplars Avenue (South)	Right to Capesthorne Road (East)	96	12	0	108	45	2	0	47	51	10	0	61	1.13	5.01	0.00	1.30	6.06	3.78	0.00
	Capesthorne Road (West)	Left to Poplars Avenue (North)	49	0	0	49	34	3	1	38	15	-3	-1	11	0.44	-1.00	-1.00	0.29	2.32	2.45	1.41
	Capesthorne Road (West)	E/B to Capesthorne Road (East)	178	13	0	191	206	25	6	237	-29	-12	-6	-46	-0.14	-0.48	-1.00	-0.20	2.06	2.74	3.46
	Capesthorne Road (West)	Right to Poplars Avenue (South)	60	0	0	60	70	10	1	81	-10	-10	-1	-21	-0.15	-1.00	-1.00	-0.26	1.28	4.47	1.41
A49 / Long Lane / Hawleys Lane	A49 (North)	Left to Long Lane	212	15	11	239	207	18	2	227	5	-3	9	12	0.03	-0.15	4.40	0.05	0.38	0.67	3.48
	A49 (North)	S/B to A49 (South)	736	96	7	839	761	78	43	882	-25	18	-36	-43	-0.03	0.23	-0.83	-0.05	0.91	1.91	7.09
	A49 (North)	Right to Hawleys Lane	161	21	26	208	160	21	20	201	1	0	6	7	0.01	0.00	0.30	0.04	0.08	0.01	1.26
	Long Lane	Left to A49 (South)	254	19	0	273	251	19	6	276	3	0	-6	-3	0.01	0.00	-1.00	-0.01	0.21	0.01	3.46
	Long Lane	W/B to Hawleys Lane	104	16	0	120	104	16	2	122	0	0	-2	-2	0.00	0.00	-1.00	-0.02	0.02	0.01	2.00
	Long Lane	Right to A49 (North)	64	0	5	68	238	21	3	262	-174	-21	2	-194	-0.73	-1.00	0.54	-0.74	14.20	6.48	0.83
	A49 (South)	Left to Hawleys Lane	66	3	0	69	66	2	6	74	0	1	-6	-5	0.00	0.34	-1.00	-0.07	0.00	0.44	3.46
	A49 (South)	N/B to A49 (North)	1293	112	37	1442	1129	115	28	1272	164	-3	9	170	0.15	-0.03	0.31	0.13	4.72	0.31	1.55
	A49 (South)	Right to Long Lane	216	23	0	239	175	18	6	199	41	5	-6	40	0.23	0.26	-1.00	0.20	2.93	1.02	3.46
	Hawleys Lane	Left to A49 (North)	346	22	24	392	355	30	31	416	-9	-8	-7	-24	-0.03	-0.26	-0.22	-0.06	0.50	1.52	1.27
	Hawleys Lane	E/B to Long Lane	120	6	0	126	124	11	1	136	-4	-5	-1	-10	-0.03	-0.47	-1.00	-0.07	0.32	1.77	1.41
	Hawleys Lane	Right to A49 (South)	73	4	0	78	75	5	4	84	-2	-1	-4	-6	-0.02	-0.11	-1.00	-0.07	0.19	0.25	2.83
Blackbrook Avenue / Insall Road / Hilden Road	Blackbrook Avenue (North)	Left to Insall Road	7	0	0	7	44	1	0	45	-37	-1	0	-38	-0.85	-1.00	0.00	-0.85	7.41	1.41	0.00
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	231	33	0	264	263	33	2	298	-32	0	-2	-34	-0.12	0.00	-1.00	-0.11	2.04	0.03	2.00
	Blackbrook Avenue (North)	Right to Hilden Road	7	0	0	7	53	8	0	61	-46	-8	0	-54	-0.87	-1.00	0.00	-0.89	8.46	4.00	0.00
	Insall Road	Left to Blackbrook Avenue (South)	73	0	0	73	86	7	1	94	-13	-7	-1	-21	-0.15	-1.00	-1.00	-0.23	1.49	3.74	1.41
	Insall Road	W/B to Hilden Road	134	0	0	134	175	19	2	196	-41	-19	-2	-62	-0.23	-1.00	-1.00	-0.32	3.31	6.16	2.00
	Insall Road	Right to Blackbrook Avenue (North)	27	0	0	27	55	8	2	65	-28	-8	-2	-38	-0.51	-1.00	-1.00	-0.59	4.40	4.00	2.00
	Blackbrook Avenue (South)	Left to Hilden Road	50	0	0	50	49	7	0	56	1	-7	0	-6	0.03	-1.00	0.00	-0.10	0.20	3.74	0.00
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	189	7	2	198	222	20	2	244	-33	-13	0	-46	-0.15	-0.65	0.02	-0.19	2.30	3.52	0.03
	Blackbrook Avenue (South)	Right to Insall Road	54	5	0	60	89	6	2	97	-35	-1	-2	-37	-0.39	-0.09	-1.00	-0.38	4.08	0.23	2.00
	Hilden Road	Left to Blackbrook Avenue (North)	98	0	0	98	97	9	0	106	1	-9	0	-8	0.01	-1.00	0.00	-0.07	0.14	4.24	0.00
	Hilden Road	E/B to Insall Road	106	10	0	116	120	15	4	139	-14	-5	-4	-23	-0.12	-0.35	-1.00	-0.17	1.34	1.48	2.83
	Hilden Road	Right to Blackbrook Avenue (South)	11	0	0	11	37	4	0	41	-26	-4	0	-30	-0.70	-1.00	0.00	-0.73	5.30	2.83	0.00
A50 / Hilden Road / Orford Road / Smith Drive	A50	Entry to Roundabout	694	57	11	761	651	65	6	722	43	-8	5	39	0.07	-0.13	0.81	0.05	1.64	1.05	1.68
	Hilden Road	Entry to Roundabout	211	10	0	221	241	24	4	269	-30	-14	-4	-48	-0.13	-0.58	-1.00	-0.18	2.01	3.37	2.83
	Orford Road	Entry to Roundabout	709	53	7	769	596	59	10	665	113	-6	-3	104	0.19	-0.11	-0.25	0.16	4.43	0.85	0.85
	Smith Drive	Entry to Roundabout	350	29	0	379	350	29	8	387	0	0	-8	-8	0.00	0.00	-1.00	-0.02	0.00	0.00	4.00
Blackbrook Avenue / A574	Blackbrook Avenue (North)	Left to A574 (East)	0	0	0	0	24	1	1	26	-24	-1	-1	-26	-1.00	-1.00	-1.00	-1.00	6.89	1.41	1.41
	Blackbrook Avenue (North)	S/B to Blackbrook Avenue (South)	293	33	0	327	313	36	2	351	-20	-3	-2	-24	-0.06	-0.08	-1.00	-0.07	1.12	0.47	2.00
	Blackbrook Avenue (North)	Right to A574 (West)	21	0	0	21	49	7	0	56	-28	-7	0	-35	-0.57	-1.00	0.00	-0.62	4.72	3.74	0.00
	A574 (East)	Left to Blackbrook Avenue (South)	227	14	3	243	230	9	2	241	-3	5	1	2	-0.02	0.51	0.61	0.01	0.23	1.37	0.75
	A574 (East)	W/B to A574 (West)	542	11	0	553	527	23	4	554	15	-12	-4	-1	0.03	-0.54	-1.00	0.00	0.65	3.04	2.83
	A574 (East)	Right to Blackbrook Avenue (North)	22	0	0	22	31	4	0	35	-9	-4	0	-13	-0.28	-1.00	0.00	-0.37	1.70	2.83	0.00
	Blackbrook Avenue (South)	Left to A574 (West)	177	15	2	194	176	10	2	188	1	5	0	6	0.01	0.51	0.00	0.03	0.10	1.43	0.00
	Blackbrook Avenue (South)	N/B to Blackbrook Avenue (North)	250	7	2	259	243	24	2	269	7	-17	0	-10	0.03	-0.71	0.02	-0.04	0.42	4.30	0.04
	Blackbrook Avenue (South)	Right to A574 (East)	129	23	0	152	137	23	0	160	-8	0	0	-8	-0.06	0.00	0.00	-0.05	0.68	0.00	0.00
	A574 (West)	Left to Blackbrook Avenue (North)	22	5	0	28	86	5	2	93	-64	0	-2	-65	-0.74	0.09	-1.00	-0.70	8.69	0.19	2.00
	A574 (West)	E/B to A574 (East)	387	18	4	409	366	20	2	388	21	-2	2	21	0.06	-0.09	1.04	0.05	1.06	0.39	1.19
	A574 (West)	Right to Blackbrook Avenue (South)	227	13	11	251	189	13	0	202	38	0	11	49	0.20	0.01	0.00	0.24	2.64	0.03	4.67
A50 / A574	A50 (North)	Left to A574	350	26	11	387	340	22	0	362	10	4	11	25	0.03	0.20	0.00	0.07	0.54	0.87	4.66
	A50 (North)	S/B to A50 (South)	271	27	0	299	241	27	7	275	30	0	-7	24	0.13	0.01	-1.00	0.09	1.90	0.07	3.74
	A574	Left to A50 (South)	384	11	0	395	386	11	3	400	-2	0	-3	-5	0.00	-0.03	-1.00	-0.01	0.09	0.09	2.45
	A574	Right to A50 (North)	357	15	2	373	393	24	6	423	-36	-9	-4	-50	-0.09	-0.39	-0.68	-0.12	1.88	2.16	2.04
	A50 (South)	N/B to A50 (North)	352	39	6	396	374	44	8	426	-22	-5	-2	-30	-0.06	-0.12	-0.30	-0.07	1.16	0.85	0.91
	A50 (South)	Right to A574	286	11	4	300	304	18	4	326	-18	-7	0	-26	-0.06	-0.42	0.02	-0.08	1.06	1.98	0.04
Crab Lane / A574 / Woolston Grange Avenue	Crab Lane	Entry to Roundabout	555	9	0	564	511	35	4	550	44	-26	-4	14	0.09	-0.74	-1.00	0.02	1.89	5.53	2.83
	A574 (East)	Entry to Roundabout	1323	61	25	1410	1488	69	28	1585	-165	-8	-3	-175	-0.11	-0.11	-0.11	-0.11	4.39	0.95	0.60
	Woolston Grange Avenue	Entry to Roundabout	775	94	31	900	775	97	23	895	0	-3	8	5	0.00	-0.03	0.33	0.01	0.00	0.31	1.48
	A574 (West)	Entry to Roundabout	516	41	4	561	538	46	3	587	-22	-5	1	-26	-0.04	-0.10	0.36	-0.04	0.96	0.72	0.57
A49 / Golborne Road	A49 (North)	Left to Golborne Road	54	6	0	60	50	5	0	55	4	1	0	5	0.08	0.30	0.00	0.10	0.55	0.62	0.00
	A49 (North)	Ahead to A49 (South)	347	23	0	370	265	38	3	306	82	-15	-3	64	0.31	-0.40	-1.00	0.21	4.70	2.76	2.45
	Golborne Road	Left to A49 (South)	365	26	13	403	278	34	0	312	87	-8	13	91	0.31	-0.23	0.00	0.29	4.83	1.43	5.04
	Golborne Road	Right to A49 (North)	20	1	19	40	34	1	0	35	-14	0	19	5	-0.42	0.10	0.00	0.14	2.74	0.10	6.19
	A49 (South)	Ahead to A49 (North)	736	69	17	822	628	60	26	714	108	9	-9	108	0.17	0.16	-0.36	0.15	4.12	1.17	2.05
	A49 (South)	Right to Golborne Road	327	22	10	359	610	56	9	675	-283	-34	1	-316	-0.46	-0.61	0.15	-0.47	13.09	5.50	0.45
Europa Boulevard / A574 / Callands Road	Europa Boulevard	Entry to Roundabout	298	8	9	315	298	8	6	312	0	0	3	3	0.00	0.00	0.53	0.01	0.00	0.00	1.16
	A574 (East)	Entry to Roundabout	934	63	15	1013	918	62	15	995	16	1	0	18	0.02	0.02	0.02	0.02	0.54	0.13	0.07
	Callands Road	Entry to Roundabout	145	13	3	161	145	13	2	160	0	0	1	1	0.00	0.00	0.54	0.01	0.01	0.00	0.67
	A574 (West)	Entry to Roundabout	484	36	25	545	484	36	12	532	0	0	13	13	0.00	0.00	1.08	0.02	0.01	0.00	3.02
Calver Road / A574	Calver Road	Left to A574 (East)	532	28	0	560	436	41	22	499	96	-13	-22	61	0.22	-0.31	-1.00	0.12	4.35	2.13	6.63
	A574 (East)	W/B to A574 (West)	934	63	15	1013	918	62	15	995	16	1	0	18	0.02	0.02	0.02	0.02	0.54	0.13	0.07
	A574 (East)	Right to Calver Road	363	6	32	401	398	30	31	459	-35	-24	1	-58	-0.09	-0.81	0.02	-0.13	1.77	5.73	0.09
	A574 (West)	Left to Calver Road	97	4	10	111	97	4	5	106	0	0	5	5	0.00	0.00	1.04	0.05	0.02	0.00	1.89
	A574 (West)	E/B to A574 (East)	464	35	15	514	448	39	7	494	16	-4	8	20	0.04	-0.11	1.11	0.04	0.77	0.69	2.35
A49 North		left turn to M62 east	124	8	4	135	128	10	4	142	-4	-2	0	-7	-0.04	-0.21	0.00	-0.05	0.40	0.71	0.00
		Stright on to A49 South	1150	104	46	1300	1145	117	38	1300	5	-13	8	0	0.00	-0.11	0.21	0.00	0.14	1.22	1.22
M62 East		left turn to A49 south	410	47	53	510	343	47	39	429	67	0	14	81	0.19	0.00	0.37	0.19	3.44	0.00	2.12
		right turn to A49 north	242	40	9	291	215	40	9	264	27	0	0	27	0.12	0.00	0.00	0.10	1.77	0.00	0.00
A49 South		left turn to M62 west	322	16	14	353	433	32	14	479	-111	-16	0	-126	-0.26	-0.49	0.03	-0.26	5.71	3.21	0.10
		straight on to A49 north	1296	116	66	1478	1432	124	60	1616	-136	-8	6	-138	-0.09	-0.07	0.10	-0.09	3.68	0.77	0.74
M62 West		left turn to A49 north	499	26	10	536	568	58	9	635	-69	-32	1	-99	-0.12	-0.54	0.15	-0.16	2.97	4.86	0.45
		right turn to A49 south	357	71	12	440	288	41	12	341	69	30	0	99	0.24	0.74	0.00	0.29	3.82	4.03	0.00
Junction 9		East bound Internal	3694		767	4461	3577		287	3864	117		480	597	0.03		1.67	0.15	1.93		20.92
		Westbound Internal	4420		363	4783	4303		287	4590	117		76	193	0.03		0.27	0.04	1.76		4.23
Junction 10		Eastbound Mainline	2425		465	2891	2177		231	2408	248		234	483	0.11		1.01	0.20	5.17		12.56
		Eastbound Offslip	1754		360	2114	1943		241	2184	-189		119	-70	-0.10		0.49	-0.03	4.39		6.86
		Westbound On Slip M6 Northbound	1768		170	1938	1809		170	1979	-41		0	-41	-0.02		0.00	-0.02	0.96		0.00
		Westbound Main Line	3242		256	3498	3220		183	3403	22		73	95	0.01		0.40	0.03	0.39		4.90
		Westbound On Slip M6 Southbound	458		18	476	456		18	474	2		0	2	0.00		0.00	0.00	0.09		0.00
		Westbound Junction Start	2881		238	3118	2764		403	3167	117		-165	-49	0.04		-0.41	-0.02	2.19		9.24

