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TRIP GENERATION AND INTERNALISATION REPORT

The Crown Estate

Hemel Garden Communities

June 2024

Report Control

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1 Executive Summary

1.1 Vectos, part of SLR, have been appointed by The Crown Estate to provide transport advice in relation to the proposed development of a new garden community known as Hemel Garden Community (HGC).

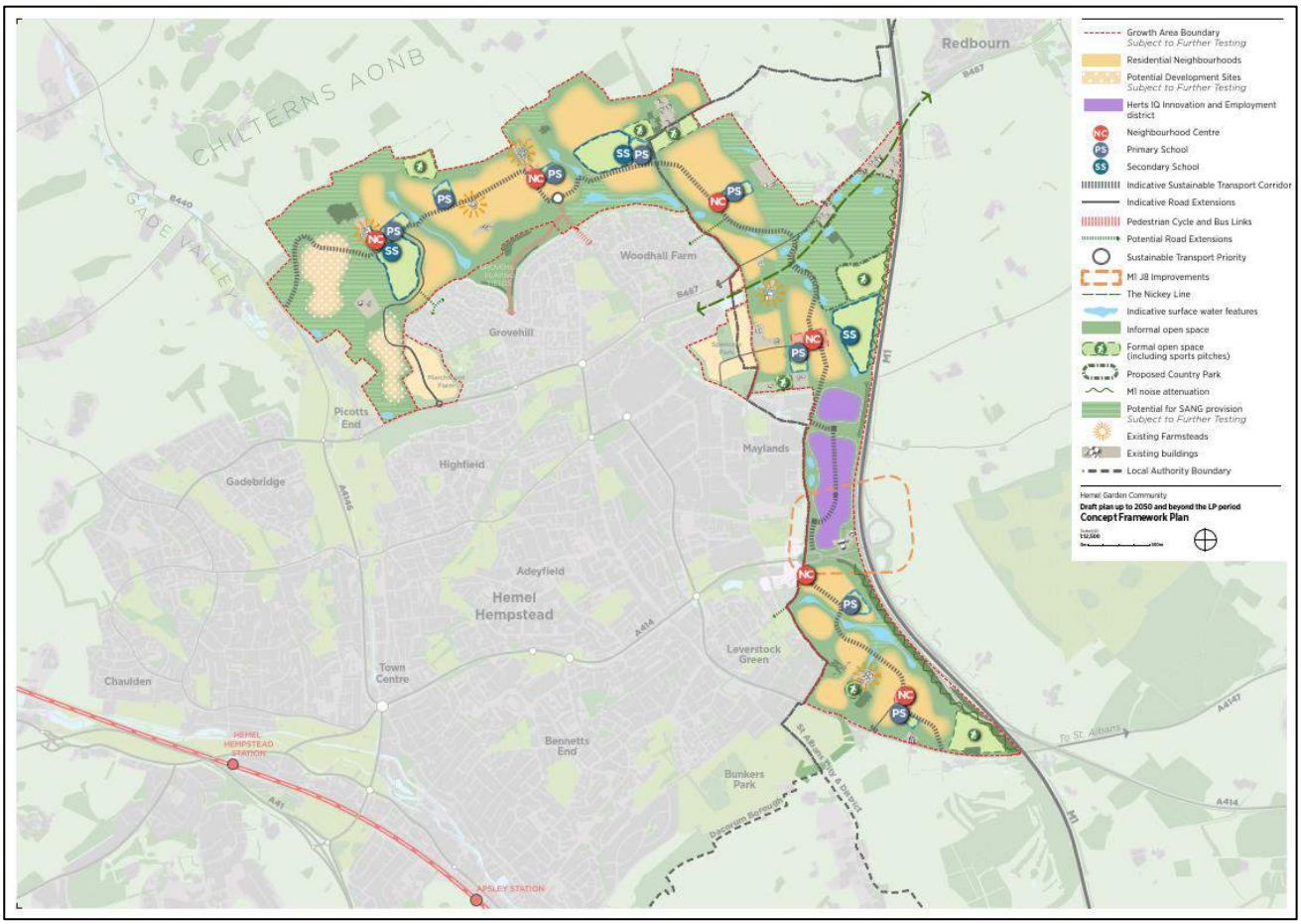
1.2 HGC are undertaking modelling in relation to supporting the Local Plans for both Dacorum Borough Council (DBC) and St Albans District Council (SADC).

1.3 To assist in that regard, this paper sets out a suggested approach to trip generation, internalisation, and modal share for use in that modelling. This builds on the methodology used at the Gilston Development (part of the Harlow and Gilston Garden Town) which was agreed by Herts County Council.

1.4 It is considered important to establish realistic trip generation estimates at this stage which are compatible with the Garden Town objectives and fully reflect the mixed-use nature of the HGC development and hence the high propensity for internalisation of trips.

1.5 A Draft Masterplan from HGC Framework Plan is shown below for context.

Figure 1.1: Draft Masterplan



Transport Vision

1.6 The overarching objective of the Transport Vision is to achieve the Garden Town target set within "Garden City Standards for the 21st Century – Practical Guides for Creating Successful New Communities – Guide 3 – Design and Master Planning." The target is as follows:

> *"A Garden City's design must enable at least 50% of trips originating in the Garden City to be made by non-car means, with a goal to increase this over time to at least 60%; and the latest best practice in street and transport design should be used as a minimum standard."*

1.7 This is recognised by the Department for Transport as creating a Vision Led approach to transport planning in which we identify the set outcomes that we want to achieve, then provide transport solutions to deliver those outcomes. The Transport Plan for HGC has been developed in a way that achieving the outcomes is achieved in the following ways:

1.8 HGC themselves have developed various strategies and vision documents which reflect the above objectives.

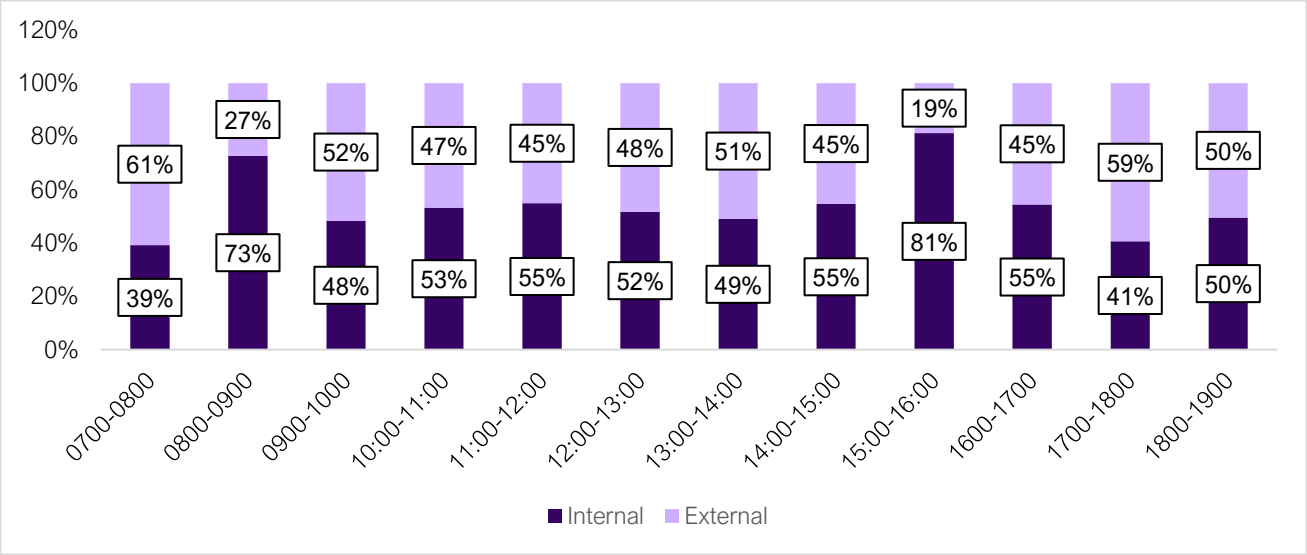
Overall Approach and Internalisation

1.9 As a result of the overall transport strategy and vision for HGC, we are anticipating that across the day the majority of trips are either internal to the growth area or are undertaken by sustainable modes of transport. Therefore, in any strategic assessment the vision needs to be taken into account and traditional high vehicle trip generation needs to be refined to account for the significant level of internal and sustainable trips.

1.10 A summary of the results, described and outlined in Sections 2-5 of this paper, is presented below.

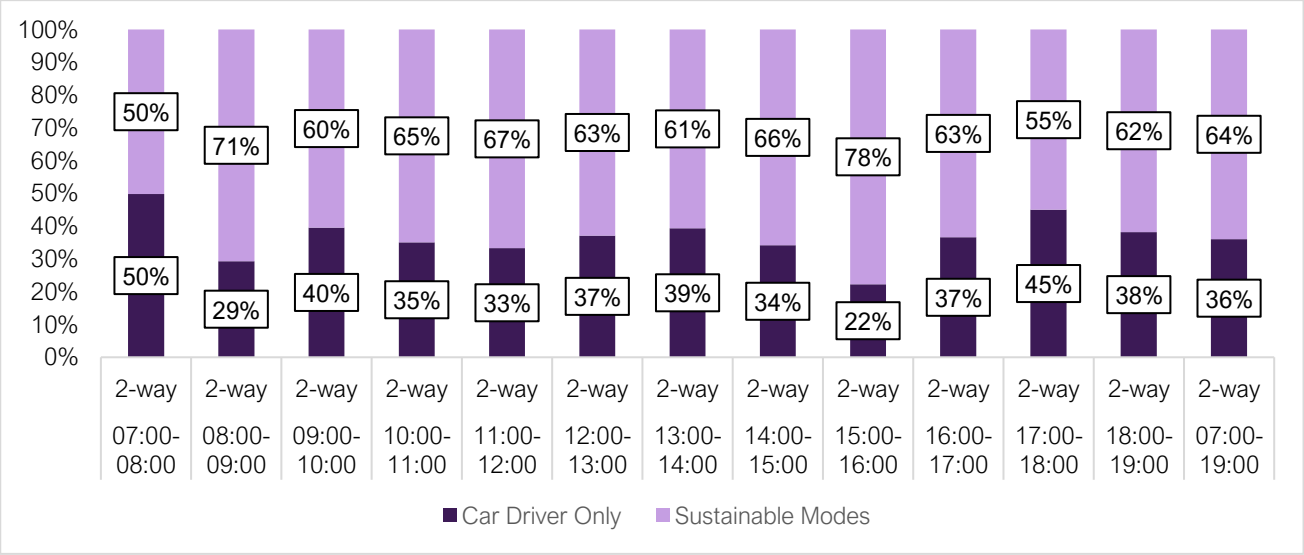
1.11 **Figure 1.2** summarises how movement changes by hour across peak periods. For example, between 08:00-09:00 schools (which are provided across the growth area) account for a large proportion of trips, and as such in that hour the level of internal trips increases significantly compared to 07:00-08:00 when employment trips are a more prominent journey purpose.

Figure 1.2 – Percentage of Internal / External Trips compared to Total Trips



1.12 **Figure 1.3** then indicates the mode share by hour to demonstrate that vehicle trips are limited to 40% of all movements.

Figure 1.3 – Percentage of Car Driver / Sustainable Mode Trips compared to Total Trips



1.13 **Figure 1.3** identifies that across the day (07:00-19:00), the proportion of car driver trips is 36%, with sustainable travel modes accounting for 64% of trips.

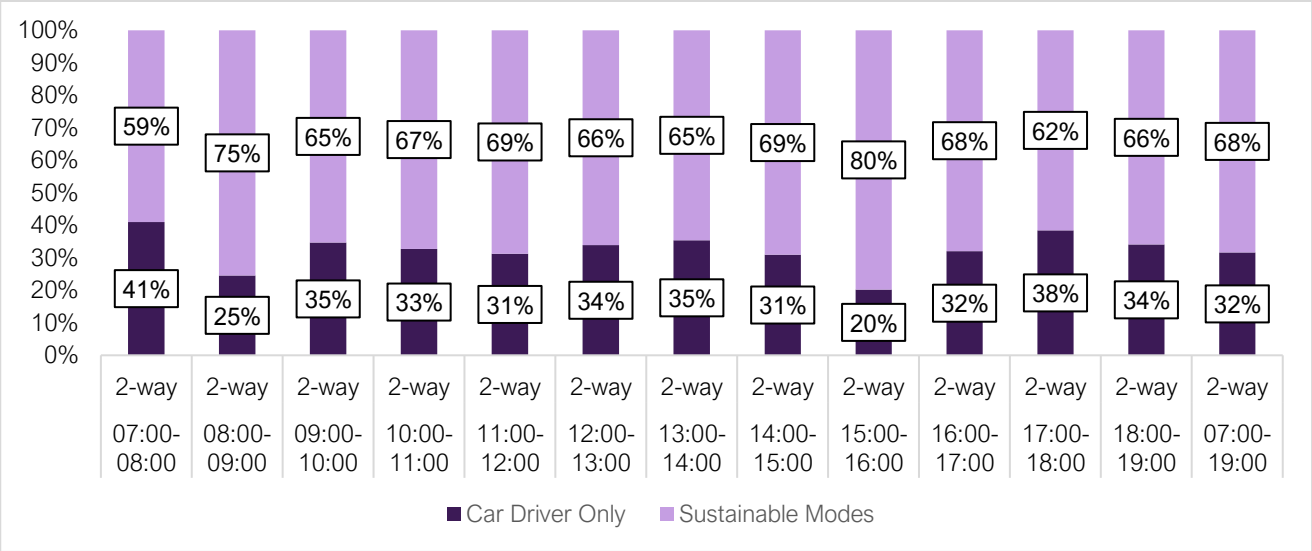
Application of Mode Shift Reductions

1.14 A distribution exercise was undertaken using the distribution of car driver trips extracted from the COMET model to identify the proportion of car driver trips that are expected to take place between

the HGC and areas within Hemel Hempstead, between the HGC and St Albans, and between the HGC and destinations further afield. Car trips that are expected to be undertaken between the HGC and Hemel Hempstead or St Albans are considered to have the potential to be shifted to sustainable modes, particularly in relation to trips to employment.

1.15 Following a mode shift exercise to account for the additional potential reduction in car drivers, the following total mode share of trips by hour was identified.

Figure 1.4 - Percentage of Car Driver / Sustainable Mode Trips compared to Total Trips After Mode Shift



1.16 **Figure 1.4** identifies that across the day (07:00-19:00), the proportion of car driver trips is 32%, with sustainable travel modes accounting for 68% of trips. In every one-hour period apart from 07:00-08:00, the proportion of trips undertaken by car drivers is less than 40%.

1.17 **Comparison to Harlow & Gilston Garden Town**

1.18 It should be noted that the external vehicle trips associated with the Gilston Park Estate scheme is broadly similar to that established within this report for the HGC. For instance, between 08:00-09:00, the external vehicle trip rate for the residential element of the Gilston Park Estate scheme was 0.205, while for the HGC, the trip rate is 0.204. Similarly, between 17:00-18:00, the trip rate was 0.228 for Gilston, and is 0.261 for the HGC. The Gilston Park Estate scheme applied a 20% mode shift target to the trip generation, and we have sought to apply a similar mode shift reduction to certain journey purposes, as detailed later in this report. This therefore shows the assessment is broadly similar.

Table 1.1: Comparison of HGC v Harlow Gilston Garden Town

Site	Scenario	08:00-09:00	17:00-18:00
Hemel	Without Mode Shift	0.242	0.302
	With Mode Shift	0.204	0.261
Gilston	Without Mode Shift	0.253	0.284
	With Mode Shift	0.205	0.228

2 Trip Generation

Introduction

2.1 This report summarises the trip generation methodology used to inform the impact assessments. The methodology is the same as that adopted by Vectos/SLR for the Gilston Park Estate scheme, which was agreed by HCC and Essex County Council. It was on the basis of the agreed trip generation methodology that all the modelling was undertaken.

2.2 It is also important to note at the outset that the trip generation for Gilston was derived pre the COVID pandemic and the significant effects this had on travel patterns. In particular, in the post COVID era there is a greater propensity to flexible working which includes hybrid working travelling outside peak periods. This is not reflected at this stage in the analysis below and, for example, all the TRICS surveys referred were carried out pre-COVID.

2.3 The trip generation methodology includes details of the anticipated:

- Trips by Land Use and Journey Purpose;
- Level of Internalisation by Journey Purpose;
- Modal Splits of Journeys; and
- Total Person and Vehicle Trips.

2.4 The purpose of the report is to provide information to facilitate appropriate testing of the Hemel Garden Community.

2.5 On the 25th of March 2024, comments were received from HCC's transport consultants, WSP, about the first version of this trip generation report. This revised report has taken into account a number of the comments received, including:

- Identifying a mode share for internal trips
- Identifying interpeak trip generation
- Adjusting the residential to primary school internalisation factors
- Revise the education trip generation
- Identifying a mode share for the first/last-mile of trips to a rail station

Summary of the Proposed Development

2.6 The HGC draft Framework Masterplan is shown in **Section 1** of this report. The site comprises residential development, on-site facilities such as retail, education and community use and substantial employment (located in the central part of East Hemel).

2.7 The proposals include up to 11,000 residential dwellings plus up to 8,000 jobs.

2.8 At this time, the level of jobs has been refined to be approximately 166,000sqm of new employment floorspace within East Hemel Hempstead (Central) but this may be subject to change up to planning submission.

2.9 The scale of development is summarised below in **Table 2.1**.

Table 2.1: Scale of Development

Land Use	Quantum	Units
Residential (Total)	11,000	dwellings
Residential (North of Redbourn Road)	7,000	dwellings
Residential (South of Redbourn Road – EHH North and South)	4,000	dwellings
EHH Central - Employment E(g)(i)	40,000	sqm
EHH Central - Employment B8	126,000	sqm

Residential Trips

Trip Generation

2.10 Total person trip rates have been derived from the TRICS database, in order to provide an estimation of the trip generation potential of the HGC. The following criteria was used to select appropriate sites:

- Sub-Land Use: Mixed Private/Affordable Housing as it is uncertain at this stage what the split of private and affordable housing will be;
- Calculation Option: Multi-modal trip rates;
- Regions: England but excluding Greater London;
- Location Types: Suburban Area, Edge of Town or Neighbourhood Centre;
- Date Range: 8 years between 01/01/2012 to 27/06/2019 to avoid Covid-19 affected years;
- Major Cities: removal of sites within major cities (e.g. 2 sites in Liverpool).

2.11 **Table 2.2** summarises the multi-modal residential TRICS sites that have been selected, based on the above criteria.

Table 2.2: Multi-Modal Residential TRICS Sites

TRICS Site Reference	Town/ City	Area	Location	Number of Dwellings
ES-03-M-05	Near Uckfield	East Sussex	Neighbourhood Centre	138
ES-03-M-07	Peacehaven	East Sussex	Edge of Town	188
ES-03-M-10	Polegate	East Sussex	Edge of Town	108
ES-03-M-11	Hailsham	East Sussex	Edge of Town	354
ES-03-M-14	Eastbourne	East Sussex	Edge of Town	119
ES-03-M-16	Bexhill	East Sussex	Edge of Town	119
HC-03-M-06	Titchfield	Hampshire	Edge of Town	328
HC-03-M-09	Stanmore	Hampshire	Edge of Town	157
HC-03-M-10	Alton	Hampshire	Edge of Town	176
HC-03-M-11	Basingstoke	Hampshire	Edge of Town	238
KC-03-M-02	Barming	Kent	Edge of Town	119
KC-03-M-03	Allington	Kent	Edge of Town	140
NF-03-M-02	Aylsham	Norfolk	Edge of Town	250
NF-03-M-05	Poringland	Norfolk	Neighbourhood Centre	150
NF-03-M-14	Wymondham	Norfolk	Edge of Town	321
OX-03-M-01	Thame	Oxfordshire	Edge of Town	100
SC-03-M-06	Redhill	Surrey	Edge of Town	500
SC-03-M-07	Guildford	Surrey	Suburban Area	199
SC-03-M-08	Longcross	Surrey	Neighbourhood Centre	107
SM-03-M-01	Taunton	Somerset	Neighbourhood Centre	135
SP-03-M-02	Hedge End	Southampton	Edge of Town	181
WL-03-M-03	Longhedge	Wiltshire	Neighbourhood Centre	260
WS-03-M-04	Chichester	West Sussex	Suburban Area	214
WS-03-M-12	Shoreham-by-Sea	West Sussex	Suburban Area	192
WS-03-M-16	Chichester	West Sussex	Suburban Area	252
WS-03-M-16	Broadbridge Heath	West Sussex	Neighbourhood Centre	121

2.12 The resultant 'Total Person' trip rates for each hour within the AM peak period (07:00-10:00), interpeak period (10:00-16:00) and the PM peak period (16:00-19:00) are summarised in **Table 2.3** below. The full TRICS output is attached as **Appendix A**.

2.13 **Table 2.3** also sets out the corresponding total person residential trip generation associated with 11,000 residential units has also been calculated.

Table 2.3: Residential Total Person Trip Rates and Trip Generation (AM, Interpeak & PM Peak Period)

	07:00-10:00			10:00-16:00			16:00-19:00		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Trip Rate	0.507	1.600	2.107	1.537	1.396	2.933	1.519	0.740	2.259
Trips	5,577	17,600	23,177	16,907	15,356	32,263	16,709	8,140	24,849

2.14 It should be noted that **Table 2.3** does not account for any reductions, which are explained in the following section, regarding journey purpose or internalisation etc.

Journey Purpose

2.15 A detailed assessment of residential trips by journey purpose was undertaken to provide the basis for a more accurate estimation of the level of internalisation, the modal splits of the resultant external trips, and the distribution of these trips across the transport network.

2.16 The TEMPRO database (version 8.1) was interrogated to determine the assignment of trips by origin/destination and journey purpose for Dacorum, for the AM peak (07:00-10:00), Interpeak (10:00-16:00) and PM peak (16:00-19:00) periods, as shown in **Table 2.4**. Whilst parts of HGC fall within SADC, it is considered that Dacorum is more reflective of the travel patterns in Hemel Hempstead.

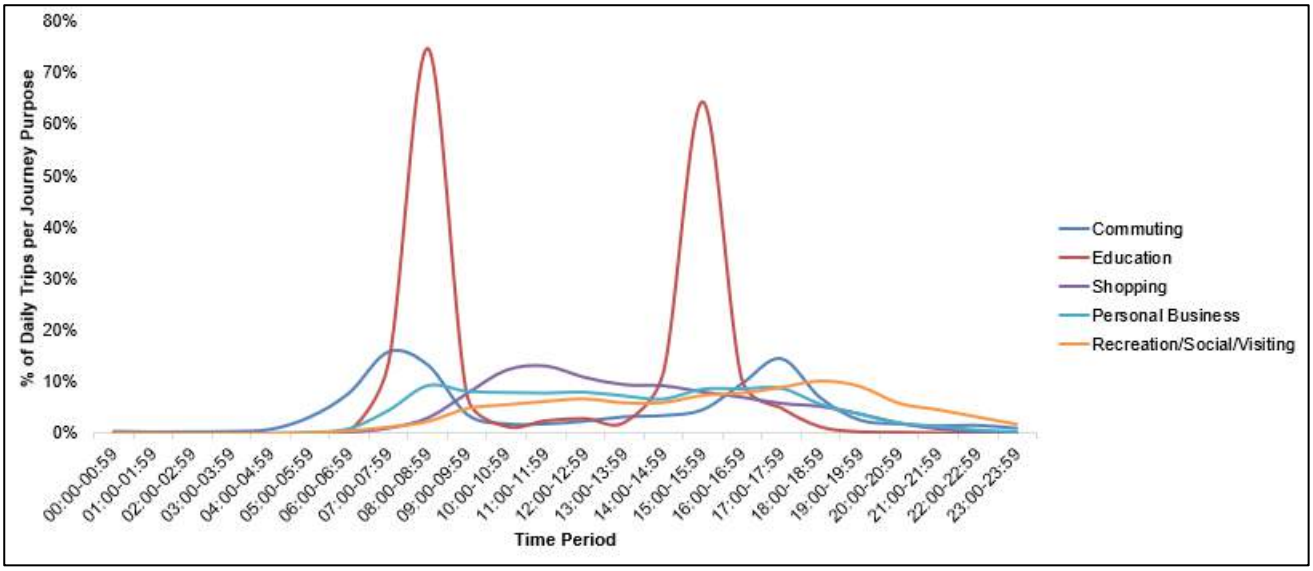
2.17 Home Based Employers Business Trips have been removed from the calculation as they do not represent regular trips and are a small proportion of the overall level of trips.

Table 2.4: 2041 TEMPRO Journey Purpose – Dacorum

Journey Purpose (Homebound)	Weekday AM Peak (0700-1000)		Weekday Interpeak (1000-1600)		Weekday PM Peak (1600-1900)	
	Origin	Destination	Origin	Destination	Origin	Destination
Work	40%	37%	11%	11%	33%	34%
Education	36%	41%	19%	17%	12%	10%
Shopping	11%	11%	37%	38%	21%	20%
Personal Business	7%	6%	14%	14%	8%	9%
Other (Recreation/Social/Visiting)	5%	5%	19%	19%	25%	27%
Total	100%	100%	100%	100%	100%	100%

2.18 These journey purpose proportions have then been broken down by the hourly distribution proportions set out within the National Travel Survey (NTS) datasets to provide an accurate split by purpose by hour. In particular, the NTS502b dataset has been utilised, thus combining the most appropriate aspects of both the NTS and TEMPRO datasets.

Figure 2.1: NTS Trips by Journey Purpose



2.19 The data in **Figure 2.1** was extrapolated for each journey purpose to equate to 100% across the AM peak, Interpeak and PM peak periods, as demonstrated in **Table 2.5**.

Table 2.5: NTS Trips by Journey Purpose (Extrapolated)

Journey Purpose	AM Peak Period				Interpeak Period							PM Peak Period			
	0700-0800	0800-0900	0900-1000	Total	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	Total	1600-1700	1700-1800	1800-1900	Total
Work	49%	41%	11%	100%	10%	10%	14%	19%	20%	27%	100%	31%	47%	22%	100%
Education	14%	78%	8%	100%	2%	3%	3%	3%	14%	75%	100%	63%	29%	9%	100%
Shopping	9%	26%	65%	100%	19%	21%	17%	15%	15%	13%	100%	39%	32%	29%	100%
Personal Business	21%	42%	37%	100%	17%	17%	17%	16%	14%	19%	100%	37%	38%	25%	100%
Recreation / Social / Visiting	15%	28%	57%	100%	15%	16%	18%	16%	16%	20%	100%	29%	33%	38%	100%

2.20 The proportions shown in **Table 2.5** were then applied to the AM peak, interpeak and PM peak period data obtained from TEMPRO, thereby distributing the TEMPRO data by hour. This provided an accurate split of trips by purpose by hour, as shown in **Table 2.6, Table 2.7** and **Table 2.8**.

Table 2.6: Distribution by Journey Purpose by Hour (AM Peak Period)

Journey Purpose	0700-0800		0800-0900		0900-1000		0700-1000	
	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.
Work	20%	18%	16%	15%	4%	4%	40%	37%
Education	5%	6%	28%	32%	3%	3%	36%	41%
Shopping	1%	1%	3%	3%	7%	7%	11%	11%
Personal Business	2%	1%	3%	3%	3%	2%	7%	6%
Recreation/Social	1%	1%	1%	1%	3%	3%	5%	5%
Total	28%	27%	52%	54%	20%	20%	100%	100%

Table 2.7: Distribution by Journey Purpose by Hour (Interpeak Period)

Journey Purpose	1000-1100		1100-1200		1200-1300		1300-1400		1400-1500		1500-1600		0700-1000	
	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.
Work	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	3%	3%	11%	11%
Education	0%	0%	1%	1%	1%	1%	0%	0%	3%	2%	14%	13%	19%	17%
Shopping	7%	7%	8%	8%	6%	7%	6%	6%	5%	6%	5%	5%	37%	38%
Personal Business	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	14%	14%
Recreation/ Social	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	19%	19%
Total	**14%**	**14%**	**15%**	**15%**	**14%**	**15%**	**13%**	**14%**	**15%**	**15%**	**28%**	**27%**	**100%**	**100%**

Table 2.8: Distribution by Journey Purpose by Hour (PM Peak Period)

Journey Purpose	1600-1700		1700-1800		1800-1900		1600-1900	
	Origin	Dest.	Origin	Dest.	Origin	Dest.	Origin	Dest.
Work	10%	11%	16%	16%	7%	8%	33%	34%
Education	7%	6%	3%	3%	1%	1%	12%	10%
Shopping	8%	8%	7%	7%	6%	6%	21%	20%
Personal Business	3%	3%	3%	3%	2%	2%	8%	9%
Recreation/Social	7%	8%	8%	9%	10%	10%	25%	27%
Total	36%	36%	37%	38%	26%	27%	100%	100%

2.21 The proportions shown in **Table 2.6, 2.7** and **2.8** were then applied to the AM (07:00-10:00), interpeak (10:00-16:00) and PM (16:00-19:00) period total person trip generation shown previously in **Table 2.3**.

2.22 The resulting total person trips from the residential element of the HGC (without the application of any internalisation factors) are shown in **Table 2.9, 2.10** and **2.11** below.

Table 2.9: Residential Total Person Trips by Journey Purpose – AM Peak Period

Journey Purpose	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Work	997	3,445	4,442	835	2,883	3,717	224	774	998
Education	328	918	1,246	1,776	4,966	6,742	175	488	663
Shopping	55	168	223	159	480	639	405	1,227	1,632
Personal Business	72	270	342	148	557	705	131	490	621
Recreation/ Social	40	139	179	76	260	336	156	535	691
Total	**1,493**	**4,939**	**6,433**	**2,993**	**9,146**	**12,140**	**1,090**	**3,514**	**4,604**

Table 2.10: Residential Total Person Trips by Journey Purpose – Interpeak Period

Journey Purpose	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Work	196	173	369	194	171	366	258	227	485
Education	49	49	98	87	87	174	101	102	203
Shopping	1,267	1,108	2,375	1,350	1,181	2,531	1,121	980	2,101
Personal Business	413	372	785	408	367	775	416	375	791
Recreation/ Social	471	429	900	525	478	1,003	565	515	1,080
Total	**2,396**	**2,131**	**4,526**	**2,564**	**2,284**	**4,848**	**2,461**	**2,199**	**4,660**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Work	354	312	666	383	337	720	512	451	963
Education	74	75	149	404	406	809	2,194	2,203	4,397
Shopping	977	854	1,831	955	835	1,790	832	728	1,560
Personal Business	379	341	720	347	312	659	447	403	850
Recreation/ Social	501	456	958	506	460	966	623	567	1,189
Total	**2,285**	**2,039**	**4,324**	**2,594**	**2,351**	**4,945**	**4,608**	**4,352**	**8,960**

Table 2.11: Residential Total Person Trips by Journey Purpose – PM Peak Period

Journey Purpose	PM (1600-1700)			PM (1700-1800)			PM (1800-1900)		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Work	1,775	844	2,619	2,690	1,279	3,969	1,266	602	1,868
Education	1,035	609	1,645	473	279	752	147	86	233
Shopping	1,329	652	1,981	1,102	541	1,643	993	487	1,480
Personal Business	542	258	800	550	262	811	357	170	527
Recreation/ Social	1,297	603	1,900	1,473	686	2,159	1,680	782	2,462
Total	**5,978**	**2,967**	**8,945**	**6,288**	**3,046**	**9,334**	**4,443**	**2,127**	**6,570**

Employment Trips

2.23 The proposed commercial core will provide up to 166,000sqm of floorspace comprised of a mixture of commercial uses including office units (E(g)(i) land use) and warehousing units (B8 land use). An indicative breakdown of employment floorspace across the HGC is estimated to be as follows and it should be noted that these figures are up to and are subject to change at this stage:

- Employment E(g)(i): 40,000sqm
- Employment B8: 126,000sqm
- **Total: 166,000sqm**

Employment E(g)(i): Office

2.24 Due to a low number of relevant multi-modal sites in the TRICS database, it was considered more representative to obtain vehicle trip rates for the proposed E(g)(i) floorspace at the Site. The following criteria was used to select appropriate sites within the TRICS database:

- Sub Land Use: Office
- Calculation Option: Vehicular trip rates
- Regions: England but excluding Greater London
- Floor Area: 1,000-30,000 sqm
- Location Types: Suburban Area, Edge of Town and Neighbourhood Centre
- Date Range: TRICS default range of 8 years (i.e. 01/01/15 to 24/05/23)
- Local Population: population within 1 mile less than 15,000 people
- Major Cities: removal of sites in major cities
- Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

2.25 **Table 2.12** below summarises the employment TRICS sites that have been selected based on the above criteria.

Table 2.12: Office TRICS Sites

TRICS Site Reference	Town/ City	Area	Location	Floor area
AK-02-A-01	Whitwood	Wakefield	Edge of Town	1,230sqm
DA-02-A-02	Darlington	Darlington	Edge of Town	3,530sqm
PB-02-A-04	Peterborough	Peterborough	Edge of Town	4,040sqm
WL-02-A-01	Amesbury	Wiltshire	Edge of Town	2,500sqm

2.26 The resultant peak hour vehicle trip rates are summarised in **Table 2.13** below. The full TRICS output is attached as **Appendix B**.

Table 2.13: Office Vehicle Trip Rates per 100sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Vehicle Trip Rate	2.735	0.212	2.947	0.106	2.788	2.894

2.27 In order to achieve person trip rates for the employment land uses, the 2011 Census Journey to Work data for the daytime population for Dacorum Middle Super Output Area (MSOA) 013 was obtained, which includes the local Maylands area. This shows that 78.9% of employees in that area drive a car or van as their main mode of transport. As such the vehicle trip rates above have been factored up and the results are shown in **Table 2.14** below. It should be notes that an alternative methodology is to look at the census data for each of the TRICS sites. This exercise has been undertaken as a cross check and yields very similar results.

Table 2.14: Office Total Person Trip Rates per 100sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Total Person Trip Rate	3.468	0.269	3.737	0.134	3.536	3.670

2.28 The resulting total person trips from the office element of the HGC (without the application of any internalisation factors) are shown in **Table 2.15** below.

Table 2.15: Office Total Person Trip Generation – 40,000sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Total Person Trips	1,387	108	1,495	54	1,414	1,468

2.29 It should be noted that **Table 2.13** shows gross person trip generation and does not take into account any of the adjustments to these rates that need to be made (e.g. internalisation). These will be explained in the following section.

B8 Employment: Warehousing

2.30 To determine a representative trip rate for the proposed B8 land uses, vehicle trip rates were obtained for B8 Warehousing. It should be noted that Vectos have experience of developing an alternative trip generation methodology based on extensive surveys at DIRFT – a major freight and logistics centre near Rugby. It may be appropriate to refine the estimated trip generation in due course based on this methodology.

2.31 The following criteria was used to select appropriate sites:

- Sub Land Use: Warehousing Commercial/ Warehousing Self Storage
- Calculation Option: Vehicular trip rates
- Regions: England
- Floor Area: 387-80,066sqm

- Location Types: Suburban Area, Edge of Town
- Date Range: Since 2000 due to a limited number of sites within default period of 8 years
- Local Population: population within 1 mile less than 15,000 people
- Major Cities: removal of sites in major cities
- Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

2.32 **Table 2.16** below summarises the employment TRICS sites that have been selected based on the above criteria.

Table 2.16: B8 TRICS Sites

TRICS Site Reference	Town/ City	Area	Location	Floor area
EX-02-F-01	Colchester	Essex	Edge of Town	6,560sqm
HC-02-F-03	Park Gate	Hampshire	Edge of Town	3,665sqm
SF-02-F-03	Ipswich	Suffolk	Edge of Town	4,700sqm
TB-02-F-01	Paignton	Torbay	Edge of Town	190sqm
TW-02-F-01	Washington	Tyne & Wear	Edge of Town	31,000sqm

2.33 The resultant vehicle trip rates are summarised in **Table 2.17** below. The full TRICS output is attached as **Appendix C**.

Table 2.17: B8 Vehicle Trip Rates per 100sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Vehicle Trip Rate	0.128	0.065	0.193	0.035	0.095	0.130

2.34 In order to achieve person trip rates, the same methodology has been applied as for the office element i.e. assuming 78.9% of employees in that area use driving a car or van as the main mode of transport. As such the vehicle trip rates above have been factored up and the results are shown in **Table 2.18** below.

Table 2.18: B8 Total Person Trip Rates per 100sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Total Person Trip Rate	0.162	0.082	0.245	0.044	0.120	0.165

2.35 The resulting total person trips from the B8 element of the HGC are shown in **Table 2.19** below.

Table 2.19: B8 Total Person Trip Generation – 166,000sqm

	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Total Person Trips	205	104	308	56	152	208

Educational Trips

Primary Education

2.36 Primary education facilities are to be delivered within the HGC.

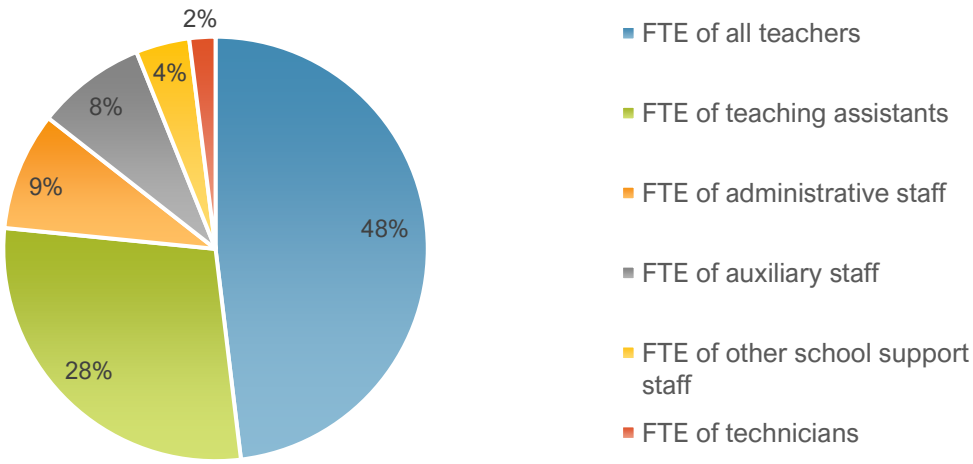
2.37 We have used a first principles approach to estimate the trips associated with primary schools rather than TRICS so that internalisation can be calculated based on the number of pupils from the HGC. Following comments received from WSP in March 2024, the trip generation has been revised to correct an error in the number of pupils per dwelling assumptions.

2.38 As well as pupil and parent trips, there will also be staff trips, and these have been assessed using the assumptions shown in **Figure 2.2** and **Table 2.20**.

2.39 The Department for Education (DfE) 'School Workforce in England: November 2022' Statistical Release has been utilised to identify the proportion of teachers versus support staff in schools.

2.40 For the academic year 2021/2022, the following proportions are identified:

Figure 2.2: Make-up of Teaching Versus Support Staff in English Schools



2.41 Based on **Figure 2.2**, the calculation of staff numbers is as follows (the number of pupils is based on an estimate of pupil yield using 2021 Census data):

Table 2.20: FTE Employees Associated with the Primary School Provision

Total Pupils (only used to determine staff)	2,700
Pupils per Class	30
Number of Classes	90
Number of Teachers	90
Number of Teaching Assistants	53
Other Staff	43
Total Staff	186

2.42 It can be observed from **Table 2.20** above that the number of staff assumed to be employed at the primary schools is robust, as it follows the guidance provided by the DfE outlined above.

