Stanmore Properties Ltd and Apley Estate

Stanmore Village, Bridgnorth

High Level Transport Appraisal

March 2020

Project Code: 4151

PJA
Seven House
High Street
Longbridge
Birmingham
B31 2UQ
pja.co.uk

Version Control and Approval

Version	Date	Main Contributor	Issued by	Approved by
A – Draft for Client	20 February 2020	JO	CS	CS
B – Updated modelling	11 March 2020	JO	CS	CS

Prepared for

Stanmore Properties Ltd and Apley Estate

Contents

Section		Page
1	Introduction	1
1.1	Overview	1
1.2	Report Purpose and Structure	2
1.3	Scoping Discussions	2
2	Baseline Conditions	4
2.1	Introduction	4
2.2	Local Highway Network	4
2.3	Sustainable Transport	5
2.4	Local Facilities	8
2.5	Highway Safety	9
3	Travel Demand	12
3.1	Introduction	12
3.2	Trip Generation	12
3.3	Trip Distribution	13
3.4	Trip Assignment	15
3.5	Off-Site Impacts	15
4	Junction Capacity Modelling	17
4.1	Introduction	17
4.2	Junction Capacity Assessments	17
4.3	Recommendations	22
5	Development and Access Proposals	23
5.1	Introduction	23
5.2	Development Aspirations	23
5.3	Park and Choose	24
5.4	Pedestrian and Cycle Access	24
5.5	Vehicle Access	25
5.6	Public Transport	26
5.7	Parking Provision	26