Appendix G : Full Journey Time Breakdown

Time Period	Decription	Route Type	Direction of Travel	Reference	Observed Journey Time	Model Journey Time	Absolute Difference	Validation Achieved
08:00 - 09:00	A49	Whole	NB	4 to 1	283	**272**	**-11**	**-4%**
		Intermediate		4 to 3	97	**85**	**-12**	**-12%**
		Intermediate		3 to 2	84	**85**	**1**	**1%**
		Intermediate		2 to 1	102	**100**	**-2**	**-2%**
		Whole	SB	1 to 4	571	**655**	**84**	**15%**
		Intermediate		1 to 2	136	**138**	**2**	**1%**
		Intermediate		2 to 3	218	**257**	**39**	**18%**
		Intermediate		3 to 4	217	**249**	**32**	**15%**
	A574	Whole	EB	6 to 9	502	**224**	**-278**	**-55%**
		Intermediate		6 to 7	91	**58**	**-33**	**-36%**
		Intermediate		7 to 8	191	**69**	**-122**	**-64%**
		Intermediate		8 to 9	220	**98**	**-122**	**-55%**
		Whole	WB	9 to 6	232	**223**	**-9**	**-4%**
		Intermediate		9 to 8	66	**76**	**10**	**15%**
		Intermediate		8 to 7	81	**76**	**-5**	**-6%**
		Intermediate		7 to 6	85	**71**	**-14**	**-16%**
	A50	Whole	EB	4 to 5	213	**189**	**-24**	**-11%**
		Whole	WB	5 to 4	305	**275**	**-30**	**-10%**
	Delph Lane / Blackbrook Avenue	Whole	NB	7 to 10	332	**300**	**-32**	**-10%**
		Intermediate		7 to 11	185	**155**	**-30**	**-16%**
		Intermediate		11 to 10	147	**144**	**-3**	**-2%**
		Whole	SB	10 to 7	319	**310**	**-9**	**-3%**
		Intermediate		10 to 11	124	**143**	**19**	**15%**
		Intermediate		11 to 7	196	**168**	**-28**	**-14%**
	M62	Whole	EB	12 to 13	162	**150**	**-12**	**-7%**
		Whole	WB	13 to 12	101	**89**	**-12**	**-12%**

Time Period	Decription	Route Type	Direction of Travel	Reference	Observed Journey Time	Model Journey Time	Absolute Difference	Validation Achieved
17:00 - 18:00	A49	Whole	NB	4 to 1	409	**434**	**25**	**6%**
		Intermediate		4 to 3	135	**116**	**-19**	**-14%**
		Intermediate		3 to 2	159	**183**	**24**	**15%**
		Intermediate		2 to 1	115	**109**	**-6**	**-5%**
		Whole	SB	1 to 4	484	**468**	**-16**	**-3%**
		Intermediate		1 to 2	171	**172**	**1**	**1%**
		Intermediate		2 to 3	182	**154**	**-28**	**-15%**
		Intermediate		3 to 4	131	**141**	**10**	**8%**
	A574	Whole	EB	6 to 9	221	**230**	**9**	**4%**
		Intermediate		6 to 7	62	**59**	**-3**	**-5%**
		Intermediate		7 to 8	85	**75**	**-10**	**-12%**
		Intermediate		8 to 9	74	**95**	**21**	**28%**
		Whole	WB	9 to 6	316	**268**	**-48**	**-15%**
		Intermediate		9 to 8	113	**96**	**-17**	**-15%**
		Intermediate		8 to 7	125	**102**	**-23**	**-18%**
		Intermediate		7 to 6	78	**71**	**-7**	**-9%**
	A50	Whole	EB	4 to 5	184	**200**	**16**	**9%**
		Whole	WB	5 to 4	392	**295**	**-97**	**-25%**
	Delph Lane / Blackbrook Avenue	Whole	NB	7 to 10	308	**298**	**-10**	**-3%**
		Intermediate		7 to 11	139	**149**	**10**	**7%**
		Intermediate		11 to 10	169	**149**	**-20**	**-12%**
		Whole	SB	10 to 7	310	**290**	**-20**	**-6%**
		Intermediate		10 to 11	138	**142**	**4**	**3%**
		Intermediate		11 to 7	172	**148**	**-24**	**-14%**
	M62	Whole	EB	12 to 13	103	**91**	**-12**	**-12%**
		Whole	WB	13 to 12	93	**90**	**-3**	**-3%**



Appendix G - Journey Time Validation Outputs

AECOM

Appendix 58

WSP Review of SATURN LMVR and HTp Response

MEMO

TO	Mike Taylor, WBC	**FROM**	Colin Wright, WSP
DATE	**22 November 2017**	**CONFIDENTIALITY**	**Confidential**
SUBJECT	**Peel Hall Farm – LMVR Review**		

Introduction

WSP have been commissioned by Warrington Borough Council (WBC) to review a suite of modelling documents that have been submitted to WBC as part of the planning application for a major residential development at Peel Hall Farm.

The Planning Application was submitted by Satnam Group in 2016 and rejected by WBC on the grounds of insufficient information relating to highway matters, namely a functioning traffic model and a set of mitigation measures to cope with the development traffic.

The following documents have been submitted to WBC in order to address the shortcoming of the planning application. These are:

- Local Model Validation Report (LMVR), Aecom, September 2017;
- Peel Hall Forecasting Report, Aecom, September 2017;
- Technical Note – Impact Summary, Highgate Transportation, September 2017.

The proposed method of review by WSP is to produce a short summary "memo style" report for each of the above documents. This document will review the information provided within the LMVR. The purpose of this report is to summarise the key points of the LMVR and raise queries where additional information may need to be sought.

Model Overview

Originally the development was to be modelled using VISSIM micro-simulation software. An existing model of M62 J9 was extended in order to cover the area of influence of the development. The extent of this VISSIM network has been converted to SATURN by Aecom under the instruction of Highgate Transportation. SATURN has been chosen as it can model elements of blocking back.

The base model is of a typical neutral day in May 2015.

The model extent is given in Figure 1.1 in the LMVR. This shown below.

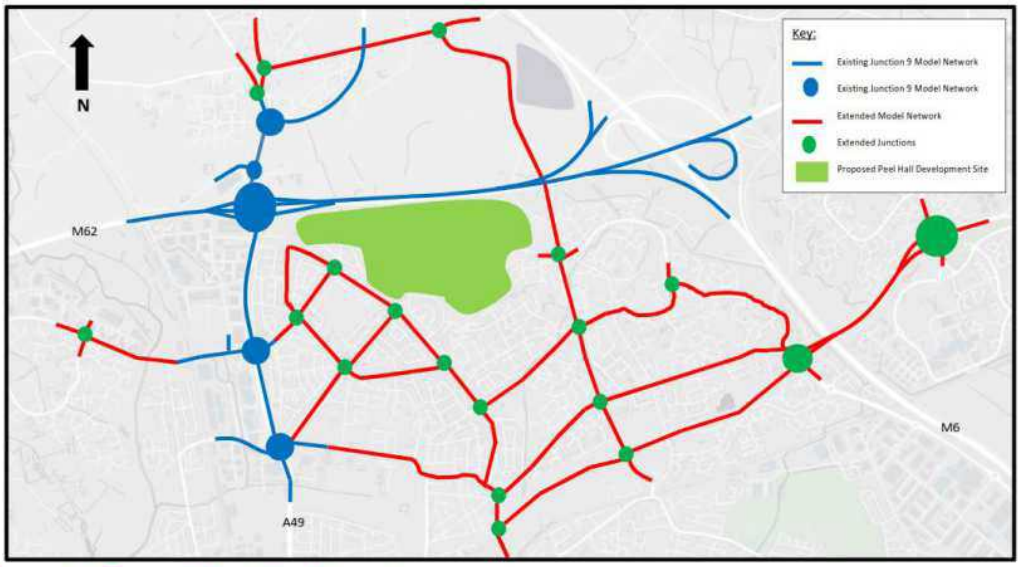


Figure 1.1: Extent of Modelled Network

1. **How has the area of influence of the development site been determined?**

Model Data

The traffic count data used is taken from 21 junction turning counts. Traffic counts were collected between 07:00 – 10:00 and 16:00 – 19:00 on the 8th July 2014 for 17 of the sites. One of the sites was surveyed on 13th May 2014, two of the sites were surveyed on 9th July 2014, and one of the sites was surveyed on 9th February 2016.

Origin destination traffic data is based upon the 2008 base VISUM model of Warrington. The VISUM model was cordoned to the model extent and OD matrices extracted.

2. **Has the 2008 OD data been uplifted to 2015 before matrix estimation was applied?**
3. **The OD data that informed the 2008 model is from Roadside Interview surveys that are at least 10 years old. How did the 2008 model validate in this area and are the OD patterns logical? Can they be relied upon to represent OD movements in May 2015?**

Traffic signal data was obtained from WBC for nine junctions in the model area. Site visits were also undertaken to better understand staging and green time durations during peak hours.

Journey routes were set up and TrafficMaster data was downloaded for 3 neutral days in May 2015. The journey routes are given in Figure 2.1 in the LMVR. This shown below.