2.43 The majority of primary school pupils will use the facilities delivered as part of the HGC.

2.44 Additionally, it is assumed that 50% of all primary-aged pupil trips will be accompanied by a parent. These parent trips will be counted as both arrivals and departures to account for the parent arriving at the school and then departing shortly after during the respective peak hours.

2.45 The distribution of pupil trips across the peak periods has been assumed to have the following distribution. It is assumed that only 10% of pupil trips will occur between 07:00 and 08:00 with the remaining 90% of pupils arriving between 08:00 and 09:00 and no pupils are expected to arrive after this point. This presents a robust assessment as most pupils will be expected to arrive before the school day starts (between 08:30-09:00), although a number of pupils will also arrive before 08:00 in order to use breakfast club facilities for example.

2.46 In the afternoon, it has been assumed that the majority of pupils (90%) will leave between 15:00-16:00 on completion of the school day. However, 10% of pupil trips have been assumed to occur between 16:00-17:00 to allow for pupils attending after-school clubs who may stay later.

2.47 Regarding the distribution of staff trips across the peak periods, it has been assumed that 75% of the employee trips will occur between 07:00 and 08:00, accounting for staff arriving prior to the start of the school day. The remaining 25% of staff are assumed to arrive between 08:00 and 09:00. This presents a robust assessment as in reality, non-teaching staff may arrive later, for example those who are part time. In the evening, it is assumed that 25% of staff members depart the school between 16:00 and 17:00, immediately after the school day ends. The remaining 75% are assumed to depart between 17:00 and 18:00.

2.48 The total person trip generation for pupils, parents and staff associated with a primary school with facilities of this size and prior to any further adjustments (i.e. internalisation) are presented in **Table 2.21** below.

Table 2.21: Primary School Total Person Trips (Pupils, Parents and Staff)

Hour	Pupil Trips			Parent Trips			Staff Trips		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
0700-0800	267	0	267	134	134	267	139	0	139
0800-0900	2,405	0	2,405	1,203	1,203	2,405	46	0	46
0900-1000	0	0	0	0	0	0	0	0	0
1500-1600	0	2,405	2,405	1,203	1,203	2,405	0	0	0
1600-1700	0	267	267	134	134	267	0	46	46
1700-1800	0	0	0	0	0	0	0	139	139
1800-1900	0	0	0	0	0	0	0	0	0

2.49 Further to the above, to ensure that trips are accounted for within the interpeak periods of 10:00-15:00, and to address comments raised by WSP, the TRICS database has been consulted.

2.50 The following criteria was used to select appropriate sites within the TRICS database:

- Sub Land Use: Education/Primary
- Trip Rate Parameter: Number of Pupils
- Calculation Option: Multi-modal Total People trip rates
- Regions: England but excluding Greater London
- Location Types: Suburban Area and Neighbourhood Centre
- Date Range: TRICS default range of 8 years (i.e. 01/01/15 to 24/05/23)
- Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

2.51 **Table 2.22** below summarises the primary school TRICS sites that have been selected based on the above criteria.

Table 2.22: Primary School TRICS Sites

TRICS Site Reference	Town/ City	Area	Location	No. of Pupils
BP-04-A-01	Blackpool	Blackpool	Neighbourhood Centre	449
CW-04-A-03	Penryn	Cornwall	Suburban Area	440
SM-04-A-01	Near Taunton	Somerset	Neighbourhood Centre	407
WL-04-A-02	Rowde	Wiltshire	Neighbourhood Centre	199

2.52 The resultant interpeak total person trip rates are summarised in **Table 2.23** below. The full TRICS output is attached as **Appendix D**.

Table 2.23: Primary School Total Person Trip Rates per Pupil

	10:00-11:00			11:00-12:00			12:00-13:00		
	Arr.	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**
Trip Rate	0.028	0.046	0.074	0.040	0.031	0.071	0.036	0.048	0.084
Trips	1	1	2	1	1	2	1	1	2
	13:00-14:00			**14:00-15:00**					
	Arr.	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**			
Trip Rate	0.035	0.063	0.098	0.136	0.079	0.215			
Trips	1	2	3	4	2	6			

2.53 The resultant interpeak trips (excluding 15:00-16:00 which is addressed by the first principles assessment) are also indicated in **Table 2.23**.

Secondary Education

2.54 Secondary education facilities are to be built to accommodate the demand created by HGC.

2.55 For the purpose of this assessment, it has been assumed that the proposed secondary schools will accommodate up to 4,320 pupils, based on provision of 3 schools. There will also be additional staff trips, and these have been assessed using the assumptions shown in **Table 2.24**.

2.56 The same DfE data, set out above in **Figure 2.2** for primary education, has been used again to provide a robust estimate for the number for full-time employees of the proposed secondary school.

Table 2.24: FTE Employees for Secondary Schools

Total Pupils	4,320
Pupils per Class	30
Number of Classes	144
Number of Teachers	144
Number of Teaching Assistants	84
Other Staff	72
Total Staff	300

2.57 The distribution of pupil and staff trips across the peak periods has been assumed to be the same as for primary education and this is robust.

2.58 Additionally, it is assumed that 10% of all secondary-aged pupil trips will be accompanied by a parent. These parent trips will be counted as both arrivals and departures to account for the parent arriving at the school and then immediately departing during the respective peak hours.

2.59 The total person trip generation for pupils, parents and staff associated with the secondary school facilities, prior to any further adjustments (i.e. internalisation) are presented in **Table 2.25** below.

Table 2.25: Secondary School Total Person Trips (Pupils, Parents and Staff)

Hour	Pupil Trips			Parent Trips			Staff Trips		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
0700-0800	432	0	432	43	43	86	225	0	225
0800-0900	3,888	0	3,888	389	389	778	75	0	75
0900-1000	0	0	0	0	0	0	0	0	0
1500-1600	3,888	0	3,888	389	389	778	0	0	0
1600-1700	0	432	432	43	43	86	0	75	75
1700-1800	0	0	0	0	0	0	0	225	225
1800-1900	0	0	0	0	0	0	0	0	0

2.60 As with the primary education, to ensure that trips are accounted for within the interpeak periods of 10:00-15:00, and to address comments raised by WSP, the TRICS database has been consulted.

2.61 The following criteria was used to select appropriate sites within the TRICS database:

- Sub Land Use: Education/Secondary
- Trip Rate Parameter: Number of Pupils
- Calculation Option: Multi-modal Total People trip rates

— Regions: England but excluding Greater London

— Location Types: Suburban Area, Edge of Town Centre and Neighbourhood Centre.

— Date Range: TRICS default range of 8 years (i.e. 01/01/15 to 24/05/23)

— Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

2.62 **Table 2.26** below summarises the secondary school TRICS sites that have been selected based on the above criteria.

Table 2.26: Secondary School TRICS Sites

TRICS Site Reference	Town/ City	Area	Location	No. of Pupils
DV-04-B-04	Exeter	Devon	Suburban Area	835
NS-04-B-01	Nailsea	North Somerset	Edge of Town Centre	900
NY-04-B-03	Skipton	North Yorkshire	Suburban Area	800
WK-04-B-01	Kineton	Warwickshire	Neighbourhood Centre	839

2.63 The resultant interpeak total person trip rates are summarised in **Table 2.27** below. The full TRICS output is attached as **Appendix E**.

Table 2.27: Secondary School Total Person Trip Rates per Pupil

	10:00-11:00			11:00-12:00			12:00-13:00		
	Arr.	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**
Trip Rate	0.036	0.020	0.056	0.024	0.022	0.046	0.023	0.037	0.060
Trips	2	1	2	1	1	2	1	2	3
	13:00-14:00			**14:00-15:00**					
	Arr.	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**			
Trip Rate	0.039	0.046	0.085	0.037	0.119	0.156			
Trips	2	2	4	2	5	7			

Summary

2.64 A summary of the total person trips anticipated for each proposed land use described within this section for the AM peak, interpeak and PM peak periods are presented in **Table 2.28**-**Table 2.30** respectively. These tables therefore combine the data presented in **Tables 2.9-2.11**, **2.15**, **2.19**, **2.21**, **2.23**, **2.25** and **2.27**.

Table 2.28: Total Person Trips Generated (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	**Out**	**Tot**	**In**	**Out**	**Tot**	**In**	**Out**	**Tot**
Residential to Employment	997	3,445	4,442	835	2,883	3,717	224	774	998

Residential to Education (Primary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Education (Secondary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Food Retail	28	84	112	79	240	320	203	613	816
Residential to Non-Food Retail	28	84	112	79	240	320	203	613	816
Residential to Personal Business	72	270	342	148	557	705	131	490	621
Residential to Recreation/ Social	40	139	179	76	260	336	156	535	691
Employment E(g)(i)	494	63	556	1,387	108	1,495	862	76	938
Employment (B8)	131	53	184	205	104	308	184	69	252
Primary School (Staff)	139	0	139	46	0	46	0	0	0
Primary School (Pupils)	267	0	267	2,405	0	2,405	0	0	0
Primary School (Parents)	134	134	267	1,203	1,203	2,405	0	0	0
Secondary School (Staff)	225	0	225	75	0	75	0	0	0
Secondary School (Pupils)	432	0	432	3,888	0	3,888	0	0	0
Secondary School (Parents)	43	43	86	389	389	778	0	0	0
Total	**3,358**	**5,232**	**8,590**	**12,592**	**10,949**	**23,541**	**2,136**	**3,659**	**5,795**

**Residential to Education Trips have been split 50:50 between Primary and Secondary Education*

Table 2.29: Total Person Trips Generated (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	196	173	369	194	171	366	258	227	485	354	312	666	383	337	720	512	451	963
Residential to Education (Primary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Education (Secondary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Non-Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Personal Business	413	372	785	408	367	775	416	375	791	379	341	720	347	312	659	447	403	850
Residential to Recreation/ Social	471	429	900	525	478	1,003	565	515	1,080	501	456	958	506	460	966	623	567	1,189
Employment E(g)(i)	184	58	242	81	67	148	202	373	575	328	252	579	162	238	400	90	269	359
Employment (B8)	177	145	323	163	157	320	193	166	360	222	163	385	152	190	342	104	270	374
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,203	1,203	2,405
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	2	1	2	1	1	2	1	2	3	2	2	4	2	5	7	0	3,888	3,888
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389	389	778
Total	**2,759**	**2,337**	**5,096**	**2,809**	**2,510**	**5,320**	**2,858**	**2,741**	**5,599**	**2,838**	**2,457**	**5,295**	**2,913**	**2,786**	**5,699**	**6,393**	**12,777**	**19,169**

**Residential to Education Trips have been split 50:50 between Primary and Secondary Education*

Table 2.30: Total Person Trips Generated (PM Peak)

Land Use	PM (1600-1700)			PM (1700-1800)			PM (1800-1900)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,775	844	2,619	2,690	1,279	3,969	1,266	602	1,868
Residential to Education (Primary)	518	305	822	237	139	376	73	43	117
Residential to Education (Secondary)	518	305	822	237	139	376	73	43	117
Residential to Food Retail	664	326	990	551	271	822	496	244	740
Residential to Non-Food Retail	664	326	990	551	271	822	496	244	740
Residential to Personal Business	542	258	800	550	262	811	357	170	527
Residential to Recreation/ Social	1,297	603	1,900	1,473	686	2,159	1,680	782	2,462
Employment E(g)(i)	94	723	817	54	1,414	1,468	36	413	448
Employment (B8)	66	157	222	56	152	208	42	110	152
Primary School (Staff)	0	46	46	0	139	139	0	0	0
Primary School (Pupils)	0	267	267	0	0	0	0	0	0
Primary School (Parents)	134	134	267	0	0	0	0	0	0
Secondary School (Staff)	0	75	75	0	225	225	0	0	0
Secondary School (Pupils)	0	432	432	0	0	0	0	0	0
Secondary School (Parents)	43	43	86	0	0	0	0	0	0
Total	**6,315**	**4,844**	**11,158**	**6,398**	**4,976**	**11,374**	**4,520**	**2,651**	**7,170**

**Residential to Education Trips have been split 50:50 between Primary and Secondary Education*

2.65 One thing to note is that there is an element of double counting in these figures e.g. residential to Education (Primary) is double counted with Primary School (pupil) trips. This issue gets resolved later in the process.

HGV Trip Generation

2.66 The OGV trip rates for the proposed residential, E(g)(i) and B8 land uses have used the same TRICS selection parameters detailed for the person trip rates (as set out previously) and these HGV trip rates will be applied in addition to the person trip rates set out previously.

2.67 In order to understand potential HGV trips associated with the proposed primary and secondary school provision, specific HGV/OGV trip rates have been derived for these two uses. In both cases, selection parameters have been limited to weekday surveys for suburban areas, edge of town locations, and neighbourhood centres. Upon extracting these trip rates, it could be seen that neither use generated any material HGV trips during the peak hours.

2.68 **Table 2.31** outlines the peak hour HGV trip rates that have been extracted from the TRICS database for the relevant uses using the same sites as set out previously in this section.

Table 2.31: HGV Trip Rates

Land Use	0800-0900			1700-1800		
	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Residential	0.002	0.001	0.003	0	0	0
E(g)(i) Office	0.009	0	0.009	0	0	0
B8	0.041	0.037	0.078	0.013	0.039	0.052
Primary School	0.000	0.000	0.000	0.000	0.000	0.000
Secondary School	0.001	0.001	0.002	0.000	0.000	0.000

2.69 **Table 2.32** outlines the peak hour HGV trip generation associated with the HGC.

Table 2.32: HGV Trip Generation

Land Use	Quantum	0800-0900			1700-1800		
		Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Residential	11,000 dwellings	22	11	33	0	0	0
E(g)(i) Office	40,000sqm	4	0	4	0	0	0
B8	126,000sqm	52	47	98	16	49	66
Primary School	2,700 pupils	0	0	0	0	0	0
Secondary School	4,320 pupils	4	4	9	0	0	0
Total:		**82**	**62**	**144**	**16**	**49**	**66**

2.70 On the basis of **Table 2.32**, it can be seen that the HGC could potentially generate approximately 144 two-way HGV trips during the AM peak hour and 66 two-way HGV trips during the PM peak hour. This is typical as more HGVs avoid the peak hours and for B8 warehouses these typically reflect shift times which also avoid the peak hours.

2.71 Unlike the trip generation discussed previously within this report, the trips presented in **Table 2.32** above are all vehicle trips and therefore no modal spit percentages will be applied to these trips. Furthermore, there will be no internalisation applied to the HGV trip generation.

Total Trip Generation

2.72 A summary of the total person trips by land use, as well as the additional HGVs, for the AM, Interpeak and PM peak periods are presented in **Table 2.33-Table 2.35** respectively. These tables therefore represent a combination of **Tables 2.28-2.30** and **Table 2.32**.

Table 2.33: Total Person Trips + HGV Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	997	3,445	4,442	835	2,883	3,717	224	774	998
Residential to Education (Primary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Education (Secondary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Food Retail	28	84	112	79	240	320	203	613	816
Residential to Non-Food Retail	28	84	112	79	240	320	203	613	816
Residential to Personal Business	72	270	342	148	557	705	131	490	621
Residential to Recreation/ Social	40	139	179	76	260	336	156	535	691
Employment E(g)(i)	494	63	556	1,387	108	1,495	862	76	938
Employment (B8)	131	53	184	205	104	308	184	69	252
Primary School (Staff)	139	0	139	46	0	46	0	0	0
Primary School (Pupils)	267	0	267	2,405	0	2,405	0	0	0
Primary School (Parents)	134	134	267	1,203	1,203	2,405	0	0	0
Secondary School (Staff)	225	0	225	75	0	75	0	0	0
Secondary School (Pupils)	432	0	432	3,888	0	3,888	0	0	0
Secondary School (Parents)	43	43	86	389	389	778	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**3,397**	**5,280**	**8,677**	**12,673**	**11,011**	**23,684**	**2,207**	**3,721**	**5,928**

Table 2.34: Total Person Trips Generated (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	196	173	369	194	171	366	258	227	485	354	312	666	383	337	720	512	451	963
Residential to Education (Primary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Education (Secondary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Non-Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Personal Business	413	372	785	408	367	775	416	375	791	379	341	720	347	312	659	447	403	850
Residential to Recreation/ Social	471	429	900	525	478	1,003	565	515	1,080	501	456	958	506	460	966	623	567	1,189
Employment E(g)(i)	184	58	242	81	67	148	202	373	575	328	252	579	162	238	400	90	269	359
Employment (B8)	177	145	323	163	157	320	193	166	360	222	163	385	152	190	342	104	270	374
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,203	1,203	2,405
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	2	1	2	1	1	2	1	2	3	2	2	4	2	5	7	0	3,888	3,888
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389	389	778
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**2,850**	**2,431**	**5,281**	**2,887**	**2,577**	**5,465**	**2,957**	**2,812**	**5,769**	**2,924**	**2,532**	**5,456**	**2,971**	**2,834**	**5,805**	**6,461**	**12,820**	**19,282**

Table 2.35: Total Person Trips Generated (PM Peak)

Land Use	PM (1600-1700)			PM (1700-1800)			PM (1800-1900)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,775	844	2,619	2,690	1,279	3,969	1,266	602	1,868
Residential to Education (Primary)	518	305	822	237	139	376	73	43	117
Residential to Education (Secondary)	518	305	822	237	139	376	73	43	117
Residential to Food Retail	664	326	990	551	271	822	496	244	740
Residential to Non-Food Retail	664	326	990	551	271	822	496	244	740
Residential to Personal Business	542	258	800	550	262	811	357	170	527
Residential to Recreation/ Social	1,297	603	1,900	1,473	686	2,159	1,680	782	2,462
Employment E(g)(i)	94	723	817	54	1,414	1,468	36	413	448
Employment (B8)	66	157	222	56	152	208	42	110	152
Primary School (Staff)	0	46	46	0	139	139	0	0	0
Primary School (Pupils)	0	267	267	0	0	0	0	0	0
Primary School (Parents)	134	134	267	0	0	0	0	0	0
Secondary School (Staff)	0	75	75	0	225	225	0	0	0
Secondary School (Pupils)	0	432	432	0	0	0	0	0	0
Secondary School (Parents)	43	43	86	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**6,353**	**4,885**	**11,239**	**6,414**	**5,025**	**11,439**	**4,536**	**2,675**	**7,212**

3 Internalisation

3.1 Due to the mixed-use nature of the proposals, a significant proportion of trips will remain internal to the HGC.

3.2 This section of the report provides details of the level of internalisation proposed for each land use. Justification and details of the assumptions used are also provided.

Residential Trips – Explanation of Internalisation by Journey Purpose

3.3 The proposed levels of internalisation for residential trips by journey purpose are summarised below in **Table 3.1** and are discussed in further detail within this section of the report.

Table 3.1: Residential Trip Internalisation

Trip Purpose	Distribution	
	External (Off-site)	Internal (On-site)
Residential to Employment	88%	12%
Residential to Education (Primary)	5%	95%
Residential to Education (Secondary)	10%	90%
Residential to Food Retail	10%	90%
Residential to Non-Food Retail	75%	25%
Residential to Personal Business	50%	50%
Residential to Recreation/Social	25%	75%

Residential to Employment

3.4 Census 2011 Origin-Destination data for other towns with similar locational characteristics and size to the proposed HGC has been sourced to observe the proportion of trips remaining within the area. A summary of this data, provided for settlements with comparable sizes and locations, is presented at **Table 3.2**. This has been calculated using the 'WU03EW – Location of usual residence and place of work by method of travel to work (MSOA Level)' dataset from the 2011 Census.

3.5 The HGC is for up to 11,000 residential units. Assuming an average of 1.54 people of working age per house, around 16,940 workers are expected. This is significantly higher than the average of the locations shown below and the raw data for towns looking at the population and level of employment is set out in **Appendix F**. In general, one would expect the level of internalisation to increase as the size of settlement increases and this is also shown in **Appendix F** with a study of a range of towns varying in size with a population of between 10,000-50,000 across England.

Table 3.2: 2011 Census Data - Percentage of People Living and Working in Middle Super Output Area

Town	County	Workers that Live in MSOA	Workers that Live and Travel to Work in MSOA	Percentage
Cottenham	Cambridgeshire	2,758	353	13%
Cranleigh	Surrey	3,842	1,226	32%
Cullompton	Devon	3,313	855	26%
Diss	Norfolk	3,929	1,586	40%
Edenbridge	Kent	3,477	828	24%
Faringdon	Oxfordshire	3,613	721	20%
Glastonbury	Somerset	2,524	612	24%
Heathfield	East Sussex	2,936	583	20%
Hook	Hampshire	3,435	567	17%
Hunstanton	Norfolk	1,370	562	41%
Ingatestone	Essex	2,155	298	14%
Ledbury	Herefordshire	3,508	1,597	46%
Liskeard	Cornwall	4,792	2,346	49%
Marlborough	Wiltshire	2,955	1,248	42%
Paddock Wood	Kent	4,313	887	21%
Sawbridgeworth	Hertfordshire	3,456	363	11%
Sherborne	Dorset	2,974	1,314	44%
Soham	Cambridgeshire	5,260	1,148	22%
St Blazey	Cornwall	2,527	361	14%
St Ives	Cornwall	2,431	1,257	52%
Swaffham	Norfolk	2,354	870	37%
Tenterden	Kent	4,427	1,358	31%
Tetbury	Gloucestershire	3,354	1,084	32%
Tidworth	Wiltshire	7,223	3,753	52%
Tiptree	Essex	6,011	1,113	19%
Watton	Norfolk	5,513	1,674	30%
Wincanton	Somerset	2,627	1,065	41%
Yatton	Somerset	3,704	665	18%
Average		**3,599**	**1,082**	**30%**

3.6 The analysis demonstrates that the average level of internalisation of trips to work across the selected areas is 30%. As such, an assumption that 12% residential employment trips will remain internal to the HGC growth area and the remaining 88% will commute to work at external locations is robust.

3.7 This has been calculated on the basis that:

- 11000 homes x 2.4 = 26,400 people
- 1.54 people per dwelling employable = 16,940
- Total Jobs = 8,000-10,000
- 25% of jobs filled internally – circa 2,000-2,500
- 2,000-2,500 jobs equal circa 12% of total employable people.

3.8 In addition to the 12% of trips within the growth area a substantial number of trips will also be attracted to the adjacent Maylands Area.

3.9 Upon review of the towns chosen for this exercise, it can be seen that in the majority of cases, the towns examined are often actually within the proximity of a larger existing town or city which is reflective of the situation proposed for the HGC. Furthermore, many of the towns selected for the exercise offer less in terms of employment uses when compared with the proposals at the HGC, yet still manage to retain an average of 30% of residents within the daytime population. The proposals for up to 166,000sqm of employment use which is significant compared with the existing settlements listed, with this area also likely to accommodate a substantial number of end-use employers which means that there will be considerable variety in terms of potential employers and job types within the site, i.e. attracting a larger overall employable population.

3.10 Further interrogation of 2011 Census Origin-Destination data has been used to understand the proportion of residents from Dacorum 013 (the MSOA most local to the Maylands Employment Area) that live and work within MSOA 013. This comprises 19.4% of residents who work within Dacorum 013 itself (430/2,223).

3.11 The overall internalisation of the MSOA 013 within the Hemel Hempstead built area i.e. those who live within the MSOA but work in Hemel Hempstead is circa 46.6% which shows the potential for a significant portion of residents to live within the site and also choose to work where employment is available locally, a lifestyle that clearly works for a significant portion of existing Hemel Hempstead residents. With around 166,000sqm of employment proposed to be built within the growth area, it is anticipated that a significant portion of future residents will also work within HGC in addition to the people working within the existing Hemel urban area.

3.12 In summary, it is considered that 12% is a highly robust figure for internalisation of residential to employment trips within HGC.

3.13 In addition to this a significant proportion of trips will be to Maylands for employment and while not internal are semi-internal as they have the opportunities to travel by sustainable modes given the close proximity of the largest employment area in Hertfordshire to the Site. This will be addressed within the assignment which is not captured within this note but is summarised within the modal split as circa 25% of journeys being undertaken by non-car modes to work.

3.14 **Table 3.3-Table 3.5** set out the summary of internal/external total person trips associated with residential to employment trips. These tables therefore consider the Residential to Employment trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.3: Residential to Employment Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
External Trips	876	3,027	3,903	733	2,533	3,266	197	680	877
Internal Trips	121	418	539	101	350	451	27	94	121
Total Trips	**997**	**3,445**	**4,442**	**835**	**2,883**	**3,717**	**224**	**774**	**998**

Table 3.4: Residential to Employment Trips Interpeak

	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
External Trips	173	152	325	171	151	321	226	200	426	311	274	586	336	297	633	450	397	846
Internal Trips	24	21	45	24	21	44	31	28	59	43	38	81	46	41	87	62	55	117
Total Trips	**196**	**173**	**369**	**194**	**171**	**366**	**258**	**227**	**485**	**354**	**312**	**666**	**383**	**337**	**720**	**512**	**451**	**963**

Table 3.5: Residential to Employment Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
External Trips	1,560	742	2,301	2,363	1,124	3,487	1,112	529	1,641
Internal Trips	215	102	318	326	155	481	154	73	227
Total Trips	**1,775**	**844**	**2,619**	**2,690**	**1,279**	**3,969**	**1,266**	**602**	**1,868**

Residential to Education – Primary School

3.15 It is proposed that primary school provision is included as part of the HGC, with sufficient capacity to accommodate all pupil demand. It is assumed that 95% of all primary school pupils will remain on-site with potentially only 5% that would go off-site but these may be to immediately adjacent schools such as that proposed in Spencer's Park for example.

3.16 **Table 3.6**-**3.8** set out the summary of internal/external total person trips associated with residential to primary school trips. These tables therefore consider the Residential to Education (Primary) trips set out within **Tables 2.233-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.6: Residential to Primary School Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
External Trips	8	23	31	44	124	169	4	12	17
Internal Trips	156	436	592	844	2,359	3,203	83	232	315
Total Trips	**164**	**459**	**623**	**888**	**2,483**	**3,371**	**87**	**244**	**331**

Table 3.7: Residential to Primary School Trips Interpeak

	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
External Trips	1	1	2	2	2	4	3	3	5	2	2	4	10	10	20	55	55	110
Internal Trips	23	23	46	41	41	83	48	48	97	35	35	71	192	193	384	1,042	1,047	2,089
Total Trips	**24**	**24**	**49**	**43**	**44**	**87**	**51**	**51**	**102**	**37**	**37**	**74**	**202**	**203**	**405**	**1,097**	**1,102**	**2,199**

Table 3.8: Residential to Primary School Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	26	15	41	12	7	19	4	2	6
Internal Trips	492	289	781	225	132	357	70	41	111
Total Trips	**518**	**305**	**822**	**237**	**139**	**376**	**73**	**43**	**117**

Residential to Education - Secondary School

3.17 Secondary education facilities are also proposed within the HGC. As noted earlier, there will be the capacity for up to 4,320 pupils.

3.18 From the residential area of the HGC, it is assumed that 10% of secondary school pupils will travel externally and the remaining 90% will be internal.

3.19 The remaining pupils that will fill the secondary schools (i.e. external pupils travelling into HGC) are discussed in further detail later in this section.

3.20 **Table 3.9-3.11** set out the summary of internal/external total person trips associated with residential to secondary school trips. These tables therefore consider the Residential to Education (Secondary) trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.9: Residential to Secondary School Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	16	46	62	89	248	337	9	24	33
Internal Trips	148	413	561	799	2,235	3,034	79	220	298
Total Trips	**164**	**459**	**623**	**888**	**2,483**	**3,371**	**87**	**244**	**331**

Table 3.10: Residential to Secondary School Trips Interpeak

	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	2	2	5	4	4	9	5	5	10	4	4	7	20	20	40	110	110	220
Internal Trips	22	22	44	39	39	78	46	46	91	33	34	67	182	183	364	987	992	1,979
Total Trips	**24**	**24**	**49**	**43**	**44**	**87**	**51**	**51**	**102**	**37**	**37**	**74**	**202**	**203**	**405**	**1,097**	**1,102**	**2,199**

Table 3.11: Residential to Secondary School Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	52	30	82	24	14	38	7	4	12
Internal Trips	466	274	740	213	125	338	66	39	105
Total Trips	**518**	**305**	**822**	**237**	**139**	**376**	**73**	**43**	**117**

Residential to Food Retail

3.21 Based on the TEMPRO/NTS journey purpose data, it has been assumed that 50% of shopping trips by residents will be for food. This is considered to be a robust assumption.

3.22 It has been assumed that 90% of food retail trips during the peak periods will be internal to HGC, based on the provision of food retail floorspace on-site, suitable for day-to-day and top-up shopping. This is also considered appropriate for peak period assessments, when primary (single purpose) retail trips are less likely to be made and food shopping tends to be undertaken as part of a linked trip.

3.23 For the purposes of a robust assessment, 10% of trips have been assigned to external locations for larger weekly shops or the purchase of items that may not be available at the on-site facilities. To be clear this is new single purpose trips i.e. people deciding to drive to a food store and then home again during the peak hours without any linking of their trip to another purpose. It should also be noted that, based on ONS data, there has been general growth in the use of home delivery services for retail over recent years and this is likely to continue in future.

3.24 **Table 3.12-3.14** set out the summary of internal/external total person trips associated with residential to food retail trips. These tables therefore consider the Residential to Food Retail trips set out within **Tables 2.33-2. 35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.12: Residential to Food Retail Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	3	8	11	8	24	32	20	61	82
Internal Trips	25	75	100	71	216	288	182	552	735
Total Trips	**28**	**84**	**112**	**79**	**240**	**320**	**203**	**613**	**816**

Table 3.13: Residential to Food Retail Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	63	55	119	68	59	127	56	49	105
Internal Trips	570	499	1,069	608	531	1,139	504	441	946
Total Trips	**633**	**554**	**1,187**	**675**	**590**	**1,265**	**560**	**490**	**1,051**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	49	43	92	48	42	90	42	36	78
Internal Trips	440	384	824	430	376	806	375	328	702
Total Trips	**488**	**427**	**916**	**478**	**418**	**895**	**416**	**364**	**780**

Table 3.14: Residential to Food Retail Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	66	33	99	55	27	82	50	24	74
Internal Trips	598	293	891	496	243	739	447	219	666
Total Trips	**664**	**326**	**990**	**551**	**271**	**822**	**496**	**244**	**740**

Residential to Non-Food Retail

3.25 It has been assumed that 50% of shopping trips from the TEMPRO/NTS journey purpose data will be for non-food.

3.26 The assessment has assumed that up to 25% of non-food retail trips will be internal and 75% will travel to external locations. These figures are based on the provision of an element of non-food retail floorspace within the HGC.

3.27 As for food retail it is important to note that this figure is for single purpose retail trips in the peak periods. Whilst one might nip to a very local shop, or call in as part of another trip, the propensity to undertake a dedicated retail trip when the network is most congested is low.

3.28 **Table 3.15-3.17** set out the summary of internal/external total person trips associated with residential to non-food retail trips. These tables therefore consider the Residential to Non-Food Retail trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.15: Residential to Non-Food Retail Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	21	63	84	60	180	240	152	460	612
Internal Trips	7	21	28	20	60	80	51	153	204
Total Trips	**28**	**84**	**112**	**79**	**240**	**320**	**203**	**613**	**816**

Table 3.16: Residential to Non-Food Retail Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	475	415	890	506	443	949	420	368	788
Internal Trips	158	138	297	169	148	316	140	123	263
Total Trips	**633**	**554**	**1,187**	**675**	**590**	**1,265**	**560**	**490**	**1,051**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	366	320	687	358	313	671	312	273	585
Internal Trips	122	107	229	119	104	224	104	91	195
Total Trips	**488**	**427**	**916**	**478**	**418**	**895**	**416**	**364**	**780**

Table 3.17: Residential to Non-Food Retail Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	498	245	743	413	203	616	372	183	555
Internal Trips	166	82	248	138	68	205	124	61	185
Total Trips	**664**	**326**	**990**	**551**	**271**	**822**	**496**	**244**	**740**

Residential to Personal Business

3.29 The TEMPRO definition of personal business includes visits to services including hairdressers, betting shops, dry cleaners, solicitors, banks, estate agents, libraries, churches and medical consultations.

3.30 Local centres will be provided within the HGC, and it is highly likely that facilities such as those set out above will be provided. Therefore, it is considered that up to 50% of trips are likely to be internal.

3.31 **Table 3.18-3.20** set out the summary of internal/external total person trips associated with residential to personal business trips. These tables therefore consider the Residential to Personal Business trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.18: Residential to Personal Business Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	36	135	171	74	278	353	65	245	310
Internal Trips	36	135	171	74	278	353	65	245	310
Total Trips	**72**	**270**	**342**	**148**	**557**	**705**	**131**	**490**	**621**

Table 3.19: Residential to Personal Business Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	Out	Total	In	Out	Total	In	Out	Total
External Trips	206	186	392	204	184	387	208	187	395
Internal Trips	206	186	392	204	184	387	208	187	395
Total Trips	**413**	**372**	**785**	**408**	**367**	**775**	**416**	**375**	**791**
	1300-1400			1400-1500			1500-1600		
	In	Out	Total	In	Out	Total	In	Out	Total
External Trips	189	171	360	173	156	329	223	201	425
Internal Trips	189	171	360	173	156	329	223	201	425
Total Trips	**379**	**341**	**720**	**347**	**312**	**659**	**447**	**403**	**850**

Table 3.20: Residential to Personal Business Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
External Trips	271	129	400	275	131	406	179	85	264
Internal Trips	271	129	400	275	131	406	179	85	264
Total Trips	**542**	**258**	**800**	**550**	**262**	**811**	**357**	**170**	**527**

Residential to Recreation/Social

3.32 As for personal business, it is assumed that the majority of recreation/social trips will be associated with on-site recreation/social facilities. As such, it is considered that up to 75% of trips are likely to be internal. This is considered to be a robust assessment, as recreational/social trips will also comprise trips such as dog walking, jogging and children playing, which is likely to occur on site.

3.33 **Table 3.21-3.23** set out the summary of internal/external total person trips associated with residential to recreation/social trips. These tables therefore consider the Residential to Recreation/Social trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.1**.

Table 3.21: Residential to Recreation/Social Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
External Trips	10	35	45	19	65	84	39	134	173
Internal Trips	30	104	134	57	195	252	117	401	518
Total Trips	**40**	**139**	**179**	**76**	**260**	**336**	**156**	**535**	**691**

Table 3.22: Residential to Recreation/Social Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	118	107	225	131	119	251	141	129	270
Internal Trips	353	322	675	394	358	752	424	386	810
Total Trips	**471**	**429**	**900**	**525**	**478**	**1,003**	**565**	**515**	**1,080**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	125	114	239	126	115	242	156	142	297
Internal Trips	376	342	718	379	345	725	467	425	892
Total Trips	**501**	**456**	**958**	**506**	**460**	**966**	**623**	**567**	**1,189**

Table 3.23: Residential to Recreation/Social Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	324	151	475	368	171	540	420	195	616
Internal Trips	973	453	1,425	1,105	514	1,619	1,260	586	1,847
Total Trips	**1,297**	**603**	**1,900**	**1,473**	**686**	**2,159**	**1,680**	**782**	**2,462**

Non-residential Trips

3.34 The proposed levels of internalisation for non-residential trips are summarised below in **Table 3.24** and are discussed in further detail within this section of the report.

Table 3.24: Non-Residential Trip Internalisation

Trip Purpose	**Distribution**	
	External (Off-site)	**Internal (On-site)**
Employment	75%	25%
Primary School Staff	75%	25%
Secondary School Staff	90%	10%
Secondary School Pupils	10%	90%
Secondary School Parents	10%	90%

Primary Education

Pupils & Parents

3.35 As discussed previously, there are no external pupil (and therefore parent) trips into the HGC area.

Staff

3.36 It has been assumed that 25% of primary education staff trips will be internal to the site for the primary schools. For the purposes of this assessment, a figure of 75% of primary school staff have been assumed to travel from external origins to the site.

3.37 In general, primary schools are more numerous than secondary schools and serve a more local population, both in terms of pupils and staff. This assumption is reflected in the higher rate of internalisation for primary school staff than secondary school staff (presented below).

3.38 **Table 3.25-3.27** below sets out the internal and external trips for the proposed primary schools and includes a breakdown of pupil, parent and staff trips. These tables therefore consider the Primary School (Staff, Pupils and Parents) trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.24**.

Table 3.25: Primary Education Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Pupils									
External Trips	0	0	0	0	0	0	0	0	0
Internal Trips	267	0	267	2,405	0	2,405	0	0	0
Total Trips	**267**	**0**	**267**	**2,405**	**0**	**2,405**	**0**	**0**	**0**
Parents									
External Trips	0	0	0	0	0	0	0	0	0
Internal Trips	134	134	267	1,203	1,203	2,405	0	0	0
Total Trips	**134**	**134**	**267**	**1,203**	**1,203**	**2,405**	**0**	**0**	**0**
Staff									
External Trips	104	0	104	35	0	35	0	0	0
Internal Trips	35	0	35	12	0	12	0	0	0
Total Trips	**139**	**0**	**139**	**46**	**0**	**46**	**0**	**0**	**0**

Table 3.26: Primary Education Trips Interpeak

	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Pupils																		
External Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Internal Trips	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Total Trips	**1**	**1**	**2**	**1**	**1**	**2**	**1**	**1**	**2**	**1**	**2**	**3**	**4**	**2**	**6**	**0**	**2,405**	**2,405**
Parents																		
External Trips																0	0	0
Internal Trips																1,203	1,203	2,405
Total Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,203**	**1,203**	**2,405**
Staff																		
External Trips																0	0	0
Internal Trips																0	0	0
Total Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 3.27: Primary Education Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Pupils									
External Trips	0	0	0	0	0	0	0	0	0
Internal Trips	0	267	267	0	0	0	0	0	0
Total Trips	**0**	**267**	**267**	**0**	**0**	**0**	**0**	**0**	**0**
Parents									
External Trips	0	0	0	0	0	0	0	0	0
Internal Trips	134	134	267	0	0	0	0	0	0
Total Trips	**134**	**134**	**267**	**0**	**0**	**0**	**0**	**0**	**0**
Staff									
External Trips	0	35	35	0	104	104	0	0	0
Internal Trips	0	12	12	0	35	35	0	0	0
Total Trips	**0**	**46**	**46**	**0**	**139**	**139**	**0**	**0**	**0**

Secondary Education

Pupils

3.39 In order to determine the level of internalisation of secondary school pupil trips, the first stage has been to establish the percentage of pupils from the HGC area as set out earlier in this report.

3.40 To ensure a robust assessment and element of choice for secondary school aged students, the proportion of external trips to the HGC area has been calculated as circa 10% of the total number of pupils (4,320) which equals 432 external pupils. This is shown in **Tables 3.28-3.30**.

Parents

3.41 The parental trips are based on the modal spilt for secondary school aged pupils for those who travel as a car passenger. This is presented in **Tables 3.28-3.30** below. Further detail about the mode split is set out in **Section 4**.

Staff

3.42 It has been assumed that 10% of secondary education staff trips will be internal to the HGC for the secondary schools.

3.43 For the purposes of this assessment, a figure of 90% of secondary school staff have been assumed to travel from external origins to the site.

3.44 **Tables 3.28-3.30** below set out the internal and external trips for the proposed secondary schools and includes a breakdown of pupil, parent and staff trips based on the explanations set out above. These tables therefore consider the Secondary School (Staff, Pupils and Parents) trips set out within **Tables 2.33-2.35** and apply the trip internalisation assumptions set out in **Table 3.24**.

Table 3.28: Secondary Education Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Pupils									
External Trips	44	0	44	399	0	399	0	0	0
Internal Trips	388	0	388	3,489	0	3,489	0	0	0
Total Trips	**432**	**0**	**432**	**3,888**	**0**	**3,888**	**0**	**0**	**0**
Parents									
External Trips	4	4	9	40	40	80	0	0	0
Internal Trips	39	39	78	349	349	698	0	0	0
Total Trips	**43**	**43**	**86**	**389**	**389**	**778**	**0**	**0**	**0**
Staff									
External Trips	203	0	203	68	0	68	0	0	0
Internal Trips	23	0	23	8	0	8	0	0	0
Total Trips	**225**	**0**	**225**	**75**	**0**	**75**	**0**	**0**	**0**

Table 3.29: Secondary Education Trips Interpeak

	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	2-way	In	Out	2-way	In	Out	2-way	In	Out	2-way	In	Out	2-way	In	Out	2-way
Pupils																		
External Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	399	399
Internal Trips	1	1	2	1	1	2	1	1	2	2	2	3	1	5	6	0	3,489	3,489
Total Trips	**2**	**1**	**2**	**1**	**1**	**2**	**1**	**2**	**3**	**2**	**2**	**4**	**2**	**5**	**7**	**0**	**3,888**	**3,888**
Parents																		
External Trips																40	40	80
Internal Trips																349	349	698
Total Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**389**	**389**	**778**
Staff																		
External Trips																0	0	0
Internal Trips																0	0	0
Total Trips	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 3.30: Secondary Education Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Pupils									
External Trips	0	44	44	0	0	0	0	0	0
Internal Trips	0	388	388	0	0	0	0	0	0
Total Trips	**0**	**432**	**432**	**0**	**0**	**0**	**0**	**0**	**0**
Parents									
External Trips	4	4	9	0	0	0	0	0	0
Internal Trips	39	39	78	0	0	0	0	0	0
Total Trips	**43**	**43**	**86**	**0**	**0**	**0**	**0**	**0**	**0**
Staff									
External Trips	0	68	68	0	203	203	0	0	0
Internal Trips	0	8	8	0	23	23	0	0	0
Total Trips	**0**	**75**	**75**	**0**	**225**	**225**	**0**	**0**	**0**

Employment

3.45 HGC is forecast to employ up to 8,000 people but this is across all land uses. Of these jobs it is envisaged that 25% of the trips would be internal based on circa 12% of employable people remaining on site as described previously for the residential element. This is robust on the basis of similar areas.

3.46 **Tables 3.31-3.33** set out the summary of internal/external total person trips associated with employment trips. These tables therefore consider the Employment E(g)(i) and Employment B8 trips in **Tables 2.33-2.35** and the internalisation assumptions set out in **Table 3.24**.

Table 3.31: Employment Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	468	87	555	1,194	159	1,352	784	109	893
Internal Trips	156	29	185	398	53	451	261	36	298
Total Trips	**625**	**116**	**740**	**1,592**	**211**	**1,803**	**1,046**	**145**	**1,190**

Table 3.32: Employment Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	271	153	424	183	168	351	296	404	701
Internal Trips	90	51	141	61	56	117	99	135	234
Total Trips	**361**	**204**	**565**	**244**	**224**	**468**	**395**	**539**	**934**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	412	311	723	235	321	556	145	405	550
Internal Trips	137	104	241	78	107	185	48	135	183
Total Trips	**550**	**415**	**964**	**314**	**428**	**742**	**194**	**539**	**733**

Table 3.33: Employment Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	120	660	779	82	1,175	1,257	58	392	450
Internal Trips	40	220	260	27	392	419	19	131	150
Total Trips	**160**	**879**	**1,039**	**110**	**1,566**	**1,676**	**77**	**523**	**600**

Total Trips Summary

3.47 **Tables 3.34-3.36** set out the summary of internal/external total person trips associated with all the proposed uses across the site and should be considered as the sum of the data presented in the internal/external trip generation tables set out in **Section 3**. Additionally, the HGV trips set out in **Table 2.32** (**Section 2)** have been added into the tables below.

Table 3.34: Total Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	1,795	3,428	5,223	2,762	3,652	6,413	1,271	1,725	2,996
HGVs	39	48	87	82	62	144	71	62	133
Internal Trips	1,564	1,804	3,367	9,830	7,298	17,128	865	1,933	2,799
Total Trips	**3,397**	**5,280**	**8,677**	**12,673**	**11,011**	**23,684**	**2,207**	**3,721**	**5,928**

Table 3.35: Total Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	1,310	1,073	2,383	1,269	1,130	2,399	1,356	1,344	2,700
HGVs	90	95	185	78	67	145	99	71	170
Internal Trips	1,449	1,264	2,713	1,541	1,380	2,921	1,502	1,396	2,899
Total Trips	**2,850**	**2,431**	**5,281**	**2,887**	**2,577**	**5,465**	**2,957**	**2,812**	**5,769**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	1,459	1,239	2,698	1,308	1,275	2,582	1,532	2,057	3,589
HGVs	86	75	161	59	47	106	69	44	112
Internal Trips	1,379	1,218	2,597	1,605	1,512	3,117	4,861	10,719	15,580
Total Trips	**2,924**	**2,532**	**5,456**	**2,971**	**2,834**	**5,805**	**6,461**	**12,820**	**19,282**

Table 3.36: Total Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	2,922	2,155	5,076	3,593	3,158	6,751	2,202	1,415	3,617
HGVs	39	42	80	16	49	66	16	25	41
Internal Trips	3,393	2,689	6,082	2,805	1,818	4,623	2,318	1,235	3,553
Total Trips	**6,353**	**4,885**	**11,239**	**6,414**	**5,025**	**11,439**	**4,536**	**2,675**	**7,212**

3.48 **Table 3.37-3.39** then indicate **Tables 3.34-3.36** as proportions.

Table 3.37: Total Trips AM Peak

	0700-0800			0800-0900			0900-1000		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	53%	65%	60%	22%	33%	27%	58%	46%	51%
HGVs	1%	1%	1%	1%	1%	1%	3%	2%	2%
Internal Trips	46%	34%	39%	78%	66%	72%	39%	52%	47%
Total Trips	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 3.38: Total Trips Interpeak

	1000-1100			1100-1200			1200-1300		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	46%	44%	45%	44%	44%	44%	46%	48%	47%
HGVs	3%	4%	4%	3%	3%	3%	3%	3%	3%
Internal Trips	51%	52%	51%	53%	54%	53%	51%	50%	50%
Total Trips	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
External Trips	50%	49%	49%	44%	45%	44%	24%	16%	19%
HGVs	3%	3%	3%	2%	2%	2%	1%	0%	1%
Internal Trips	47%	48%	48%	54%	53%	54%	75%	84%	81%
Total Trips	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 3.39: Total Trips PM Peak

	1600-1700			1700-1800			1800-1900		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
External Trips	46%	44%	45%	56%	63%	59%	49%	53%	50%
HGVs	1%	1%	1%	0%	1%	1%	0%	1%	1%
Internal Trips	53%	55%	54%	44%	36%	40%	51%	46%	49%
Total Trips	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

3.49 The resultant numbers of internal, external and total person trips by land use are presented in **Tables 3.40-3.42**, **Tables 3.43-3.45** and **Tables 3.46-3.48** respectively. These tables can then be compared directly to the total trips in **Tables 2.33-2.35**.

Table 3.40: Total Internal People Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	121	418	539	101	350	451	27	94	121
Residential to Education (Primary)	156	436	592	844	2,359	3,203	83	232	315
Residential to Education (Secondary)	148	413	561	799	2,235	3,034	79	220	298
Residential to Food Retail	25	75	100	71	216	288	182	552	735
Residential to Non-Food Retail	7	21	28	20	60	80	51	153	204
Residential to Personal Business	36	135	171	74	278	353	65	245	310
Residential to Recreation/ Social	30	104	134	57	195	252	117	401	518
Employment E(g)(i)	123	16	139	347	27	374	215	19	234
Employment (B8)	33	13	46	51	26	77	46	17	63
Primary School (Staff)	35	0	35	12	0	12	0	0	0
Primary School (Pupils)	267	0	267	2,405	0	2,405	0	0	0
Primary School (Parents)	134	134	267	1,203	1,203	2,405	0	0	0
Secondary School (Staff)	23	0	23	8	0	8	0	0	0
Secondary School (Pupils)	388	0	388	3,489	0	3,489	0	0	0
Secondary School (Parents)	39	39	78	349	349	698	0	0	0
Total	**1,564**	**1,804**	**3,367**	**9,830**	**7,298**	**17,128**	**865**	**1,933**	**2,799**

Table 3.41: Total Internal People Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	24	21	45	24	21	44	31	28	59	43	38	81	46	41	87	62	55	117
Residential to Education (Primary)	23	23	46	41	41	83	48	48	97	35	35	71	192	193	384	1,042	1,047	2,089
Residential to Education (Secondary)	22	22	44	39	39	78	46	46	91	33	34	67	182	183	364	987	992	1,979
Residential to Food Retail	570	499	1,069	608	531	1,139	504	441	946	440	384	824	430	376	806	375	328	702
Residential to Non-Food Retail	158	138	297	169	148	316	140	123	263	122	107	229	119	104	224	104	91	195
Residential to Personal Business	206	186	392	204	184	387	208	187	395	189	171	360	173	156	329	223	201	425
Residential to Recreation/ Social	353	322	675	394	358	752	424	386	810	376	342	718	379	345	725	467	425	892
Employment E(g)(i)	46	15	61	20	17	37	50	93	144	82	63	145	40	59	100	22	67	90
Employment (B8)	44	36	81	41	39	80	48	42	90	56	41	96	38	48	85	26	68	93
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,203	1,203	2,405
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	1	1	2	1	1	2	1	1	2	2	2	3	1	5	6	0	3,489	3,489
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	349	349	698
Total	**1,449**	**1,264**	**2,713**	**1,541**	**1,380**	**2,921**	**1,502**	**1,396**	**2,899**	**1,379**	**1,218**	**2,597**	**1,605**	**1,512**	**3,117**	**4,861**	**10,719**	**15,580**

Table 3.42: Total Internal People Trips (PM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	215	102	318	326	155	481	154	73	227
Residential to Education (Primary)	492	289	781	225	132	357	70	41	111
Residential to Education (Secondary)	466	274	740	213	125	338	66	39	105
Residential to Food Retail	598	293	891	496	243	739	447	219	666
Residential to Non-Food Retail	166	82	248	138	68	205	124	61	185
Residential to Personal Business	271	129	400	275	131	406	179	85	264
Residential to Recreation/ Social	973	453	1,425	1,105	514	1,619	1,260	586	1,847
Employment E(g)(i)	24	181	204	13	354	367	9	103	112
Employment (B8)	16	39	56	14	38	52	10	28	38
Primary School (Staff)	0	12	12	0	35	35	0	0	0
Primary School (Pupils)	0	267	267	0	0	0	0	0	0
Primary School (Parents)	134	134	267	0	0	0	0	0	0
Secondary School (Staff)	0	8	8	0	23	23	0	0	0
Secondary School (Pupils)	0	388	388	0	0	0	0	0	0
Secondary School (Parents)	39	39	78	0	0	0	0	0	0
Total	**3,393**	**2,689**	**6,082**	**2,805**	**1,818**	**4,623**	**2,318**	**1,235**	**3,553**

Table 3.43: Total External People Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	876	3,027	3,903	733	2,533	3,266	197	680	877
Residential to Education (Primary)	8	23	31	44	124	169	4	12	17
Residential to Education (Secondary)	16	46	62	89	248	337	9	24	33
Residential to Food Retail	3	8	11	8	24	32	20	61	82
Residential to Non-Food Retail	21	63	84	60	180	240	152	460	612
Residential to Personal Business	36	135	171	74	278	353	65	245	310
Residential to Recreation/ Social	10	35	45	19	65	84	39	134	173
Employment E(g)(i)	370	47	417	1041	81	1121	646	57	703
Employment (B8)	98	40	138	153	78	231	138	52	189
Primary School (Staff)	104	0	104	35	0	35	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	203	0	203	68	0	68	0	0	0
Secondary School (Pupils)	44	0	44	399	0	399	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
Total	**1,795**	**3,428**	**5,223**	**2,762**	**3,652**	**6,413**	**1,271**	**1,725**	**2,996**

Table 3.44: Total External Person Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	173	152	325	171	151	321	226	200	426	311	274	586	336	297	633	450	397	846
Residential to Education (Primary)	1	1	2	2	2	4	3	3	5	2	2	4	10	10	20	55	55	110
Residential to Education (Secondary)	2	2	5	4	4	9	5	5	10	4	4	7	20	20	40	110	110	220
Residential to Food Retail	63	55	119	68	59	127	56	49	105	49	43	92	48	42	90	42	36	78
Residential to Non-Food Retail	475	415	890	506	443	949	420	368	788	366	320	687	358	313	671	312	273	585
Residential to Personal Business	206	186	392	204	184	387	208	187	395	189	171	360	173	156	329	223	201	425
Residential to Recreation/ Social	118	107	225	131	119	251	141	129	270	125	114	239	126	115	242	156	142	297
Employment E(g)(i)	138	44	182	60	51	111	151	280	431	246	189	434	121	178	300	67	202	269
Employment (B8)	133	109	242	122	117	240	145	125	270	167	122	289	114	143	256	78	203	280
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	399	399
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
Total	**1,310**	**1,073**	**2,383**	**1,269**	**1,130**	**2,399**	**1,356**	**1,344**	**2,700**	**1,459**	**1,239**	**2,698**	**1,308**	**1,275**	**2,582**	**1,532**	**2,057**	**3,589**

Table 3.45: Total External People Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,560	742	2,301	2,363	1,124	3,487	1,112	529	1,641
Residential to Education (Primary)	26	15	41	12	7	19	4	2	6
Residential to Education (Secondary)	52	30	82	24	14	38	7	4	12
Residential to Food Retail	66	33	99	55	27	82	50	24	74
Residential to Non-Food Retail	498	245	743	413	203	616	372	183	555
Residential to Personal Business	271	129	400	275	131	406	179	85	264
Residential to Recreation/ Social	324	151	475	368	171	540	420	195	616
Employment E(g)(i)	71	542	613	40	1061	1101	27	310	336
Employment (B8)	49	117	167	42	114	156	31	83	114
Primary School (Staff)	0	35	35	0	104	104	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	68	68	0	203	203	0	0	0
Secondary School (Pupils)	0	44	44	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
Total	**2,922**	**2,155**	**5,076**	**3,593**	**3,158**	**6,751**	**2,202**	**1,415**	**3,617**

Table 3.46: Total People (Internal & External) Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	997	3,445	4,442	835	2,883	3,717	224	774	998
Residential to Education (Primary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Education (Secondary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Food Retail	28	84	112	79	240	320	203	613	816
Residential to Non-Food Retail	28	84	112	79	240	320	203	613	816
Residential to Personal Business	72	270	342	148	557	705	131	490	621
Residential to Recreation/ Social	40	139	179	76	260	336	156	535	691
Employment E(g)(i)	494	63	556	1,387	108	1,495	862	76	938
Employment (B8)	131	53	184	205	104	308	184	69	252
Primary School (Staff)	139	0	139	46	0	46	0	0	0
Primary School (Pupils)	267	0	267	2,405	0	2,405	0	0	0
Primary School (Parents)	134	134	267	1,203	1,203	2,405	0	0	0
Secondary School (Staff)	225	0	225	75	0	75	0	0	0
Secondary School (Pupils)	432	0	432	3,888	0	3,888	0	0	0
Secondary School (Parents)	43	43	86	389	389	778	0	0	0
Total	**3,358**	**5,232**	**8,590**	**12,592**	**10,949**	**23,541**	**2,136**	**3,659**	**5,795**

Table 3.47: Total People (External & Internal) Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	196	173	369	194	171	366	258	227	485	354	312	666	383	337	720	512	451	963
Residential to Education (Primary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Education (Secondary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Non-Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Personal Business	413	372	785	408	367	775	416	375	791	379	341	720	347	312	659	447	403	850
Residential to Recreation/ Social	471	429	900	525	478	1,003	565	515	1,080	501	456	958	506	460	966	623	567	1,189
Employment E(g)(i)	184	58	242	81	67	148	202	373	575	328	252	579	162	238	400	90	269	359
Employment (B8)	177	145	323	163	157	320	193	166	360	222	163	385	152	190	342	104	270	374
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,203	1,203	2,405
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	2	1	2	1	1	2	1	2	3	2	2	4	2	5	7	0	3,888	3,888
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389	389	778
Total	**2,759**	**2,337**	**5,096**	**2,809**	**2,510**	**5,320**	**2,858**	**2,741**	**5,599**	**2,838**	**2,457**	**5,295**	**2,913**	**2,786**	**5,699**	**6,393**	**12,777**	**19,169**

Table 3.48: Total People (Internal & External) Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,775	844	2,619	2,690	1,279	3,969	1,266	602	1,868
Residential to Education (Primary)	518	305	822	237	139	376	73	43	117
Residential to Education (Secondary)	518	305	822	237	139	376	73	43	117
Residential to Food Retail	664	326	990	551	271	822	496	244	740
Residential to Non-Food Retail	664	326	990	551	271	822	496	244	740
Residential to Personal Business	542	258	800	550	262	811	357	170	527
Residential to Recreation/ Social	1,297	603	1,900	1,473	686	2,159	1,680	782	2,462
Employment E(g)(i)	94	723	817	54	1,414	1,468	36	413	448
Employment (B8)	66	157	222	56	152	208	42	110	152
Primary School (Staff)	0	46	46	0	139	139	0	0	0
Primary School (Pupils)	0	267	267	0	0	0	0	0	0
Primary School (Parents)	134	134	267	0	0	0	0	0	0
Secondary School (Staff)	0	75	75	0	225	225	0	0	0
Secondary School (Pupils)	0	432	432	0	0	0	0	0	0
Secondary School (Parents)	43	43	86	0	0	0	0	0	0
Total	**6,315**	**4,844**	**11,158**	**6,398**	**4,976**	**11,374**	**4,520**	**2,651**	**7,170**

4 Baseline Mode Splits

4.1 The trips discussed in the previous sections of this report are total person trips (except the HGV trip generation). Therefore, the following section sets out the modal splits by journey purpose for all the proposed land uses.

4.2 It is important to note that no allowance is made for changes in working patterns post COVID i.e. an increase in working from home and a shift away from peak hour commuting.

4.3 It is also important to note that the existing mode shares for active travel, upon which the baseline mode splits are based (further detail about the data sources are set out in this section), identify a higher proportion of walking trips than cycling trips. Due to this, it is considered that the baseline mode splits set out in this report are likely to overestimate the proportion of walking trips and underestimate the proportion of cycling trips. That being said, the HGC will be developed to include active travel corridors which cater for significant walking and cycling trips, which reflects the overall active travel trips and recognises the potential for some transfer between walking and cycling trips.

Internal Trips

4.4 To identify the mode split of the following internal trips, the Hertfordshire County Travel Survey (2022) was referred to:

- Residential to Employment
- Residential to Food Retail
- Residential to Non-food Retail
- Residential to Personal Business
- Residential to Recreation/Social
- Employment
- Staff to Primary School
- Staff to Secondary School

4.5 This report identifies that for journeys less than 1 mile, the following mode share is currently adopted within Hertfordshire.

Table 4.1: Existing Mode Share for Journeys Less Than 1 Mile

Mode	%
Walk	76.0%
Cycle	1.9%
Bus	0.5%
Train	0.0%
Car Driver	14.4%
Car Passenger	7.2%
Total	100%

**Mode share categories have been combined to rationalise smaller mode shares.*

4.6 It is considered appropriate that for the above internal trips within the HGC site, that the mode share assumptions set out in **Table 4.1** are adopted for all journey types.

4.7 However, for the residential to education and school pupil/parent trips, mode splits were based on NTS data table 'NTS0614a: Trips to and from school for trip length by main mode and age, aged 5 to 16' for trips under 1 mile. The mode share for primary and secondary school trips is set out below.

Table 4.2: NTS Mode Share for Primary and Secondary School Trips Under 1 Mile

Mode	Primary %	Secondary %
Walk	86.0%	90%
Cycle	1%	1%
Bus	1%	4%
Car	12%	5%
Other	0%	0%
Total	**100%**	**100%**

4.8 For secondary school pupils, NTS data table NTS502a for travel to education trips was applied to the mode share set out above to identify the proportion of car driver and car passenger trips. This is to ensure that pupils driving to secondary school are included within the analysis alongside parents driving pupils as car passengers. The resultant mode share is set out below.

Table 4.3: Secondary School Mode Share for Journeys Under 1 Mile

	07:00 -08:00	08:00 -09:00	09:00 -10:00	10:00 -11:00	11:00 -12:00	12:00 -13:00	13:00 -14:00	14:00 -15:00	15:00 -16:00	16:00 -17:00	17:00 -18:00	18:00 -19:00
Walk	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Cycle	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Car Driver	1%	2%	3%	1%	2%	2%	1%	4%	2%	2%	2%	2%
Car Passenger	3%	3%	2%	4%	3%	3%	3%	1%	3%	3%	3%	3%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

4.9 However, it is considered that the HGC will include a range of on-site facilities and high quality active and sustainable transport infrastructure which will ensure that a greater number of trips will be undertaken by walking, cycling and public transport. In turn, this will decrease the number of car

driver trips. A 20% reduction in car driver trips is therefore proposed. The decrease in car driver trips will be accounted for by an equivalent uplift in public transport, walk and cycle trips.

4.10 The resultant mode share for the following journey purposes is set out in **Table 4.4**:

- Residential to Employment
- Residential to Food Retail
- Residential to Non-food Retail
- Residential to Personal Business
- Residential to Recreation/Social
- Employment
- Staff to Primary School
- Staff to Secondary School

Table 4.4: Adjusted HCC County Travel Survey Mode Split

Mode	%
Walk	76.7%
Cycle	2.6%
Bus	1.9%
Train	0.0%
Car Driver	11.5%
Car Passenger	7.2%
Total	100.0%

4.11 The same exercise was also undertaken for the primary school mode split, with the revised modal share outlined in **Table 4.5**.

Table 4.5: Adjusted NTS Mode Share for Primary School Trips

Mode	Primary %
Walk	86.8%
Cycle	1.6%
Bus	1.9%
Car	9.7%
Other	0%
Total	**100%**

4.12 Additionally, the same exercise was undertaken for secondary school trips; however, this was undertaken across the day to reflect the data shown in **Table 4.3**. The revised secondary school mode share is set out in **Table 4.6**.

Table 4.6: Adjusted Secondary School Mode Share

	07:00 -08:00	08:00 -09:00	09:00 -10:00	10:00 -11:00	11:00 -12:00	12:00 -13:00	13:00 -14:00	14:00 -15:00	15:00 -16:00	16:00 -17:00	17:00 -18:00	18:00 -19:00
Walk	89.9%	89.9%	90.0%	89.9%	89.9%	89.9%	89.9%	90.0%	89.9%	89.9%	89.9%	89.9%
Cycle	1.2%	1.3%	1.3%	1.2%	1.3%	1.3%	1.2%	1.3%	1.3%	1.2%	1.3%	1.2%
Bus	4.4%	4.5%	4.6%	4.4%	4.5%	4.5%	4.4%	4.6%	4.5%	4.4%	4.5%	4.4%
Car Driver	1.1%	1.7%	2.6%	0.9%	1.8%	1.7%	1.2%	2.9%	1.7%	1.5%	1.6%	1.3%
Car Passenger	3.5%	2.7%	1.5%	3.7%	2.6%	2.7%	3.3%	1.2%	2.6%	2.9%	2.8%	3.1%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

4.13 Based on the revised mode share, the baseline internal trips by mode are set out in **Tables 4.7-4.9**.

Table 4.7: Internal Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1,296	1,466	2,762	8,286	5,983	14,269	683	1,536	2,218
Cycle	27	35	62	144	116	260	21	45	66
Bus	50	52	102	356	257	613	19	43	61
Train	0	0	0	0	0	0	0	0	0
Car Driver	100	138	238	527	552	1,079	82	173	255
Car Passenger	91	113	204	517	389	907	61	137	198
Total	1,564	1,804	3,367	9,830	7,298	17,128	865	1,933	2,799

Table 4.8: Internal Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1,118	975	2,093	1,191	1,068	2,260	1,164	1,083	2,246
Cycle	37	33	70	39	35	75	38	35	74
Bus	29	25	54	31	28	59	30	28	58
Train	0	0	0	0	0	0	0	0	0
Car Driver	162	140	302	168	150	318	163	150	313
Car Passenger	104	91	195	110	99	209	108	100	208
Total	1,449	1,264	2,713	1,541	1,380	2,921	1,502	1,396	2,899
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	1,066	943	2,009	1,275	1,204	2,479	3,817	9,014	12,831
Cycle	35	31	66	38	35	73	82	163	245
Bus	28	24	52	36	34	69	180	378	558
Train	0	0	0	0	0	0	0	0	0
Car Driver	151	132	283	143	132	275	554	586	1,140
Car Passenger	99	87	186	114	107	220	227	579	807
Total	1,379	1,218	2,597	1,605	1,512	3,117	4,861	10,719	15,580

Table 4.9: Internal Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	2,698	2,190	4,887	2,203	1,424	3,627	1,794	957	2,751
Cycle	75	53	129	68	45	113	59	31	91
Bus	84	75	159	59	38	98	47	25	71
Train	0	0	0	0	0	0	0	0	0
Car Driver	310	201	510	275	181	456	252	134	386
Car Passenger	227	170	397	200	130	329	166	89	255
Total	3,393	2,689	6,082	2,805	1,818	4,623	2,318	1,235	3,553

External Trips

Residential to Employment

4.14 The travel to work mode share has been devised using data from the 2011 Census data for the Dacorum 013 MSOA. 2011 Census data has been utilised instead of 2021 Census data as the latter data is not considered to be robust given that at the time of the 2021 Census survey, government advice was for people to work from home and not to travel due to the ongoing Covid-19 pandemic. As such, the data relating to method of travel to work in the 2021 Census is not considered to be representative.

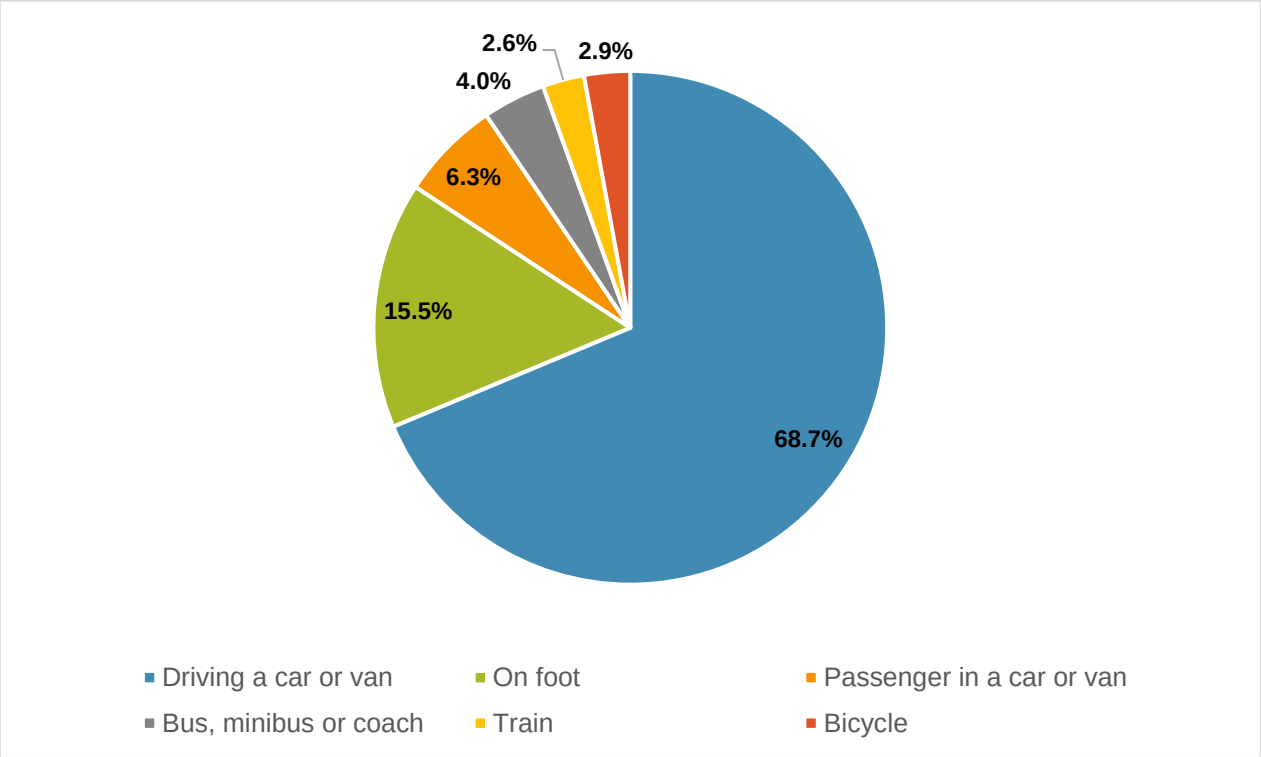
4.15 The residents travel to work mode share is as shown in **Figure 4.1**.

4.16 The method of travel to work dataset includes usual residents who 'work mainly at or from home' as well as those who are not in employment. In order to be robust and consider only usual residents who travel to work, those categories have been removed from the assessment and the remaining proportions have been extrapolated.

4.17 It would also be conventional to exclude walking and cycling trips on the basis that they are already included in the internal trip element. However, in this case, there are external facilities within easy walking and cycling proximity – in particular Maylands employment area. Hence this element has been retained.

4.18 It should also be noted that the categories for underground, motorcycle, other and taxi have been removed from the analysis, with the remaining modes reproportioned accordingly.

Figure 4.1: 2011 Census Mode Share for Journey to Work (Residents of Dacorum 013 MSOA)



4.19 The mode spilt outlined above is therefore considered a robust estimation of the modal split for external trips.

4.20 **Tables 4.10-4.12** set out the resultant residential to employment external trips by mode. These tables therefore reflect the Residential to Employment trips set out in **Tables 3.40-3.42** with the mode share assumptions set out below and in **Figure 4.1** applied.

Table 4.10: External Residential to Employment Trips by Mode (AM Peak)

Mode	%	07:00-08:00			08:00-09:00			09:00-10:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	15.5%	136	470	606	114	393	507	31	106	136
Cycle	2.9%	25	88	113	21	73	94	6	20	25
Bus	4.0%	35	120	155	29	100	129	8	27	35
Train	2.6%	23	80	103	19	67	86	5	18	23
Car Driver	68.7%	602	2,080	2,682	504	1,740	2,244	135	467	602
Car Passenger	6.3%	55	190	245	46	159	205	12	43	55
Total	**100%**	**876**	**3,027**	**3,903**	**733**	**2,533**	**3,266**	**197**	**680**	**877**

Table 4.11: External Residential to Employment Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	27	24	50	27	23	50	35	31	66
Cycle	5	4	9	5	4	9	7	6	12
Bus	7	6	13	7	6	13	9	8	17
Train	5	4	9	4	4	8	6	5	11
Car Driver	119	105	223	117	103	221	156	137	293
Car Passenger	11	10	20	11	9	20	14	13	27
Total	**173**	**152**	**325**	**171**	**151**	**321**	**226**	**200**	**426**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	48	43	91	52	46	98	70	62	131
Cycle	9	8	17	10	9	18	13	11	24
Bus	12	11	23	13	12	25	18	16	34
Train	8	7	15	9	8	17	12	10	22
Car Driver	214	189	402	231	204	435	309	272	582
Car Passenger	20	17	37	21	19	40	28	25	53
Total	**311**	**274**	**586**	**336**	**297**	**633**	**450**	**397**	**846**

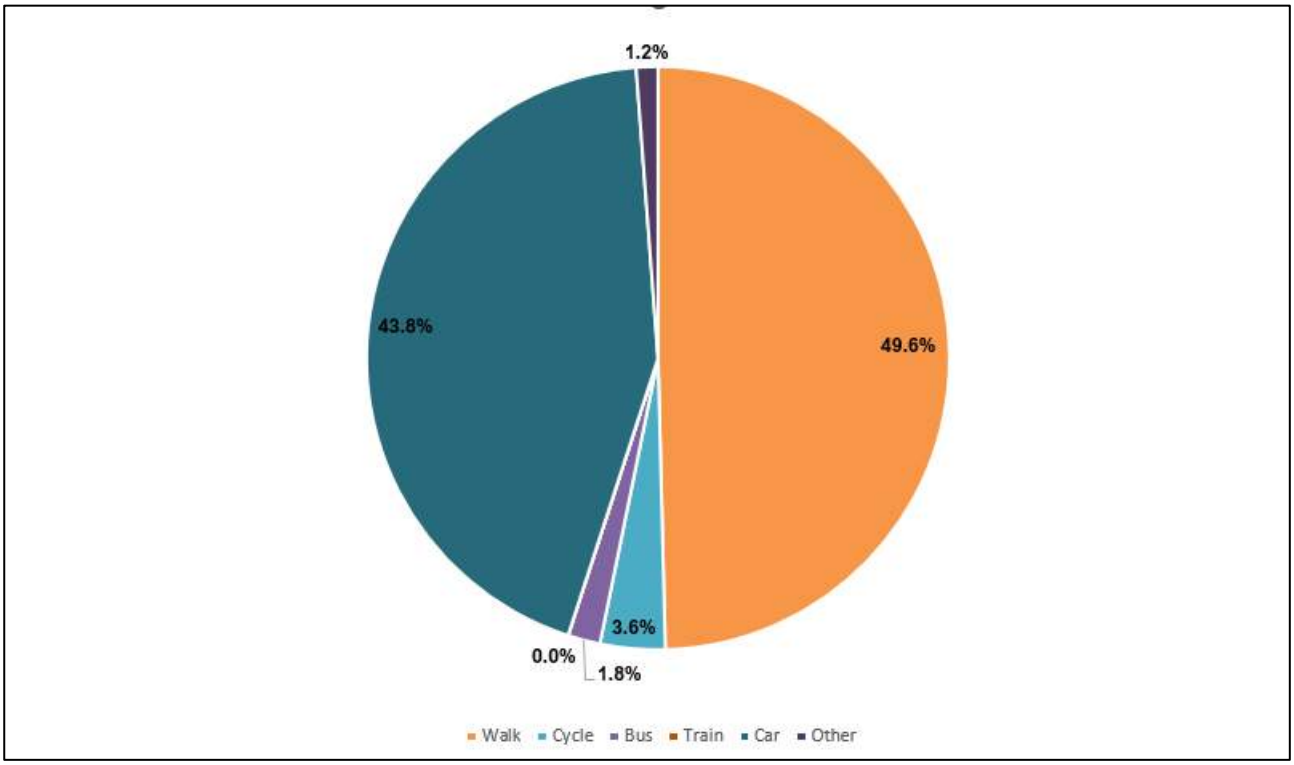
Table 4.12: External Residential to Employment Trips by Mode (PM Peak)

Mode	%	16:00-17:00			17:00-18:00			18:00-19:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	15.5%	242	115	357	367	175	542	173	82	255
Cycle	2.9%	45	21	67	68	33	101	32	15	47
Bus	4.0%	62	29	91	94	44	138	44	21	65
Train	2.6%	41	19	60	62	30	92	29	14	43
Car Driver	68.7%	1,072	509	1,581	1,624	772	2,396	764	363	1,128
Car Passenger	6.3%	98	47	145	148	71	219	70	33	103
Total	**100%**	**1,560**	**742**	**2,301**	**2,363**	**1,124**	**3,487**	**1,112**	**529**	**1,641**

Residential to Education – Primary School

4.21 A similar approach has also been used to establish the modal split for primary school travel. Figure 5.4.2 within the 'Hertfordshire Traffic and Transport Data Report (2022)' provides a percentage breakdown of modal split for journeys made to primary school. A summary of this data is provided in **Figure 4.2** below.

Figure 4.2: Mode of Travel to School (Primary)



4.22 The data shown above does not separate 'car driver' and 'car passenger'. Therefore, all trips were split proportionally between car driver and car passenger, based on the NTS proportions per hour for 'Education' and Escort Education,' provided in Table NTS0502a. The other mode share was also reproportioned across all other modes. The resultant mode split for primary school aged pupils is presented in **Table 4.13** below. It should be noted that the actual sustainable mode may vary between walk, cycle and bus, depending on the location of the residential area within HGC and the external school. However, for the purposes of this note and at a high level, the car driver and passenger numbers are considered reasonable.

Table 4.13: Residential to Primary Education Modal Split (External Trips)

Mode	0700-0800	0800-0900	0900-1000	1500-1600	1600-1700	1700-1800	1800-1900
Walk	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%	49.6%
Cycle	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Bus	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Train	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Car Driver	12.1%	19.5%	30.1%	20.0%	17.5%	18.6%	15.3%
Car Passenger	31.7%	24.3%	13.7%	23.8%	26.3%	25.2%	28.5%
Other	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Total	100%	100%	100%	100%	100%	100%	100%

4.23 **Tables 4.14-4.16** set out the resultant residential to primary school external trips by mode. These tables therefore reflect the Residential to Education (Primary) trips set out in **Tables 3.40-3.42** with the mode share assumptions set out in **Table 4.13** applied.

Table 4.14: External Residential to Primary School Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	4	12	16	22	62	85	2	6	8
Cycle	0	1	1	2	5	7	0	1	1
Bus	0	0	1	1	2	3	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	4	10	14	19	54	74	2	5	7
Total	8	23	31	44	124	169	4	12	17

Table 4.15: External Residential to Primary School Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1	1	1	1	1	2	1	1	3
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	1	1	1	1	1	2	1	1	2
Total	1	1	2	2	2	4	3	3	5
	1300-1400			**1400-1500**			**1500-1600**		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1	1	2	5	5	10	28	28	55
Cycle	0	0	0	0	0	1	2	2	5
Bus	0	0	0	0	0	0	1	1	2
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	1	1	2	4	4	9	24	24	48
Total	2	2	4	10	10	20	55	55	110

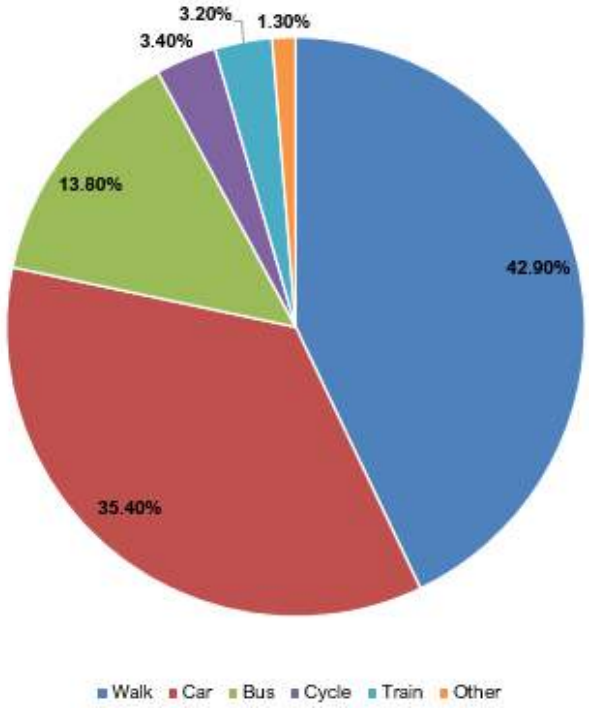
Table 4.16: External Residential to Primary School Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	13	8	21	6	3	9	2	1	3
Cycle	1	1	2	0	0	1	0	0	0
Bus	0	0	1	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	11	7	18	5	3	8	2	1	3
Total	26	15	41	12	7	19	4	2	6

Residential to Education – Secondary School External Trips

4.24 A similar approach has also been used to establish the modal split for secondary school pupils. Figure 5.4.2 within the 'Hertfordshire Traffic and Transport Data Report (2022)' provides a percentage breakdown of modal split for journeys made to secondary school. A summary of this data is provided in **Figure 4.3** below.