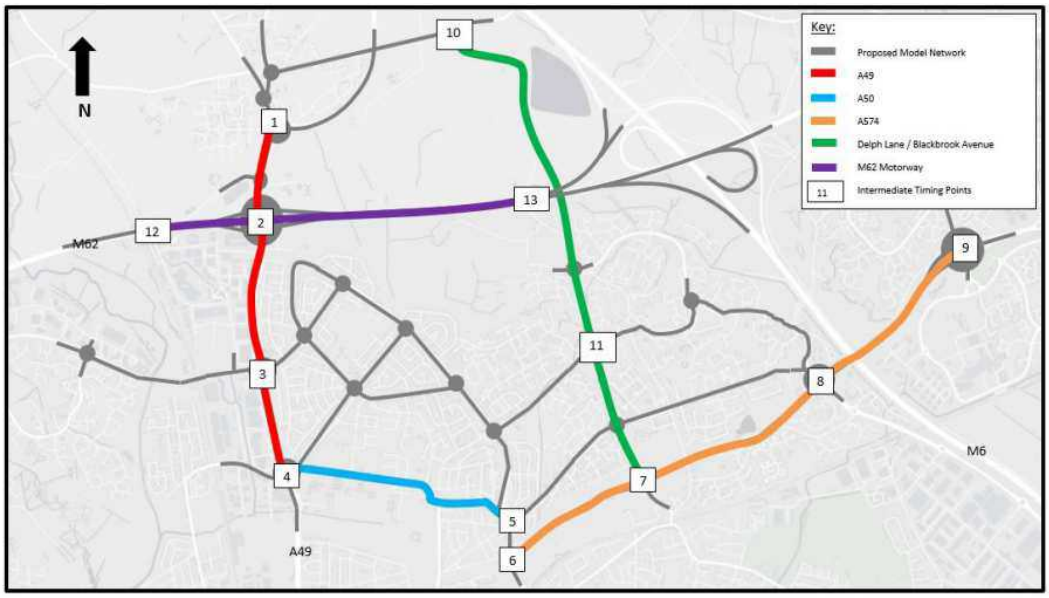


Figure 2.1: Proposed Journey Time Routes for Validation

Finally a number of site visits were undertaken during May and June 2016. This observed driver behaviour, queue lengths, lane usage and estimations of vehicle speed. "The site visits and information collected provided a valuable resource in calibrating the SATURN base models".

4. **How was this information used? There is no further mention of site specific adjustments to the SATURN model. Base year queueing in the model is not reported on or discussed.**

Model Development

The modelled time periods were AM 08:00 – 09:00 and PM 17:00 – 18:00.

5. **Confirmation that these are peak hour models and not one hour averages of the three hour data collection period?**

The model has been constructed with 5 user classes: Car Commute, Car Work, Car Other, LGV and HGV. The pcu values used to convert vehicle matrices into Passenger Car Units for assignment in SATURN are 1.0 for Car, 1.0 for LGV and 2.3 for HGV.

The original M62 J9 model coding was checked to ensure it was still reflective of the current situation. The remaining network was coded using CAD overlays, aerial images and notes taken during site visits. Speed flow curves were applied to the M62 and to Birchwood Way. The remaining links did not have speed flow curves applied, the free flow speed reflected the speed limit expect in areas where traffic calming was in place.

The original VISUM zone structure was not detailed enough in the residential areas that form the southern boundary of the Peel Hall Farm site. They were large zones with multiple connectors. An exercise was undertaken to disaggregate the zones and provide realistic loading points.

6. **Provide updated zone plan showing the extent of disaggregation and loading points for trips? What is the final number of zones?**

The process of matrix estimation describes running matrix estimation in both VISUM and SATURN. It is not entirely clear why this has been carried out. Is this two entirely separate processes or somehow linked (from VISSIM to VISUM to SATURN)? Prior and Post ME matrix results are not provided.

7. **Provide Prior and Post ME matrix integrity results – Prior and Post ME totals, R2, slope and intercept values – to ensure OD patterns remain consistent.**

Convergence is good and in line with DfT TAG criteria, though DMRB is quoted as throughout the document.

8. **Why is DMRB quoted as guidance, should be looking to DfT TAG guidance?**

Calibration and Validation

The traffic counts are said to have been factored to a common year of 2015 using Tempro NTEM dataset v6.2, details of which are given in Technical Note HTp/1107/TN/20 which is an appendix to the forecasting report.

9. **Technical Note TN/20 only details growth factors for 2015-2025 and 2015-2030? The dataset to be used should be NTEM v7.2 (available since March 2017) for car trips. LGV and HGV growth factors are typically derived from National Transport Model (NTM). State factors used and sources to adjust counts to a common year for all vehicle types.**

10. **Has any adjustment been made for seasonality?**

Calibration statistics are presented for turning movements and link counts. The results show GEH<5 for 85% of counts across all vehicle types and time periods.

Validation performance is measured against journey times on the 10 routes (five bi-directional) selected. In each time period 9 out of 10 routes meet the criteria, though the modelled times are quicker than observed in 16 of the 20 routes, 9 out of 10 in the AM.

In the AM peak Birchwood Way EB (JR 6-9) is 55% quicker in the model than observed. This is a key route and known area of delay especially on the EB approach to College Place roundabout. Entry flows to the roundabout calibrate well with observed, which may conclude that the choice of speed flow curve on A574 is not representative and / or the turning movements at College Place roundabout are not being represented in the model.

11. **Provide comparison between modelled and observed turning movements at College Place roundabout.**

12. **Were there any network issues that caused observed journey time EB in the AM peak on Birchwood Way to be higher than normal? How do other neutral periods compare?**

Journey route 6-9 continues to Oakwood Gate junction (section 8-9). There is no count data used at that junction so getting the journey route to validate on that section will be very difficult.

13. **If the model needs to extend to Oakwood Gate then count data should be used to ensure that the flows at that junction are accurately represented.**

Other

14. **Provide plots of base year flows, delays and queuing.**

Summary

A SATURN model of the area around Peel Hall Farm has been produced using turning count data and OD patterns from the 2008 VISUM model. The model represents a neutral day in May 2015.

Notwithstanding the points of clarification regarding growth factors, final zone structure, prior and post ME comparisons, the model compares well with observed data for calibration counts and validation journey routes.

However, there are two issues that require further examination. Firstly, the OD data used in the model has been extracted from the 2008 VISUM model of Warrington. This model was informed by RSIs from 2006 and 2007 and thus the data is at least 10 years old. Evidence is required to show that the OD data is still relevant to trip patterns in May 2015. If the OD data cannot be shown to be suitable, there is now a validated SATURN / Emme multimodal model of Warrington with a base year of 2016 which can be used.

Secondly, the scale of the difference between the modelled and observed journey time EB on Birchwood Way in the AM peak requires further examination. Birchwood Way EB in the AM peak is one of the most congested routes on the network and is critical to model accurately given its influence in this part of Warrington. As it stands the model suggest additional capacity on this route that in reality doesn't exist. This may influence development traffic behaviour in forecast scenarios and underestimate the need for mitigation measures.

Colin Wright
Principal Transport Planner

RESPONSE TO WSP LMVR REVIEW (Rev. A)

PROJECT: Peel Hall, Warrington

REVIEW DATE: 22 November 2017

REF.: APP/M0655/W/17/3178530

Land at Peel Hall, Warrington

Outline application for a new residential neighbourhood including C2 and C3 uses; local employment (B1 uses); local centre including food store up to 2,000m^2, A1-A5 (inclusive) and D1 use class units of up to 600m^2 total (with no single unit of more than 200m^2) and family restaurant/pub of up to 800m^2 (A3/A4 use); site for primary school; open space including sports pitches with ancilary facilities; means of access and supporting infrastructure at Peel Hall, Warrington.

Model Overview

1. How has the area of influence of the development site been determined?

   The area of influence of the development site was determined through our scoping meetings with WBC (19th January 2016 and updated following meeting 12th September 2016). See meeting minutes and modelling scope attached for reference.

Model Data

2. Has the 2008 OD data been uplifted to 2015 before matrix estimation was applied?

   It can be confirmed that the 2008 OD data has been uplifted to 2015.

3. The OD data that informed the 2008 model is from Roadside Interview surveys that are at least 10 years old. How did the 2008 model validate in this area and are the OD patterns logical? Can they be relied upon to represent OD movements in May 2015?

   The OD data was based on the 2008 VISUM model of Warrington, as this was agreed to be the most reliable data set available within the time-frame available. The planning application that is the subject of the appeal was validated in mid-2016 and 2015 was considered acceptable earlier this year; it would not be reasonable to update this now. Future years were agreed with WBC in March 2017 and HE confirmed in January 2017 that a year of opening assessment with all development traffic was unnecessary in this case. The current future years of 2025 and 2030 broadly align with what was previously discussed during 2016 in any event.

4. How was this information used? There is no further mention of site specific adjustments to the SATURN model. Base year queueing in the model is not reported on or discussed.

   The 2016 flow data and 2016 and 2017 observations were taken into account during validation and calibration of the model. It is agreed that this can be made clear in any further LMVR.

Model Development

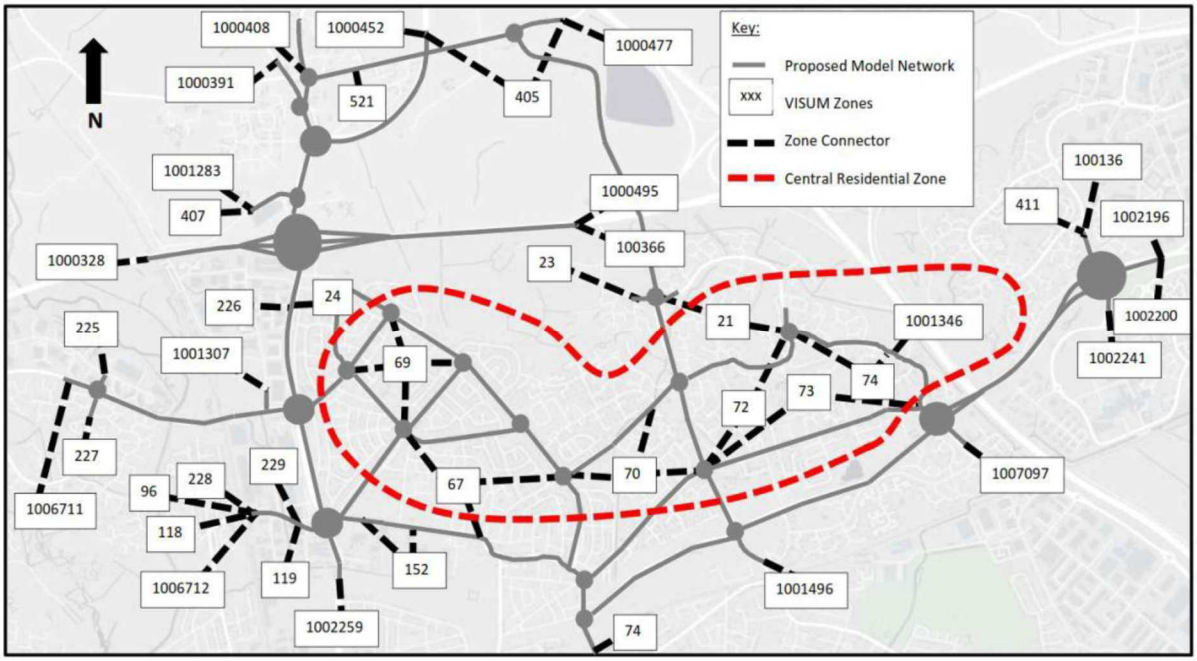
5. Confirmation that these are peak hour models and not one hour averages of the three hour data collection period?

   A two and half hour model period was developed for both the AM and PM model periods in VISSIM to ensure that VISSIM replicated the rise of fall of queueing across the network. Within that period, it was agreed that 0800–0900 and 1700–1800 would be reported upon. Within SATURN typically you model a single hour period and then report upon this. The SATURN model is intended to provide an assessment of the same data collected and used to inform the VISSIM assessment, which is a process that started in January 2016.

6. Provide updated zone plan showing the extent of disaggregation and loading points for trips? What is the final number of zones?

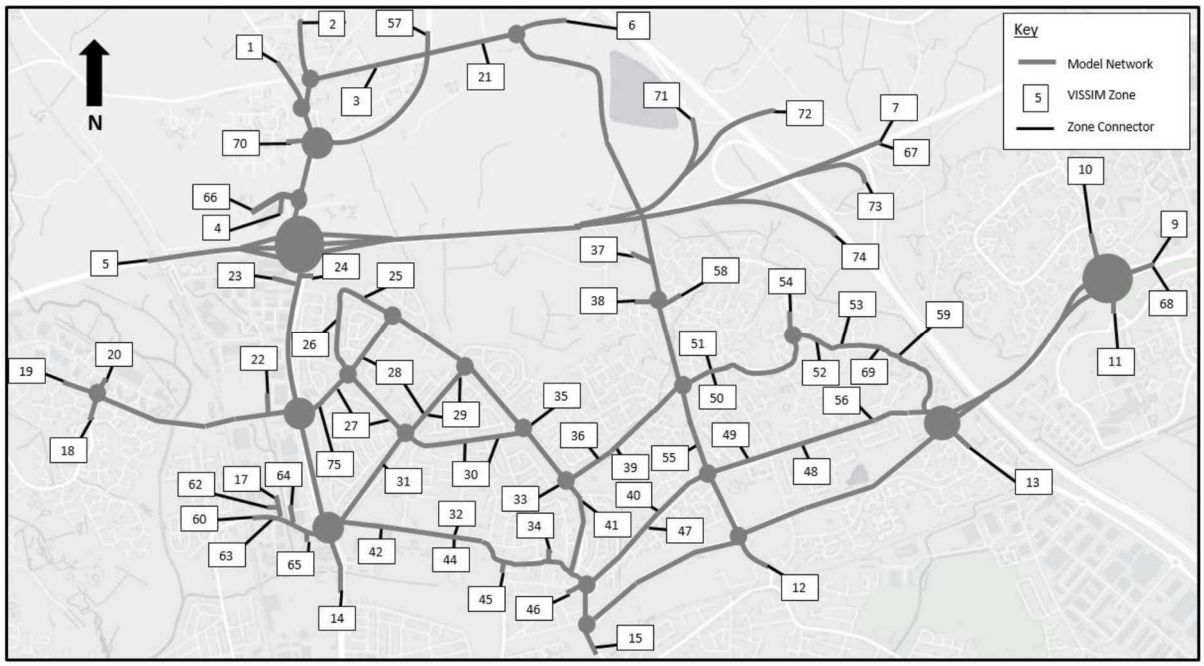
   The zone structure for the Warring Multi Modal Model (WMMM) is shown in Figure 1 below, as provided in the original supporting LMVR.