Figure 4.3: Mode of Travel to School (Secondary)



4.25 The data shown above does not separate 'car driver' and 'car passenger'. Therefore, all trips were split proportionally between car driver and car passenger, based on the NTS proportions per hour for 'Education' and Escort Education,' provided in Table NTS0502a. The other mode share was also reproportioned across all other modes. The resultant mode split for secondary school aged pupils is presented in **Table 4.17** below. It should be noted that the actual sustainable mode may vary between walk, cycle and bus, depending on the location of the residential area within HGC and the external school. However, for the purposes of this note and at a high level, the car driver and passenger numbers are considered reasonable.

Table 4.17: Residential to Secondary Education Modal Split (External Trips)

Mode	0700-0800	0800-0900	0900-1000	1500-1600	1600-1700	1700-1800	1800-1900
Walk	43.55%	43.55%	43.55%	43.55%	43.55%	43.55%	43.55%
Cycle	4.05%	4.05%	4.05%	4.05%	4.05%	4.05%	4.05%
Bus	13.80%	13.80%	13.80%	13.80%	13.80%	13.80%	13.80%
Train	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%
Car Driver	9.82%	15.73%	24.32%	16.14%	14.11%	15.02%	12.33%
Car Passenger	25.58%	19.67%	11.08%	19.26%	21.29%	20.38%	23.07%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

4.26 **Tables 4.18-4.20** set out the resultant residential to secondary school external trips by mode. These tables therefore reflect the Residential to Education (Secondary) trips set out in **Tables 3.40-3.42** with the mode share assumptions set out in **Table 4.17** applied.

Table 4.18: External Residential to Secondary School Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	7	20	27	39	108	147	4	11	14
Cycle	1	2	3	4	10	14	0	1	1
Bus	2	6	9	12	34	47	1	3	5
Train	1	1	2	3	8	11	0	1	1
Car Driver	2	5	6	14	39	53	2	6	8
Car Passenger	4	12	16	17	49	66	1	3	4
Total	**16**	**46**	**62**	**89**	**248**	**337**	**9**	**24**	**33**

Table 4.19: External Residential to Secondary School Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1	1	2	2	2	4	2	2	4
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	1	1	1	1	1	1	1
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	1	1	1	1	1	2
Car Passenger	1	1	1	1	1	2	1	1	2
Total	**2**	**2**	**5**	**4**	**4**	**9**	**5**	**5**	**10**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	2	2	3	9	9	18	48	48	96
Cycle	0	0	0	1	1	2	4	4	9
Bus	1	1	1	3	3	6	15	15	30
Train	0	0	0	1	1	1	4	4	7
Car Driver	0	0	1	5	5	11	18	18	35
Car Passenger	1	1	2	2	2	3	21	21	42
Total	**4**	**4**	**7**	**20**	**20**	**40**	**110**	**110**	**220**

Table 4.20: External Residential to Secondary School Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	23	13	36	10	6	16	3	2	5
Cycle	2	1	3	1	1	2	0	0	0
Bus	7	4	11	3	2	5	1	1	2
Train	2	1	3	1	0	1	0	0	0
Car Driver	7	4	12	4	2	6	1	1	1
Car Passenger	11	6	18	5	3	8	2	1	3
Total	**52**	**30**	**82**	**24**	**14**	**38**	**7**	**4**	**12**

Residential to Food/Non-Food Retail & Personal Business

4.27 The TRICS database was interrogated to obtain an appropriate modal split for these trip purposes, based on food retail sites, as these will provide robust modal splits. The following selection criteria was used to obtain representative sites:

- Sub Land Use: Food Superstore
- Calculation Option: Multi-Modal Trip Rates
- Regions: England, but excluding Greater London
- Number of Units: 2,000-6,000sqm
- Location Types: Suburban Area, Edge of Town and Neighbourhood Centre
- Date Range: TRICS default range of 8 years (i.e. 01/01/15 to 29/09/22)
- Local Population within 1 mile: All included (sites to be individually interrogated)
- Major Cities: removal of sites within major cities
- Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

4.28 The modal splits per hour for each AM (0700-1000), Interpeak (10:00-16:00) and PM (1600-1900) period were then extracted from TRICS. The TRICS output is attached at **Appendix G**.

4.29 For the purposes of this assessment and to be robust, it has been assumed that for food retail, residents will travel by bus and car only for external trips, but it is anticipated that cycling will make up a reasonable volume of trips in future. For non-food retail and personal business trips, it is assumed that cycling will also make up a proportion of trips.

4.30 The modal shares for travel by cycle, bus, single-occupancy vehicles and multi-occupancy vehicles were extracted and used to form the basis of the final mode split. Walking and other public transport trips have been removed. The subsequent TRICS mode split applied to external trips is presented in **Tables 4.21-4.22** and **Tables 4.23-4.24**. below.

Table 4.21: TRICS Mode Split Adopted for Food Retail AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Bus	7.3%	11.2%	8.0%	6.9%	4.6%	4.2%
Single-Occupancy Vehicle	26.1%	17.1%	22.9%	22.9%	23.9%	24.9%
Multi-Occupancy Vehicle	38.3%	36.9%	46.2%	45.5%	47.8%	48.8%
Other Modes*	28.3%	34.8%	22.9%	24.7%	23.7%	22.1%
Total	100%	100%	100%	100%	100%	100%

**Not included within the assessment*

Table 4.22: TRICS Mode Split Adopted for Food Retail Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Bus	6.1%	6.5%	7.0%	6.3%	6.0%	7.3%
Single-Occupancy Vehicle	23.1%	20.3%	19.9%	21.3%	22.1%	21.1%
Multi-Occupancy Vehicle	49.0%	53.3%	49.7%	46.5%	53.3%	43.7%
Other Modes*	21.8%	19.9%	23.4%	25.9%	18.6%	27.9%
Total	100%	100%	100%	100%	100%	100%

**Not included within the assessment*

Table 4.23: TRICS Mode Split Adopted for Non-Food Retail/Personal Business AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cycle	1.2%	1.5%	2.6%	1.0%	1.7%	1.3%
Bus	7.3%	11.2%	8.0%	6.9%	4.6%	4.2%
Single-Occupancy Vehicle	26.1%	17.1%	22.9%	22.9%	23.9%	24.9%
Multi-Occupancy Vehicle	38.3%	36.9%	46.2%	45.5%	47.8%	48.8%
Other Modes*	27.10%	33.30%	20.30%	23.70%	22.00%	20.80%
Total	100%	100%	100%	100%	100%	100%

**Not included within the assessment*

Table 4.24: TRICS Mode Split Adopted for Non-Food Retail/Personal Business Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Cycle	1.6%	1.5%	1.3%	1.2%	1.0%	1.3%
Bus	6.1%	6.5%	7.0%	6.3%	6.0%	7.3%
Single-Occupancy Vehicle	23.1%	20.3%	19.9%	21.3%	22.1%	21.1%
Multi-Occupancy Vehicle	49.0%	53.3%	49.7%	46.5%	53.3%	43.7%
Other Modes*	20.20%	18.40%	22.10%	24.70%	17.60%	26.60%
Total	100%	100%	100%	100%	100%	100%

**Not included within the assessment*

4.31 The bus and cycle mode shares presented above have not been adjusted for the final mode split used within the assessment.

4.32 The single and multi-occupancy mode shares have been used to derive car driver and car passenger mode shares.

4.33 As the single-occupancy vehicles and multi-occupancy vehicles both include a car driver it is necessary to assume the number of occupants within a multi-occupancy vehicle. For the purposes of this assessment, we have assumed just one passenger per multi-occupancy vehicle, which provides a worst-case assessment.

4.34 For example, to obtain the proportion of people travelling by car who are car driver for 0700-0800, the following calculation was undertaken:

(26.1% + 38.3%) / (26.1% + 38.3% + 38.3%) = 62.7%

4.35 To obtain the car passenger mode share for 0700-0800, the following calculation was undertaken:

38.3% / (26.1% + 38.3% + 38.3%) = 37.3%

4.36 This calculation was applied to each hour, to obtain the split between car drivers and car passengers. The results are presented in **Table 4.25-4.26** below.

Table 4.25: Car Driver/Car Passenger Mode Split AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Car Driver	62.7%	59.4%	59.9%	60.1%	60.0%	60.2%
Car Passenger	37.3%	40.6%	40.1%	39.9%	40.0%	39.8%
Total	100%	100%	100%	100%	100%	100%

Table 4.26: Car Driver/Car Passenger Mode Split Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Car Driver	59.5%	58.0%	58.3%	59.3%	58.6%	59.7%
Car Passenger	40.5%	42.0%	41.7%	40.7%	41.4%	40.3%
Total	100%	100%	100%	100%	100%	100%

4.37 However, as described previously, residents are also expected to travel by bus for the purposes of non-food retail, and bus and cycling for non-food retail and personal business. Therefore, the mode splits presented in **Tables 4.25-4.26** have been applied to the percentage mode share remaining once the bus/cycle mode share, as shown in **Tables 4.21-4.22** and **4.23-4.24**, have been taken into account.

4.38 For example, the following calculation has been undertaken to obtain the final car driver mode share for 0700-0800:

*(100% - 7.3%) * 62.7% = 58.1%*

4.39 To obtain the car passenger mode share for 0700-0800, the following calculation was undertaken:

*(100% - 7.3%) * 37.3% = 34.6%*

4.40 This calculation was subsequently applied to each hour, to obtain the final car driver and car passenger mode shares for the purposes of this assessment. The results are presented in **Tables 4.27-4.28** and **4.29-4.30**.

Table 4.27: Food Retail External Trips Mode Split AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Bus	7.3%	11.2%	8.0%	6.9%	4.6%	4.2%
Car Driver	58.1%	52.8%	55.1%	55.9%	57.2%	57.6%
Car Passenger	34.6%	36.0%	36.9%	37.2%	38.2%	38.2%
Total	100%	100%	100%	100%	100%	100%

Table 4.28: Food Retail External Trips Mode Split Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Bus	6.1%	6.5%	7.0%	6.3%	6.0%	7.3%
Car Driver	55.9%	54.2%	54.3%	55.6%	55.1%	55.4%
Car Passenger	38.0%	39.3%	38.7%	38.1%	38.9%	37.3%
Total	100%	100%	100%	100%	100%	100%

Table 4.29: Non-Food Retail/Personal Business External Trips Mode Split AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cycle	1.2%	1.5%	2.6%	1.0%	1.7%	1.3%
Bus	7.3%	11.2%	8.0%	6.9%	4.6%	4.2%
Car Driver	57.4%	51.9%	53.6%	55.3%	56.2%	56.9%
Car Passenger	34.1%	35.4%	35.8%	36.8%	37.5%	37.6%
Total	100%	100%	100%	100%	100%	100%

Table 4.30: Non-Food Retail/Personal Business External Trips Mode Split Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Cycle	1.6%	1.5%	1.3%	1.2%	1.0%	1.3%
Bus	6.1%	6.5%	7.0%	6.3%	6.0%	7.3%
Car Driver	55.0%	53.4%	53.5%	54.9%	54.5%	54.6%
Car Passenger	37.3%	38.6%	38.2%	37.6%	38.5%	36.8%
Total	100%	100%	100%	100%	100%	100%

4.41 The tables below then set out the resultant residential to food/non-food retail & personal business external trips by mode. These tables therefore reflect the Residential to Food, Residential to Non-Food Retail and Residential to Personal Business trips set out in **Tables 3.40-3.42** with the mode share assumptions set out in driver and car passenger mode shares for the purposes of this assessment. The results are presented in **Tables 4.27-4.28** and **4.29-4.30** applied.

Table 4.31: External Residential to Food Retail Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Bus	0	1	1	1	3	4	2	5	7
Car Driver	2	5	6	4	13	17	11	34	45
Car Passenger	1	3	4	3	9	12	7	23	30
Total	3	8	11	8	24	32	20	61	82

Table 4.32: External Residential to Food Retail Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Bus	4	3	7	4	4	8	4	3	7
Car Driver	35	31	66	37	32	69	30	27	57
Car Passenger	24	21	45	27	23	50	22	19	41
Total	63	55	119	68	59	127	56	49	105
	1300-1400			1400-1500			1500-1600		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Bus	3	3	6	3	3	5	3	3	6
Car Driver	27	24	51	26	23	49	23	20	43
Car Passenger	19	16	35	19	16	35	16	14	29
Total	49	43	92	48	42	90	42	36	78

Table 4.33: External Residential to Food Retail Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Bus	5	2	7	3	1	4	2	1	3
Car Driver	37	18	55	32	15	47	29	14	43
Car Passenger	25	12	37	21	10	31	19	9	28
Total	66	33	99	55	27	82	50	24	74

Table 4.34: External Residential to Non-Food Retail/Personal Business Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	1	2	3	2	7	9	6	18	24
Bus	4	14	19	15	51	66	17	56	74
Car Driver	33	114	146	69	238	307	116	378	494
Car Passenger	19	68	87	47	163	210	78	253	330
Total	57	198	255	134	459	592	217	705	923

Table 4.35: External Residential to Non-Food Retail/Personal Business Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	11	10	21	11	9	20	8	7	15
Bus	42	37	78	46	41	87	44	39	83
Car Driver	374	330	705	379	334	713	336	297	633
Car Passenger	254	225	479	274	242	516	240	212	452
Total	681	601	1,283	710	626	1,336	628	555	1,183
	1300-1400			1400-1500			1500-1600		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	7	6	13	5	5	10	7	6	13
Bus	35	31	66	32	28	60	39	35	74
Car Driver	305	269	574	290	256	545	292	259	551
Car Passenger	209	185	394	205	181	385	197	175	372
Total	556	491	1,047	531	469	1,001	536	474	1,010

Table 4.36: External Residential to Non-Food Retail/Personal Business Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	8	4	11	12	6	17	7	3	11
Bus	53	26	79	32	15	47	23	11	34
Car Driver	426	207	632	387	188	574	313	152	465
Car Passenger	283	137	420	258	125	383	207	101	308
Total	769	374	1,143	688	334	1,022	551	268	818

Residential to Recreation/Social

4.42 The TRICS database was interrogated to obtain an appropriate modal split for trips associated with recreation and social purposes. For the purposes of this assessment, modal splits were obtained for 'Fitness Clubs.' This is deemed to be appropriate due to the lack of AM peak period data for other Leisure land uses within the TRICS database.

4.43 The following selection criteria was used to obtain representative sites:

- Land Use: Leisure
- Sub Lane Use: Fitness Club (Private)
- Calculation Option: Multi-Modal Trip Rates
- Regions: England, but excluding Greater London
- Number of Units: Default

- Date Range: TRICS default range of 8 years (i.e. 01/01/15 to 19/11/22)
- Local Population within 1 mile: All included (sites to be individually interrogated)
- Major Cities: removal of sites within major cities
- Removal of sites that do not present modal share by vehicle occupancy
- Covid: removal of sites flagged by TRICS as having been undertaken during a Covid year

4.44 Subsequently, the modal splits for 0700-0800, 0800-0900, 0900-1000, 1600-1700, 1700-1800 and 1800-1900 were obtained and are summarised in **Table 4.37-4.38**. The TRICS output is attached at **Appendix H**.

Table 4.37: TRICS Mode Split (Fitness Club) AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Pedestrians	16.7%	28.7%	19.5%	24.3%	18.8%	17.3%
Cyclists	0.0%	8.0%	5.8%	5.0%	8.1%	6.3%
Bus	4.2%	12.6%	4.5%	2.8%	1.7%	2.1%
Single Vehicle Occupants	54.2%	28.7%	25.3%	29.3%	28.6%	40.3%
Multi Vehicle Occupants	25.0%	19.5%	44.2%	38.7%	42.3%	33.5%

Table 4.38: TRICS Mode Split (Fitness Club) Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Pedestrians	24.6%	38.4%	36.2%	34.8%	32.7%	29.1%
Cyclists	5.4%	8.9%	0.0%	5.9%	4.5%	6.4%
Bus	13.2%	8.9%	2.4%	4.4%	6.4%	4.7%
Single Vehicle Occupants	19.8%	24.0%	22.8%	20.7%	32.7%	26.7%
Multi Vehicle Occupants	35.9%	17.1%	37.0%	31.1%	22.7%	32.0%

4.45 However, due to the location of the HGC, it was concluded that few external leisure or social trips will be by walking. Therefore, for the purposes of this assessment and to be robust, it has been assumed that residents will travel by bus and car or will choose to cycle for external trips.

4.46 The modal shares for travel by cycle, bus, single-occupancy vehicles and multi-occupancy vehicles were extracted and used to form the basis of the final mode split. The mode shares for walking trips have been redistributed across the remaining modes, based on their proportion of the total mode split.

4.47 For example, to calculate the increase in single vehicle occupants from 0700-0800, the following calculation was undertaken:

*16.7% * (54.2% / (54.2% + 25% + 0.0% + 4.2%)) = 10.9%*

4.48 This calculation was applied to the remaining modes, and across each hour. The additional mode share per mode, as a result of the removal of walking trips is presented in **Table 4.39-4.40**.

Table 4.39: Additional Mode Share per Mode AM and PM Peaks

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cyclists	0.0%	3.3%	1.4%	1.6%	1.9%	1.3%
Bus	0.8%	5.3%	1.1%	0.9%	0.4%	0.4%
Single Vehicle Occupants	10.9%	12.0%	6.2%	9.4%	6.7%	8.5%
Multi Vehicle Occupants	5.0%	8.1%	10.8%	12.4%	9.9%	7.1%

Table 4.40: Additional Mode Share per Mode Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Cyclists	1.8%	5.8%	0.0%	3.3%	2.2%	2.7%
Bus	4.4%	5.8%	1.4%	2.5%	3.2%	2.0%
Single Vehicle Occupants	6.6%	15.6%	13.3%	11.6%	16.1%	11.1%
Multi Vehicle Occupants	11.9%	11.1%	21.5%	17.4%	11.2%	13.3%

4.49 Subsequently, the percentages shown above were added to the original mode shares presented in **Table 4.30-4.31**, resulting in a mode split without pedestrian trips. This is presented in **Table 4.41-4.42**.

Table 4.41: Mode Share (Without Pedestrian Trips) AM and PM Peak

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cyclists	0.0%	11.3%	7.2%	6.6%	10.0%	7.6%
Bus	5.0%	17.9%	5.6%	3.7%	2.1%	2.5%
Single Vehicle Occupants	65.1%	40.7%	31.5%	38.7%	35.3%	48.8%
Multi Vehicle Occupants	30.0%	27.6%	55.0%	51.1%	52.2%	40.6%

Table 4.42: Mode Share (Without Pedestrian Trips) Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Cyclists	7.2%	14.7%	0.0%	9.2%	6.7%	9.1%
Bus	17.6%	14.7%	3.8%	6.9%	9.6%	6.7%
Single Vehicle Occupants	26.4%	39.6%	36.1%	32.3%	48.8%	37.8%
Multi Vehicle Occupants	47.8%	28.2%	58.5%	48.5%	33.9%	45.3%

4.50 To convert the single-occupancy vehicle and multi-occupancy vehicle to car driver and car passenger trips, the same methodology that was used to obtain the Shopping and Personal Business mode split was used.

4.51 For example, to obtain the car driver mode share for 0700-0800, the following calculation was undertaken:

(65.1% + 30%) / (65.1% + 30% + 30%) = 76.0%

4.52 To obtain the car passenger mode share for 0700-0800, the following calculation was undertaken:

30% / (65.1% + 30% + 30%) = 24%

4.53 This calculation was applied to each hour, to obtain the split between car drivers and car passengers. The results are presented in **Table 4.43-4.44** below.

Table 4.43: Car Driver/ Car Passenger Mode Split AM and PM Peak

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Car Driver	76.0%	71.2%	61.1%	63.7%	62.6%	68.8%
Car Passenger	24.0%	28.8%	38.9%	36.3%	37.4%	31.2%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 4.44: Car Driver/ Car Passenger Mode Split Interpeak

Mode	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600
Car Driver	60.8%	70.6%	61.8%	62.5%	70.9%	64.7%
Car Passenger	39.2%	29.4%	38.2%	37.5%	29.1%	35.3%
Total	**60.8%**	**70.6%**	**61.8%**	**62.5%**	**70.9%**	**64.7%**

4.54 As undertaken previously, the mode splits presented above have subsequently been applied to the percentage mode share remaining once the bus and cycle mode shares, as shown in **Table 4.34-4.35**, have been taken into account.

4.55 For example, the following calculation has been undertaken to obtain the final car driver mode share for 0700-0800:

*(100% - (0% + 5%)) * 76% = 72.2%*

4.56 Likewise, to obtain the final car passenger mode share for 0700-0800, the following calculation has been undertaken:

*(100% - (0% + 5%)) * 24% = 22.8%*

4.57 This calculation was subsequently applied to each hour, to obtain the final car driver and car passenger mode shares for the purposes of this assessment. The results are presented in **Table 4.45-4.46**.

Table 4.45: Recreation/ Social Mode Split for External Trips AM and PM Peak

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cycle	0.0%	11.3%	7.2%	6.6%	10.0%	7.6%
Bus	5.0%	17.9%	5.6%	3.7%	2.1%	2.5%
Car Driver	72.2%	50.4%	53.3%	57.2%	55.1%	61.8%
Car Passenger	22.8%	20.4%	33.9%	32.5%	32.9%	28.0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 4.46: Recreation/ Social Mode Split for External Trips Interpeak

Mode	0700-0800	0800-0900	0900-1000	1600-1700	1700-1800	1800-1900
Cycle	7.2%	14.7%	0.0%	9.2%	6.7%	9.1%
Bus	17.6%	14.7%	3.8%	6.9%	9.6%	6.7%
Car Driver	45.8%	49.9%	59.4%	52.4%	59.4%	54.5%
Car Passenger	29.5%	20.7%	36.8%	31.5%	24.3%	29.7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

4.58 **Table 4.47-4.49** set out the resultant residential to recreation/social external trips by mode. These tables therefore reflect the Residential to Recreation/Social trips set out in **Tables 3.40-3.42** with the mode share assumptions set out in **Tables 4.45-4.46** applied.

Table 4.47: External Residential to Recreation/ Social Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	0	0	0	2	7	10	3	10	12
Bus	1	2	2	3	12	15	2	7	10
Car Driver	7	25	32	10	33	42	21	71	92
Car Passenger	2	8	10	4	13	17	13	45	59
Total	**10**	**35**	**45**	**19**	**65**	**84**	**39**	**134**	**173**

Table 4.48: External Residential to Recreation/ Social Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	8	8	16	19	18	37	0	0	0
Bus	21	19	40	19	18	37	5	5	10
Car Driver	54	49	103	65	60	125	84	76	160
Car Passenger	35	32	66	27	25	52	52	47	99
Total	**118**	**107**	**225**	**131**	**119**	**251**	**141**	**129**	**270**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Cycle	12	11	22	8	8	16	14	13	27
Bus	9	8	16	12	11	23	10	9	20
Car Driver	66	60	126	75	68	143	85	77	162
Car Passenger	39	36	75	31	28	59	46	42	88
Total	**125**	**114**	**239**	**126**	**115**	**242**	**156**	**142**	**297**

Table 4.49: External Residential to Recreation/ Social Trips by Mode (PM Peak)

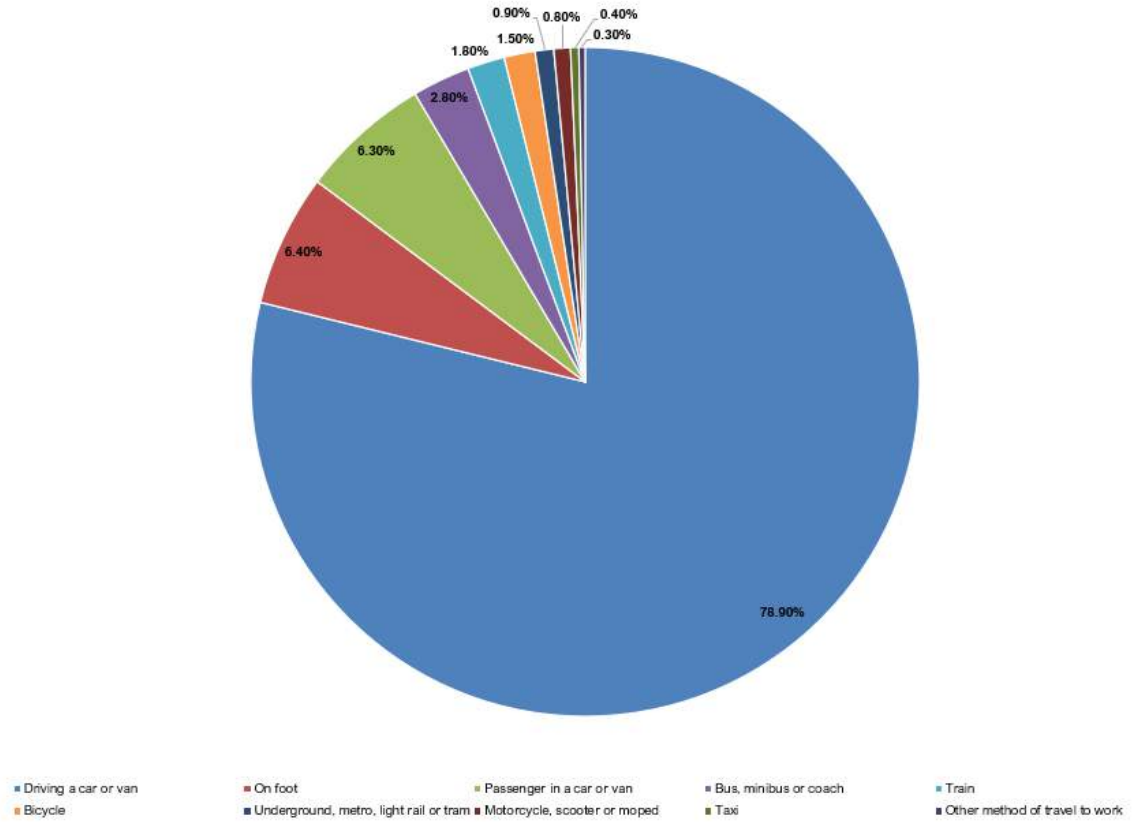
Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Cycle	21	10	31	37	17	54	32	15	47
Bus	12	6	18	8	4	11	11	5	16
Car Driver	185	86	272	203	94	297	260	121	380
Car Passenger	105	49	155	121	56	177	118	55	173
Total	**324**	**151**	**475**	**368**	**171**	**540**	**420**	**195**	**616**

Employment

4.59 To determine an appropriate baseline modal split for trips generated by the employment land uses at the HGC, the 2011 Census Origin-Destination data was interrogated. The method of travel to work data was extracted for people employed within the Dacorum 013 Middle Super Output Area, which lies adjacent to the HGC.

4.60 The modal split derived from this data is presented below in **Figure 4.4**.

Figure 4.4: 2011 Census Mode Share for Journey to Work (Employees of Dacorum 013 MSOA)



4.61 **Tables 4.50-4.53** set out the resultant employment external trips by mode. These tables therefore reflect the Employment E(g)(i) and Employment B8 trips set out in **Tables 3.40-3.42** with the mode share assumptions set out below and in **Figure 4.4** applied.

Table 4.50: External Employment Trips by Mode (AM Peak)

Mode	%	07:00-08:00			08:00-09:00			09:00-10:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	7.5%	35	7	42	90	12	102	59	8	67
Cycle	2.7%	12	2	15	32	4	36	21	3	24
Bus	2.8%	13	2	16	34	4	38	22	3	25
Train	1.8%	9	2	10	22	3	25	14	2	16
Car Driver	78.9%	369	68	438	941	125	1,066	618	86	704
Car Passenger	6.3%	30	5	35	75	10	85	49	7	56
Total	**100.0%**	**468**	**87**	**555**	**1,194**	**159**	**1,352**	**784**	**109**	**893**

Table 4.51: External Employment Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	20	12	32	14	13	26	22	31	53
Cycle	7	4	11	5	4	9	8	11	19
Bus	8	4	12	5	5	10	8	11	20
Train	5	3	8	3	3	6	5	7	13
Car Driver	214	120	334	144	133	277	234	319	553
Car Passenger	17	10	27	12	11	22	19	25	44
Total	**271**	**153**	**424**	**183**	**168**	**351**	**296**	**404**	**701**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	31	23	55	18	24	42	11	31	41
Cycle	11	8	19	6	9	15	4	11	15
Bus	12	9	20	7	9	16	4	11	15
Train	8	6	13	4	6	10	3	7	10
Car Driver	325	245	570	185	253	439	115	319	434
Car Passenger	26	20	46	15	20	35	9	25	35
Total	**412**	**311**	**723**	**235**	**321**	**556**	**145**	**405**	**550**

Table 4.52: External Employment Trips by Mode (PM Peak)

Mode	%	16:00-17:00			17:00-18:00			18:00-19:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	6.4%	9	50	59	6	89	95	4	30	34
Cycle	1.5%	3	18	21	2	31	33	2	10	12
Bus	2.8%	3	19	22	2	33	35	2	11	13
Train	1.8%	2	12	14	2	22	23	1	7	8
Car Driver	78.9%	95	520	615	65	926	991	46	309	355
Car Passenger	6.3%	8	42	49	5	74	79	4	25	28
Total	**100.0%**	**120**	**660**	**779**	**82**	**1,175**	**1,257**	**58**	**392**	**450**

Education

Primary School (External)

Staff

4.62 The same modal share applied to the proposed employment uses - see **Figure 4.4** has been applied to primary school staff trips to the HGC.

4.63 The resulting trip generation is presented in **Table 4.53-4.55**. These tables therefore reflect the Primary School (Staff) trips set out in **Tables 3.40-3.42** with the mode share assumptions set out below and in **Figure 4.4** applied.

Table 4.53: External Primary School (Staff) Trips by Mode (AM Peak)

Mode	%	07:00-08:00			08:00-09:00			09:00-10:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	6.4%	7	0	7	2	0	2	0	0	0
Cycle	1.5%	2	0	2	1	0	1	0	0	0
Bus	2.8%	3	0	3	1	0	1	0	0	0
Train	1.8%	2	0	2	1	0	1	0	0	0
Car Driver	78.9%	82	0	82	27	0	27	0	0	0
Car Passenger	6.3%	7	0	7	2	0	2	0	0	0
Total	100.0%	104	0	104	35	0	35	0	0	0

Table 4.54: External Primary School (Staff) Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Driving a car or van	0	0	0	0	0	0	0	0	0
On foot	0	0	0	0	0	0	0	0	0
Passenger in a car or van	0	0	0	0	0	0	0	0	0
Bus, minibus or coach	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 4.55: External Primary School (Staff) Trips by Mode (PM Peak)

Mode	%	16:00-17:00			17:00-18:00			18:00-19:00		
		In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	6.4%	0	3	3	0	8	8	0	0	0
Cycle	1.5%	0	1	1	0	3	3	0	0	0
Bus	2.8%	0	1	1	0	3	3	0	0	0
Train	1.8%	0	1	1	0	2	2	0	0	0
Car Driver	78.9%	0	27	27	0	82	82	0	0	0
Car Passenger	6.3%	0	2	2	0	7	7	0	0	0
Total	**100.0%**	**0**	**35**	**35**	**0**	**104**	**104**	**0**	**0**	**0**

Secondary School (External)

Pupils/Parents travelling Into the HGC For Secondary School

4.64 In order to establish the number of car driver trips associated with the secondary school provision, the External Pupil trips (outlined in **Tables 3.40-3.42**) have been split into self-driven and car passenger (parental driver) trips per hour using the modal split presented in **Table 4.17**.

4.65 This methodology has been used to allow for a small number of self-driven pupil trips (students of driving age) and thus is considered to be robust.

4.66 The number of parent-driven pupil trips is assumed to represent 80% of parental trips to secondary school, 20% accompanying pupils on a public transport trip. Any external pupils will travel by foot, cycle or public transport, if not a car passenger/driver, to the school.

Staff

4.67 The same modal share applied to the proposed employment uses (**Figure 4.4)** has been applied to secondary school staff trips to the HGC.

4.68 The resulting trip generation for pupil, parent and staff trips is presented below in **Table 4.56-4.58**. These tables therefore reflect the Secondary School (Staff, Pupils and Parents) trips set out in **Tables 3.40-3.42** with the mode share assumptions set out in **Table 4.17** and **Figure 4.4** applied, as described above.

Table 4.56: Secondary School External Trips (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
STAFF									
Walk	15	0	15	5	0	5	0	0	0
Cycle	5	0	5	2	0	2	0	0	0
Bus	6	0	6	2	0	2	0	0	0
Train	4	0	4	1	0	1	0	0	0
Car Driver	160	0	160	53	0	53	0	0	0
Car Passenger	13	0	13	4	0	4	0	0	0
Total	**203**	**0**	**203**	**68**	**0**	**68**	**0**	**0**	**0**
PUPILS									
Walk	19	0	19	174	0	174	0	0	0
Cycle	2	0	2	16	0	16	0	0	0
Bus	6	0	6	55	0	55	0	0	0
Train	1	0	1	13	0	13	0	0	0
Car Driver	4	0	4	63	0	63	0	0	0
Car Passenger	11	0	11	78	0	78	0	0	0
Total	**44**	**0**	**44**	**399**	**0**	**399**	**0**	**0**	**0**
PARENTS									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	4	4	9	40	40	80	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Total	4	4	9	40	40	80	0	0	0

Table 4.57: Secondary School External Trips (Interpeak)

Mode	100:00-11:00			11:00-12:00			12:00-13:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
STAFF									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Total	**0**	**68**	**68**	**0**	**203**	**203**	**0**	**0**	**0**
PUPILS									
Walk	0	19	19	0	0	0	0	0	0
Cycle	0	2	2	0	0	0	0	0	0
Bus	0	6	6	0	0	0	0	0	0
Train	0	1	1	0	0	0	0	0	0
Car Driver	0	6	6	0	0	0	0	0	0
Car Passenger	0	9	9	0	0	0	0	0	0
Total	**0**	**44**	**44**	**0**	**0**	**0**	**0**	**0**	**0**
PARENTS									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	4	4	9	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Total	**4**	**4**	**9**	**0**	**0**	**0**	**0**	**0**	**0**
Mode	**13:00-14:00**			**14:00-15:00**			**15:00-16:00**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
STAFF									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Driving a car or van	0	0	0	0	0	0	0	0	0
On foot	0	0	0	0	0	0	0	0	0
Passenger in a car or van	0	0	0	0	0	0	0	0	0
Bus, minibus or coach	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PUPILS									
Walk	0	0	0	0	0	0	0	174	174

Cycle	0	0	0	0	0	0	0	16	16
Bus	0	0	0	0	0	0	0	55	55
Train	0	0	0	0	0	0	0	13	13
Car Driver	0	0	0	0	0	0	0	64	64
Car Passenger	0	0	0	0	0	0	0	77	77
Total	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**399**	**399**
PARENTS									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	0	0	0	0	0	0	40	40	80
Car Passenger	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**40**	**80**

Table 4.58: Secondary School External Trips (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
STAFF									
Walk	0	5	5	0	15	15	0	0	0
Cycle	0	2	2	0	5	5	0	0	0
Bus	0	2	2	0	6	6	0	0	0
Train	0	1	1	0	4	4	0	0	0
Car Driver	0	53	53	0	160	160	0	0	0
Car Passenger	0	4	4	0	13	13	0	0	0
Total	**0**	**68**	**68**	**0**	**203**	**203**	**0**	**0**	**0**
PUPILS									
Walk	0	19	19	0	0	0	0	0	0
Cycle	0	2	2	0	0	0	0	0	0
Bus	0	6	6	0	0	0	0	0	0
Train	0	1	1	0	0	0	0	0	0
Car Driver	0	6	6	0	0	0	0	0	0
Car Passenger	0	9	9	0	0	0	0	0	0
Total	**0**	**44**	**44**	**0**	**0**	**0**	**0**	**0**	**0**
PARENTS									
Walk	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0
Bus	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0
Car Driver	4	4	9	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0	0	0	0
Total	**4**	**4**	**9**	**0**	**0**	**0**	**0**	**0**	**0**

Total External Trips

4.69 **Table 4.59-4.61** set out the total external trips by mode summarising each land use as set out above. These do not include HGVs, but they are considered at the end of this section. These tables should therefore be considered the sum of all trip generation tables included within **Section 4**.

Table 4.59: Total External Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	225	508	733	446	576	1,022	96	131	226
Cycle	49	95	145	81	107	188	36	52	88
Bus	70	146	216	153	207	360	52	102	155
Train	39	83	122	59	77	136	20	21	40
Car Driver	1,265	2,301	3,566	1,726	2,228	3,953	904	1,042	1,946
Car Passenger	146	296	441	297	457	754	163	378	541
Total	1,795	3,428	5,223	2,762	3,652	6,413	1,271	1,725	2,996

Table 4.60: Total External Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	49	37	86	43	39	82	61	65	126
Cycle	32	26	58	40	36	76	23	24	47
Bus	81	70	151	82	73	156	71	67	139
Train	10	7	16	8	7	15	12	13	24
Car Driver	796	636	1,432	743	662	1,406	841	857	1,697
Car Passenger	342	298	640	352	312	664	349	318	667
Total	1,310	1,073	2,383	1,269	1,130	2,399	1,356	1,344	2,700
	1300-1400			1400-1500			1500-1600		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	82	69	151	84	84	168	156	341	497
Cycle	38	33	71	31	31	62	45	64	109
Bus	71	62	133	70	65	135	91	145	235
Train	16	13	29	14	14	28	18	34	52
Car Driver	937	787	1,724	813	810	1,622	881	1,070	1,951
Car Passenger	314	276	590	296	270	566	342	403	744
Total	1,459	1,239	2,698	1,308	1,275	2,582	1,532	2,057	3,589

Table 4.61: Total External Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	287	213	500	390	296	685	182	115	297
Cycle	81	59	140	121	96	216	73	44	118
Bus	142	95	237	141	108	250	83	50	132
Train	45	36	81	64	57	121	31	21	52
Car Driver	1,826	1,436	3,262	2,314	2,240	4,553	1,412	960	2,372
Car Passenger	541	316	857	564	361	925	421	225	646
Total	2,922	2,155	5,076	3,593	3,158	6,751	2,202	1,415	3,617

First/Last Mile of Train Trips

4.70 It is recognised that trips undertaken by rail will have a first/last mile journey which is undertaken by a separate mode. It is proposed that the train trips identified in this report will be proportioned into train trips via cycle, via bus and via car during the distribution analysis.

4.71 To proportion the rail trips for first/last-mile travel, reference was made to the NTS Multi-stage Trips (2014) report. This identifies that the method of travel to a rail station when the station is over 1 mile away, is as follows:

- Walk: 14%
- Bus: 54%
- Car: 28%
- Other (Assumed to Represent Cycle): 4%

4.72 However, it is considered that the distance between the site and local rail stations is too far for people to walk. The NTS mode share proportions set out above have therefore been adjusted to split the mode share of walking trips 60:40 to bus and cycle trips, as follows:

- Walk: 0%
- Bus: 60%
- Car: 28%
- Cycle: 12%

Total External Car Trips

4.73 **Tables 4.62-4.64** summarise the external car driver trips by mode for each journey purpose, in addition to HGV trips. These tables therefore extract the car driver trips only from each of the trip generation tables contained in **Section 4**.

Table 4.62: Total External Car Driver Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	602	2,080	2,682	504	1,740	2,244	135	467	602
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	2	5	6	14	39	53	2	6	8
Residential to Food Retail	2	5	6	4	13	17	11	34	45
Residential to Non-Food Retail	12	36	48	31	93	124	81	246	328
Residential to Personal Business	21	78	98	38	144	183	35	131	166
Residential to Recreation/ Social	7	25	32	10	33	42	21	71	92
Employment E(g)(i)	292	37	329	821	64	884	510	45	555
Employment (B8)	77	31	109	121	61	182	109	41	149
Primary School (Staff)	82	0	82	27	0	27	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	160	0	160	53	0	53	0	0	0
Secondary School (Pupils)	4	0	4	63	0	63	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**1,304**	**2,349**	**3,653**	**1,807**	**2,290**	**4,097**	**975**	**1,104**	**2,079**

Table 4.63: Total External Car Driver Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	119	105	223	117	103	221	156	137	293	214	189	402	231	204	435	309	272	582
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	0	0	0	1	1	1	1	1	2	0	0	1	5	5	11	18	18	35
Residential to Food Retail	35	31	66	37	32	69	30	27	57	27	24	51	26	23	49	23	20	43
Residential to Non-Food Retail	261	228	489	270	236	506	225	197	422	201	176	377	195	171	366	170	149	319
Residential to Personal Business	113	102	216	109	98	207	111	100	211	104	94	198	94	85	179	122	110	232
Residential to Recreation/ Social	54	49	103	65	60	125	84	76	160	66	60	126	75	68	143	85	77	162
Employment E(g)(i)	109	35	143	48	40	88	119	221	340	194	149	343	96	141	236	53	159	212
Employment (B8)	105	86	191	96	93	189	114	98	213	131	96	228	90	112	202	61	160	221
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	64
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**886**	**730**	**1,617**	**821**	**729**	**1,550**	**939**	**928**	**1,867**	**1,023**	**862**	**1,885**	**872**	**857**	**1,729**	**950**	**1,114**	**2,064**

Table 4.64: Total External Car Driver Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,072	509	1,581	1,624	772	2,396	764	363	1,128
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	7	4	12	4	2	6	1	1	1
Residential to Food Retail	37	18	55	32	15	47	29	14	43
Residential to Non-Food Retail	276	135	411	232	114	346	212	104	315
Residential to Personal Business	150	71	221	155	74	228	102	48	150
Residential to Recreation/ Social	185	86	272	203	94	297	260	121	380
Employment E(g)(i)	56	428	483	32	836	868	21	244	265
Employment (B8)	39	93	131	33	90	123	25	65	90
Primary School (Staff)	0	27	27	0	82	82	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	53	53	0	160	160	0	0	0
Secondary School (Pupils)	0	6	6	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**1,865**	**1,478**	**3,342**	**2,330**	**2,289**	**4,619**	**1,428**	**985**	**2,414**

5 Mode Shift Reductions

5.1 It is considered that external car drivers associated with employment trips have the most potential for mode shift to sustainable transport modes. This includes:

- Residential to Employment
- Employment E(g)(i)
- Employment B8
- Staff to Primary School
- Staff to Secondary School

5.2 However, this potential for mode shift is considered to only likely materialise for trips that occur in locations where significant active and public transport interventions will be introduced. As such, significant mode shift from car drivers to walking, cycling or public transport will only likely be achievable for car drivers that will commute between the HGC and areas in Hemel Hempstead and St Albans.

5.3 A distribution exercise was undertaken using the distribution of car driver trips extracted from the COMET model to identify the proportion of car driver trips that are expected to take place between the HGC and areas within Hemel Hempstead, between the HGC and St Albans, and between the HGC and destinations further afield. As the COMET model has separate AM and PM peak distributions, this exercise was done for both time periods. The proportion of car driver trips with an origin/destination in each location in the AM and PM peak periods are set out in **Table 5.1**.

Table 5.1: AM and PM Peak Car Driver Distribution

Location	AM Peak	PM Peak
Hemel Hempstead	15.58%	27.61%
St Albans	27.23%	18.32%
Other	57.19%	54.07%
Total	100%	100%

5.4 To adjust the mode share, it is assumed that car driver trips from drivers within Hemel Hempstead could feasibly be shifted to walk, cycle or bus trips. For the car driver trips travelling between the HGC and St Albans, the additional distance would result in car driver to walking mode shift being less likely, so it was assumed that car driver trips would only be shifted to cycle and bus trips. The modes to be adjusted were done so proportionally in line with the baseline Census mode split.

5.5 For both areas, the proportion of car passenger and train trips remained the same. For all other areas, the mode shift would not change.

5.6 These adjusted mode share assumptions are set out in **Table 5.2** and **Table 5.3** respectively.

Table 5.2: Adjusted Mode Share Assumptions – AM Peak

Residential to Work							
Mode	**Census**	**Walk/Bus/ Cycle Hemel**	**Walk/Bus/ Cycle St Albans**	**Hemel**	**St Albans**	**Other**	**Adjusted**
Driving a car or van	69%			40%	40%	69%	56.4%
On foot	16%	69%		35%	16%	16%	18.6%
Passenger in a car or van	6%			6%	6%	6%	6.3%
Bus, minibus or coach	4%	18%	58%	9%	21%	4%	9.3%
Train	3%			3%	3%	3%	2.6%
Bicycle	3%	13%	42%	7%	15%	3%	6.8%
Total	100%	100%	100%	100%	100%	100%	100%
Employment							
Mode	**Census**	**Walk/Bus/ Cycle Hemel**	**Walk/Bus/ Cycle St Albans**	**Hemel**	**St Albans**	**Other**	**Adjusted**
Driving a car or van	79%			40%	40%	79%	62.2%
On foot	8%	58%		30%	30%	8%	17.2%
Passenger in a car or van	6%			6%	6%	6%	6.3%
Bus, minibus or coach	3%	22%	51%	11%	11%	3%	6.4%
Train	2%			2%	2%	2%	1.8%
Bicycle	3%	20%	49%	11%	11%	3%	6.1%
Total	100%	100%	100%	100%	100%	100%	100%

5.7 **Table 5.3: Adjusted Mode Share Assumptions – PM Peak**

Residential to Work							
Mode	**Census**	**Walk/Bus/ Cycle Hemel**	**Walk/Bus/ Cycle St Albans**	**Hemel**	**St Albans**	**Other**	**Adjusted**
Driving a car or van	69%			40%	40%	69%	55.5%
On foot	16%	69%		35%	16%	16%	21.0%
Passenger in a car or van	6%			6%	6%	6%	6.3%
Bus, minibus or coach	4%	18%	58%	9%	21%	4%	8.4%
Train	3%			3%	3%	3%	2.6%
Bicycle	3%	13%	42%	7%	15%	3%	6.1%
Total	100%	100%	100%	100%	100%	100%	100%
Employment							
Mode	**Census**	**Walk/Bus /Cycle Hemel**	**Walk/Bus/ Cycle St Albans**	**Hemel**	**St Albans**	**Other**	**Adjusted**
Driving a car or van	79%			40%	40%	79%	61.0%
On foot	8%	58%		30%	30%	8%	17.9%
Passenger in a car or van	6%			6%	6%	6%	6.3%
Bus, minibus or coach	3%	22%	51%	11%	11%	3%	6.7%
Train	2%			2%	2%	2%	1.8%
Bicycle	3%	20%	49%	11%	11%	3%	6.3%
Total	100%	100%	100%	100%	100%	100%	100%

5.8 Following the identification of the AM and PM peak mode shift assumptions, the average mode share was calculated for both the Residential to Work and Employment trips.

5.9 A comparison of the baseline mode split, as described in **Section 4**, and the average adjusted mode split for the car driver trips is shown in **Table 5.4**.

Table 5.4: Comparison of Modal Split

Mode	Residential to Employment		Employment / Staff to Schools	
	Baseline Mode Split	Adjusted Mode Split	Baseline Mode Split	Adjusted Mode Split
Driving a Car or Van	68.7%	56.0%	78.9%	61.6%
On Foot	15.5%	19.8%	7.5%	17.5%
Passenger in a Car or Van	6.3%	6.3%	6.3%	6.3%
Bus, Minibus or Coach	4.0%	8.8%	2.8%	6.5%
Train	2.6%	2.6%	1.8%	1.8%
Bicycle	2.9%	6.5%	2.7%	6.2%
Total	100%	100%	100%	100%

Adjusted External Trips

5.10 The resultant external trips by mode following the adjustments to the journey to work trips is set out in **Tables 5.5-5.7**.

Table 5.5: Adjusted Total External Trips by Mode (AM Peak)

Mode	**07:00-08:00**			**08:00-09:00**			**09:00-10:00**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	340	647	987	607	701	1,308	183	171	353
Cycle	108	206	314	153	203	356	70	80	150
Bus	141	297	438	237	336	573	91	140	231
Train	39	83	122	59	77	136	20	21	40
Car Driver	1,020	1,900	2,920	1,409	1,878	3,286	744	936	1,680
Car Passenger	146	296	441	297	457	754	163	378	541
Total	1,795	3,428	5,223	2,762	3,652	6,413	1,271	1,725	2,996

Table 5.6: Adjusted Total External Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	84	59	142	69	62	131	100	114	214
Cycle	47	37	84	53	47	100	41	45	87
Bus	99	83	182	97	87	185	93	92	185
Train	10	7	16	8	7	15	12	13	24
Car Driver	728	590	1,318	690	614	1,304	761	762	1,522
Car Passenger	342	298	640	352	312	664	349	318	667
Total	**1,310**	**1,073**	**2,383**	**1,269**	**1,130**	**2,399**	**1,356**	**1,344**	**2,700**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	137	112	248	122	129	251	190	399	589
Cycle	64	54	118	51	53	104	66	93	158
Bus	102	87	188	95	92	187	118	179	297
Train	16	13	29	14	14	28	18	34	52
Car Driver	826	699	1,525	730	716	1,446	799	950	1,749
Car Passenger	314	276	590	296	270	566	342	403	744
Total	**1,459**	**1,239**	**2,698**	**1,308**	**1,275**	**2,582**	**1,532**	**2,057**	**3,589**

Table 5.7: Adjusted Total External Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	366	321	687	499	492	992	236	177	412
Cycle	140	112	253	208	188	395	115	77	192
Bus	223	159	382	260	218	478	139	90	229
Train	45	36	81	64	57	121	31	21	52
Car Driver	1,607	1,211	2,817	1,998	1,841	3,840	1,260	825	2,086
Car Passenger	541	316	857	564	361	925	421	225	646
Total	**2,922**	**2,155**	**5,076**	**3,593**	**3,158**	**6,751**	**2,202**	**1,415**	**3,617**

Total External Car Trips

5.11 **Table 5.8-5.10** summarise the external car driver trips by mode for each journey purpose, in addition to HGV trips. These tables therefore extract the car driver trips only from each of the trip generation tables above.

Table 5.8: Adjusted Total External Car Driver Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	491	1,694	2,185	410	1,418	1,828	110	381	491
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	2	5	6	14	39	53	2	6	8
Residential to Food Retail	2	5	6	4	13	17	11	34	45
Residential to Non-Food Retail	12	36	48	31	93	124	81	246	328
Residential to Personal Business	21	78	98	38	144	183	35	131	166
Residential to Recreation/ Social	7	25	32	10	33	42	21	71	92
Employment E(g)(i)	228	29	257	641	50	691	398	35	433
Employment (B8)	61	24	85	95	48	143	85	32	117
Primary School (Staff)	64	0	64	21	0	21	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	125	0	125	42	0	42	0	0	0
Secondary School (Pupils)	4	0	4	63	0	63	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**1,059**	**1,948**	**3,007**	**1,490**	**1,940**	**3,430**	**815**	**998**	**1,813**

Table 5.9: Adjusted Total External Car Driver Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	97	85	182	96	84	180	127	112	238	174	154	328	188	166	354	252	222	474
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	0	0	0	1	1	1	1	1	2	0	0	1	5	5	11	18	18	35
Residential to Food Retail	35	31	66	37	32	69	30	27	57	27	24	51	26	23	49	23	20	43
Residential to Non-Food Retail	261	228	489	270	236	506	225	197	422	201	176	377	195	171	366	170	149	319
Residential to Personal Business	113	102	216	109	98	207	111	100	211	104	94	198	94	85	179	122	110	232
Residential to Recreation/ Social	54	49	103	65	60	125	84	76	160	66	60	126	75	68	143	85	77	162
Employment E(g)(i)	85	27	112	37	31	68	93	172	266	151	116	268	75	110	185	41	124	166
Employment (B8)	82	67	149	75	72	148	89	77	166	103	75	178	70	88	158	48	125	173
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	64
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**818**	**685**	**1,502**	**768**	**681**	**1,449**	**860**	**833**	**1,692**	**913**	**773**	**1,686**	**788**	**764**	**1,552**	**868**	**993**	**1,861**

Table 5.10: Adjusted Total External Car Driver Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	873	415	1,288	1,323	629	1,952	623	296	919
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	7	4	12	4	2	6	1	1	1
Residential to Food Retail	37	18	55	32	15	47	29	14	43
Residential to Non-Food Retail	276	135	411	232	114	346	212	104	315
Residential to Personal Business	150	71	221	155	74	228	102	48	150
Residential to Recreation/ Social	185	86	272	203	94	297	260	121	380
Employment E(g)(i)	44	334	378	25	654	678	16	191	207
Employment (B8)	30	72	103	26	70	96	19	51	70
Primary School (Staff)	0	21	21	0	64	64	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	42	42	0	125	125	0	0	0
Secondary School (Pupils)	0	6	6	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**1,645**	**1,252**	**2,897**	**2,015**	**1,890**	**3,905**	**1,277**	**850**	**2,127**

6 Total Trips & Addressing Double-Counted Trips

6.1 Following on from the internal and external trips outlined in **Section 4**, and the mode shift reductions applied to the external trips in **Section 5**, the total trip generation by mode anticipated to be associated with the site is set out in **Tables 6.1-6.3**.

Table 6.1: Total Trips (Internal & External) Generated by the HGC by Mode – AM Peak

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1,647	2,127	3,774	8,946	6,731	15,677	874	1,724	2,598
Cycle	144	252	397	348	359	707	94	125	219
Bus	220	375	595	789	745	1,534	113	176	289
Train	44	98	141	74	131	206	39	82	121
Car Driver	1,082	1,987	3,069	1,738	2,223	3,961	795	1,045	1,840
Car Passenger	221	393	614	696	760	1,456	222	507	728
Total	3,358	5,232	8,590	12,592	10,949	23,541	2,136	3,659	5,795

Table 6.2: Total Trips (Internal & External) Generated by the HGC by Mode - Interpeak

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1,216	1,047	2,264	1,277	1,145	2,422	1,280	1,211	2,491
Cycle	89	73	162	97	88	185	87	88	175
Bus	124	104	228	121	108	229	115	114	229
Train	55	47	102	59	52	110	59	55	115
Car Driver	829	678	1,506	795	708	1,503	862	855	1,718
Car Passenger	446	388	833	461	409	870	455	417	871
Total	2,759	2,337	5,096	2,809	2,510	5,320	2,858	2,741	5,599
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	1,217	1,067	2,284	1,412	1,347	2,760	4,042	9,473	13,515
Cycle	107	91	199	99	97	196	176	309	486
Bus	127	109	236	131	128	259	438	751	1,189
Train	54	47	101	49	45	94	60	71	132
Car Driver	921	781	1,702	819	799	1,618	1,145	1,316	2,461
Car Passenger	412	362	774	403	370	772	531	856	1,387
Total	2,838	2,457	5,295	2,913	2,786	5,699	6,393	12,777	19,169

Table 6.3: Total Trips (Internal & External) Generated by the HGC by Mode - PM Peak

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	3,094	2,532	5,626	2,730	1,935	4,665	2,054	1,147	3,201
Cycle	238	183	421	292	245	537	191	118	309
Bus	330	264	593	352	282	634	216	132	348
Train	102	64	166	99	74	172	56	33	89
Car Driver	1,800	1,336	3,136	2,170	1,954	4,125	1,418	909	2,327
Car Passenger	750	466	1,216	755	486	1,241	585	312	896
Total	6,315	4,844	11,158	6,398	4,976	11,374	4,520	2,651	7,170

6.2 Residential to Education and Pupil to School trips, and Residential to Employment and Employment trips inherently contain an element of double counting, i.e. internal residential to education trips are also captured in the internal pupil/parent to school trips. Similarly, internal residential to employment trips are also captured in the internal employment trips and the internal staff to school trips. As such, double counting is inherently present within **Tables 6.1-6.3**.

6.3 To address this issue, internal trips associated with the trip attractor land uses (schools and employment) have been removed from the total trips. The number of trips removed from the total by mode associated with these land uses are shown in **Tables 6.4-6.6**.

Table 6.4: Double Counted Trips Removed (Internal Trip Attractor Uses) – AM Peak

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	-868	-144	-1,012	-6,631	-1,106	-7,737	-209	-45	-254
Cycle	-24	-6	-30	-154	-36	-190	-9	0	-10
Bus	-60	-21	-81	-477	-194	-671	-8	7	-1
Train	-4	-15	-19	-16	-54	-70	-19	-61	-80
Car Driver	-41	-13	-53	-289	-211	-500	3	66	68
Car Passenger	-45	-2	-47	-297	-4	-301	-19	-3	-21
Total	-1,041	-201	-1,242	-7,864	-1,605	-9,468	-261	-36	-298

Table 6.5: Double Counted Trips Removed (Internal Trip Attractor Uses) - Interpeak

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	-89	-56	-145	-67	-61	-127	-94	-121	-215
Cycle	-9	-7	-16	-9	-8	-18	-11	-11	-22
Bus	-3	-1	-4	2	2	4	5	2	7
Train	-45	-40	-85	-51	-45	-95	-48	-42	-90
Car Driver	61	56	116	66	58	124	54	44	99
Car Passenger	-7	-4	-10	-4	-4	-9	-7	-10	-17
Total	-93	-53	-145	-63	-58	-121	-101	-137	-238
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	-123	-96	-218	-79	-101	-179	-1,105	-6,420	-7,524
Cycle	-12	-10	-22	-11	-11	-22	-38	-148	-186
Bus	-1	0	-2	0	-2	-2	-211	-465	-676
Train	-38	-34	-72	-35	-31	-65	-42	-37	-79
Car Driver	44	40	84	46	38	84	-200	-236	-436
Car Passenger	-10	-8	-18	-6	-8	-14	-3	-276	-280
Total	-140	-107	-247	-84	-114	-197	-1,600	-7,581	-9,181

Table 6.6: Double Counted Trips Removed (Internal Trip Attractor Uses) - PM Peak

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	-167	-895	-1,062	-38	-357	-395	-28	-108	-137
Cycle	-16	-29	-45	-6	-19	-25	-7	-8	-15
Bus	-13	-56	-69	-11	-23	-35	-10	-10	-19
Train	-58	-28	-86	-34	-17	-51	-25	-12	-37
Car Driver	44	-11	33	63	-1	63	53	17	69
Car Passenger	-3	-47	-50	-2	-32	-34	-1	-9	-11
Total	-212	-1,066	-1,279	-27	-449	-476	-19	-131	-150

6.4 The resultant total trips associated with the HGC once the double counted trips have been removed is set out in **Tables 6.7-6.9**.

Table 6.7: Total Trips (After Double Counted Trips Removed) – AM Peak

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	779	1,983	2,762	2,315	5,625	7,940	665	1,679	2,344
Cycle	121	246	367	194	323	517	84	125	210
Bus	161	354	515	312	551	863	105	183	288
Train	39	83	122	59	77	136	20	21	40
Car Driver	1,042	1,974	3,016	1,449	2,012	3,461	798	1,110	1,908
Car Passenger	176	391	567	399	756	1,156	203	504	707
Total	2,317	5,031	7,348	4,728	9,345	14,073	1,875	3,623	5,497

Table 6.8: Total Trips (After Double Counted Trips Removed) - Interpeak

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	1,127	991	2,118	1,210	1,085	2,294	1,186	1,090	2,276
Cycle	80	66	146	88	79	167	76	77	153
Bus	121	103	224	123	110	233	120	117	237
Train	10	7	16	8	7	15	12	13	24
Car Driver	889	733	1,623	861	766	1,627	916	900	1,816
Car Passenger	439	384	823	457	405	862	447	407	854
Total	2,667	2,284	4,951	2,746	2,453	5,199	2,758	2,603	5,361
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	1,094	972	2,066	1,334	1,247	2,580	2,937	3,053	5,990
Cycle	95	82	177	88	86	174	138	162	300
Bus	125	108	234	131	126	258	227	286	513
Train	16	13	29	14	14	28	18	34	52
Car Driver	965	822	1,786	865	837	1,702	945	1,080	2,025
Car Passenger	402	354	756	397	362	758	528	580	1,107
Total	2,698	2,350	5,048	2,829	2,672	5,502	4,793	5,195	9,988

Table 6.9: Total Trips (After Double Counted Trips Removed) - PM Peak

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	2,927	1,636	4,563	2,692	1,578	4,270	2,026	1,038	3,064
Cycle	223	153	376	286	226	512	184	110	294
Bus	316	208	524	341	259	599	206	122	329
Train	45	36	81	64	57	121	31	21	52
Car Driver	1,844	1,325	3,169	2,234	1,954	4,188	1,471	926	2,396
Car Passenger	747	419	1,166	753	454	1,207	583	302	886
Total	6,102	3,777	9,880	6,371	4,527	10,898	4,501	2,520	7,020

7 Proposed Trips Summary

7.1 This section of the report summarises the number of person trips generated by the HGC, based on the methodology described previously.

Total Person & Vehicle Trips

7.2 Summaries of the total person trips by land use for the AM and PM peak periods are presented in **Table 7.1- 7.3.** These tables reproduce the trips set out in **Tables 2.33-2.35**.

Table 7.1: Total Person Trip Generation + HGVs (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	997	3,445	4,442	835	2,883	3,717	224	774	998
Residential to Education (Primary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Education (Secondary)	164	459	623	888	2,483	3,371	87	244	331
Residential to Food Retail	28	84	112	79	240	320	203	613	816
Residential to Non-Food Retail	28	84	112	79	240	320	203	613	816
Residential to Personal Business	72	270	342	148	557	705	131	490	621
Residential to Recreation/ Social	40	139	179	76	260	336	156	535	691
Employment E(g)(i)	494	63	556	1,387	108	1,495	862	76	938
Employment (B8)	131	53	184	205	104	308	184	69	252
Primary School (Staff)	139	0	139	46	0	46	0	0	0
Primary School (Pupils)	267	0	267	2,405	0	2,405	0	0	0
Primary School (Parents)	134	134	267	1,203	1,203	2,405	0	0	0
Secondary School (Staff)	225	0	225	75	0	75	0	0	0
Secondary School (Pupils)	432	0	432	3,888	0	3,888	0	0	0
Secondary School (Parents)	43	43	86	389	389	778	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**3,397**	**5,280**	**8,677**	**12,673**	**11,011**	**23,684**	**2,207**	**3,721**	**5,928**

Table 7.2: Total Person Trip Generation + HGVs (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	196	173	369	194	171	366	258	227	485	354	312	666	383	337	720	512	451	963
Residential to Education (Primary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Education (Secondary)	24	24	49	43	44	87	51	51	102	37	37	74	202	203	405	1,097	1,102	2,199
Residential to Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Non-Food Retail	633	554	1,187	675	590	1,265	560	490	1,051	488	427	916	478	418	895	416	364	780
Residential to Personal Business	413	372	785	408	367	775	416	375	791	379	341	720	347	312	659	447	403	850
Residential to Recreation/ Social	471	429	900	525	478	1,003	565	515	1,080	501	456	958	506	460	966	623	567	1,189
Employment E(g)(i)	184	58	242	81	67	148	202	373	575	328	252	579	162	238	400	90	269	359
Employment (B8)	177	145	323	163	157	320	193	166	360	222	163	385	152	190	342	104	270	374
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	1	1	2	1	1	2	1	1	2	1	2	3	4	2	6	0	2,405	2,405
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,203	1,203	2,405
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	2	1	2	1	1	2	1	2	3	2	2	4	2	5	7	0	3,888	3,888
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389	389	778
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**2,850**	**2,431**	**5,281**	**2,887**	**2,577**	**5,465**	**2,957**	**2,812**	**5,769**	**2,924**	**2,532**	**5,456**	**2,971**	**2,834**	**5,805**	**6,461**	**12,820**	**19,282**

Table 7.3: Total Person Trips Generated + HGVs (PM Peak)

Land Use	PM (1600-1700)			PM (1700-1800)			PM (1800-1900)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,775	844	2,619	2,690	1,279	3,969	1,266	602	1,868
Residential to Education (Primary)	518	305	822	237	139	376	73	43	117
Residential to Education (Secondary)	518	305	822	237	139	376	73	43	117
Residential to Food Retail	664	326	990	551	271	822	496	244	740
Residential to Non-Food Retail	664	326	990	551	271	822	496	244	740
Residential to Personal Business	542	258	800	550	262	811	357	170	527
Residential to Recreation/ Social	1,297	603	1,900	1,473	686	2,159	1,680	782	2,462
Employment E(g)(i)	94	723	817	54	1,414	1,468	36	413	448
Employment (B8)	66	157	222	56	152	208	42	110	152
Primary School (Staff)	0	46	46	0	139	139	0	0	0
Primary School (Pupils)	0	267	267	0	0	0	0	0	0
Primary School (Parents)	134	134	267	0	0	0	0	0	0
Secondary School (Staff)	0	75	75	0	225	225	0	0	0
Secondary School (Pupils)	0	432	432	0	0	0	0	0	0
Secondary School (Parents)	43	43	86	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**6,353**	**4,885**	**11,239**	**6,414**	**5,025**	**11,439**	**4,536**	**2,675**	**7,212**

7.3 The individually determined levels of internalisation were then applied to each land use. The resultant numbers of external total person trips by land use are presented in **Table 7.4-7.6** respectively. These tables reproduce the data presented in **Tables 3.40-3.42**.

Table 7.4: Total External Person Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	876	3,027	3,903	733	2,533	3,266	197	680	877
Residential to Education (Primary)	8	23	31	44	124	169	4	12	17
Residential to Education (Secondary)	16	46	62	89	248	337	9	24	33
Residential to Food Retail	3	8	11	8	24	32	20	61	82
Residential to Non-Food Retail	21	63	84	60	180	240	152	460	612
Residential to Personal Business	36	135	171	74	278	353	65	245	310
Residential to Recreation/ Social	10	35	45	19	65	84	39	134	173
Employment E(g)(i)	370	47	417	1041	81	1121	646	57	703
Employment (B8)	98	40	138	153	78	231	138	52	189
Primary School (Staff)	104	0	104	35	0	35	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	203	0	203	68	0	68	0	0	0
Secondary School (Pupils)	44	0	44	399	0	399	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
Total	**1,795**	**3,428**	**5,223**	**2,762**	**3,652**	**6,413**	**1,271**	**1,725**	**2,996**

Table 7.5: Total External Person Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	173	152	325	171	151	321	226	200	426	311	274	586	336	297	633	450	397	846
Residential to Education (Primary)	1	1	2	2	2	4	3	3	5	2	2	4	10	10	20	55	55	110
Residential to Education (Secondary)	2	2	5	4	4	9	5	5	10	4	4	7	20	20	40	110	110	220
Residential to Food Retail	63	55	119	68	59	127	56	49	105	49	43	92	48	42	90	42	36	78
Residential to Non-Food Retail	475	415	890	506	443	949	420	368	788	366	320	687	358	313	671	312	273	585
Residential to Personal Business	206	186	392	204	184	387	208	187	395	189	171	360	173	156	329	223	201	425
Residential to Recreation/ Social	118	107	225	131	119	251	141	129	270	125	114	239	126	115	242	156	142	297
Employment E(g)(i)	138	44	182	60	51	111	151	280	431	246	189	434	121	178	300	67	202	269
Employment (B8)	133	109	242	122	117	240	145	125	270	167	122	289	114	143	256	78	203	280
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	399	399
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
Total	**1,310**	**1,073**	**2,383**	**1,269**	**1,130**	**2,399**	**1,356**	**1,344**	**2,700**	**1,459**	**1,239**	**2,698**	**1,308**	**1,275**	**2,582**	**1,532**	**2,057**	**3,589**

Table 7.6: Total External People Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,560	742	2,301	2,363	1,124	3,487	1,112	529	1,641
Residential to Education (Primary)	26	15	41	12	7	19	4	2	6
Residential to Education (Secondary)	52	30	82	24	14	38	7	4	12
Residential to Food Retail	66	33	99	55	27	82	50	24	74
Residential to Non-Food Retail	498	245	743	413	203	616	372	183	555
Residential to Personal Business	271	129	400	275	131	406	179	85	264
Residential to Recreation/ Social	324	151	475	368	171	540	420	195	616
Employment E(g)(i)	71	542	613	40	1061	1101	27	310	336
Employment (B8)	49	117	167	42	114	156	31	83	114
Primary School (Staff)	0	35	35	0	104	104	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	68	68	0	203	203	0	0	0
Secondary School (Pupils)	0	44	44	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
Total	**2,922**	**2,155**	**5,076**	**3,593**	**3,158**	**6,751**	**2,202**	**1,415**	**3,617**

7.4 **Table 7.7-7.9** below then show the breakdown of external trips by mode, as described in **Section 4**.

Table 7.7: Total External Trips by Mode (AM Peak)

Mode	07:00-08:00			08:00-09:00			09:00-10:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	225	508	733	446	576	1,022	96	131	226
Cycle	49	95	145	81	107	188	36	52	88
Bus	70	146	216	153	207	360	52	102	155
Train	39	83	122	59	77	136	20	21	40
Car Driver	1,265	2,301	3,566	1,726	2,228	3,953	904	1,042	1,946
Car Passenger	146	296	441	297	457	754	163	378	541
Total	1,795	3,428	5,223	2,762	3,652	6,413	1,271	1,725	2,996

Table 7.8: Total External Trips by Mode (Interpeak)

Mode	1000-1100			1100-1200			1200-1300		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	49	37	86	43	39	82	61	65	126
Cycle	32	26	58	40	36	76	23	24	47
Bus	81	70	151	82	73	156	71	67	139
Train	10	7	16	8	7	15	12	13	24
Car Driver	796	636	1,432	743	662	1,406	841	857	1,697
Car Passenger	342	298	640	352	312	664	349	318	667
Total	**1,310**	**1,073**	**2,383**	**1,269**	**1,130**	**2,399**	**1,356**	**1,344**	**2,700**
	1300-1400			**1400-1500**			**1500-1600**		
	In	**Out**	**2-way**	**In**	**Out**	**2-way**	**In**	**Out**	**2-way**
Walk	82	69	151	84	84	168	156	341	497
Cycle	38	33	71	31	31	62	45	64	109
Bus	71	62	133	70	65	135	91	145	235
Train	16	13	29	14	14	28	18	34	52
Car Driver	937	787	1,724	813	810	1,622	881	1,070	1,951
Car Passenger	314	276	590	296	270	566	342	403	744
Total	**1,459**	**1,239**	**2,698**	**1,308**	**1,275**	**2,582**	**1,532**	**2,057**	**3,589**

Table 7.9: Total External Trips by Mode (PM Peak)

Mode	16:00-17:00			17:00-18:00			18:00-19:00		
	In	Out	2-way	In	Out	2-way	In	Out	2-way
Walk	287	213	500	390	296	685	182	115	297
Cycle	81	59	140	121	96	216	73	44	118
Bus	142	95	237	141	108	250	83	50	132
Train	45	36	81	64	57	121	31	21	52
Car Driver	1,826	1,436	3,262	2,314	2,240	4,553	1,412	960	2,372
Car Passenger	541	316	857	564	361	925	421	225	646
Total	2,922	2,155	5,076	3,593	3,158	6,751	2,202	1,415	3,617

7.5 **Table 7.10-7.12** then provide a breakdown of the vehicle traffic flows generated by the HGC by journey purpose, as described in **Section 4**. These tables reproduce the data presented in **Tables 4.26-4.27**.

Table 7.10: Total External Car Driver Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	602	2,080	2,682	504	1,740	2,244	135	467	602
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	2	5	6	14	39	53	2	6	8
Residential to Food Retail	2	5	6	4	13	17	11	34	45
Residential to Non-Food Retail	12	36	48	31	93	124	81	246	328
Residential to Personal Business	21	78	98	38	144	183	35	131	166
Residential to Recreation/ Social	7	25	32	10	33	42	21	71	92
Employment E(g)(i)	292	37	329	821	64	884	510	45	555
Employment (B8)	77	31	109	121	61	182	109	41	149
Primary School (Staff)	82	0	82	27	0	27	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	160	0	160	53	0	53	0	0	0
Secondary School (Pupils)	4	0	4	63	0	63	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**1,304**	**2,349**	**3,653**	**1,807**	**2,290**	**4,097**	**975**	**1,104**	**2,079**

Table 7.11: Total External Car Driver Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	119	105	223	117	103	221	156	137	293	214	189	402	231	204	435	309	272	582
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	0	0	0	1	1	1	1	1	2	0	0	1	5	5	11	18	18	35
Residential to Food Retail	35	31	66	37	32	69	30	27	57	27	24	51	26	23	49	23	20	43
Residential to Non-Food Retail	261	228	489	270	236	506	225	197	422	201	176	377	195	171	366	170	149	319
Residential to Personal Business	113	102	216	109	98	207	111	100	211	104	94	198	94	85	179	122	110	232
Residential to Recreation/ Social	54	49	103	65	60	125	84	76	160	66	60	126	75	68	143	85	77	162
Employment E(g)(i)	109	35	143	48	40	88	119	221	340	194	149	343	96	141	236	53	159	212
Employment (B8)	105	86	191	96	93	189	114	98	213	131	96	228	90	112	202	61	160	221
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	64
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**886**	**730**	**1,617**	**821**	**729**	**1,550**	**939**	**928**	**1,867**	**1,023**	**862**	**1,885**	**872**	**857**	**1,729**	**950**	**1,114**	**2,064**

Table 7.12: Total External Car Driver Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	1,072	509	1,581	1,624	772	2,396	764	363	1,128
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	7	4	12	4	2	6	1	1	1
Residential to Food Retail	37	18	55	32	15	47	29	14	43
Residential to Non-Food Retail	276	135	411	232	114	346	212	104	315
Residential to Personal Business	150	71	221	155	74	228	102	48	150
Residential to Recreation/ Social	185	86	272	203	94	297	260	121	380
Employment E(g)(i)	56	428	483	32	836	868	21	244	265
Employment (B8)	39	93	131	33	90	123	25	65	90
Primary School (Staff)	0	27	27	0	82	82	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	53	53	0	160	160	0	0	0
Secondary School (Pupils)	0	6	6	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**1,865**	**1,478**	**3,342**	**2,330**	**2,289**	**4,619**	**1,428**	**985**	**2,414**

7.6 **Table 7.13-7.15** then provide a breakdown of the adjusted vehicle traffic flows generated by the HGC by journey purpose, as described in **Section 5**. These tables reproduce the data presented in **Tables 5.7-5.9**.

Table 7.13: Adjusted Total External Car Driver Trips (AM Peak)

Land Use	AM (0700-0800)			AM (0800-0900)			AM (0900-1000)		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	491	1,694	2,185	410	1,418	1,828	110	381	491
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	2	5	6	14	39	53	2	6	8
Residential to Food Retail	2	5	6	4	13	17	11	34	45
Residential to Non-Food Retail	12	36	48	31	93	124	81	246	328
Residential to Personal Business	21	78	98	38	144	183	35	131	166
Residential to Recreation/ Social	7	25	32	10	33	42	21	71	92
Employment E(g)(i)	228	29	257	641	50	691	398	35	433
Employment (B8)	61	24	85	95	48	143	85	32	117
Primary School (Staff)	64	0	64	21	0	21	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	125	0	125	42	0	42	0	0	0
Secondary School (Pupils)	4	0	4	63	0	63	0	0	0
Secondary School (Parents)	4	4	9	40	40	80	0	0	0
HGVs	39	48	87	82	62	144	71	62	133
Total	**1,059**	**1,948**	**3,007**	**1,490**	**1,940**	**3,430**	**815**	**998**	**1,813**

Table 7.14: Adjusted Total External Car Driver Trips (Interpeak)

Land Use	1000-1100			1100-1200			1200-1300			1300-1400			1400-1500			1500-1600		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	97	85	182	96	84	180	127	112	238	174	154	328	188	166	354	252	222	474
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	0	0	0	1	1	1	1	1	2	0	0	1	5	5	11	18	18	35
Residential to Food Retail	35	31	66	37	32	69	30	27	57	27	24	51	26	23	49	23	20	43
Residential to Non-Food Retail	261	228	489	270	236	506	225	197	422	201	176	377	195	171	366	170	149	319
Residential to Personal Business	113	102	216	109	98	207	111	100	211	104	94	198	94	85	179	122	110	232
Residential to Recreation/ Social	54	49	103	65	60	125	84	76	160	66	60	126	75	68	143	85	77	162
Employment E(g)(i)	85	27	112	37	31	68	93	172	266	151	116	268	75	110	185	41	124	166
Employment (B8)	82	67	149	75	72	148	89	77	166	103	75	178	70	88	158	48	125	173
Primary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary School (Pupils)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	64
Secondary School (Parents)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	80
HGVs	90	95	185	78	67	145	99	71	170	86	75	161	59	47	106	69	44	112
Total	**818**	**685**	**1,502**	**768**	**681**	**1,449**	**860**	**833**	**1,692**	**913**	**773**	**1,686**	**788**	**764**	**1,552**	**868**	**993**	**1,861**

Table 7.15: Adjusted Total External Car Driver Trips (PM Peak)

Land Use	1600-1700			1700-1800			1800-1900		
	In	Out	Tot	In	Out	Tot	In	Out	Tot
Residential to Employment	873	415	1,288	1,323	629	1,952	623	296	919
Residential to Education (Primary)	0	0	0	0	0	0	0	0	0
Residential to Education (Secondary)	7	4	12	4	2	6	1	1	1
Residential to Food Retail	37	18	55	32	15	47	29	14	43
Residential to Non-Food Retail	276	135	411	232	114	346	212	104	315
Residential to Personal Business	150	71	221	155	74	228	102	48	150
Residential to Recreation/ Social	185	86	272	203	94	297	260	121	380
Employment E(g)(i)	44	334	378	25	654	678	16	191	207
Employment (B8)	30	72	103	26	70	96	19	51	70
Primary School (Staff)	0	21	21	0	64	64	0	0	0
Primary School (Pupils)	0	0	0	0	0	0	0	0	0
Primary School (Parents)	0	0	0	0	0	0	0	0	0
Secondary School (Staff)	0	42	42	0	125	125	0	0	0
Secondary School (Pupils)	0	6	6	0	0	0	0	0	0
Secondary School (Parents)	4	4	9	0	0	0	0	0	0
HGVs	39	42	80	16	49	66	16	25	41
Total	**1,645**	**1,252**	**2,897**	**2,015**	**1,890**	**3,905**	**1,277**	**850**	**2,127**

7.7 The external trip estimates in this note do not take into account a number of factors such as:

i) peak hour congestion causing people to vary their journey time to avoid that congestion (peak spreading);

ii) combining of trips e.g. many retail trips in the peak hours will be combined with a journey to work.