   Figure 1 – WMMM zone structure



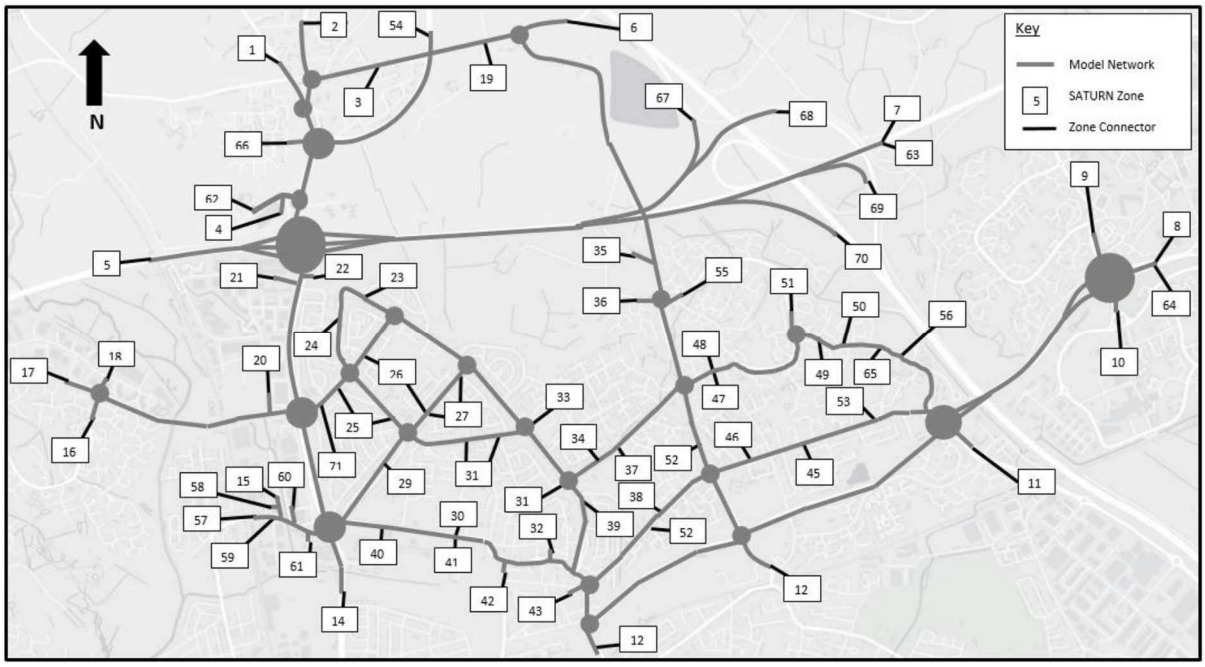
The zone structure, totalling 42 zones, of the WMMM presented in Figure 1, was disaggregated within the central residential zone, to provide a more suitable structure for loading points into the VISSIM model, originally developed for this assessment. The updated VISSIM zone structure including loading points is presented below in Figure 2 (see also Appendix 1).

Figure 2 – VISSIM model zone structure



The zone structure and number of zones remained the same at 71 when moving to SATURN, only the zone numbers changed. A plan of the SATURN zone structure is presented in Figure 3 below (see also at Appendix 2).

Figure 3 – SATURN model zone structure



7. Provide Prior and Post ME matrix integrity results – Prior and Post ME totals, R2, slope and intercept values – to ensure OD patterns remain consistent.

   Whilst these can be provided, it is considered unnecessary; the original VISUM model was built by WSP.

   It is acknowledged that a considerable volume of work was required to convert the matrices to VISSIM originally, and then into SATURN.

8. Why is DMRB quoted as guidance, should be looking to DfT TAG guidance?

   The guidance reference can be updated going forward; these are essentially the same standards.

Calibration and Validation

9. Technical Note TN/20 only details growth factors for 2015-2025 and 2015-2030? The dataset to be used should be NTEM v7.2 (available since March 2017) for car trips. LGV and HGV growth factors are typically derived from National Transport Model (NTM). State factors used and sources to adjust counts to a common year for all vehicle types.

   The growth calculations are as per previously agreed approach with WBC and were updated in May 2017 to reflect NTEM v7.2, which provided lower growth rates than v6.2. HTp/TN/07/Addendum (October 2016) provided an update on reducing background growth, further to the previously provided HTp/TN/07 dated May 2016 that set out the agreed strategy. It is understood that AECOM originally used v6.2 to growth the 2014 survey data to 2015.

10. Has any adjustment been made for seasonality?

    No additional adjustments were made for seasonality, as per previously agreed approach.

11. Provide comparison between modelled and observed turning movements at College Place roundabout.

    This will be provided going forward.

12. Were there any network issues that caused observed journey time EB in the AM peak on Birchwood Way to be higher than normal? How do other neutral periods compare?

    No network issues were reported for the journey times dated 12th, 13th, 14th, May 2015 as obtained from Basemap.co.uk.

    Since 2015 the Oakwood Gate roundabout has benefitted from signalisation of the eastbound approach and corresponding internal circulatory link. The implementation of traffic signals has significantly reduced queues on the A574 Birchwood Way in an eastbound direction and so comparison of the existing journey times with those in 2015 is not recommended. To provide a comparison of journey times for the eastbound route following the A574 Birchwood Road a number of week's data from 2015 and 2014 has been obtained from Basemap.co.uk. and summarised in Table 1 below.

    Table 1, Comparison of Eastbound Journey times for the A574 Birchwood Way

Year	Month	Date Range	Journey Time (Seconds)
2015	April	21st - 23rd	616
		28th - 30th	638
	May	5th - 7th	490
		12th - 14th	502
		18th - 21st	637
	September	8th - 10th	599
		15th - 17th	567
		22th - 24th	764
		29th - 1st	768
2014	May	13th - 15th	556

*Journey time used to Validate Model

    Table 1 identifies that journey times along the A574 differ noticeably, depending upon the time of the year. Comparison of the same week in 2014 identifies the average journey time in the AM peak was approximately 10% higher than the journey time observed during 2015. The journey time data identifies a significant proportion of the delays to vehicles in an eastbound direction traveling along the A574 Birchwood Way are experienced at roundabouts along the route. The route is characterised by a number of roundabouts, so a small change in flows can have a significant impact upon the levels of delay at junctions.

The introduction of the new signals at Oakwood Gate regulate the flow of traffic in an eastbound direction, which has a significant impact on and can be attributed to a significant proportion of the journey times.

13. If the model needs to extend to Oakwood Gate then count data should be used to ensure that the flows at that junction are accurately represented.

    We are happy to consider removing the far eastern extents from a future version of the SATURN model; please confirm.

Other

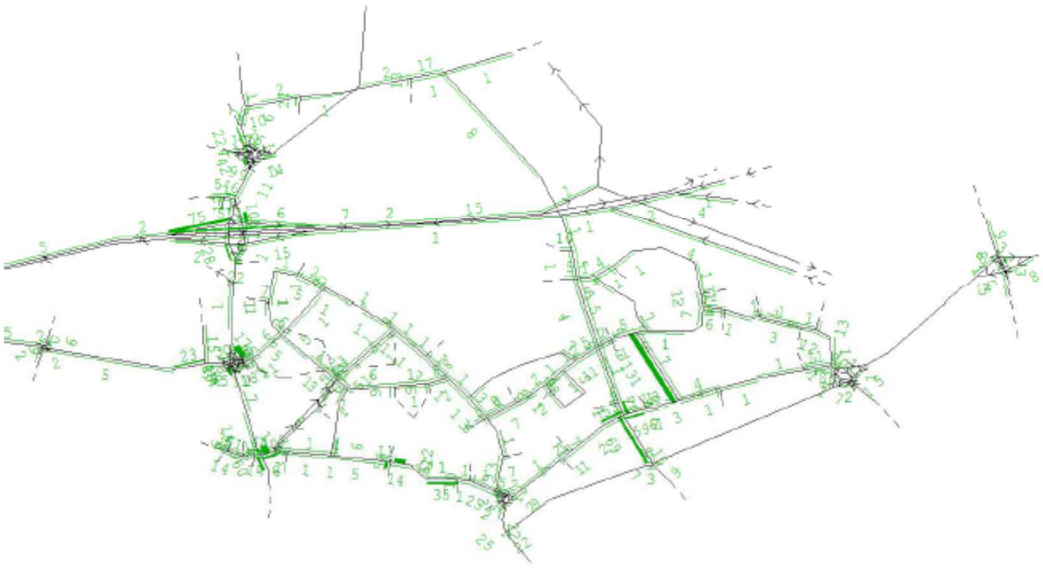
14. Provide plots of base year flows, delays and queuing.

    Base year flows have been provided within the spreadsheets supplied as part of the validation exercise, and also as part of the comparison exercise with the future year flows. Plots of delays for the base year are provided below in Figures 4 to 7 (see also Appendix 3 and 4).