HGV Trips

7.8 A summary of the HGV trips per land use are set out below at **Table 7.9** and **7.10** for reference. These tables reproduce the data outlined in **Table 2.25**.

Table 7.16: HGV Trip Generation - AM

Land Use	Quantum	0700-0800			0800-0900			0900-1000		
		Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Residential	11,000 dwellings	11	11	22	22	11	33	11	22	33
E(g)(i) Office	40,000sqm	0	0	0	4	0	4	4	7	11
B8	126,000sqm	28	33	60	52	47	98	49	30	79
Primary School	2,700 pupils	0	0	0	0	0	0	3	3	5
Secondary School	4,320 pupils	0	4	4	4	4	9	4	0	4
Total:		**39**	**48**	**87**	**82**	**62**	**144**	**71**	**62**	**133**

Table 7.17: HGV Trip Generation - Interpeak

Land Use	Quantum	1000-1100			1100-1200			1200-1300		
		Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Residential	11,000 dwellings	22	22	44	22	11	33	22	22	44
E(g)(i) Office	40,000sqm	0	0	0	0	0	0	0	0	0
B8	126,000sqm	66	66	131	52	52	103	77	49	126
Primary School	2,700 pupils	3	3	5	0	0	0	0	0	0
Secondary School	4,320 pupils	0	4	4	4	4	9	0	0	0
Total:		90	95	185	78	67	145	99	71	170
Land Use	**Quantum**	**1300-1400**			**1400-1500**			**1500-1600**		
		Arr.	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**	**Arr.**	**Dep.**	**2-Way**
Residential	11,000 dwellings	11	22	33	11	11	22	22	11	33
E(g)(i) Office	40,000sqm	7	4	11	4	4	7	0	0	0
B8	126,000sqm	68	49	117	44	33	77	47	33	79
Primary School	2,700 pupils	0	0	0	0	0	0	0	0	0
Secondary School	4,320 pupils	0	0	0	0	0	0	0	0	0
Total:		86	75	161	59	47	106	69	44	112

Table 7.18: HGV Trip Generation - PM

Land Use	Quantum	1600-1700			1700-1800			1900-2000		
		Arr.	Dep.	2-Way	Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Residential	11,000 dwellings	11	0	11	0	0	0	0	11	11
E(g)(i) Office	40,000sqm	0	0	0	0	0	0	0	0	0
B8	126,000sqm	28	42	69	16	49	66	16	14	30
Primary School	2,700 pupils	0	0	0	0	0	0	0	0	0
Secondary School	4,320 pupils	0	0	0	0	0	0	0	0	0
Total:		**39**	**42**	**80**	**16**	**49**	**66**	**16**	**25**	**41**

Conclusions

7.9 Notwithstanding that further work is needed to refine the above trip estimates, we consider they present a reasonable basis for undertaking Local Plan modelling.

Appendix A

Calculation Reference: AUDIT-152301-231117-1122

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	6 days
	HC	HAMPSHIRE	4 days
	KC	KENT	2 days
	OX	OXFORDSHIRE	1 days
	SC	SURREY	3 days
	SP	SOUTHAMPTON	1 days
	WS	WEST SUSSEX	4 days
03	SOUTH WEST		
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	3 days

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

Primary Filtering 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: No of Dwellings
Actual Range: 100 to 500 (units:)
Range Selected by User: 100 to 1412 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 31/12/19

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
Wednesday	8 days
Thursday	9 days

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

Selected survey types:

Manual count	26 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	16
Neighbourhood Centre (PPS6 Local Centre)	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	1
Residential Zone	16
Village	5
Out of Town	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	16 days - Selected
Servicing vehicles Excluded	14 days - Selected

Secondary Filtering selection:

Use Class:

C3	26 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	3 days
5,001 to 10,000	7 days
10,001 to 15,000	7 days
15,001 to 20,000	3 days
20,001 to 25,000	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:

5,001 to 25,000	1 days
25,001 to 50,000	4 days
50,001 to 75,000	5 days
75,001 to 100,000	4 days
125,001 to 250,000	11 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	2 days
1.1 to 1.5	21 days
1.6 to 2.0	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:

Yes	23 days
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.

PTAL Rating:

No PTAL Present	26 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 ES-03-M-05 HOUSES & FLATS EAST SUSSEX
A26 CROWBOROUGH RD
NEAR UCKFIELD
FIVE ASH DOWN VILLAGE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 138
Survey date: MONDAY *30/06/14* *Survey Type: MANUAL*

2 ES-03-M-07 MIXED HOUSING EAST SUSSEX
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 188
Survey date: THURSDAY *12/11/15* *Survey Type: MANUAL*

3 ES-03-M-10 MIXED HOUSES & FLATS EAST SUSSEX
DITTONS ROAD
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

4 ES-03-M-11 MIXED HOUSES & FLATS EAST SUSSEX
HEMPSTEAD LANE
HAILSHAM
UPPER HORSEBRIDGE
Edge of Town
Residential Zone
Total No of Dwellings: 354
Survey date: WEDNESDAY *13/07/16* *Survey Type: MANUAL*

5 ES-03-M-14 MIXED HOUSES & FLATS EAST SUSSEX
KINGS DRIVE
EASTBOURNE
UPPERTON
Edge of Town
Residential Zone
Total No of Dwellings: 119
Survey date: THURSDAY *15/11/18* *Survey Type: MANUAL*

6 ES-03-M-16 MIXED HOUSES & FLATS EAST SUSSEX
BARNHORN ROAD
BEXHILL
LITTLE COMMON
Edge of Town
Residential Zone
Total No of Dwellings: 119
Survey date: WEDNESDAY *10/07/19* *Survey Type: MANUAL*

7 HC-03-M-06 HOUSES & FLATS HAMPSHIRE
HUNTS POND ROAD
NEAR FAREHAM
TITCHFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 328
Survey date: WEDNESDAY *04/11/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 HC-03-M-09 MIXED HOUSES & FLATS HAMPSHIRE
ROMSEY ROAD
WINCHESTER
STANMORE
Edge of Town
Residential Zone
Total No of Dwellings: 157
Survey date: THURSDAY *07/06/18* *Survey Type: MANUAL*

9 HC-03-M-10 MIXED HOUSES & FLATS HAMPSHIRE
RAWLINGS LANE
ALTON

Edge of Town
Residential Zone
Total No of Dwellings: 176
Survey date: TUESDAY *05/03/19* *Survey Type: MANUAL*

10 HC-03-M-11 MIXED HOUSES & FLATS HAMPSHIRE
ALDERMASTON ROAD
BASINGSTOKE

Edge of Town
No Sub Category
Total No of Dwellings: 238
Survey date: THURSDAY *07/03/19* *Survey Type: MANUAL*

11 KC-03-M-02 MIXED HOUSES AND FLATS KENT
HERMITAGE LANE
MAIDSTONE
BARMING
Edge of Town
No Sub Category
Total No of Dwellings: 119
Survey date: TUESDAY *05/06/18* *Survey Type: MANUAL*

12 KC-03-M-03 MIXED HOUSES & FLATS KENT
BUNYARD WAY
MAIDSTONE
ALLINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 140
Survey date: TUESDAY *22/05/18* *Survey Type: MANUAL*

13 NF-03-M-02 MIXED HOUSES NORFOLK
CAWSTON ROAD
AYLSHAM

Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY *17/09/19* *Survey Type: MANUAL*

14 NF-03-M-05 MIXED HOUSES NORFOLK
CAISTOR LANE
NEAR NORWICH
PORINGLAND
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 150
Survey date: MONDAY *16/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 NF-03-M-14 MIXED HOUSES & FLATS NORFOLK
NORWICH COMMON
WYMONDHAM

Edge of Town
Residential Zone
Total No of Dwellings: 321
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

16 OX-03-M-01 MIXED HOUSES OXFORDSHIRE
WENMAN ROAD
THAME

Edge of Town
Industrial Zone
Total No of Dwellings: 100
Survey date: THURSDAY *28/06/18* *Survey Type: MANUAL*

17 SC-03-M-06 HOUSES & FLATS SURREY
ST ANNE'S DRIVE
REDHILL

Edge of Town
Residential Zone
Total No of Dwellings: 500
Survey date: WEDNESDAY *11/12/13* *Survey Type: MANUAL*

18 SC-03-M-07 HOUSES/FLATS SURREY
EPSOM ROAD
GUILDFORD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 199
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

19 SC-03-M-08 MIXED HOUSES & FLATS SURREY
CHOBHAM LANE
LONGCROSS

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 107
Survey date: TUESDAY *12/11/19* *Survey Type: MANUAL*

20 SM-03-M-01 DETACHED & TERRACED HOUSES SOMERSET
MILTON HILL
TAUNTON
MONKTON HEATHFIELD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 135
Survey date: WEDNESDAY *26/09/18* *Survey Type: MANUAL*

21 SP-03-M-02 MIXED HOUSES & FLATS SOUTHAMPTON
BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town
Total No of Dwellings: 181
Survey date: WEDNESDAY *23/10/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

22 WL-03-M-03 MIXED HOUSES & FLATS WILTSHIRE
WARNEFORD CRESCENT
NEAR SALISBURY
LONGHEDGE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 260
Survey date: TUESDAY *09/10/18* *Survey Type: MANUAL*

23 WS-03-M-04 HOUSES & FLATS WEST SUSSEX
SUMMERSDALE ROAD
CHICHESTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 214
Survey date: THURSDAY *08/05/14* *Survey Type: MANUAL*

24 WS-03-M-12 HOUSES & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD
SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 192
Survey date: WEDNESDAY *27/04/16* *Survey Type: MANUAL*

25 WS-03-M-16 MIXED FLATS & HOUSES WEST SUSSEX
BROYLE ROAD
CHICHESTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 252
Survey date: WEDNESDAY *21/03/18* *Survey Type: MANUAL*

26 WS-03-M-20 MIXED HOUSES & FLATS WEST SUSSEX
OLD GUILDFORD ROAD
HORSHAM
BROADBRIDGE HEATH
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 121
Survey date: THURSDAY *24/10/19* *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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.75

	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	26	199	0.076	26	199	0.299	26	199	0.375
08:00 - 09:00	26	199	0.125	26	199	0.370	26	199	0.495
09:00 - 10:00	26	199	0.122	26	199	0.161	26	199	0.283
10:00 - 11:00	26	199	0.115	26	199	0.134	26	199	0.249
11:00 - 12:00	26	199	0.120	26	199	0.133	26	199	0.253
12:00 - 13:00	26	199	0.132	26	199	0.128	26	199	0.260
13:00 - 14:00	26	199	0.129	26	199	0.138	26	199	0.267
14:00 - 15:00	26	199	0.123	26	199	0.159	26	199	0.282
15:00 - 16:00	26	199	0.242	26	199	0.165	26	199	0.407
16:00 - 17:00	26	199	0.250	26	199	0.144	26	199	0.394
17:00 - 18:00	26	199	0.320	26	199	0.146	26	199	0.466
18:00 - 19:00	26	199	0.297	26	199	0.147	26	199	0.444
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.278			2.149			4.427

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:	100 - 500 (units:)
Survey date date range:	01/01/12 - 31/12/19
Number of weekdays (Monday-Friday):	26
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
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/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.003	26	199	0.003	26	199	0.006
08:00 - 09:00	26	199	0.006	26	199	0.006	26	199	0.012
09:00 - 10:00	26	199	0.002	26	199	0.002	26	199	0.004
10:00 - 11:00	26	199	0.001	26	199	0.002	26	199	0.003
11:00 - 12:00	26	199	0.003	26	199	0.003	26	199	0.006
12:00 - 13:00	26	199	0.001	26	199	0.002	26	199	0.003
13:00 - 14:00	26	199	0.003	26	199	0.001	26	199	0.004
14:00 - 15:00	26	199	0.002	26	199	0.003	26	199	0.005
15:00 - 16:00	26	199	0.007	26	199	0.008	26	199	0.015
16:00 - 17:00	26	199	0.003	26	199	0.002	26	199	0.005
17:00 - 18:00	26	199	0.003	26	199	0.002	26	199	0.005
18:00 - 19:00	26	199	0.002	26	199	0.002	26	199	0.004
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.036			0.036			0.072

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.001	26	199	0.001	26	199	0.002
08:00 - 09:00	26	199	0.002	26	199	0.001	26	199	0.003
09:00 - 10:00	26	199	0.001	26	199	0.002	26	199	0.003
10:00 - 11:00	26	199	0.002	26	199	0.002	26	199	0.004
11:00 - 12:00	26	199	0.002	26	199	0.001	26	199	0.003
12:00 - 13:00	26	199	0.002	26	199	0.002	26	199	0.004
13:00 - 14:00	26	199	0.001	26	199	0.002	26	199	0.003
14:00 - 15:00	26	199	0.001	26	199	0.001	26	199	0.002
15:00 - 16:00	26	199	0.002	26	199	0.001	26	199	0.003
16:00 - 17:00	26	199	0.001	26	199	0.000	26	199	0.001
17:00 - 18:00	26	199	0.000	26	199	0.000	26	199	0.000
18:00 - 19:00	26	199	0.000	26	199	0.001	26	199	0.001
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.014			0.029

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.000	26	199	0.000	26	199	0.000
08:00 - 09:00	26	199	0.001	26	199	0.001	26	199	0.002
09:00 - 10:00	26	199	0.000	26	199	0.000	26	199	0.000
10:00 - 11:00	26	199	0.000	26	199	0.000	26	199	0.000
11:00 - 12:00	26	199	0.000	26	199	0.000	26	199	0.000
12:00 - 13:00	26	199	0.000	26	199	0.000	26	199	0.000
13:00 - 14:00	26	199	0.000	26	199	0.000	26	199	0.000
14:00 - 15:00	26	199	0.000	26	199	0.000	26	199	0.000
15:00 - 16:00	26	199	0.001	26	199	0.001	26	199	0.002
16:00 - 17:00	26	199	0.000	26	199	0.001	26	199	0.001
17:00 - 18:00	26	199	0.000	26	199	0.000	26	199	0.000
18:00 - 19:00	26	199	0.000	26	199	0.000	26	199	0.000
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.003			0.005

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.003	26	199	0.011	26	199	0.014
08:00 - 09:00	26	199	0.005	26	199	0.015	26	199	0.020
09:00 - 10:00	26	199	0.004	26	199	0.005	26	199	0.009
10:00 - 11:00	26	199	0.003	26	199	0.003	26	199	0.006
11:00 - 12:00	26	199	0.002	26	199	0.003	26	199	0.005
12:00 - 13:00	26	199	0.004	26	199	0.003	26	199	0.007
13:00 - 14:00	26	199	0.003	26	199	0.004	26	199	0.007
14:00 - 15:00	26	199	0.003	26	199	0.004	26	199	0.007
15:00 - 16:00	26	199	0.013	26	199	0.005	26	199	0.018
16:00 - 17:00	26	199	0.008	26	199	0.005	26	199	0.013
17:00 - 18:00	26	199	0.014	26	199	0.007	26	199	0.021
18:00 - 19:00	26	199	0.008	26	199	0.005	26	199	0.013
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.070			0.070			0.140

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.088	26	199	0.428	26	199	0.516
08:00 - 09:00	26	199	0.150	26	199	0.617	26	199	0.767
09:00 - 10:00	26	199	0.147	26	199	0.218	26	199	0.365
10:00 - 11:00	26	199	0.141	26	199	0.176	26	199	0.317
11:00 - 12:00	26	199	0.149	26	199	0.175	26	199	0.324
12:00 - 13:00	26	199	0.168	26	199	0.168	26	199	0.336
13:00 - 14:00	26	199	0.166	26	199	0.178	26	199	0.344
14:00 - 15:00	26	199	0.162	26	199	0.208	26	199	0.370
15:00 - 16:00	26	199	0.409	26	199	0.226	26	199	0.635
16:00 - 17:00	26	199	0.374	26	199	0.200	26	199	0.574
17:00 - 18:00	26	199	0.467	26	199	0.203	26	199	0.670
18:00 - 19:00	26	199	0.425	26	199	0.203	26	199	0.628
19:00 - 20:00	1	119	0.168	1	119	0.017	1	119	0.185
20:00 - 21:00	1	119	0.151	1	119	0.017	1	119	0.168
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.165			3.034			6.199

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.022	26	199	0.047	26	199	0.069
08:00 - 09:00	26	199	0.032	26	199	0.136	26	199	0.168
09:00 - 10:00	26	199	0.047	26	199	0.033	26	199	0.080
10:00 - 11:00	26	199	0.026	26	199	0.032	26	199	0.058
11:00 - 12:00	26	199	0.028	26	199	0.030	26	199	0.058
12:00 - 13:00	26	199	0.031	26	199	0.025	26	199	0.056
13:00 - 14:00	26	199	0.030	26	199	0.031	26	199	0.061
14:00 - 15:00	26	199	0.030	26	199	0.038	26	199	0.068
15:00 - 16:00	26	199	0.111	26	199	0.048	26	199	0.159
16:00 - 17:00	26	199	0.063	26	199	0.035	26	199	0.098
17:00 - 18:00	26	199	0.055	26	199	0.034	26	199	0.089
18:00 - 19:00	26	199	0.041	26	199	0.034	26	199	0.075
19:00 - 20:00	1	119	0.008	1	119	0.008	1	119	0.016
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.524			0.531			1.055

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.003	26	199	0.029	26	199	0.032
08:00 - 09:00	26	199	0.003	26	199	0.033	26	199	0.036
09:00 - 10:00	26	199	0.003	26	199	0.007	26	199	0.010
10:00 - 11:00	26	199	0.002	26	199	0.006	26	199	0.008
11:00 - 12:00	26	199	0.004	26	199	0.006	26	199	0.010
12:00 - 13:00	26	199	0.006	26	199	0.005	26	199	0.011
13:00 - 14:00	26	199	0.007	26	199	0.006	26	199	0.013
14:00 - 15:00	26	199	0.006	26	199	0.005	26	199	0.011
15:00 - 16:00	26	199	0.025	26	199	0.005	26	199	0.030
16:00 - 17:00	26	199	0.019	26	199	0.005	26	199	0.024
17:00 - 18:00	26	199	0.019	26	199	0.004	26	199	0.023
18:00 - 19:00	26	199	0.011	26	199	0.003	26	199	0.014
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.108			0.114			0.222

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.000	26	199	0.009	26	199	0.009
08:00 - 09:00	26	199	0.000	26	199	0.008	26	199	0.008
09:00 - 10:00	26	199	0.000	26	199	0.003	26	199	0.003
10:00 - 11:00	26	199	0.000	26	199	0.001	26	199	0.001
11:00 - 12:00	26	199	0.000	26	199	0.001	26	199	0.001
12:00 - 13:00	26	199	0.001	26	199	0.001	26	199	0.002
13:00 - 14:00	26	199	0.001	26	199	0.001	26	199	0.002
14:00 - 15:00	26	199	0.002	26	199	0.000	26	199	0.002
15:00 - 16:00	26	199	0.003	26	199	0.000	26	199	0.003
16:00 - 17:00	26	199	0.004	26	199	0.000	26	199	0.004
17:00 - 18:00	26	199	0.007	26	199	0.001	26	199	0.008
18:00 - 19:00	26	199	0.005	26	199	0.001	26	199	0.006
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.026			0.049

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.000	26	199	0.000	26	199	0.000
08:00 - 09:00	26	199	0.000	26	199	0.002	26	199	0.002
09:00 - 10:00	26	199	0.000	26	199	0.000	26	199	0.000
10:00 - 11:00	26	199	0.000	26	199	0.000	26	199	0.000
11:00 - 12:00	26	199	0.000	26	199	0.000	26	199	0.000
12:00 - 13:00	26	199	0.000	26	199	0.000	26	199	0.000
13:00 - 14:00	26	199	0.000	26	199	0.000	26	199	0.000
14:00 - 15:00	26	199	0.000	26	199	0.000	26	199	0.000
15:00 - 16:00	26	199	0.003	26	199	0.000	26	199	0.003
16:00 - 17:00	26	199	0.000	26	199	0.000	26	199	0.000
17:00 - 18:00	26	199	0.000	26	199	0.000	26	199	0.000
18:00 - 19:00	26	199	0.000	26	199	0.000	26	199	0.000
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.002			0.005

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
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	26	199	0.003	26	199	0.038	26	199	0.041
08:00 - 09:00	26	199	0.003	26	199	0.042	26	199	0.045
09:00 - 10:00	26	199	0.003	26	199	0.010	26	199	0.013
10:00 - 11:00	26	199	0.002	26	199	0.007	26	199	0.009
11:00 - 12:00	26	199	0.004	26	199	0.007	26	199	0.011
12:00 - 13:00	26	199	0.006	26	199	0.006	26	199	0.012
13:00 - 14:00	26	199	0.008	26	199	0.007	26	199	0.015
14:00 - 15:00	26	199	0.008	26	199	0.006	26	199	0.014
15:00 - 16:00	26	199	0.030	26	199	0.006	26	199	0.036
16:00 - 17:00	26	199	0.023	26	199	0.005	26	199	0.028
17:00 - 18:00	26	199	0.027	26	199	0.005	26	199	0.032
18:00 - 19:00	26	199	0.016	26	199	0.004	26	199	0.020
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.133			0.143			0.276

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.75

	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	26	199	0.116	26	199	0.524	26	199	0.640
08:00 - 09:00	26	199	0.190	26	199	0.810	26	199	1.000
09:00 - 10:00	26	199	0.201	26	199	0.266	26	199	0.467
10:00 - 11:00	26	199	0.172	26	199	0.218	26	199	0.390
11:00 - 12:00	26	199	0.183	26	199	0.215	26	199	0.398
12:00 - 13:00	26	199	0.209	26	199	0.202	26	199	0.411
13:00 - 14:00	26	199	0.207	26	199	0.219	26	199	0.426
14:00 - 15:00	26	199	0.203	26	199	0.257	26	199	0.460
15:00 - 16:00	26	199	0.563	26	199	0.285	26	199	0.848
16:00 - 17:00	26	199	0.468	26	199	0.245	26	199	0.713
17:00 - 18:00	26	199	0.562	26	199	0.249	26	199	0.811
18:00 - 19:00	26	199	0.489	26	199	0.246	26	199	0.735
19:00 - 20:00	1	119	0.176	1	119	0.025	1	119	0.201
20:00 - 21:00	1	119	0.151	1	119	0.017	1	119	0.168
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.890			3.778			7.668

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL CARS
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	26	199	0.061	26	199	0.264	26	199	0.325
08:00 - 09:00	26	199	0.102	26	199	0.338	26	199	0.440
09:00 - 10:00	26	199	0.104	26	199	0.140	26	199	0.244
10:00 - 11:00	26	199	0.089	26	199	0.108	26	199	0.197
11:00 - 12:00	26	199	0.097	26	199	0.108	26	199	0.205
12:00 - 13:00	26	199	0.109	26	199	0.105	26	199	0.214
13:00 - 14:00	26	199	0.106	26	199	0.114	26	199	0.220
14:00 - 15:00	26	199	0.104	26	199	0.137	26	199	0.241
15:00 - 16:00	26	199	0.214	26	199	0.138	26	199	0.352
16:00 - 17:00	26	199	0.220	26	199	0.126	26	199	0.346
17:00 - 18:00	26	199	0.286	26	199	0.130	26	199	0.416
18:00 - 19:00	26	199	0.273	26	199	0.132	26	199	0.405
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.992			1.865			3.857

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL LGVS
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	26	199	0.010	26	199	0.029	26	199	0.039
08:00 - 09:00	26	199	0.014	26	199	0.023	26	199	0.037
09:00 - 10:00	26	199	0.014	26	199	0.015	26	199	0.029
10:00 - 11:00	26	199	0.022	26	199	0.020	26	199	0.042
11:00 - 12:00	26	199	0.018	26	199	0.020	26	199	0.038
12:00 - 13:00	26	199	0.018	26	199	0.017	26	199	0.035
13:00 - 14:00	26	199	0.018	26	199	0.018	26	199	0.036
14:00 - 15:00	26	199	0.015	26	199	0.017	26	199	0.032
15:00 - 16:00	26	199	0.018	26	199	0.016	26	199	0.034
16:00 - 17:00	26	199	0.024	26	199	0.015	26	199	0.039
17:00 - 18:00	26	199	0.027	26	199	0.013	26	199	0.040
18:00 - 19:00	26	199	0.019	26	199	0.011	26	199	0.030
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.217			0.214			0.431

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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL MOTOR CYCLES
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	26	199	0.001	26	199	0.003	26	199	0.004
08:00 - 09:00	26	199	0.000	26	199	0.002	26	199	0.002
09:00 - 10:00	26	199	0.001	26	199	0.002	26	199	0.003
10:00 - 11:00	26	199	0.000	26	199	0.001	26	199	0.001
11:00 - 12:00	26	199	0.001	26	199	0.001	26	199	0.002
12:00 - 13:00	26	199	0.001	26	199	0.001	26	199	0.002
13:00 - 14:00	26	199	0.002	26	199	0.003	26	199	0.005
14:00 - 15:00	26	199	0.001	26	199	0.001	26	199	0.002
15:00 - 16:00	26	199	0.001	26	199	0.001	26	199	0.002
16:00 - 17:00	26	199	0.003	26	199	0.001	26	199	0.004
17:00 - 18:00	26	199	0.004	26	199	0.001	26	199	0.005
18:00 - 19:00	26	199	0.002	26	199	0.001	26	199	0.003
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.018			0.035

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 B

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	PB	PETERBOROUGH	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	AK	WAKEFIELD	1 days
09	NORTH		
	DA	DARLINGTON	1 days

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

Primary Filtering 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:	1230 to 4040 (units: sqm)
Range Selected by User:	1000 to 30000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 24/05/23

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
Wednesday	1 days
Thursday	1 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:

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:

Commercial Zone	1
Development Zone	1
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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	6 days - Selected
Servicing vehicles Excluded	14 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	3 days
10,001 to 15,000	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
100,001 to 125,000	1 days
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	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.

PTAL Rating:

No PTAL Present	4 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 AK-02-A-01 OFFICES WAKEFIELD
PIONEER WAY
CASTLEFORD
WHITWOOD
Edge of Town
No Sub Category
Total Gross floor area: 1230 sqm
Survey date: TUESDAY 23/05/17 Survey Type: MANUAL

2 DA-02-A-02 ENGINEERING COMPANY DARLINGTON
ALDERMAN BEST WAY
DARLINGTON

Edge of Town
No Sub Category
Total Gross floor area: 3530 sqm
Survey date: THURSDAY 18/10/18 Survey Type: MANUAL

3 PB-02-A-04 OFFICES PETERBOROUGH
LYNCH WOOD
PETERBOROUGH

Edge of Town
Commercial Zone
Total Gross floor area: 4040 sqm
Survey date: WEDNESDAY 19/10/16 Survey Type: MANUAL

4 WL-02-A-01 PET INSURANCE COMPANY WILTSHIRE
THE CRESCENT
AMESBURY
SUNRISE WAY
Edge of Town
Development Zone
Total Gross floor area: 2500 sqm
Survey date: TUESDAY 18/09/18 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
EC-02-A-04	Covid
NM-02-A-01	Covid
SF-02-A-03	Covid
TV-02-A-05	Covid
WO-02-A-03	Covid

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
TOTAL 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	4	2825	0.973	4	2825	0.124	4	2825	1.097
08:00 - 09:00	4	2825	2.735	4	2825	0.212	4	2825	2.947
09:00 - 10:00	4	2825	1.699	4	2825	0.150	4	2825	1.849
10:00 - 11:00	4	2825	0.363	4	2825	0.115	4	2825	0.478
11:00 - 12:00	4	2825	0.159	4	2825	0.133	4	2825	0.292
12:00 - 13:00	4	2825	0.398	4	2825	0.735	4	2825	1.133
13:00 - 14:00	4	2825	0.646	4	2825	0.496	4	2825	1.142
14:00 - 15:00	4	2825	0.319	4	2825	0.469	4	2825	0.788
15:00 - 16:00	4	2825	0.177	4	2825	0.531	4	2825	0.708
16:00 - 17:00	4	2825	0.186	4	2825	1.425	4	2825	1.611
17:00 - 18:00	4	2825	0.106	4	2825	2.788	4	2825	2.894
18:00 - 19:00	3	3357	0.070	3	3357	0.814	3	3357	0.884
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.831			7.992			15.823

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:	1230 - 4040 (units: sqm)
Survey date date range:	01/01/15 - 24/05/23
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	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/A - OFFICE
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	4	2825	0.000	4	2825	0.000	4	2825	0.000
08:00 - 09:00	4	2825	0.009	4	2825	0.009	4	2825	0.018
09:00 - 10:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
10:00 - 11:00	4	2825	0.009	4	2825	0.018	4	2825	0.027
11:00 - 12:00	4	2825	0.009	4	2825	0.000	4	2825	0.009
12:00 - 13:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
13:00 - 14:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
14:00 - 15:00	4	2825	0.009	4	2825	0.009	4	2825	0.018
15:00 - 16:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
16:00 - 17:00	4	2825	0.009	4	2825	0.000	4	2825	0.009
17:00 - 18:00	4	2825	0.000	4	2825	0.009	4	2825	0.009
18:00 - 19:00	3	3357	0.000	3	3357	0.000	3	3357	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.045			0.045			0.090

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/A - OFFICE
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	4	2825	0.000	4	2825	0.000	4	2825	0.000
08:00 - 09:00	4	2825	0.009	4	2825	0.000	4	2825	0.009
09:00 - 10:00	4	2825	0.009	4	2825	0.018	4	2825	0.027
10:00 - 11:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
11:00 - 12:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
12:00 - 13:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
13:00 - 14:00	4	2825	0.018	4	2825	0.009	4	2825	0.027
14:00 - 15:00	4	2825	0.009	4	2825	0.009	4	2825	0.018
15:00 - 16:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
16:00 - 17:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
17:00 - 18:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
18:00 - 19:00	3	3357	0.000	3	3357	0.000	3	3357	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.045			0.036			0.081

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/A - OFFICE
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	4	2825	0.018	4	2825	0.009	4	2825	0.027
08:00 - 09:00	4	2825	0.009	4	2825	0.000	4	2825	0.009
09:00 - 10:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
10:00 - 11:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
11:00 - 12:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
12:00 - 13:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
13:00 - 14:00	4	2825	0.000	4	2825	0.009	4	2825	0.009
14:00 - 15:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
15:00 - 16:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
16:00 - 17:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
17:00 - 18:00	4	2825	0.000	4	2825	0.009	4	2825	0.009
18:00 - 19:00	3	3357	0.000	3	3357	0.000	3	3357	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.027			0.054

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/A - OFFICE
CARS
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	4	2825	0.938	4	2825	0.106	4	2825	1.044
08:00 - 09:00	4	2825	2.637	4	2825	0.177	4	2825	2.814
09:00 - 10:00	4	2825	1.602	4	2825	0.062	4	2825	1.664
10:00 - 11:00	4	2825	0.257	4	2825	0.044	4	2825	0.301
11:00 - 12:00	4	2825	0.142	4	2825	0.124	4	2825	0.266
12:00 - 13:00	4	2825	0.381	4	2825	0.699	4	2825	1.080
13:00 - 14:00	4	2825	0.611	4	2825	0.469	4	2825	1.080
14:00 - 15:00	4	2825	0.283	4	2825	0.407	4	2825	0.690
15:00 - 16:00	4	2825	0.150	4	2825	0.469	4	2825	0.619
16:00 - 17:00	4	2825	0.142	4	2825	1.389	4	2825	1.531
17:00 - 18:00	4	2825	0.097	4	2825	2.717	4	2825	2.814
18:00 - 19:00	3	3357	0.070	3	3357	0.794	3	3357	0.864
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.310			7.457			14.767

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/A - OFFICE
LGVS
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	4	2825	0.027	4	2825	0.018	4	2825	0.045
08:00 - 09:00	4	2825	0.062	4	2825	0.027	4	2825	0.089
09:00 - 10:00	4	2825	0.088	4	2825	0.071	4	2825	0.159
10:00 - 11:00	4	2825	0.097	4	2825	0.053	4	2825	0.150
11:00 - 12:00	4	2825	0.009	4	2825	0.009	4	2825	0.018
12:00 - 13:00	4	2825	0.018	4	2825	0.035	4	2825	0.053
13:00 - 14:00	4	2825	0.018	4	2825	0.018	4	2825	0.036
14:00 - 15:00	4	2825	0.018	4	2825	0.035	4	2825	0.053
15:00 - 16:00	4	2825	0.027	4	2825	0.053	4	2825	0.080
16:00 - 17:00	4	2825	0.035	4	2825	0.035	4	2825	0.070
17:00 - 18:00	4	2825	0.009	4	2825	0.053	4	2825	0.062
18:00 - 19:00	3	3357	0.000	3	3357	0.010	3	3357	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.408			0.417			0.825

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/A - OFFICE
MOTOR CYCLES
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	4	2825	0.009	4	2825	0.000	4	2825	0.009
08:00 - 09:00	4	2825	0.018	4	2825	0.000	4	2825	0.018
09:00 - 10:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
10:00 - 11:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
11:00 - 12:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
12:00 - 13:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
13:00 - 14:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
14:00 - 15:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
15:00 - 16:00	4	2825	0.000	4	2825	0.009	4	2825	0.009
16:00 - 17:00	4	2825	0.000	4	2825	0.000	4	2825	0.000
17:00 - 18:00	4	2825	0.000	4	2825	0.009	4	2825	0.009
18:00 - 19:00	3	3357	0.000	3	3357	0.010	3	3357	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.028			0.055

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 C

VECTOS 97 TOTTENHAM COURT ROAD LONDON Licence No: 152301

Calculation Reference: AUDIT-152301-231115-1113

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	TB	TORBAY	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days

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

Primary Filtering 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: 190 to 31000 (units: sqm)
Range Selected by User: 190 to 80100 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 22/11/21

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
Friday	4 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	5

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	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	9 days - Selected

Secondary Filtering selection:

Use Class:

n/a	2 days
B8	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	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
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	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.

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.

PTAL Rating:

No PTAL Present	5 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 EX-02-F-01 SPORTS SUPPLEMENTS ESSEX
BRUNEL WAY
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 6560 sqm
Survey date: FRIDAY *18/05/18* *Survey Type: MANUAL*

2 HC-02-F-03 PPE DISTRIBUTION HAMPSHIRE
WARSASH ROAD
PARK GATE

Edge of Town
Industrial Zone
Total Gross floor area: 3665 sqm
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

3 SF-02-F-03 ROAD HAULAGE SUFFOLK
CENTRAL AVENUE
IPSWICH
WARREN HEATH
Edge of Town
Industrial Zone
Total Gross floor area: 4700 sqm
Survey date: FRIDAY *18/09/15* *Survey Type: MANUAL*

4 TB-02-F-01 OPTICS WAREHOUSE TORBAY
ALDERS WAY
PAIGNTON

Edge of Town
Industrial Zone
Total Gross floor area: 190 sqm
Survey date: FRIDAY *29/03/19* *Survey Type: MANUAL*

5 TW-02-F-01 ASDA DISTRIBUTION CENTRE TYNE & WEAR
MANDARIN WAY
WASHINGTON
PATTISON IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 31000 sqm
Survey date: FRIDAY *13/11/15* *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
BO-02-F-01	Covid

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
TOTAL 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	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.082	5	9223	0.033	5	9223	0.115
08:00 - 09:00	5	9223	0.128	5	9223	0.065	5	9223	0.193
09:00 - 10:00	5	9223	0.115	5	9223	0.043	5	9223	0.158
10:00 - 11:00	5	9223	0.111	5	9223	0.091	5	9223	0.202
11:00 - 12:00	5	9223	0.102	5	9223	0.098	5	9223	0.200
12:00 - 13:00	5	9223	0.121	5	9223	0.104	5	9223	0.225
13:00 - 14:00	5	9223	0.139	5	9223	0.102	5	9223	0.241
14:00 - 15:00	5	9223	0.095	5	9223	0.119	5	9223	0.214
15:00 - 16:00	5	9223	0.065	5	9223	0.169	5	9223	0.234
16:00 - 17:00	5	9223	0.041	5	9223	0.098	5	9223	0.139
17:00 - 18:00	5	9223	0.035	5	9223	0.095	5	9223	0.130
18:00 - 19:00	5	9223	0.026	5	9223	0.069	5	9223	0.095
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.060			1.086			2.146

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:	190 - 31000 (units: sqm)
Survey date date range:	01/01/15 - 22/11/21
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	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/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 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.022	5	9223	0.026	5	9223	0.048
08:00 - 09:00	5	9223	0.041	5	9223	0.037	5	9223	0.078
09:00 - 10:00	5	9223	0.039	5	9223	0.024	5	9223	0.063
10:00 - 11:00	5	9223	0.052	5	9223	0.052	5	9223	0.104
11:00 - 12:00	5	9223	0.041	5	9223	0.041	5	9223	0.082
12:00 - 13:00	5	9223	0.061	5	9223	0.039	5	9223	0.100
13:00 - 14:00	5	9223	0.054	5	9223	0.039	5	9223	0.093
14:00 - 15:00	5	9223	0.035	5	9223	0.026	5	9223	0.061
15:00 - 16:00	5	9223	0.037	5	9223	0.026	5	9223	0.063
16:00 - 17:00	5	9223	0.022	5	9223	0.033	5	9223	0.055
17:00 - 18:00	5	9223	0.013	5	9223	0.039	5	9223	0.052
18:00 - 19:00	5	9223	0.013	5	9223	0.011	5	9223	0.024
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.430			0.393			0.823

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)
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	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.004	5	9223	0.000	5	9223	0.004
08:00 - 09:00	5	9223	0.007	5	9223	0.000	5	9223	0.007
09:00 - 10:00	5	9223	0.000	5	9223	0.002	5	9223	0.002
10:00 - 11:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
11:00 - 12:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
12:00 - 13:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
13:00 - 14:00	5	9223	0.000	5	9223	0.000	5	9223	0.000
14:00 - 15:00	5	9223	0.002	5	9223	0.007	5	9223	0.009
15:00 - 16:00	5	9223	0.013	5	9223	0.013	5	9223	0.026
16:00 - 17:00	5	9223	0.004	5	9223	0.000	5	9223	0.004
17:00 - 18:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
18:00 - 19:00	5	9223	0.000	5	9223	0.004	5	9223	0.004
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.038			0.026			0.064

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)
CARS
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	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.048	5	9223	0.004	5	9223	0.052
08:00 - 09:00	5	9223	0.067	5	9223	0.009	5	9223	0.076
09:00 - 10:00	5	9223	0.056	5	9223	0.011	5	9223	0.067
10:00 - 11:00	5	9223	0.035	5	9223	0.024	5	9223	0.059
11:00 - 12:00	5	9223	0.037	5	9223	0.041	5	9223	0.078
12:00 - 13:00	5	9223	0.039	5	9223	0.048	5	9223	0.087
13:00 - 14:00	5	9223	0.063	5	9223	0.043	5	9223	0.106
14:00 - 15:00	5	9223	0.048	5	9223	0.080	5	9223	0.128
15:00 - 16:00	5	9223	0.020	5	9223	0.126	5	9223	0.146
16:00 - 17:00	5	9223	0.011	5	9223	0.056	5	9223	0.067
17:00 - 18:00	5	9223	0.020	5	9223	0.052	5	9223	0.072
18:00 - 19:00	5	9223	0.013	5	9223	0.050	5	9223	0.063
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.457			0.544			1.001

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
LGVS
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	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.013	5	9223	0.002	5	9223	0.015
08:00 - 09:00	5	9223	0.017	5	9223	0.020	5	9223	0.037
09:00 - 10:00	5	9223	0.020	5	9223	0.009	5	9223	0.029
10:00 - 11:00	5	9223	0.020	5	9223	0.015	5	9223	0.035
11:00 - 12:00	5	9223	0.022	5	9223	0.013	5	9223	0.035
12:00 - 13:00	5	9223	0.017	5	9223	0.017	5	9223	0.034
13:00 - 14:00	5	9223	0.020	5	9223	0.020	5	9223	0.040
14:00 - 15:00	5	9223	0.013	5	9223	0.009	5	9223	0.022
15:00 - 16:00	5	9223	0.009	5	9223	0.013	5	9223	0.022
16:00 - 17:00	5	9223	0.007	5	9223	0.009	5	9223	0.016
17:00 - 18:00	5	9223	0.002	5	9223	0.004	5	9223	0.006
18:00 - 19:00	5	9223	0.000	5	9223	0.009	5	9223	0.009
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.160			0.140			0.300

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)
MOTOR CYCLES
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	1	190	0.000	1	190	0.000	1	190	0.000
06:00 - 07:00	1	190	0.000	1	190	0.000	1	190	0.000
07:00 - 08:00	5	9223	0.000	5	9223	0.000	5	9223	0.000
08:00 - 09:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
09:00 - 10:00	5	9223	0.000	5	9223	0.000	5	9223	0.000
10:00 - 11:00	5	9223	0.004	5	9223	0.000	5	9223	0.004
11:00 - 12:00	5	9223	0.002	5	9223	0.002	5	9223	0.004
12:00 - 13:00	5	9223	0.004	5	9223	0.000	5	9223	0.004
13:00 - 14:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
14:00 - 15:00	5	9223	0.000	5	9223	0.004	5	9223	0.004
15:00 - 16:00	5	9223	0.000	5	9223	0.004	5	9223	0.004
16:00 - 17:00	5	9223	0.002	5	9223	0.000	5	9223	0.002
17:00 - 18:00	5	9223	0.000	5	9223	0.000	5	9223	0.000
18:00 - 19:00	5	9223	0.000	5	9223	0.000	5	9223	0.000
19:00 - 20:00	1	190	0.000	1	190	0.000	1	190	0.000
20:00 - 21:00	1	190	0.000	1	190	0.000	1	190	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.010			0.026

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 D

Filtering Summary

Land Use	04/A	EDUCATION/PRIMARY
Selected Trip Rate Calculation Parameter Range	92-538 PUPILS	
Actual Trip Rate Calculation Parameter Range	126-538 PUPILS	
Date Range	Minimum: 01/01/15	Maximum: 15/11/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	1
	Thursday	2
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Neighbourhood Centre (PPS6 Local Centre)	3
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	10 - Selected
	Servicing vehicles Excluded	1 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	2
	5,001 to 10,000	1
	50,001 to 100,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	50,001 to 75,000	1
	75,001 to 100,000	1
	250,001 to 500,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	2
PTAL Rating	No PTAL Present	4

Calculation Reference: AUDIT-529505-240328-0339

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	1 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
08	NORTH WEST		
	BP	BLACKPOOL	1 days

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

Primary Filtering 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:	126 to 538 (units:)
Range Selected by User:	92 to 538 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 15/11/22

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	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)	1
Neighbourhood Centre (PPS6 Local 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	2
Village	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	10 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

F1(a)	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

25,001 to 50,000	1 days
50,001 to 75,000	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	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.

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.

PTAL Rating:

No PTAL Present	4 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

Site(1):	BP-04-A-01	Gross floor area:	4520 sqm
Development Name:	PRIMARY SCHOOL	Number of pupils:	449
Location:	BLACKPOOL		
Postcode:	FY4 1EE	No of Employees:	90
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	27/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	5
Site(2):	CW-04-A-03	Gross floor area:	3900 sqm
Development Name:	PRIMARY ACADEMY	Number of pupils:	440
Location:	PENRYN		
Postcode:	TR10 8RA	No of Employees:	70
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/03/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	50
Site(3):	SM-04-A-01	Gross floor area:	2525 sqm
Development Name:	PRIMARY SCHOOL	Number of pupils:	407
Location:	NEAR TAUNTON		
Postcode:	TA2 8FT	No of Employees:	72
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	27/09/18
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	44
Site(4):	WL-04-A-02	Gross floor area:	1750 sqm
Development Name:	C OF E PRIMARY ACADEMY	Number of pupils:	199
Location:	ROWDE		
Postcode:	SN10 2ND	No of Employees:	27
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	03/04/19
Sub-Location Type:	Village	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	48

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
NF-04-A-01	21/09/22	Since covid
NY-04-A-05	17/05/22	Since covid
NY-04-A-06	23/05/22	Since covid
TV-04-A-01	25/05/22	Since covid
TV-04-A-02	23/05/22	Since covid
TV-04-A-03	26/05/22	Since covid
WK-04-A-01	15/11/22	Since covid

Trip Rates for Key Periods		Trips per 1 pupils PUPILS	
Period	Inbound	Outbound	Total
0800-0900	1.262	0.317	1.579
1700-1800	0.028	0.090	0.118

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.72

	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	4	374	0.059	4	374	0.029	4	374	0.088
08:00 - 09:00	4	374	0.304	4	374	0.241	4	374	0.545
09:00 - 10:00	4	374	0.038	4	374	0.033	4	374	0.071
10:00 - 11:00	4	374	0.019	4	374	0.019	4	374	0.038
11:00 - 12:00	4	374	0.025	4	374	0.019	4	374	0.044
12:00 - 13:00	4	374	0.019	4	374	0.021	4	374	0.040
13:00 - 14:00	4	374	0.025	4	374	0.034	4	374	0.059
14:00 - 15:00	4	374	0.050	4	374	0.035	4	374	0.085
15:00 - 16:00	4	374	0.171	4	374	0.213	4	374	0.384
16:00 - 17:00	4	374	0.078	4	374	0.120	4	374	0.198
17:00 - 18:00	3	432	0.016	3	432	0.032	3	432	0.048
18:00 - 19:00	3	432	0.015	3	432	0.013	3	432	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.819			0.809			1.628

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:	126 - 538 (units:)
Survey date date range:	01/01/15 - 15/11/22
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	7
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	4	374	0.000	4	374	0.000	4	374	0.000
08:00 - 09:00	4	374	0.001	4	374	0.001	4	374	0.002
09:00 - 10:00	4	374	0.000	4	374	0.000	4	374	0.000
10:00 - 11:00	4	374	0.001	4	374	0.001	4	374	0.002
11:00 - 12:00	4	374	0.000	4	374	0.000	4	374	0.000
12:00 - 13:00	4	374	0.000	4	374	0.000	4	374	0.000
13:00 - 14:00	4	374	0.000	4	374	0.000	4	374	0.000
14:00 - 15:00	4	374	0.000	4	374	0.000	4	374	0.000
15:00 - 16:00	4	374	0.001	4	374	0.001	4	374	0.002
16:00 - 17:00	4	374	0.000	4	374	0.000	4	374	0.000
17:00 - 18:00	3	432	0.000	3	432	0.000	3	432	0.000
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

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 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	4	374	0.000	4	374	0.000	4	374	0.000
08:00 - 09:00	4	374	0.001	4	374	0.001	4	374	0.002
09:00 - 10:00	4	374	0.001	4	374	0.001	4	374	0.002
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.000	4	374	0.000	4	374	0.000
12:00 - 13:00	4	374	0.000	4	374	0.000	4	374	0.000
13:00 - 14:00	4	374	0.000	4	374	0.000	4	374	0.000
14:00 - 15:00	4	374	0.000	4	374	0.000	4	374	0.000
15:00 - 16:00	4	374	0.000	4	374	0.000	4	374	0.000
16:00 - 17:00	4	374	0.000	4	374	0.000	4	374	0.000
17:00 - 18:00	3	432	0.000	3	432	0.000	3	432	0.000
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	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.*

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	4	374	0.000	4	374	0.000	4	374	0.000
08:00 - 09:00	4	374	0.001	4	374	0.001	4	374	0.002
09:00 - 10:00	4	374	0.001	4	374	0.001	4	374	0.002
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.000	4	374	0.000	4	374	0.000
12:00 - 13:00	4	374	0.000	4	374	0.000	4	374	0.000
13:00 - 14:00	4	374	0.001	4	374	0.000	4	374	0.001
14:00 - 15:00	4	374	0.001	4	374	0.000	4	374	0.001
15:00 - 16:00	4	374	0.001	4	374	0.002	4	374	0.003
16:00 - 17:00	4	374	0.000	4	374	0.000	4	374	0.000
17:00 - 18:00	3	432	0.000	3	432	0.000	3	432	0.000
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.004			0.009

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 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	4	374	0.002	4	374	0.000	4	374	0.002
08:00 - 09:00	4	374	0.030	4	374	0.005	4	374	0.035
09:00 - 10:00	4	374	0.000	4	374	0.000	4	374	0.000
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.000	4	374	0.000	4	374	0.000
12:00 - 13:00	4	374	0.000	4	374	0.002	4	374	0.002
13:00 - 14:00	4	374	0.002	4	374	0.001	4	374	0.003
14:00 - 15:00	4	374	0.000	4	374	0.001	4	374	0.001
15:00 - 16:00	4	374	0.002	4	374	0.026	4	374	0.028
16:00 - 17:00	4	374	0.002	4	374	0.003	4	374	0.005
17:00 - 18:00	3	432	0.004	3	432	0.003	3	432	0.007
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.041			0.083

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 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	4	374	0.101	4	374	0.031	4	374	0.132
08:00 - 09:00	4	374	0.460	4	374	0.090	4	374	0.550
09:00 - 10:00	4	374	0.047	4	374	0.031	4	374	0.078
10:00 - 11:00	4	374	0.022	4	374	0.020	4	374	0.042
11:00 - 12:00	4	374	0.029	4	374	0.020	4	374	0.049
12:00 - 13:00	4	374	0.021	4	374	0.021	4	374	0.042
13:00 - 14:00	4	374	0.026	4	374	0.040	4	374	0.066
14:00 - 15:00	4	374	0.043	4	374	0.042	4	374	0.085
15:00 - 16:00	4	374	0.074	4	374	0.322	4	374	0.396
16:00 - 17:00	4	374	0.063	4	374	0.203	4	374	0.266
17:00 - 18:00	3	432	0.019	3	432	0.056	3	432	0.075
18:00 - 19:00	3	432	0.015	3	432	0.019	3	432	0.034
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.920			0.895			1.815

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 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	4	374	0.017	4	374	0.010	4	374	0.027
08:00 - 09:00	4	374	0.634	4	374	0.170	4	374	0.804
09:00 - 10:00	4	374	0.029	4	374	0.032	4	374	0.061
10:00 - 11:00	4	374	0.006	4	374	0.026	4	374	0.032
11:00 - 12:00	4	374	0.009	4	374	0.011	4	374	0.020
12:00 - 13:00	4	374	0.015	4	374	0.025	4	374	0.040
13:00 - 14:00	4	374	0.007	4	374	0.019	4	374	0.026
14:00 - 15:00	4	374	0.072	4	374	0.035	4	374	0.107
15:00 - 16:00	4	374	0.172	4	374	0.518	4	374	0.690
16:00 - 17:00	4	374	0.033	4	374	0.111	4	374	0.144
17:00 - 18:00	3	432	0.005	3	432	0.030	3	432	0.035
18:00 - 19:00	3	432	0.004	3	432	0.008	3	432	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.003			0.995			1.998

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 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	4	374	0.002	4	374	0.000	4	374	0.002
08:00 - 09:00	4	374	0.120	4	374	0.048	4	374	0.168
09:00 - 10:00	4	374	0.005	4	374	0.005	4	374	0.010
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.002	4	374	0.000	4	374	0.002
12:00 - 13:00	4	374	0.001	4	374	0.000	4	374	0.001
13:00 - 14:00	4	374	0.000	4	374	0.003	4	374	0.003
14:00 - 15:00	4	374	0.021	4	374	0.001	4	374	0.022
15:00 - 16:00	4	374	0.029	4	374	0.095	4	374	0.124
16:00 - 17:00	4	374	0.007	4	374	0.034	4	374	0.041
17:00 - 18:00	3	432	0.000	3	432	0.001	3	432	0.001
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.187			0.187			0.374

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 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	4	374	0.000	4	374	0.000	4	374	0.000
08:00 - 09:00	4	374	0.007	4	374	0.004	4	374	0.011
09:00 - 10:00	4	374	0.002	4	374	0.001	4	374	0.003
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.001	4	374	0.000	4	374	0.001
12:00 - 13:00	4	374	0.000	4	374	0.000	4	374	0.000
13:00 - 14:00	4	374	0.000	4	374	0.000	4	374	0.000
14:00 - 15:00	4	374	0.000	4	374	0.000	4	374	0.000
15:00 - 16:00	4	374	0.003	4	374	0.015	4	374	0.018
16:00 - 17:00	4	374	0.005	4	374	0.002	4	374	0.007
17:00 - 18:00	3	432	0.000	3	432	0.000	3	432	0.000
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	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			0.022			0.040

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 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	4	374	0.003	4	374	0.000	4	374	0.003
08:00 - 09:00	4	374	0.009	4	374	0.000	4	374	0.009
09:00 - 10:00	4	374	0.001	4	374	0.044	4	374	0.045
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.000	4	374	0.000	4	374	0.000
12:00 - 13:00	4	374	0.000	4	374	0.000	4	374	0.000
13:00 - 14:00	4	374	0.000	4	374	0.000	4	374	0.000
14:00 - 15:00	4	374	0.000	4	374	0.000	4	374	0.000
15:00 - 16:00	4	374	0.044	4	374	0.009	4	374	0.053
16:00 - 17:00	4	374	0.000	4	374	0.004	4	374	0.004
17:00 - 18:00	3	432	0.000	3	432	0.000	3	432	0.000
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.057			0.114

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 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	4	374	0.005	4	374	0.000	4	374	0.005
08:00 - 09:00	4	374	0.137	4	374	0.052	4	374	0.189
09:00 - 10:00	4	374	0.008	4	374	0.049	4	374	0.057
10:00 - 11:00	4	374	0.000	4	374	0.000	4	374	0.000
11:00 - 12:00	4	374	0.003	4	374	0.000	4	374	0.003
12:00 - 13:00	4	374	0.001	4	374	0.000	4	374	0.001
13:00 - 14:00	4	374	0.000	4	374	0.003	4	374	0.003
14:00 - 15:00	4	374	0.021	4	374	0.001	4	374	0.022
15:00 - 16:00	4	374	0.076	4	374	0.118	4	374	0.194
16:00 - 17:00	4	374	0.011	4	374	0.040	4	374	0.051
17:00 - 18:00	3	432	0.000	3	432	0.001	3	432	0.001
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.262			0.264			0.526

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 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.72

	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	4	374	0.124	4	374	0.041	4	374	0.165
08:00 - 09:00	4	374	1.262	4	374	0.317	4	374	1.579
09:00 - 10:00	4	374	0.084	4	374	0.113	4	374	0.197
10:00 - 11:00	4	374	0.028	4	374	0.046	4	374	0.074
11:00 - 12:00	4	374	0.040	4	374	0.031	4	374	0.071
12:00 - 13:00	4	374	0.036	4	374	0.048	4	374	0.084
13:00 - 14:00	4	374	0.035	4	374	0.063	4	374	0.098
14:00 - 15:00	4	374	0.136	4	374	0.079	4	374	0.215
15:00 - 16:00	4	374	0.324	4	374	0.985	4	374	1.309
16:00 - 17:00	4	374	0.109	4	374	0.357	4	374	0.466
17:00 - 18:00	3	432	0.028	3	432	0.090	3	432	0.118
18:00 - 19:00	3	432	0.019	3	432	0.027	3	432	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.225			2.197			4.422

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 04 - EDUCATION/A - PRIMARY
MULTI-MODAL CARS
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	4	374	0.056	4	374	0.027	4	374	0.083
08:00 - 09:00	4	374	0.292	4	374	0.230	4	374	0.522
09:00 - 10:00	4	374	0.033	4	374	0.027	4	374	0.060
10:00 - 11:00	4	374	0.017	4	374	0.016	4	374	0.033
11:00 - 12:00	4	374	0.021	4	374	0.013	4	374	0.034
12:00 - 13:00	4	374	0.017	4	374	0.019	4	374	0.036
13:00 - 14:00	4	374	0.015	4	374	0.030	4	374	0.045
14:00 - 15:00	4	374	0.048	4	374	0.030	4	374	0.078
15:00 - 16:00	4	374	0.167	4	374	0.207	4	374	0.374
16:00 - 17:00	4	374	0.075	4	374	0.118	4	374	0.193
17:00 - 18:00	3	432	0.016	3	432	0.030	3	432	0.046
18:00 - 19:00	3	432	0.015	3	432	0.013	3	432	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.772			0.760			1.532

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 04 - EDUCATION/A - PRIMARY
MULTI-MODAL LGVS
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	4	374	0.003	4	374	0.001	4	374	0.004
08:00 - 09:00	4	374	0.009	4	374	0.007	4	374	0.016
09:00 - 10:00	4	374	0.004	4	374	0.004	4	374	0.008
10:00 - 11:00	4	374	0.002	4	374	0.003	4	374	0.005
11:00 - 12:00	4	374	0.004	4	374	0.005	4	374	0.009
12:00 - 13:00	4	374	0.002	4	374	0.003	4	374	0.005
13:00 - 14:00	4	374	0.009	4	374	0.004	4	374	0.013
14:00 - 15:00	4	374	0.001	4	374	0.005	4	374	0.006
15:00 - 16:00	4	374	0.003	4	374	0.002	4	374	0.005
16:00 - 17:00	4	374	0.003	4	374	0.002	4	374	0.005
17:00 - 18:00	3	432	0.000	3	432	0.002	3	432	0.002
18:00 - 19:00	3	432	0.000	3	432	0.000	3	432	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.038			0.078

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 E

SLR Consulting Tottenham Court Road London Licence No: 529505

Filtering Summary

Land Use	04/B	EDUCATION/SECONDARY
Selected Trip Rate Calculation Parameter Range	520-1913 PUPILS	
Actual Trip Rate Calculation Parameter Range	800-1439 PUPILS	
Date Range	Minimum: 01/01/16	Maximum: 10/05/23
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	2
	Friday	1
Main Location Types selected	Edge of Town Centre	1
	Suburban Area (PPS6 Out of Centre)	2
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	6 - Selected
	Servicing vehicles Excluded	X - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	15,001 to 20,000	1
	20,001 to 25,000	2
Population <5 Mile ranges selected	25,001 to 50,000	2
	75,001 to 100,000	1
	125,001 to 250,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	2
PTAL Rating	No PTAL Present	4

Calculation Reference: AUDIT-529505-240402-0459

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : B - SECONDARY
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DV	DEVON	1 days
	NS	NORTH SOMERSET	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days

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

Primary Filtering 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:	800 to 1439 (units:)
Range Selected by User:	520 to 1913 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 10/05/23

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	2 days
Friday	1 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:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	2
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	3
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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	6 days - Selected
Servicing vehicles Excluded	X days - Selected

Secondary Filtering selection:

Use Class:

F1(a)	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	2 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
125,001 to 250,000	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	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.

Travel Plan:

Not Known	1 days
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.

PTAL Rating:

No PTAL Present	4 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

Site(1):	DV-04-B-04	Gross floor area:	12650 sqm
Development Name:	SECONDARY ACADEMY	Number of pupils:	835
Location:	EXETER		
Postcode:	EX2 6AP	No of Employees:	114
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	02/04/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	110
Site(2):	NS-04-B-01	Gross floor area:	12000 sqm
Development Name:	SECONDARY SCHOOL	Number of pupils:	900
Location:	NAILSEA		
Postcode:	BS48 2HN	No of Employees:	130
Main Location Type:	Edge of Town Centre	Survey Date:	03/10/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	107
Site(3):	NY-04-B-03	Gross floor area:	6884 sqm
Development Name:	GIRLS' HIGH SCHOOL	Number of pupils:	800
Location:	SKIPTON		
Postcode:	BD23 1QL	No of Employees:	110
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	08/03/19
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	40
Site(4):	WK-04-B-01	Gross floor area:	8200 sqm
Development Name:	SECONDARY SCHOOL	Number of pupils:	839
Location:	KINETON		
Postcode:	CV35 0JX	No of Employees:	62
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/19
Sub-Location Type:	Village	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	82

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
TV-04-B-02	24/05/22	Since Covid-19
WL-04-B-01	10/05/23	Since Covid-19

Trip Rates for Key Periods		Trips per 1 pupils PUPILS	
Period	Inbound	Outbound	Total
0800-0900	0.170	0.148	0.318
1700-1800	0.060	0.036	0.096

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.59

	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	4	844	0.046	4	844	0.012	4	844	0.058
08:00 - 09:00	4	844	0.170	4	844	0.148	4	844	0.318
09:00 - 10:00	4	844	0.016	4	844	0.013	4	844	0.029
10:00 - 11:00	4	844	0.015	4	844	0.012	4	844	0.027
11:00 - 12:00	4	844	0.014	4	844	0.014	4	844	0.028
12:00 - 13:00	4	844	0.012	4	844	0.016	4	844	0.028
13:00 - 14:00	4	844	0.013	4	844	0.013	4	844	0.026
14:00 - 15:00	4	844	0.019	4	844	0.020	4	844	0.039
15:00 - 16:00	4	844	0.053	4	844	0.091	4	844	0.144
16:00 - 17:00	4	844	0.070	4	844	0.087	4	844	0.157
17:00 - 18:00	4	844	0.060	4	844	0.036	4	844	0.096
18:00 - 19:00	4	844	0.060	4	844	0.037	4	844	0.097
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.548			0.499			1.047

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 - 1439 (units:)
Survey date date range:	01/01/16 - 10/05/23
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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/B - SECONDARY
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.002	4	844	0.002	4	844	0.004
09:00 - 10:00	4	844	0.000	4	844	0.000	4	844	0.000
10:00 - 11:00	4	844	0.000	4	844	0.000	4	844	0.000
11:00 - 12:00	4	844	0.000	4	844	0.000	4	844	0.000
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.000	4	844	0.000	4	844	0.000
14:00 - 15:00	4	844	0.001	4	844	0.000	4	844	0.001
15:00 - 16:00	4	844	0.001	4	844	0.001	4	844	0.002
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.000	4	844	0.000	4	844	0.000
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.003			0.007

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.002	4	844	0.001	4	844	0.003
09:00 - 10:00	4	844	0.000	4	844	0.001	4	844	0.001
10:00 - 11:00	4	844	0.000	4	844	0.001	4	844	0.001
11:00 - 12:00	4	844	0.001	4	844	0.001	4	844	0.002
12:00 - 13:00	4	844	0.000	4	844	0.001	4	844	0.001
13:00 - 14:00	4	844	0.000	4	844	0.000	4	844	0.000
14:00 - 15:00	4	844	0.000	4	844	0.000	4	844	0.000
15:00 - 16:00	4	844	0.000	4	844	0.000	4	844	0.000
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.000	4	844	0.000	4	844	0.000
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.005			0.008

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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TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.005	4	844	0.005	4	844	0.010
09:00 - 10:00	4	844	0.000	4	844	0.000	4	844	0.000
10:00 - 11:00	4	844	0.000	4	844	0.000	4	844	0.000
11:00 - 12:00	4	844	0.001	4	844	0.000	4	844	0.001
12:00 - 13:00	4	844	0.001	4	844	0.000	4	844	0.001
13:00 - 14:00	4	844	0.001	4	844	0.000	4	844	0.001
14:00 - 15:00	4	844	0.003	4	844	0.004	4	844	0.007
15:00 - 16:00	4	844	0.001	4	844	0.001	4	844	0.002
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.001	4	844	0.001	4	844	0.002
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.011			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.*

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
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	4	844	0.002	4	844	0.000	4	844	0.002
08:00 - 09:00	4	844	0.043	4	844	0.000	4	844	0.043
09:00 - 10:00	4	844	0.001	4	844	0.000	4	844	0.001
10:00 - 11:00	4	844	0.001	4	844	0.000	4	844	0.001
11:00 - 12:00	4	844	0.000	4	844	0.000	4	844	0.000
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.000	4	844	0.001	4	844	0.001
14:00 - 15:00	4	844	0.000	4	844	0.000	4	844	0.000
15:00 - 16:00	4	844	0.000	4	844	0.031	4	844	0.031
16:00 - 17:00	4	844	0.000	4	844	0.012	4	844	0.012
17:00 - 18:00	4	844	0.001	4	844	0.001	4	844	0.002
18:00 - 19:00	4	844	0.002	4	844	0.001	4	844	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.050			0.046			0.096

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.056	4	844	0.005	4	844	0.061
08:00 - 09:00	4	844	0.270	4	844	0.082	4	844	0.352
09:00 - 10:00	4	844	0.021	4	844	0.011	4	844	0.032
10:00 - 11:00	4	844	0.020	4	844	0.014	4	844	0.034
11:00 - 12:00	4	844	0.017	4	844	0.018	4	844	0.035
12:00 - 13:00	4	844	0.015	4	844	0.023	4	844	0.038
13:00 - 14:00	4	844	0.015	4	844	0.017	4	844	0.032
14:00 - 15:00	4	844	0.025	4	844	0.052	4	844	0.077
15:00 - 16:00	4	844	0.033	4	844	0.146	4	844	0.179
16:00 - 17:00	4	844	0.034	4	844	0.114	4	844	0.148
17:00 - 18:00	4	844	0.092	4	844	0.060	4	844	0.152
18:00 - 19:00	4	844	0.095	4	844	0.067	4	844	0.162
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.693			0.609			1.302

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.013	4	844	0.000	4	844	0.013
08:00 - 09:00	4	844	0.268	4	844	0.003	4	844	0.271
09:00 - 10:00	4	844	0.012	4	844	0.001	4	844	0.013
10:00 - 11:00	4	844	0.015	4	844	0.005	4	844	0.020
11:00 - 12:00	4	844	0.005	4	844	0.003	4	844	0.008
12:00 - 13:00	4	844	0.007	4	844	0.014	4	844	0.021
13:00 - 14:00	4	844	0.023	4	844	0.021	4	844	0.044
14:00 - 15:00	4	844	0.011	4	844	0.036	4	844	0.047
15:00 - 16:00	4	844	0.011	4	844	0.189	4	844	0.200
16:00 - 17:00	4	844	0.007	4	844	0.082	4	844	0.089
17:00 - 18:00	4	844	0.012	4	844	0.015	4	844	0.027
18:00 - 19:00	4	844	0.008	4	844	0.005	4	844	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.392			0.374			0.766

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.004	4	844	0.000	4	844	0.004
08:00 - 09:00	4	844	0.118	4	844	0.001	4	844	0.119
09:00 - 10:00	4	844	0.001	4	844	0.001	4	844	0.002
10:00 - 11:00	4	844	0.000	4	844	0.001	4	844	0.001
11:00 - 12:00	4	844	0.001	4	844	0.001	4	844	0.002
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.001	4	844	0.006	4	844	0.007
14:00 - 15:00	4	844	0.000	4	844	0.002	4	844	0.002
15:00 - 16:00	4	844	0.001	4	844	0.109	4	844	0.110
16:00 - 17:00	4	844	0.000	4	844	0.006	4	844	0.006
17:00 - 18:00	4	844	0.001	4	844	0.000	4	844	0.001
18:00 - 19:00	4	844	0.001	4	844	0.001	4	844	0.002
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.*

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.018	4	844	0.000	4	844	0.018
09:00 - 10:00	4	844	0.000	4	844	0.000	4	844	0.000
10:00 - 11:00	4	844	0.000	4	844	0.000	4	844	0.000
11:00 - 12:00	4	844	0.000	4	844	0.000	4	844	0.000
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.000	4	844	0.000	4	844	0.000
14:00 - 15:00	4	844	0.000	4	844	0.000	4	844	0.000
15:00 - 16:00	4	844	0.000	4	844	0.007	4	844	0.007
16:00 - 17:00	4	844	0.000	4	844	0.010	4	844	0.010
17:00 - 18:00	4	844	0.000	4	844	0.000	4	844	0.000
18:00 - 19:00	4	844	0.000	4	844	0.001	4	844	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.018			0.036

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.099	4	844	0.009	4	844	0.108
09:00 - 10:00	4	844	0.009	4	844	0.001	4	844	0.010
10:00 - 11:00	4	844	0.000	4	844	0.000	4	844	0.000
11:00 - 12:00	4	844	0.000	4	844	0.000	4	844	0.000
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.000	4	844	0.000	4	844	0.000
14:00 - 15:00	4	844	0.001	4	844	0.029	4	844	0.030
15:00 - 16:00	4	844	0.001	4	844	0.090	4	844	0.091
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.014	4	844	0.000	4	844	0.014
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.124			0.129			0.253

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 04 - EDUCATION/B - SECONDARY
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	4	844	0.004	4	844	0.000	4	844	0.004
08:00 - 09:00	4	844	0.234	4	844	0.010	4	844	0.244
09:00 - 10:00	4	844	0.011	4	844	0.001	4	844	0.012
10:00 - 11:00	4	844	0.000	4	844	0.001	4	844	0.001
11:00 - 12:00	4	844	0.001	4	844	0.001	4	844	0.002
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.001	4	844	0.006	4	844	0.007
14:00 - 15:00	4	844	0.001	4	844	0.031	4	844	0.032
15:00 - 16:00	4	844	0.001	4	844	0.206	4	844	0.207
16:00 - 17:00	4	844	0.000	4	844	0.016	4	844	0.016
17:00 - 18:00	4	844	0.015	4	844	0.001	4	844	0.016
18:00 - 19:00	4	844	0.001	4	844	0.001	4	844	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.269			0.274			0.543

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 04 - EDUCATION/B - SECONDARY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.59

	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	4	844	0.074	4	844	0.005	4	844	0.079
08:00 - 09:00	4	844	0.815	4	844	0.095	4	844	0.910
09:00 - 10:00	4	844	0.045	4	844	0.013	4	844	0.058
10:00 - 11:00	4	844	0.036	4	844	0.020	4	844	0.056
11:00 - 12:00	4	844	0.024	4	844	0.022	4	844	0.046
12:00 - 13:00	4	844	0.023	4	844	0.037	4	844	0.060
13:00 - 14:00	4	844	0.039	4	844	0.046	4	844	0.085
14:00 - 15:00	4	844	0.037	4	844	0.119	4	844	0.156
15:00 - 16:00	4	844	0.046	4	844	0.572	4	844	0.618
16:00 - 17:00	4	844	0.041	4	844	0.224	4	844	0.265
17:00 - 18:00	4	844	0.120	4	844	0.077	4	844	0.197
18:00 - 19:00	4	844	0.106	4	844	0.074	4	844	0.180
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.406			1.304			2.710

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 04 - EDUCATION/B - SECONDARY
MULTI-MODAL CARS
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	4	844	0.044	4	844	0.012	4	844	0.056
08:00 - 09:00	4	844	0.158	4	844	0.137	4	844	0.295
09:00 - 10:00	4	844	0.015	4	844	0.010	4	844	0.025
10:00 - 11:00	4	844	0.012	4	844	0.008	4	844	0.020
11:00 - 12:00	4	844	0.011	4	844	0.012	4	844	0.023
12:00 - 13:00	4	844	0.009	4	844	0.013	4	844	0.022
13:00 - 14:00	4	844	0.010	4	844	0.012	4	844	0.022
14:00 - 15:00	4	844	0.014	4	844	0.015	4	844	0.029
15:00 - 16:00	4	844	0.052	4	844	0.086	4	844	0.138
16:00 - 17:00	4	844	0.069	4	844	0.087	4	844	0.156
17:00 - 18:00	4	844	0.056	4	844	0.034	4	844	0.090
18:00 - 19:00	4	844	0.057	4	844	0.037	4	844	0.094
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.507			0.463			0.970

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 04 - EDUCATION/B - SECONDARY
MULTI-MODAL LGVS
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	4	844	0.001	4	844	0.000	4	844	0.001
08:00 - 09:00	4	844	0.003	4	844	0.003	4	844	0.006
09:00 - 10:00	4	844	0.001	4	844	0.001	4	844	0.002
10:00 - 11:00	4	844	0.002	4	844	0.003	4	844	0.005
11:00 - 12:00	4	844	0.001	4	844	0.001	4	844	0.002
12:00 - 13:00	4	844	0.003	4	844	0.003	4	844	0.006
13:00 - 14:00	4	844	0.001	4	844	0.001	4	844	0.002
14:00 - 15:00	4	844	0.001	4	844	0.001	4	844	0.002
15:00 - 16:00	4	844	0.000	4	844	0.002	4	844	0.002
16:00 - 17:00	4	844	0.001	4	844	0.001	4	844	0.002
17:00 - 18:00	4	844	0.004	4	844	0.001	4	844	0.005
18:00 - 19:00	4	844	0.003	4	844	0.000	4	844	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.017			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.*

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
MULTI-MODAL MOTOR CYCLES
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	4	844	0.000	4	844	0.000	4	844	0.000
08:00 - 09:00	4	844	0.001	4	844	0.000	4	844	0.001
09:00 - 10:00	4	844	0.000	4	844	0.000	4	844	0.000
10:00 - 11:00	4	844	0.000	4	844	0.000	4	844	0.000
11:00 - 12:00	4	844	0.000	4	844	0.000	4	844	0.000
12:00 - 13:00	4	844	0.000	4	844	0.000	4	844	0.000
13:00 - 14:00	4	844	0.000	4	844	0.000	4	844	0.000
14:00 - 15:00	4	844	0.000	4	844	0.000	4	844	0.000
15:00 - 16:00	4	844	0.000	4	844	0.000	4	844	0.000
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.000	4	844	0.000	4	844	0.000
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.000			0.001

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.*

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
MULTI-MODAL Servicing 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	4	844	0.001	4	844	0.000	4	844	0.001
08:00 - 09:00	4	844	0.002	4	844	0.001	4	844	0.003
09:00 - 10:00	4	844	0.001	4	844	0.001	4	844	0.002
10:00 - 11:00	4	844	0.001	4	844	0.001	4	844	0.002
11:00 - 12:00	4	844	0.001	4	844	0.001	4	844	0.002
12:00 - 13:00	4	844	0.001	4	844	0.001	4	844	0.002
13:00 - 14:00	4	844	0.001	4	844	0.001	4	844	0.002
14:00 - 15:00	4	844	0.000	4	844	0.000	4	844	0.000
15:00 - 16:00	4	844	0.000	4	844	0.000	4	844	0.000
16:00 - 17:00	4	844	0.000	4	844	0.000	4	844	0.000
17:00 - 18:00	4	844	0.000	4	844	0.000	4	844	0.000
18:00 - 19:00	4	844	0.000	4	844	0.000	4	844	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.006			0.014

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.*

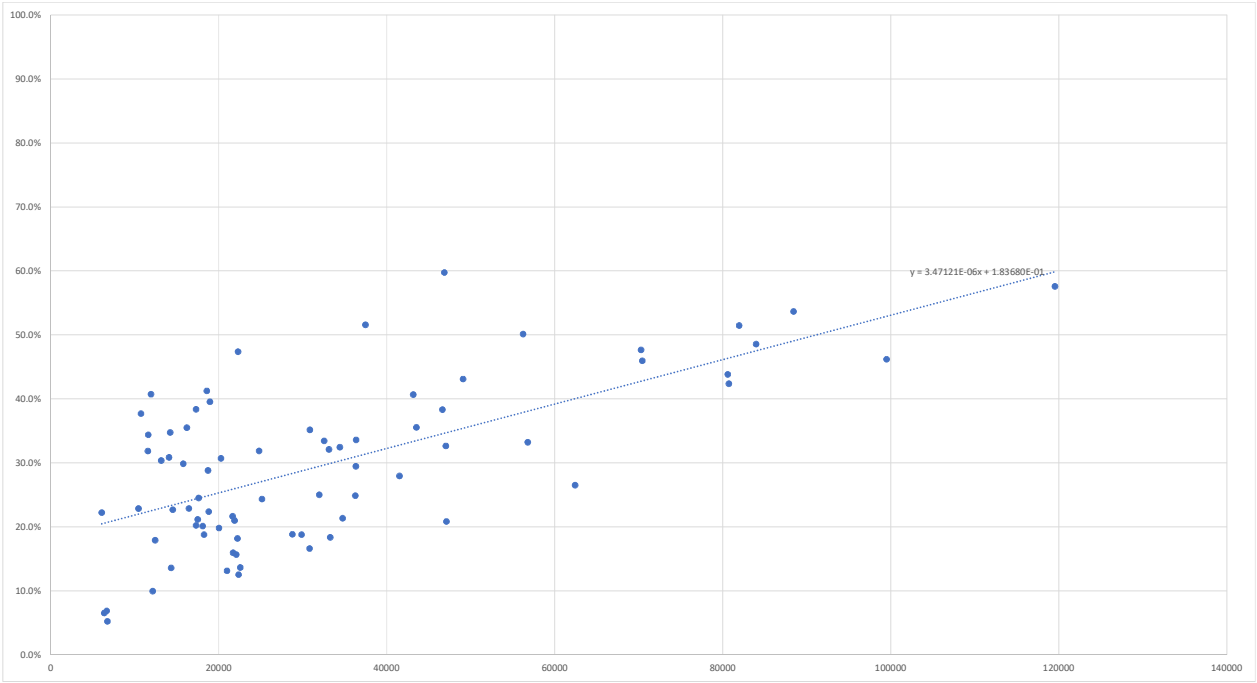
Appendix F

Population Bracket	Total Population	Population in Employment	Employed Population Living & Working in Same Town	Working population including commuters
Population < 10,000	6,463	2,942	261	1,759
10,000 ≤ Population < 20,000	15,229	6,118	1,683	6,747
20,000 ≤ Population < 30,000	23,106	9,683	2,064	7,840
30,000 ≤ Population < 40,000	34,014	13,925	4,070	13,384
40,000 ≤ Population < 50,000	45,611	19,140	7,160	21,486
50,000 ≤ Population	79,228	33,467	15,649	36,139