Base year Delay Plots

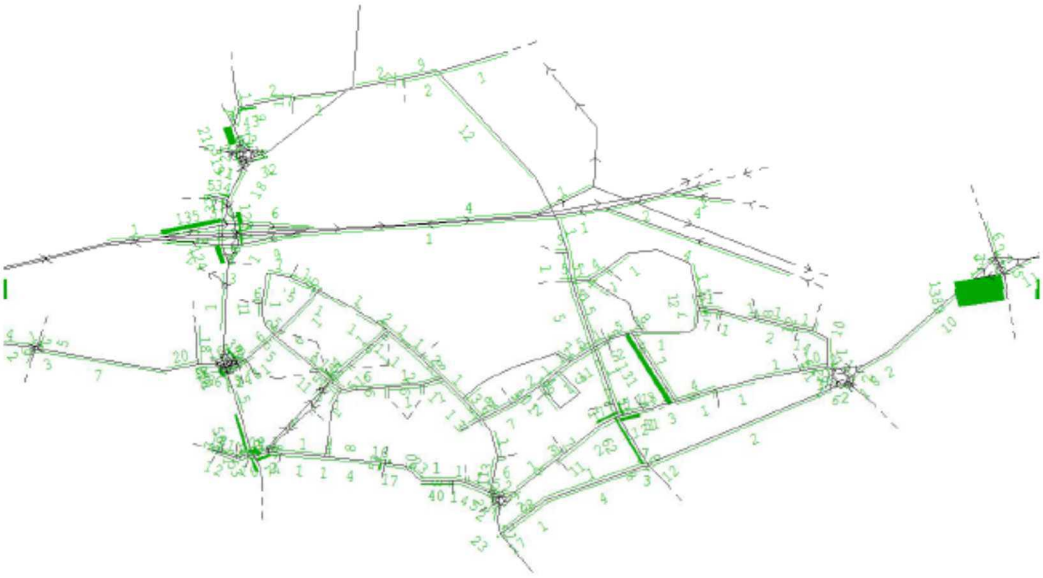
AM

Figure 4, AM Peak Period Delay Plots



PM

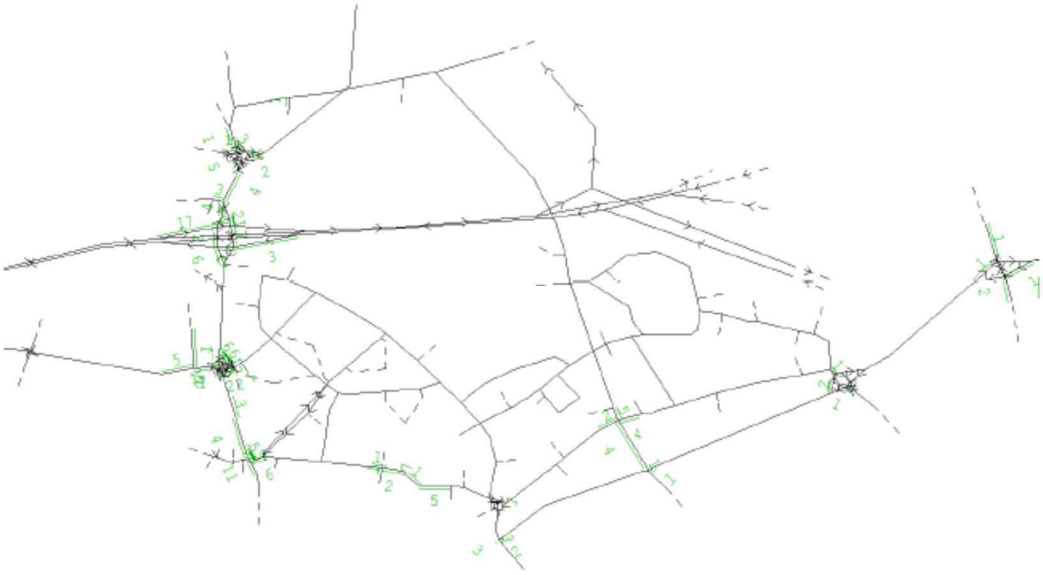
Figure 5, PM Peak Period Delay Plots



Base Year Queue Plots

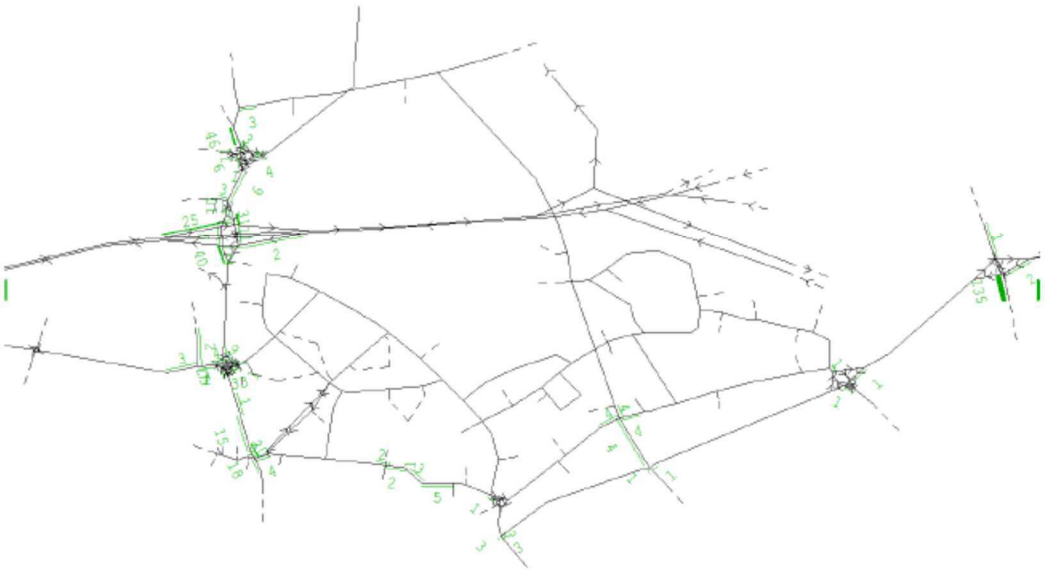
AM

Figure 6, AM Peak Base Year Period Average Queue Plots

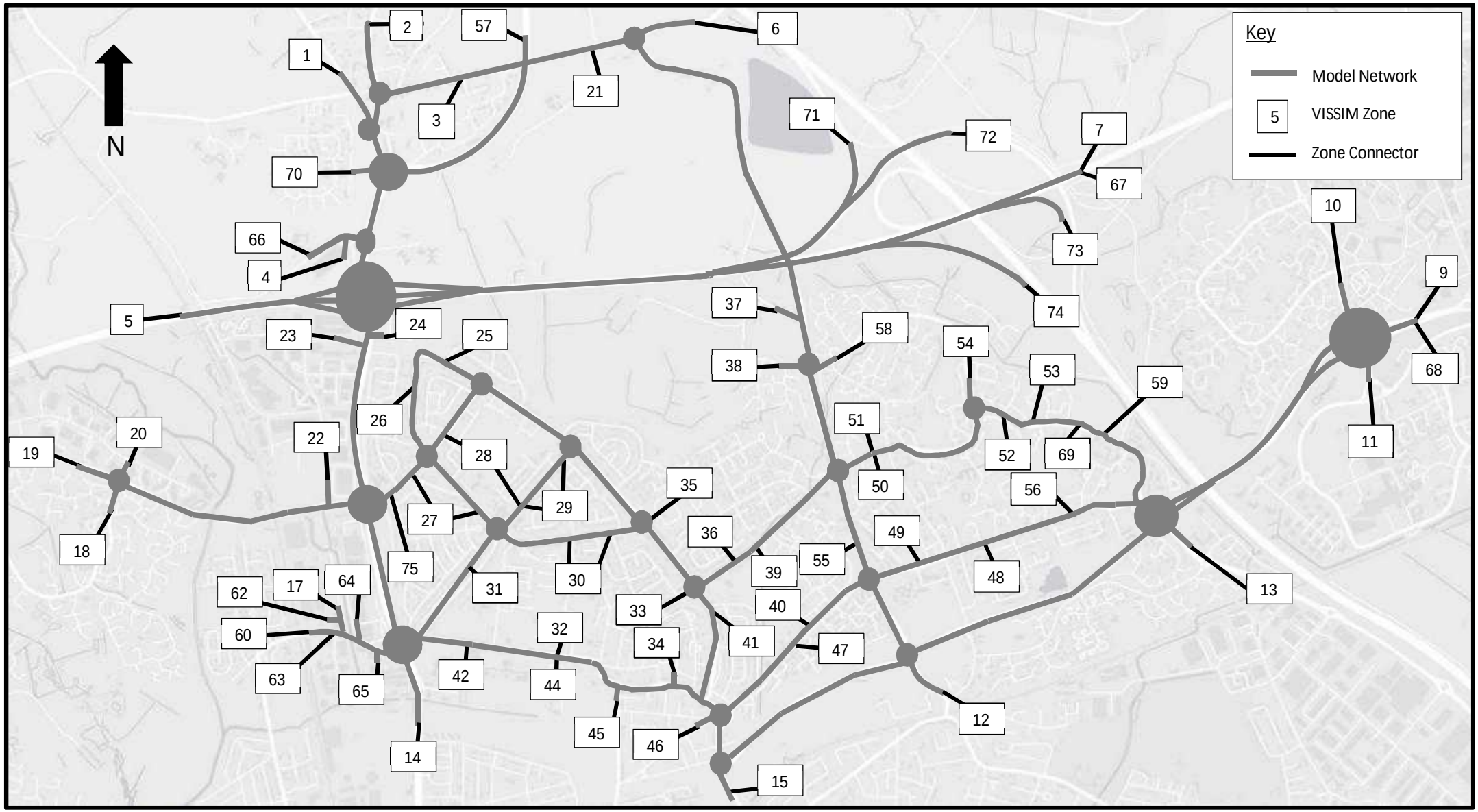


PM

Figure 7, PM Peak Base Year Period Average Queue Plots



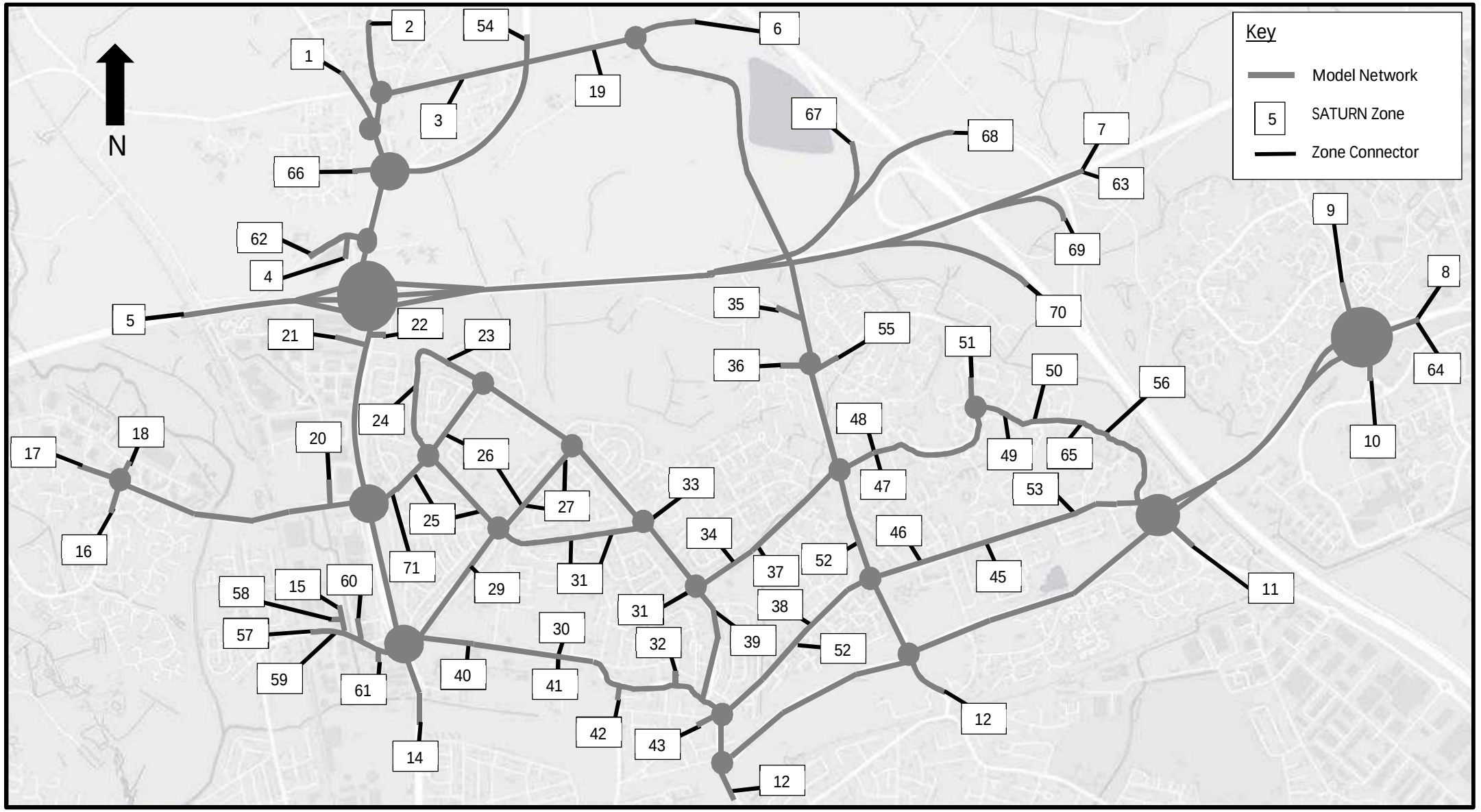
Appendix 1



Appendix A – VISSIM Zone Structure

AECOM

Appendix 2

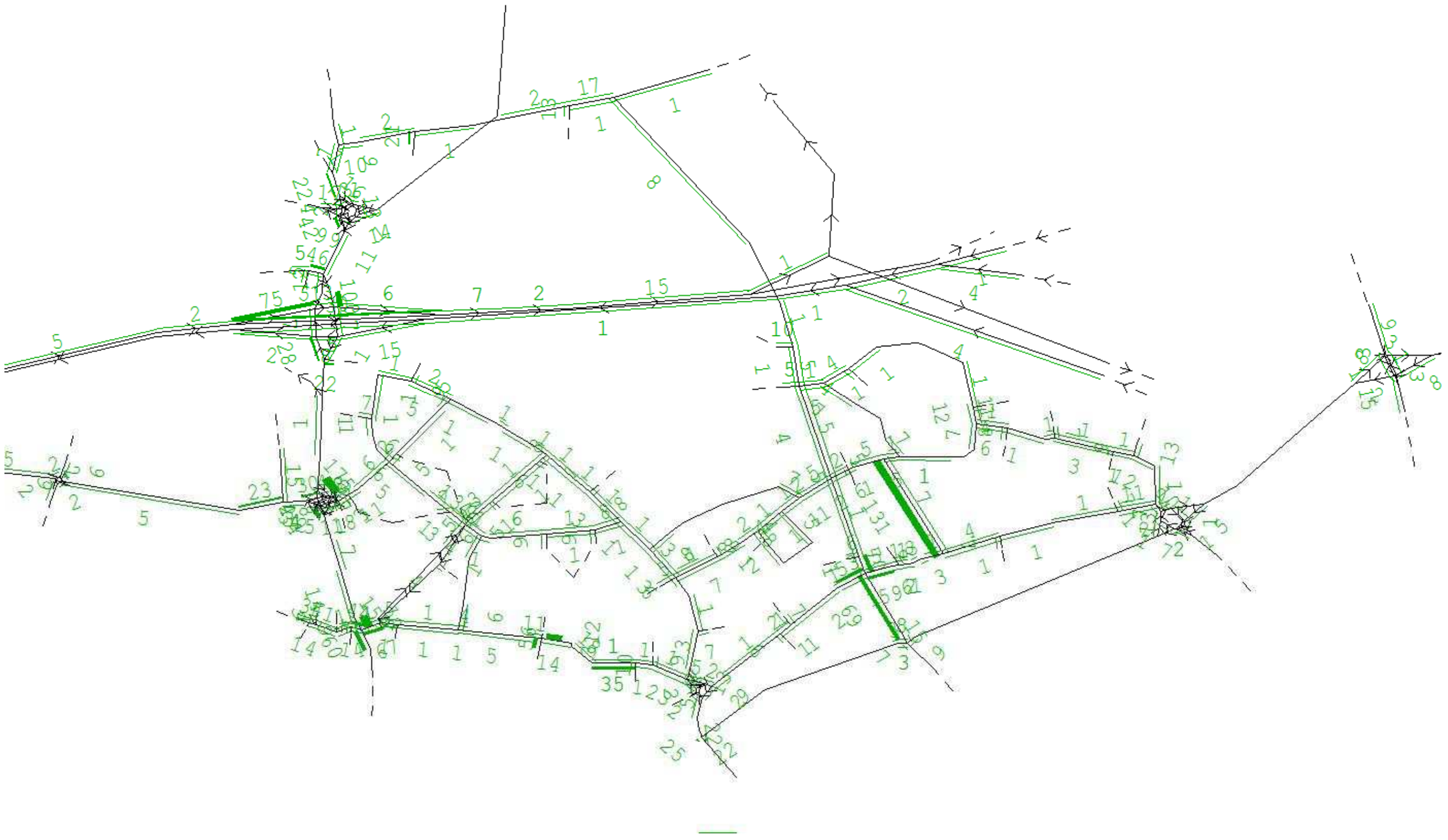


Appendix B – SATURN Zone Structure

Appendix 3

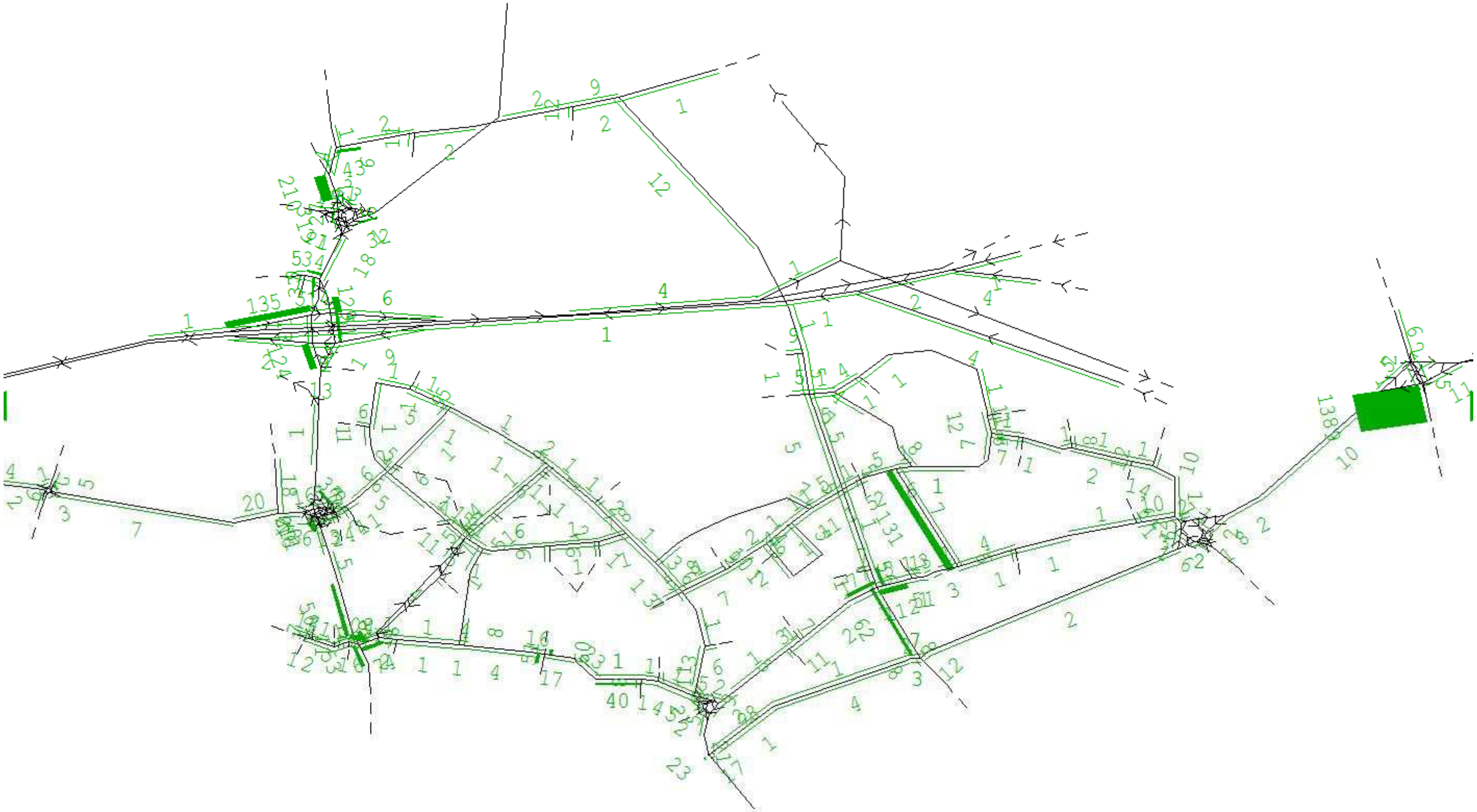
Project number: 60487959

AM Peak Period Total Delay Plot



Project number: 60487959

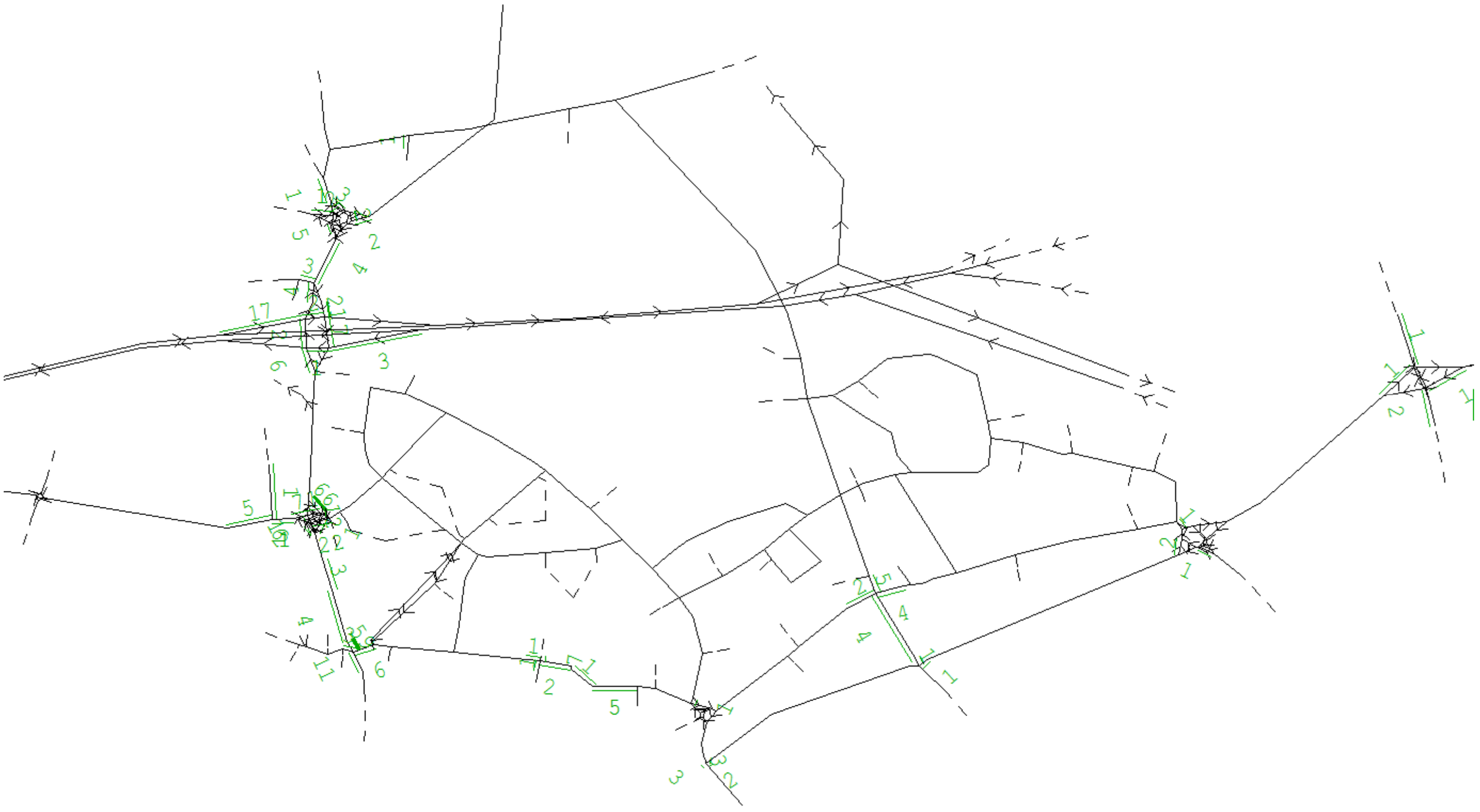
PM Peak Period Total Delay Plot



Appendix 4

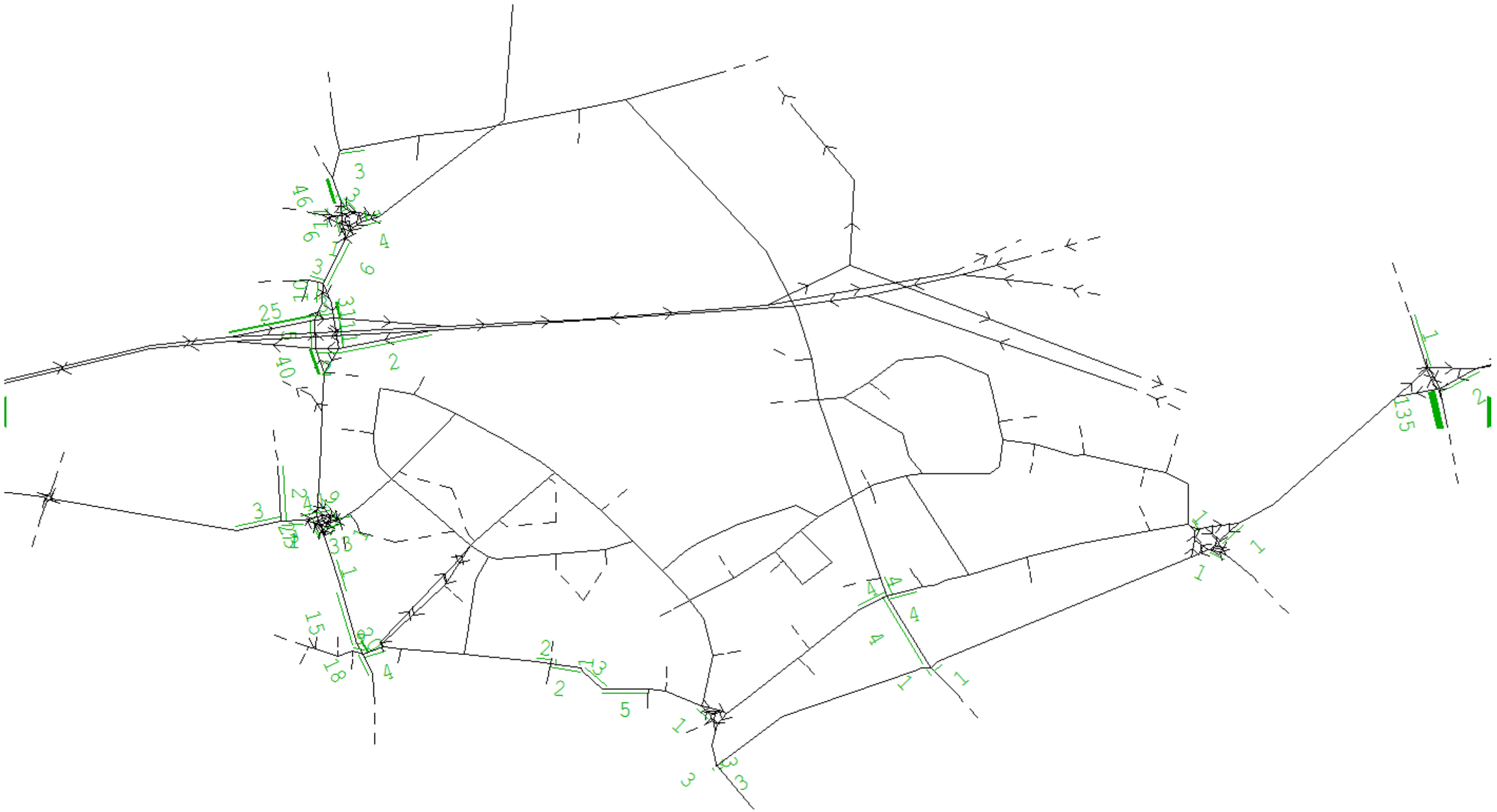
Project number: 60487959

AM Peak Period Average Queue Plot



Project number: 60487959

PM Peak Period Average Queue Plot



Appendix 59

Atkins Review of SATURN Reports and HTp Response

ATKINS

Atkins Limited

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Ben Laverick
Assistant Asset Manager
Highways England
Piccadilly Gate
Store Street
Manchester
M1 2WD

23 Oct 2017

Dear Ben

Re: Peel Hall, Warrington

Highways England has received documentation in support of a planning appeal by SATNAM Millennium for a mixed use site in Warrington known as Peel Hall. SATNAM's lead Consultant for transport are Highgate Transportation and they have supplied a Technical Note summarising SATURN modelling work undertaken by their sub-consultant AECOM in order to assess the impacts of the proposed development on the surrounding highway network. In addition, they have supplied two reports and a Technical Note written by AECOM themselves.

I write to provide our comments on the reports and technical notes in relation to the impact of the development on the SRN.

SATURN Model LMVR

A Local Model Validation Report (LMVR) has been produced by AECOM on behalf of Highgate Transportation. The LMVR has been provided to Atkins and is reviewed herein.

Geographical Model Coverage

The geographical coverage of the model appears to be the same as the VISSIM model previously produced by AECOM on behalf of Highgate Transportation.

In Figure 1.1 of the LMVR there is reference to an existing SATURN model covering the M62 and A49 but no reference is made to this elsewhere within the report suggesting that this figure may be erroneous.

In terms of properly assessing the impact of the proposed development on the SRN, it is recommended that the model be extended to cover M6 Junction 21 and 21a. Traffic travelling to/from the development to/from the South may well use Junction 21 of the M6 and it would be useful for the impact on this junction to be understood through the use of the model.

It should be noted that although this is a SATURN model, the scale of the modelled network severely limits the models ability to assign traffic to different routes.

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Data

The majority of the traffic count data used in the model was collected in 2014 and is therefore some three or so years out of date. It is not clear as to why more contemporary data has not been collected or if any attempt has been made to compare this data to current conditions.

Origin – Destination data has been extracted from the Warrington Multi-Model Transport Model developed in 2008. This is robust in lieu of a more up to date model.

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The development trips and distribution appear to be in line with previous reporting.

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Tables 4.1 and 5.2 illustrate the impact of the development on journey times in 2025. It should be noted that a partial build-out of the development is assumed in this year.

It can be seen from a review of these tables that the development has a significant detrimental impact on the majority of the journey times that are reported upon. It is also noted that the results of the impact on the M62 are not reported and should be requested.

Tables 5.3 and 5.4 illustrate the impact of the development on journey times in 2030. As with the 2025 scenarios, there is significant dis-benefit with the proposed development. However, it is also noted that the Do Minimum journey times fall between 2025 and 2030 in some cases which is illogical albeit not impossible. Further clarification should be sought as to why this is the case.

Tables 5.3 and 5.4 illustrate the impact of the development on journey times in 2030 with the 'through route' within the proposed development. As with the 2030 preferred scenario, there is significant dis-benefit with the proposed development.

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Figures 6.1 and 6.2 illustrate the impact of the development on delay in 2025. It should be noted that a partial build-out of the development is assumed in this year.

The figures illustrate increases in delay across the majority of the network and critically, there is a significant increase in delay on the eastbound offslip to Junction 9 of the M62 in the Evening Peak.

Figures 6.3 and 6.4 illustrate the impact of the development on delay in 2030. As with the 2025 scenarios, there is significant dis-benefit with the proposed development and again, as with the 2025 scenarios, there is a significant increase in delay on the eastbound offslip to Junction 9 of the M62 in the Evening Peak.

Assessment of Impacts on Queuing & Volume over Capacity

The assessment of impacts on queuing and Volume over Capacity are described in Sections 7 and 8.

The outputs show that overall in 2025, the M62 J9 will be operating over its theoretical capacity with large queues forming on the majority of arms in both peak periods. Queues on the eastbound off-slip are could have an impact upon the safe operation of the mainline, as can occasionally happens currently

The outputs show that overall in, the 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

It is noted that the introduction of the through-road as part of the proposed development does not appear to have a material difference in the V/C and queuing on the SRN, although there are negative impacts on the A49 approach arms.

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A Technical Note has been produced by AECOM for Highgate Transportation. The Technical Note has been provided to Atkins but is not reviewed herein as it repeats the same data as is presented in the other provided reports. As such, the review would draw the same conclusions as for the reviews of the other reports and technical notes.

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The outputs from the SATURN modelling described above have been summarised by the applicants lead transport consultant, Highgate Transportation, in a technical note (HTp/1107/TN/22). The following is a summary of the document and the key points that have been made as it relates to the SRN (M62 Junction 9).

Scenarios

TN22 summarises the testing, using SATURN, of the following scenarios:

- Base 2015 – this is calibrated from existing traffic count and journey time data.
- 'Do Minimum' 2025 – this is the base traffic growthed to a future year of 2025, plus committed development traffic.
- 'Do Something' 2025 – this is the Do Minimum 2025 scenario plus the Peel Hall development flows for a part build-out scenario of 600 dwellings and no internal vehicular link for car traffic between the majority of the residential areas and the local centre.
- 'Do Minimum' 2030 – this is the base traffic growthed to a future year of 2030, plus committed development traffic.
- 'Do Something' 2030 – this is the Do Minimum 2030 scenario plus full build-out of the Peel Hall development, with an internal link to the local centre, but no through-route for general traffic across the site.
- 'Through-Route' 2030 - this is the Do Minimum 2030 scenario plus full buildout of the Peel Hall development, with a fully open through-route for general traffic between the A49 (a new signalised junction is proposed) in the west and the proposed site access roundabout junction with Mill Lane to the east of the site.

The SATURN outputs from each set of scenarios have been compared to identify the change in the volume / capacity (V/C) of specific junctions. In the case of the SRN this exercise has been undertaken for the AM and PM peak periods for the M62 J9. The results from TN22 summarised in the following Table 1 for 2025 and Table 2 for 2030.

Table 1 – Comparison of V/C and Queuing of M62 J9 in 2025 Scenarios

Arm	Do Minimum		Do Something	
	V/C	Queue (PCU)	V/C	Queue (PCU)
AM Peak				
M62 EB Off Slip	97	21	98	21
A49 North Arm	109	71	109	71
M62 WB Off Slip	71	4	72	4
A49 South Arm	91	15	93	18
PM Peak				
M62 EB Off Slip	135	78	117	89
A49 North Arm	106	49	107	52
M62 WB Off Slip	50	2	51	2
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The outputs summarised in Table 1 show that overall in 2025 M62 J9 will be operating over its theoretical capacity with large queues forming on the majority of arms in both peak periods. Queues

on the eastbound off-slip are could have an impact upon the safe operation of the mainline, as can occasionally happens currently.

Table 2 – Comparison of V/C and Queuing of M62 J9 in 2030 Scenarios

Arm	Do Minimum		Do Something		Through-Route	
	VoC	Queue (PCU)	VoC	Queue (PCU)	VoC	Queue (PCU)
AM Peak						
M62 EB Off Slip	101	22	102	21	102	20
A49 North Arm	109	71	109	71	109	71
M62 WB Off Slip	74	4	75	4	75	4
A49 South Arm	94	36	96	38	98	41
PM Peak						
M62 EB Off Slip	119	100	123	119	123	119
A49 North Arm	105	45	106	48	107	55
M62 WB Off Slip	52	2	53	2	53	2
A49 South Arm	104	121	107	143	101	96

The outputs summarised in Table 2 show that overall in 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

It is noted that the introduction of the through-road as part of the proposed development does not appear to have a material difference in the V/C and queuing on the SRN, although there are negative impacts on the A49 approach arms.

TN22 concludes that the traffic from the proposed development in al scenarios is not significant and as such do not merit further investigation / modelling, which has been recommended for adjacent junctions identified as having V/C over 85%.

M62 J9 is predicted to be significantly over capacity in all scenarios and whilst the addition of the Peel Hall traffic does not result in a considerable jump in the impact, it does result in further worsening of the performance of the SRN and as such the extent of this should be further investigated and reported upon.

Conclusions & Recommendations

Conclusions

The review of the provided documentation has come to the following conclusions.

- It has not been possible to accurately review the modelling as the model itself has not been supplied. A more detailed review could be undertaken if the model and associated output files and spreadsheets were supplied.
- Atkins has concerns over the appropriateness of SATURN as an assessment tool and has some concerns about the limited geographical scope of the model.
- Atkins has concerns over the time periods used in the SATURN model
- Atkins has concerns over the age of the data used to build the model
- No assessment of the full development at opening year has taken place although this was previously requested by Highways England.
- M62 J9 is significantly over capacity in all tested scenarios and the addition of the Peel Hall traffic does not result in a considerable jump in the impact, but it does result in further worsening of the performance of the SRN.

Recommendations

Atkins would offer Highways England the following recommendations in progressing the assessment of the proposed Peel Hall development.

- The consultant supply the model and associated output files and spreadsheets
- The consultant supply more information in support of the modelling in line with comments set out within this letter
- The consultant undertake operational modelling of the M62 J9 and its associated slip roads, and merge and diverges using an appropriate modelling tool.

On the basis of the above, it is recommended that planning permission should not be granted until adequate information is provided to assess impacts on the Strategic Road Network.

Yours Sincerely,
For and on behalf of ATKINS Limited

Gavin Coupe
Managing Consultant
Transportation

HighgateTransportation

Land at Peel Hall, Warrington

Response to Atkins Review

(ref: 5150363.056) for Highways England

(HTp/1107/TN/23)

November 2017

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Contents

Appendices

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited in response to Atkins' review of the Saturn LMVR, Forecasting Report and supporting Technical Notes on behalf of Highways England (ref: 5150363.056) dated 23rd October 2017 and received by HTp on 2nd November 2017. The Aktins letter is included as **Appendix 1** to this report for ease of reference.

1.2 The conclusions of the Atkins response are addressed in **Section 2.0** of this report and the Saturn model is to be forwarded direct to Aktins from AECOM for review as requested.

1.3 It is considered that the Saturn model has been produced in line with previous discussions and in agreement with Warrington Borough Council and Highways England. The most recent agreed meeting notes for Warrington Borough Council and Highways England are contained in **Appendix 2** and **Appendix 3** respectively for reference.

2.0 Response

Network Coverage and Use of Saturn

2.1 The original meeting with Warrington Borough Council and Highways England on 19th January 2016 was used to discuss and agree the extent of the area to be modelled for the Peel Hall application.

2.2 A VISSIM of the model area was constructed and validated to a base year of 2015. However, due to the nature of how VISSIM calculates route choice, and its methodology for assigning trips onto the model network, the future year models become unworkable within reasonable time constraints and unrepresentative of realistic network conditions. For this reason, other model packages where considered as an alternative to VISSIM upon which to run future year scenarios for the whole network.

2.3 SATURN was the recommended modelling choice for the following reasons:

i. Highways England currently have all their Regional Traffic Models within SATURN.

ii. The same processes and standard modelling methodology for the VISSIM could be applied to the SATURN model build, but the future year SATURN models provide sensible, workable outputs, within a quicker timescale to allow identification of the forecast impact resulting from the development.

iii. The following statement is taken directly from the first page of the SATURN model and details its six basic functions which ensure its suitability for use of modelling the impact of the Peel Hall development:

- as a combined traffic simulation and assignment model for the analysis of road-investment schemes ranging from traffic management schemes over relatively localised networks (typically of the order of 100 to 200 nodes) through to major infrastructure improvements where models with over 1000 junctions are not infrequent;
- as a "conventional" traffic assignment model for the analysis of much larger networks (e.g., up to 7,500 links in the smallest standard PC version, 200,000 in the largest)
- as a simulation model of individual junctions;
- as a network editor, data base and analysis system;
- as a matrix manipulation package for the production of, e.g., trip matrices; and
- as a trip matrix demand model covering the basic elements of trip distribution, modal split etc.