Town	District	Total Population	Population in Employment	Employed Population Living & Working in Same Town	Working population including commuters
Harwich	Tendring	6072	2,050	456	1,888
Chigwell	Epping	6367	2,511	164	1,681
Sandhurst	Bracknell Forest	6670	2,850	196	1,238
Esher	Elmbridge	6743	4,355	228	2,230
Chatteris	Fenland	10453	4,181	956	2,688
Selsey	Chichester	10737	3,464	1,306	2,640
Thame	South Oxfordshire	11561	5,021	1,599	6,923
Henley-on-Thames	South Oxfordshire	11619	4,187	1,440	5,984
Sheerness	Swale	11938	3,753	1,529	5,187
Kidlington	Cherwell	12142	5,310	528	1,689
Epping	Epping	12430	4,854	870	5,137
Dorking	Mole Valley	13153	5,218	1,585	9,626
New Milton	New Forest	14095	4,688	1,447	5,454
Maldon	Maldon	14220	5,429	1,887	6,789
Rickmansworth	Three Rivers	14329	5,522	751	5,108
Godalming	Waverley	14533	5,972	1,355	7,202
Royston	North Hertfordshire	15781	7,275	2,174	6,042
Alton	East Hampshire	16198	6,850	2,433	6,809
South Woodham Ferrers	Chelmsford	16453	7,508	1,718	3,815
Reigate	Reigate and Banstead	17292	6,758	1,368	10,929
Lewes	Lewes	17297	6,378	2,447	11,949
Amersham	Chiltern	17501	6,549	1,386	7,785
Great Dunmow	Uttlesford	17,616	6,801	1,668	4,844
Ascot	Windsor and Maidenhead	18091	6,236	1,255	7,428
Brentwood	Brentwood	18241	8,085	1,520	9,066
Newmarket	Forest Heath	18575	8,665	3,575	9,291
Tonbridge	Tonbridge and Malling	18729	8,071	2,326	11,352
Ware	East Hertfordshire	18799	8,450	1,891	7,445
Saffron Walden	Uttlesford	18949	7,732	3,058	7,485
Redhill	Reigate and Banstead	20031	9,356	1,856	12,281
Ely	East Cambridgeshire	20256	8,707	2,674	8,293
Sunbury-on-Thames	Spelthorne	20980	8,599	1,129	6,815
Wokingham	Wokingham	21651	8,950	1,938	10,695
Staines-upon-thames	Spelthorne	21702	9,662	1,542	10,136
Potters bar	Hertsmere	21882	8,097	1,699	7,430
Horley	Reigate and Banstead	22076	10,093	1,583	5,281
Swanley	Sevenoaks	22227	8,694	1,581	5,302
March	Fenland	22298	7,991	3,787	7,774
Thatcham	West Berkshire	22354	10,426	1,308	2,961
Loughton	Epping Forest	22556	8,889	1,213	5,823
Witham	Braintree	24810	10,476	3,340	10,438
Didcot	South Oxfordshire	25140	12,105	2,948	6,369
Cheshunt	Broxbourne	28765	11,242	2,117	10,383
Billericay	Basildon	29857	11,961	2,247	7,621
Wickford	Basildon	30822	12,695	2,109	6,473
Bicester	Cherwell	30854	14,937	5,252	11,592
Borehamwood	Hertsmere	31955	12,964	3,243	12,146
Braintree	Braintree	32559	13,502	4,515	13,341
Abingdon	Vale of White Horse	33130	15,271	4,902	13,077
Rayleigh	Rochford	33276	13,320	2,447	8,216
Hatfield	Welwyn Hatfield	34426	13,069	4,241	22,027
Strood	Medway	34745	13,763	2,939	12,742
Dunstable	Central bedfordshire	36253	14,739	3,667	11,840
Aldershot	Rushmoor	36321	16,815	4,956	15,307
Horsham	Horsham	36353	15,845	5,323	17,316
Leighton Buzzard	Central bedfordshire	37469	10,178	5,249	16,526
Bishop's Stortford	East Hertfordshire	41509	18,019	5,037	11,992
Sittingbourne	Swale	43149	17,054	6,935	17,779
Letchworth	North Hertfordshire	43529	17,295	6,147	15,554
Welwyn Garden City	Welwyn Hatfield	46619	19,321	7,405	28,061
Banbury	Cherwell	46853	20,618	12,321	24,721
Dartford	Dartford	47036	20,050	6,548	37,184
Farnborough	Rushmoor	47104	21,014	4,378	14,966
Wellingborough	Wellingborough	49087	19,746	8,509	21,631
Kettering	Kettering	56226	23,733	11,901	26,148
Maidenhead	Windsor and Maidenhead	56774	23,182	7,703	24,009
St Albans	St Albans	62420	26,568	7,046	23,280
Aylesbury	Aylesbury Vale	70272	30,999	14,777	28,819
Guildford	Guildford	70407	29,602	13,606	43,506
High Wycombe	Wycombe	80589	32,554	14,270	33,965
Hemel Hempstead	Dacorum	80718	33,424	14,160	33,176
Harlow	Harlow	81944	33,967	17,485	33,458
Stevenage	Stevenage	83,957	36,007	17,491	38,180
Royal Leamington Spa	Warwick	88411	37,819	20,297	48,364
Chelmsford	Chelmsford	99,494	43,309	20,013	47,697
Colchester	Colchester	119,526	50,443	29,042	53,062
Average		32,592	13,576	4,842	13,940

Working population inc. commuters excl. town	% of workers both living & working in town compared with entire employed population of town	% of employment offer that usual residents comprise
1,498	8.9%	14.8%
5,064	27.5%	24.9%
5,776	21.3%	26.3%
9,313	29.2%	30.4%
14,326	37.4%	33.3%
20,489	46.8%	43.3%

Working population inc. commuters excl. town	% of workers both living & working in town compared with entire employed population of town	% of employment offer that usual residents comprise
1,432	22.2%	24.2%
1,517	6.5%	9.8%
1,042	6.9%	15.8%
2,002	5.2%	10.2%
1,732	22.9%	35.6%
1,334	37.7%	49.5%
5,324	31.8%	23.1%
4,544	34.4%	24.1%
3,658	40.7%	29.5%
1,161	9.9%	31.3%
4,267	17.9%	16.9%
8,041	30.4%	16.5%
4,007	30.9%	26.5%
4,902	34.8%	27.8%
4,357	13.6%	14.7%
5,847	22.7%	18.8%
3,868	29.9%	36.0%
4,376	35.5%	35.7%
2,097	22.9%	45.0%
9,561	20.2%	12.5%
9,502	38.4%	20.5%
6,399	21.2%	17.8%
3,176	24.5%	34.4%
6,173	20.1%	16.9%
7,546	18.8%	16.8%
5,716	41.3%	38.5%
9,026	28.8%	20.5%
5,554	22.4%	25.4%
4,427	39.5%	40.9%
10,425	19.8%	15.1%
5,619	30.7%	32.2%
5,686	13.1%	16.6%
8,757	21.7%	18.1%
8,594	16.0%	15.2%
5,731	21.0%	22.9%
3,698	15.7%	30.0%
3,721	18.2%	29.8%
3,987	47.4%	48.7%
1,653	12.5%	44.2%
4,610	13.6%	20.8%
7,098	31.9%	32.0%
3,421	24.4%	46.3%
8,266	18.8%	20.4%
5,374	18.8%	29.5%
4,364	16.6%	32.6%
6,340	35.2%	45.3%
8,903	25.0%	26.7%
8,826	33.4%	33.8%
8,175	32.1%	37.5%
5,769	18.4%	29.8%
17,786	32.5%	19.3%
9,803	21.4%	23.1%
8,173	24.9%	31.0%
10,351	29.5%	32.4%
11,993	33.6%	30.7%
11,277	51.6%	31.8%
6,955	28.0%	42.0%
10,844	40.7%	39.0%
9,407	35.5%	39.5%
20,656	38.3%	26.4%
12,400	59.8%	49.8%
30,636	32.7%	17.6%
10,588	20.8%	29.3%
13,122	43.1%	39.3%
14,247	50.1%	45.5%
16,306	33.2%	32.1%
16,234	26.5%	30.3%
14,042	47.7%	51.3%
29,900	46.0%	31.3%
19,695	43.8%	42.0%
19,016	42.4%	42.7%
15,973	51.5%	52.3%
20,689	48.6%	45.8%
28,067	53.7%	42.0%
27,684	46.2%	42.0%
24,020	57.6%	54.7%
9,098	35.7%	34.7%



y = 3.47121E-06x + 0.183680

y (internalisation %)	25.3%
x (total population)	20000

Summary of Working Populations % within Similarly Populated Settlements

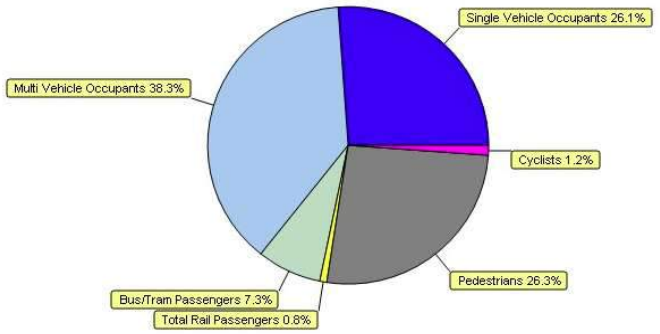
Location			% of Workers Working in MSOA compared with All Workers Living in MSOA	% of People Living and Working in MSOA			% of Employment Offer Usual Residents of MSOA Comprise		
Town	County	District		Total Workers from MSOA	Workers from MSOA	%	Total Workers in MSOA	Workers from MSOA	%
Cottenham	Cambridgeshire	South Cambridgeshire	54%	2,758	353	13%	1,482	353	24%
Cranleigh	Surrey	Waverly	79%	3,842	1,226	32%	3,020	1,226	41%
Cullompton	Devon	Mid Devon	76%	3,313	855	26%	2,528	855	34%
Diss	Norfolk	South Norfolk	114%	3,929	1,586	40%	4,480	1,586	35%
Edenbridge	Kent	Sevenoaks	82%	3,477	828	24%	2,860	828	29%
Faringdon	Oxfordshire	Vale of White Horse	49%	3,613	721	20%	1,772	721	41%
Glastonbury	Somerset	Mendip	89%	2,524	612	24%	2,254	612	27%
Heathfield	East Sussex	Wealden	64%	2,936	583	20%	1,878	583	31%
Hook (Hart)	Hampshire	Hart	180%	3,435	567	17%	6,197	567	9%
Hunstanton	Norfolk	King's Lynn and West Norfolk	124%	1,370	562	41%	1,695	562	33%
Ingatestone	Essex	Brentwood	69%	2,155	298	14%	1,489	298	20%
Ledbury	Herefordshire	Herefordshire	107%	3,508	1,597	46%	3,761	1,597	42%
Liskeard	Cornwall	Cornwall	116%	4,792	2,346	49%	5,562	2,346	42%
Marlborough	Wiltshire	Wiltshire	124%	2,955	1,248	42%	3,676	1,248	34%
Paddock Wood	Kent	Tunbridge Wells	101%	4,313	887	21%	4,349	887	20%
Sawbridgeworth	Hertfordshire	East Hertfordshire	77%	3,456	363	11%	2,658	363	14%
Sherborne	Dorset	West Dorset	145%	2,974	1,314	44%	4,305	1,314	31%
Soham	Cambridgeshire	East Cambridgeshire	51%	5,260	1,148	22%	2,658	1,148	43%
St. Blazey	Cornwall	Cornwall	59%	2,527	361	14%	1,494	361	24%
St. Ives (Cornwall)	Cornwall	Cornwall	113%	2,431	1,257	52%	2,759	1,257	46%
Swaffham	Norfolk	Breckland	113%	2,354	870	37%	2,650	870	33%
Tenterden	Kent	Ashford	66%	4,427	1,358	31%	2,920	1,358	47%
Tetbury	Gloucestershire	Cotswold	90%	3,354	1,084	32%	3,008	1,084	36%
Tidworth	Wiltshire	Wiltshire	107%	7,223	3,753	52%	7,748	3,753	48%
Tiptree	Essex	Colchester	59%	6,011	1,113	19%	3,541	1,113	31%
Watton	Norfolk	Breckland	74%	5,513	1,674	30%	4,102	1,674	41%
Wincanton	Somerset	South Somerset	115%	2,627	1,065	41%	3,011	1,065	35%
Yatton	Somerset	North Somerset	93%	3,704	665	18%	3463	665	19%
Average			**93%**	**3,599**	**1,082**	**30%**	**3,261**	**1,082**	**33%**

Appendix G

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

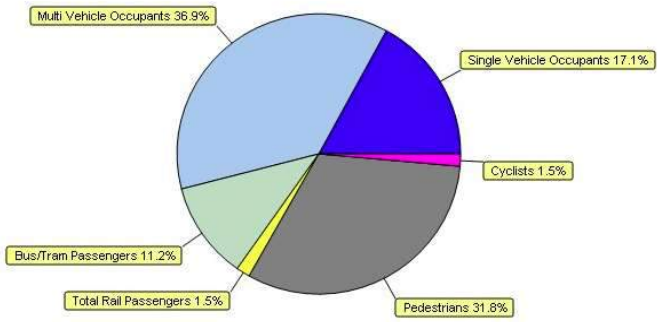
Start/End Time Selection
Start 07:00
End 08:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

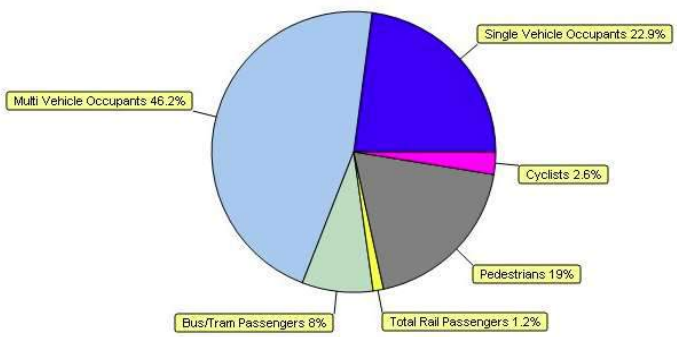
Start/End Time Selection
Start 08:00
End 09:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

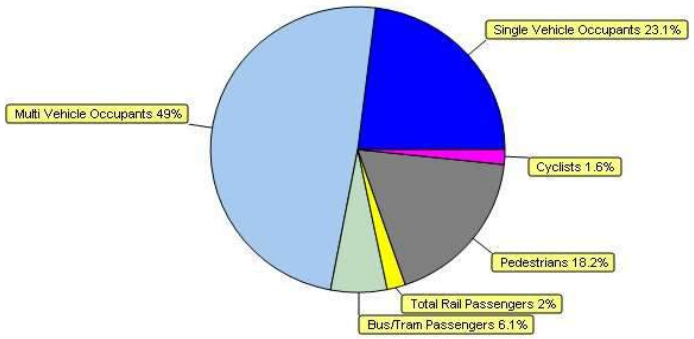
Start/End Time Selection
Start 09:00
End 10:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

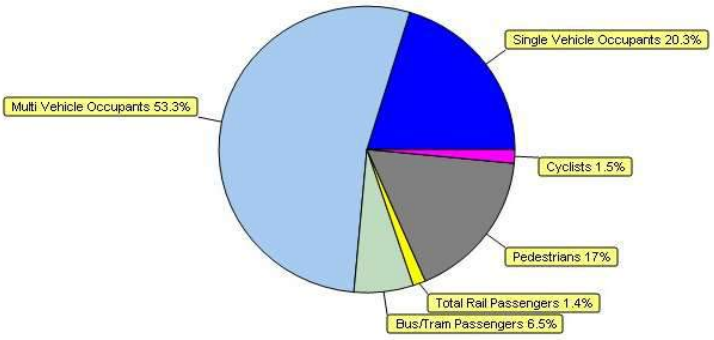
Start/End Time Selection
Start 10:00
End 11:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

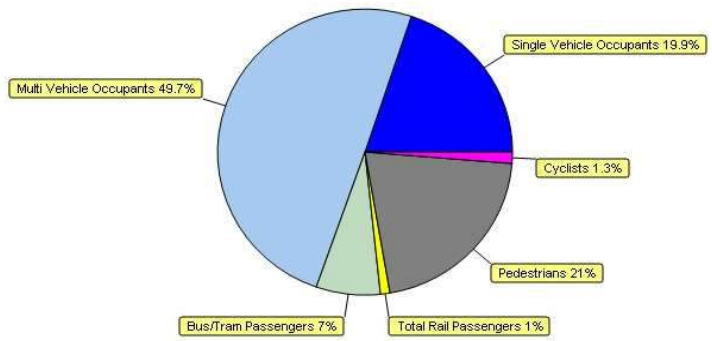
Start/End Time Selection
Start 11:00
End 12:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

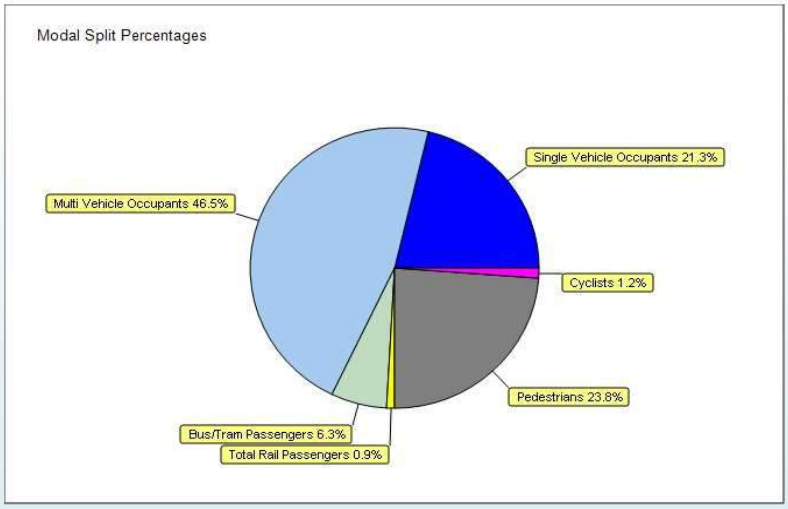
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 12:00
End 13:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

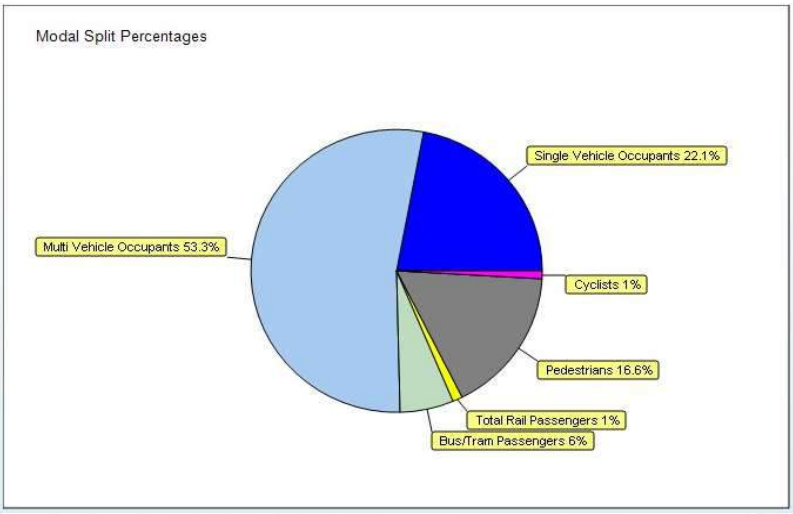
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 13:00
End 14:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

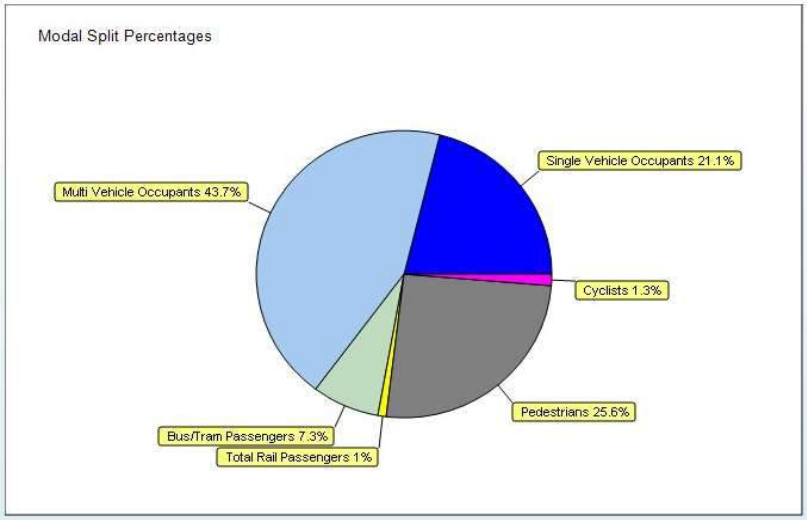
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 14:00
End 15:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

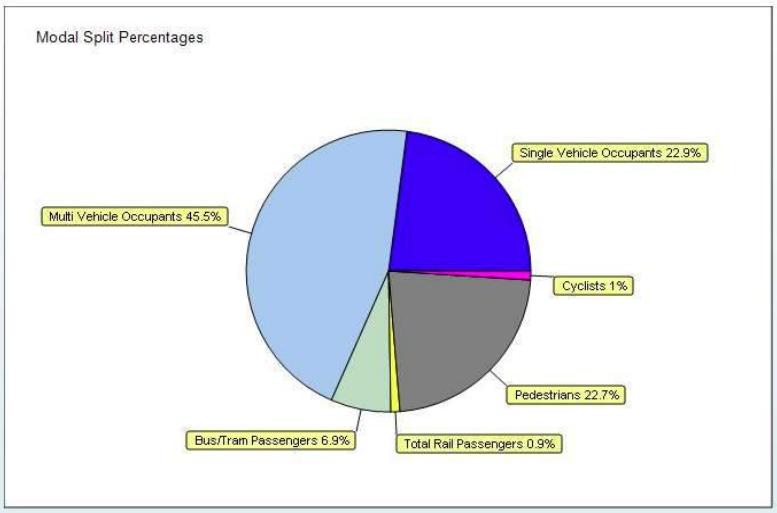
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 15:00
End 16:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

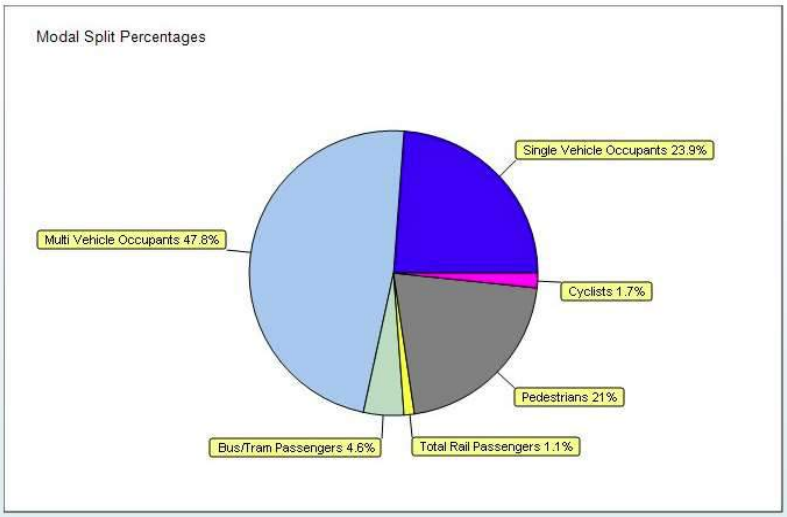
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 16:00
End 17:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

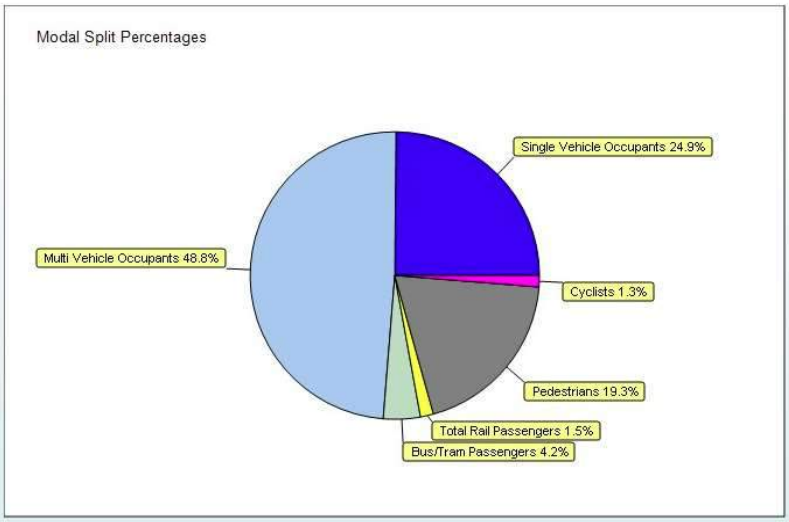
- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 17:00
End 18:00

WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 01 - RETAIL A - FOOD SUPERSTORE | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection
Start 18:00
End 19:00

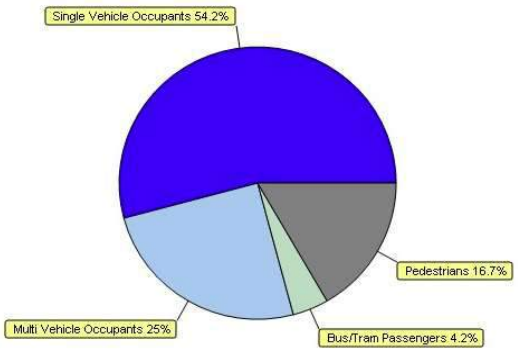
WARNING
Only a time period within the 07:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Appendix H

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection

Start 07:00

End 08:00

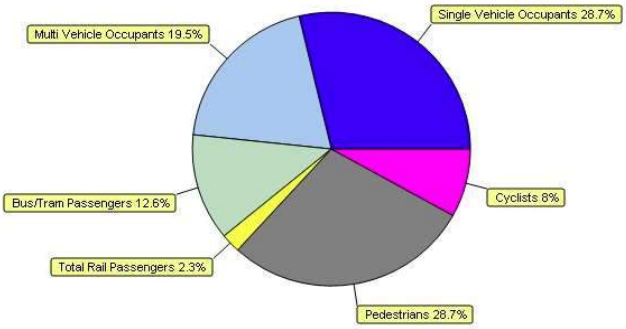
WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection

Start 08:00

End 09:00

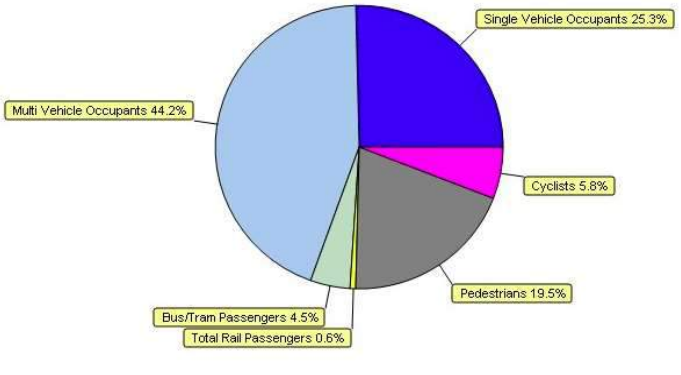
WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction
- Arrivals
- Departures
- Totals

- Use All Times
- Select Start/End Time
- Use Peak Period

Start/End Time Selection

Start 09:00

End 10:00

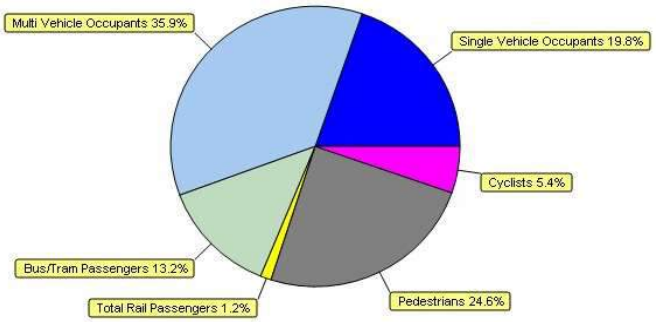
WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time / Use Peak Period (Select Start/End Time)

Start/End Time Selection: Start 10:00, End 11:00

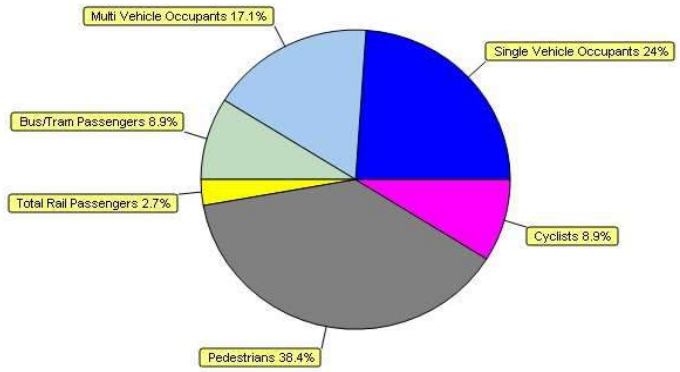
WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time / Use Peak Period (Select Start/End Time)

Start/End Time Selection: Start 11:00, End 12:00

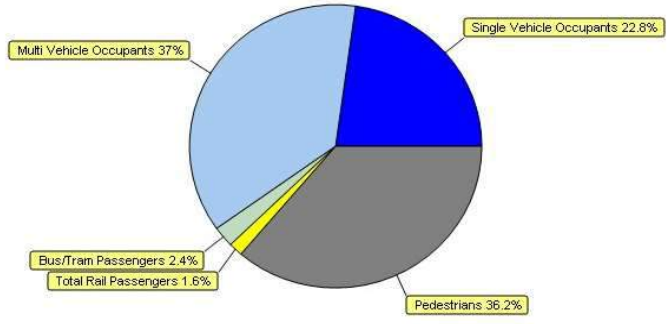
WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return

Modal Split Percentages



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time / Use Peak Period (Select Start/End Time)

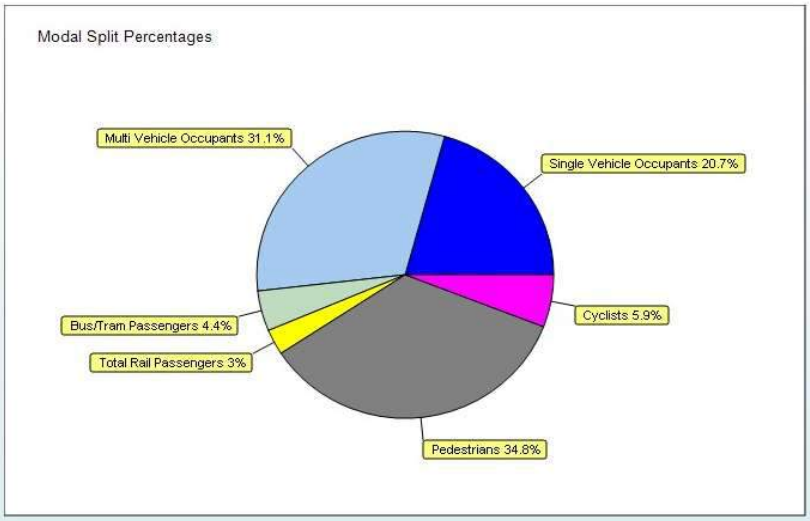
Start/End Time Selection: Start 12:00, End 13:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

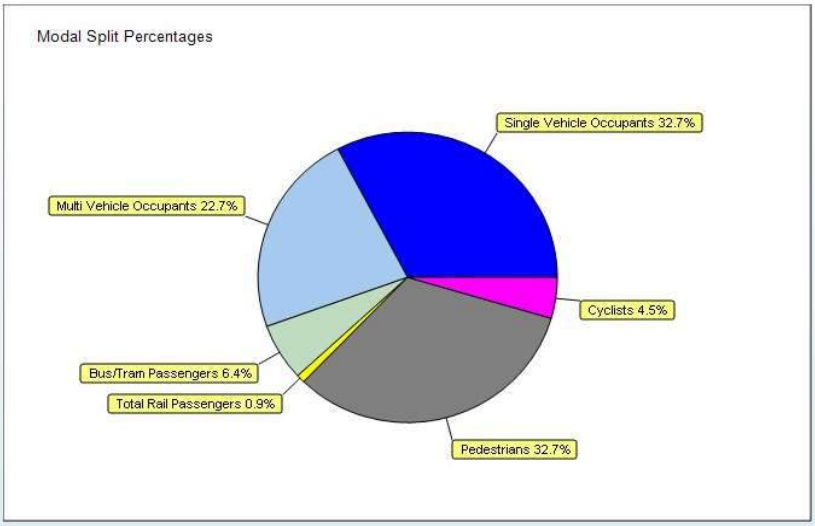
Start/End Time Selection: Start 13:00, End 14:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

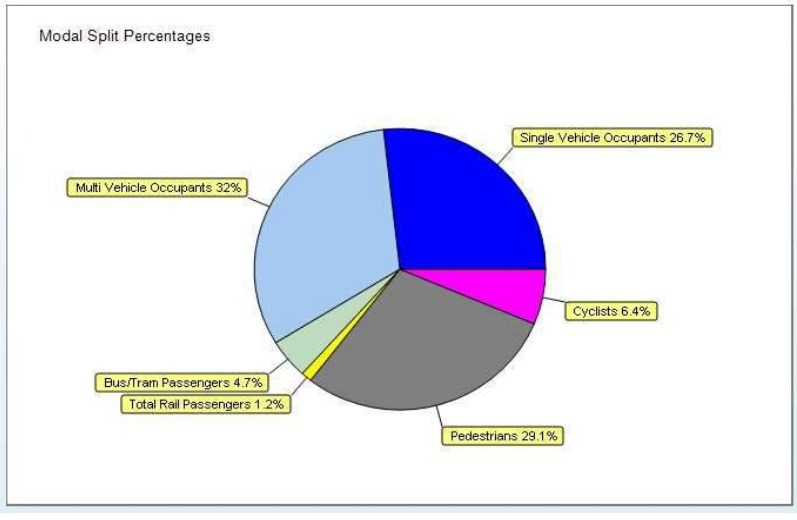
Start/End Time Selection: Start 14:00, End 15:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

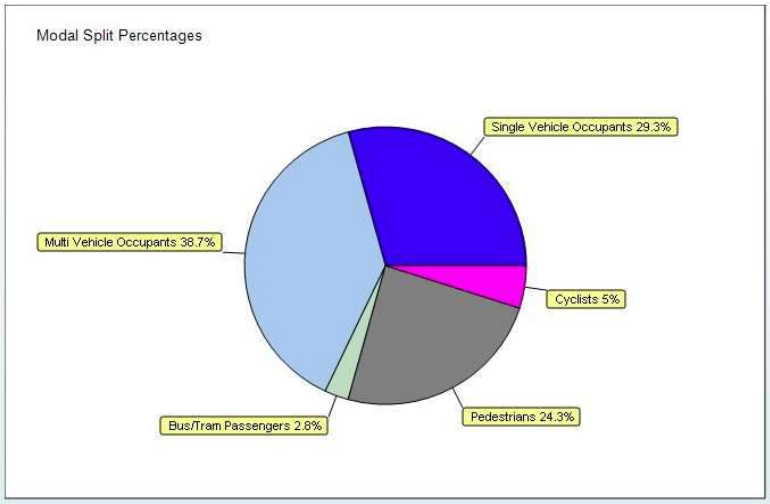
Start/End Time Selection: Start 15:00, End 16:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

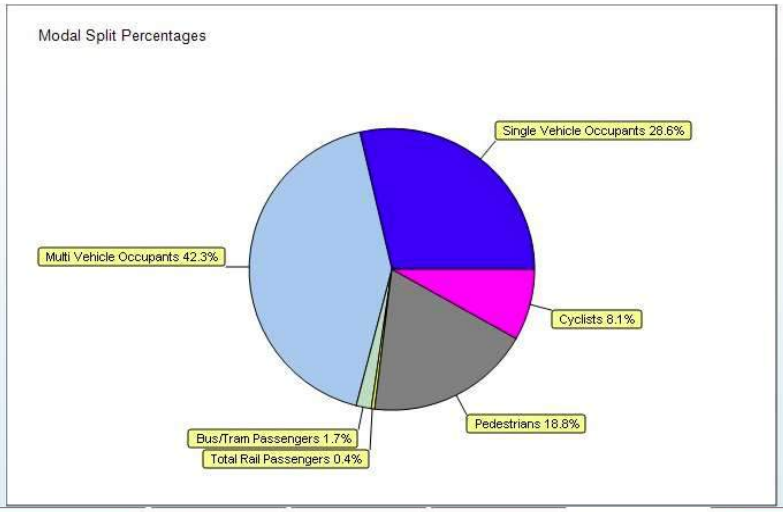
Start/End Time Selection: Start 16:00, End 17:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

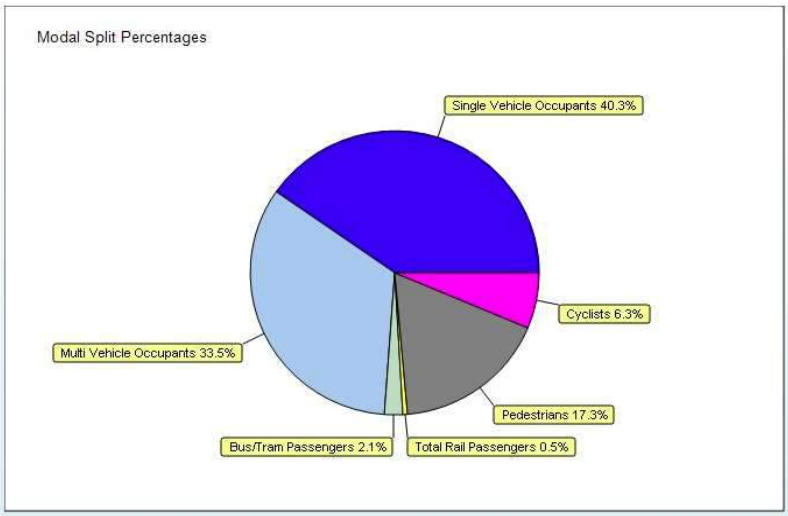
Start/End Time Selection: Start 17:00, End 18:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

Graph | 07 - LEISURE K - FITNESS CLUB (PRIVATE) | MULTI-MODAL TRIP RATE CALCULATIONS

Trip Rate | List Sites | Map | Export to PDF/JPEG | Graph | Library | Reports | Good Practice Guide | Settings | Help | Log Out | Return



Time Range/Peak Period Selection

Direction: Arrivals / Departures / Totals (Totals)

Use All Times / Select Start/End Time (Select Start/End Time) / Use Peak Period

Start/End Time Selection: Start 18:00, End 19:00

WARNING

Only a time period within the 06:00-22:00 window can be used to create the chart, time periods outside this window have insufficient surveys

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