2.4 The use of SATURN was agreed with Warrington Borough Council earlier this year following the refusal for planning permission at the committee held at the end of February 2017 (see meeting note contained at **Appendix 2**). The geographical coverage of the model is the same as that agreed for the VISSIM.

2.5 Furthermore, at the meeting with Highways England on 23rd January 2017 (see notes contained in **Appendix 3**) the difficulties that had been faced working with VISSIM for this network was also discussed and in terms of the actual impact of the development on the M62 network. This meeting also confirmed that the assessment process going forward was likely to be SATURN based. Following this, a Technical Note (HTp/TN/15 dated February 2017) was provided to Highways England setting out the minimal trip impact forecast to arise from the Peel Hall development through Junction 9 of the M62. It was agreed that this junction already experiences significant delay at peak hours.

Selection of Time Periods

2.6 A two and half hour model period was developed for both the AM and PM model periods in VISSIM to ensure that VISSIM replicated the rise of fall of queueing across the network. Within that period it was agreed that the periods of 0800–0900 and 1700–1800 would be reported upon. Within SATURN typically you model a single hour period and then report upon this.

2.7 The SATURN model is intended to provide an assessment of the same data collected and used to inform the VISSIM assessment. This is a process that started in January 2016.

Age of Data

2.8 The planning application that is the subject of the appeal was validated in mid-2016 and furthermore, 2015 was considered acceptable earlier this year; it is not reasonable to update this now.

2.9 Future years also agreed with Warrington Borough Council and it is considered that these broadly align with what has been previously agreed and therefore should be considered acceptable.

2.10 In any event, the flows related to the motorway network were extracted from Highway England's model.

Modelling Scenarios

2.11 The modelling scenarios were agreed with Warrington Borough Council and are in line with those requested by Highways England.

2.12 At the January 2017 meeting with Highways England it was stated that there is no value in modelling for a full build out in the opening year, and that a phased approached was to be assessed instead; in line with Warrington Borough Council's previous request.

2.13 Therefore, the scenario for a full build out at year of opening has not been carried out for the SATURN model.

Assessment of Impacts

2.14 It was noted that there are some isolated cases at junctions where Do minimum journey times fall between 2025 and 2030 for Do minimum. This is a complex network with many route choices available and therefore this result is considered plausible.

3.0 Conclusions

3.1 It is concluded that:

i. The SATURN model will be issued to Atkins direct from AECOM for review as requested.
ii. The use of SATURN for modelling the network in proximity to the Peel Hall site is suitable.
iii. The network coverage is suitable and is as per that agreed throughout the process to date.
iv. Time periods used in the SATURN model are as per the VISSIM model.
v. The data has been validated to 2015 and does not need to be updated as we are mid-process and this request would be unreasonable.
vi. It is acknowledged that the existing M62 Junction 9 is congested at peak times and operating over theoretical capacity, but that the impact of the Peel Hall site on Junction 9 of the M62 is not severe or significant. It is not considered that further modelling of this junction is required.
vii. The scenario for opening year and full build out was removed at the request of Highways England at the January 2017 meeting, as it was unrepresentative and therefore irrelevant. This has been replaced by scenarios for a future year of 2025 with half the development built out as agreed with Warrington Borough Council.

Appendix 1

Atkins Letter to Highways England (23/10/17)

ATKINS

Atkins Limited

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2nd Floor
3 New York Street
Manchester
M1 4HN

Your ref: NW097 - 17/18
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Ben Laverick
Assistant Asset Manager
Highways England
Piccadilly Gate
Store Street
Manchester
M1 2WD

23 Oct 2017

Dear Ben

Re: Peel Hall, Warrington

Highways England has received documentation in support of a planning appeal by SATNAM Millennium for a mixed use site in Warrington known as Peel Hall. SATNAM's lead Consultant for transport are Highgate Transportation and they have supplied a Technical Note summarising SATURN modelling work undertaken by their sub-consultant AECOM in order to assess the impacts of the proposed development on the surrounding highway network. In addition, they have supplied two reports and a Technical Note written by AECOM themselves.

I write to provide our comments on the reports and technical notes in relation to the impact of the development on the SRN.

SATURN Model LMVR

A Local Model Validation Report (LMVR) has been produced by AECOM on behalf of Highgate Transportation. The LMVR has been provided to Atkins and is reviewed herein.

Geographical Model Coverage

The geographical coverage of the model appears to be the same as the VISSIM model previously produced by AECOM on behalf of Highgate Transportation.

In Figure 1.1 of the LMVR there is reference to an existing SATURN model covering the M62 and A49 but no reference is made to this elsewhere within the report suggesting that this figure may be erroneous.

In terms of properly assessing the impact of the proposed development on the SRN, it is recommended that the model be extended to cover M6 Junction 21 and 21a. Traffic travelling to/from the development to/from the South may well use Junction 21 of the M6 and it would be useful for the impact on this junction to be understood through the use of the model.

It should be noted that although this is a SATURN model, the scale of the modelled network severely limits the models ability to assign traffic to different routes.

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The outputs show that overall in, the 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

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The SATURN outputs from each set of scenarios have been compared to identify the change in the volume / capacity (V/C) of specific junctions. In the case of the SRN this exercise has been undertaken for the AM and PM peak periods for the M62 J9. The results from TN22 summarised in the following Table 1 for 2025 and Table 2 for 2030.

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Table 2 – Comparison of V/C and Queuing of M62 J9 in 2030 Scenarios

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The outputs summarised in Table 2 show that overall in 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

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- Atkins has concerns over the appropriateness of SATURN as an assessment tool and has some concerns about the limited geographical scope of the model.
- Atkins has concerns over the time periods used in the SATURN model
- Atkins has concerns over the age of the data used to build the model
- No assessment of the full development at opening year has taken place although this was previously requested by Highways England.
- M62 J9 is significantly over capacity in all tested scenarios and the addition of the Peel Hall traffic does not result in a considerable jump in the impact, but it does result in further worsening of the performance of the SRN.

Recommendations

Atkins would offer Highways England the following recommendations in progressing the assessment of the proposed Peel Hall development.

- The consultant supply the model and associated output files and spreadsheets
- The consultant supply more information in support of the modelling in line with comments set out within this letter
- The consultant undertake operational modelling of the M62 J9 and its associated slip roads, and merge and diverges using an appropriate modelling tool.

On the basis of the above, it is recommended that planning permission should not be granted until adequate information is provided to assess impacts on the Strategic Road Network.

Yours Sincerely,
For and on behalf of ATKINS Limited

Gavin Coupe
Managing Consultant
Transportation

Appendix 2

Warrington Borough Council Meeting Note (22/03/17)

NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 22nd March 2017

HELD: Warrington BC, New Town House @ 10:00.

PRESENT:	Richard Flood	WBC
	Andy Oates	WBC
	Mike Davies	WBC
	Colin Griffiths	Satnam
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

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1. HTp asked if WBC would audit the VISSIM information submitted on 6th January. WBC didn't consider it necessary as now moving to SATURN.

2. The use of SATURN to move forward with the modelling was agreed with WBC. However WBC highway officers do not agree to the use of the network already completed within their SATURN model as the WBC SATURN model has not yet been validated (latest estimate, the model will be ready by September 2017). Therefore the Satnam team will build a SATURN model from scratch.

3. HTp and Satnam confirmed that they have instructed AECOM to carry out the Peel Hall SATURN model, using the same modelling team as used for the VISSIM modelling i.e. separate from the team preparing the WBC SATURN modelling. Therefore no conflict of interest for the AECOM team arises.

Scenario testing

4. Years of assessment had previously been set out as 2019 and 2029 (both with all development). However, HTp proposed the following for moving forward:

    a. Based on now being one year further on, an opening year of 2020 is more appropriate.

    b. The phasing programme has been revised to reflect a ten year build out, and confirmed based on housing numbers. Therefore an assessment year of 'opening year plus 10 years after' is considered appropriate to assess the forecast traffic impact from the whole development.

    c. An interim year has previously been requested by WBC, as set out in their consultation response, to assess the development for a mid-build scenario without the spine road in place and thereby all traffic must use the external road network to access the local centre facilities.

d. The current phasing schedule sets out end of year five for the initial section of the spine road link to be provided. It is therefore considered that five years after opening (2025) is appropriate to be modelled but without putting the initial link for the spine road in; this would be for circa 600 dwellings.

5. Therefore the SATURN modelling years of assessment are proposed as 2025 and 2031. These were agreed with WBC as reasonable and consistent.

6. WBC are keen to see a link road scenario through the site tested. HTp confirmed that this was a scenario we would be looking to include as a sensitivity test. It was confirmed by CG that if this road was a priority for WBC, Satnam would not build the road as it would serve wider needs, but would instead assist the council in achieving it as far as current land ownership allowed. It was made clear that other residential properties would have to be acquired to facilitate this route onto Poplars Avenue and these would have to be acquired by the council as they are operated by a housing association.

Work Stages

7. HTp tabled a preliminary schedule of work stages (see attached) for the proposed SATURN modelling. It was agreed that this was broadly similar to that set out by WBC (albeit for VISSIM) and reasonable.

8. WBC had concerns over the iterative nature and the amount of audit work likely to arise for the pre-app stage as a model audit was outside the normal scope of a pre-app and as such would not usually be carried out until after submission of a planning application.

9. On that basis, WBC do not intend to review the SATURN base model as part of the pre-app, or the outputs at each stage, and therefore the Satnam team can carry out this work without staged checking by WBC, as WBC had confidence in AECOM. It was agreed that there was no overriding need for the step by step review.

10. It was discussed that a follow up meeting would be arranged for three months' time (June 2017) to update WBC on progress and discuss impact and anticipated mitigation.

11. HTp to keep WBC updated on progress periodically.

12. WBC agreed to supply a response within the next two weeks regarding an indication of the level of engagement they consider reasonable as part of this pre-app process (and fee).

Timescales

13. HTp estimate that with the modelling required and step by step review by WBC, the TA would be ready by September 2017.

14. Appeal to be lodged by August 2017 for refused application. Inquiry expected within six months of this, hence late 2017 date likely. If WBC require an opportunity to reconsider a second application prior to the inquiry therefore, it would have to be submitted in late July 2017.

15. Agreed between CG and MD that any second application would ideally be considered at committee in October 2017. A speedy resolution of S106 arising from any favourable committee decision will be required, and it was agreed that a draft S106 should be submitted with the application and be in a position ready to sign immediately following committee.

Mitigation Measures

16. HTp asked if WBC, as local highway authority, had a feel for mitigation measures to protect the area to the south of Poplars Avenue. WBC were unwilling to provide any advice or comment until they have considered the modelling results.

Planning Issues

17. EDUCATION: CG to feedback to MD once advice is received Education.
18. OPENSPACE: MD to feedback once he has further input from within the council.
19. HEALTH CONTRIBUTIONS: CG to respond.
20. ECOLOGY: updates ongoing and MD emphasised that an agreed position with GMEU and WBC was required for resubmitted application.
21. AFFORDABLE HOUSING: position agreed.
22. AIR QUALITY: MD suggested that AQ be relooked to ensure it takes on board the most recent reports from WHO etc.
23. SECTION 106: draft to be submitted with second application and/or worked up prior to inquiry.
24. CONDITIONS: CG to prepare a list and send to MD when appropriate.
25. VIABILITY: MD noted that if Satnam were to raise viability points then a viability appraisal was required with the application.
26. LOCAL PLAN: the SATURN model is being prepared by WBC to test possible Local Plan allocations; CG to liaise with MB regarding general progress on Local Plan.

Actions

i. AO to feedback on work tasks WBC can do for the pre-app, and timescales.

ii. HTp to confirm to AECOM to continue with SATURN from scratch.

iii. Next meeting scheduled for June 2017.

iv. Information to be sent to WBC as work produced.

END OF MEETING

Appendix 3

Highways England Meeting Note (23/01/17)

NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 23rd January 2017

HELD: Highways England, Piccadilly Gate, Manchester @ 14:00.

PRESENT:	Shaun Reynolds	Highways England
	Alistair Johnson	AECOM
	Catherine Zoeftig	AECOM
	Gavin Coupe	Atkins
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

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1. Aktins are finalising their response on HE's behalf for the VISSIM base model, it is not expected that there will be any major comments just minor tweaks or questions. It is expected that HTp will have sight of their review by the end of next week.

2. HE would like to understand the implications of the Peel Hall access strategy in terms of numbers of development trips through Junction 9 of the M62. Modelling an opening year with full development in place is not meaningful in terms of identifying a mitigation strategy for a site of this size in this location, and does not reflect the phasing strategy. The phasing of the Peel Hall development was discussed and HTp agreed to provide phased development flows through Junction 9, based on the agreed gravity model.

3. RIS2 funding (2020-2025) for the Warrington Box area was discussed in terms of potential access strategy for the site and mechanism for contributions.