Appendices

Appendix A Road Safety Data 28

Appendix B TRICS outputs 29

Appendix C Trip Distribution and Assignment 30

Appendix D Junction Modelling Outputs 31

1 Introduction

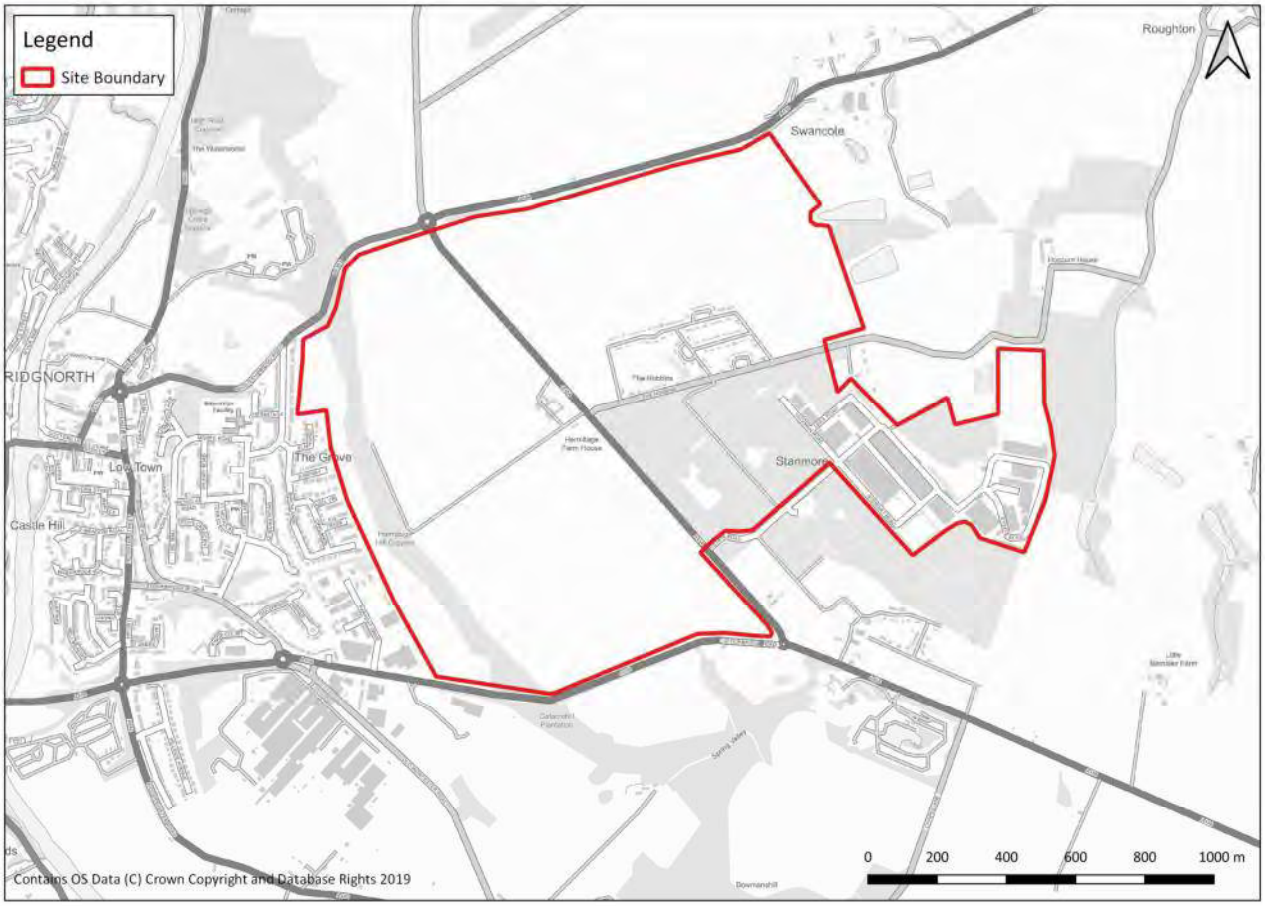
1.1 Overview

1.1.1 PJA have been commissioned by Stanmore Properties Ltd and Apley Estate to provide transport services in relation to the Stanmore Village site in Bridgnorth.

1.1.2 The site is located approximately 1.5km east of Bridgnorth town centre. It is bisected by the A454 between its junction with Wolverhampton Road and an Unnamed Road to the north, and the A458 to the south, as shown in Figure 1-1.

1.1.3 It should be noted that the red line area shown in Figure 1-1, includes all land which is in any way influenced by the development proposals including existing development, retained parkland, and Safeguarded land, only to be removed from Green Belt designation.

Figure 1-1: Site location



1.1.4 It is currently proposed to develop the site to include approximately 850 dwellings, 16ha of employment (approximately 68,000m^2 of buildings), a local centre and associated green infrastructure.

1.2 Report Purpose and Structure

1.2.1 This report provides a high-level appraisal of the site in transport terms, based on the findings from a site visit, traffic count data and desktop based appraisal. It sets out at a high level, the key issues and opportunities for the site.

1.2.2 The remainder of this report is structured as follows:

- **Section 2** describes the baseline conditions within the vicinity of the site including access by all modes, highway safety and the local highway network;
- **Section 3** provides details on the likely trip generation for the site, based on current development proposals, and resultant distribution and assignment;
- **Section 4** outlines the results of junction capacity modelling; and
- **Section 5** outlines the key issues for the site and how these may be addressed, in terms of providing access to site by all modes and on-site parking provision.

1.3 Scoping Discussions

1.3.1 Initial scoping discussions have been conducted with the Highways Officers at Shropshire County Council (SCC). A summary of these discussions is as follows:

- SCC were comfortable with access from the A454 and implementing measures to reduce speed and severance. The view was that roundabouts would be the most appropriate form of junction as they would assist in controlling speeds
- SCC was less amenable to an access off the A458 and would need to be convinced that a safe access could be provided on this part of the network;
- SCC would be looking for 1:20 gradients on all roads and pedestrian linkages however there is some flexibility in this where it cannot be achieved;
- SCC agreed that the A458 and B4363 were not attractive for walking and cycling into Bridgnorth and that a link through the woodland to the west of the site would be necessary. SCC accepted the constraints (gradients and trees) and that the roads that the link would tie into are steeper than 1:20 and this is a reasonable consideration;
- SCC was comfortable with using JtW census data for the distribution;
- SCC suggested a need to consider other committed developments but suggested the existing allocated sites to the west of Bridgnorth have been in the plan for a long time with no sign of coming forward and therefore there is an argument not to treat them as committed;
- SCC suggested that parking in the town centre was a concern for residents; and

- SCC suggested that the P&R was important to address concerns of parking. SCC agreed that it could accept a dual use car park linked to the local centre with a bus stop/hub linking to the town centre.

2 Baseline Conditions

2.1 Introduction

2.1.1 This section provides an outline of the baseline conditions within the vicinity of the site, including the local highway network, public transport infrastructure and highway safety.

2.2 Local Highway Network

A454

2.2.1 The A454 is a single carriageway which runs north-west to south-east between its junction with the B4263 in the north and A458 to the south. Locally it provides access between Wolverhampton and the outskirts of Bridgnorth. It has a speed limit of 60mph (national speed limit). It is approximately 7m in width, with a narrow footway (approximately 1m in width) provided on the eastbound side of the carriageway. There are numerous hidden dips in the road which restrict visibility in certain locations. It also provides access to Stanmore Country Park, and Stanmore Business Park (a large industrial estate), from Estate Road.

B4363 Wolverhampton Road

2.2.2 The B4363 Wolverhampton Road is a single carriageway road providing access from the east to Bridgnorth Town Centre. To the west of its junction with A454, the speed limit is 40mph. Travelling towards Bridgnorth Town Centre, there is an incline of 10%, with sharp bends to the left and right. In the eastbound direction there is an environmental weight restriction (HGVs over 7.5 tonnes). A narrow footway is provided on the westbound side of the carriageway (approximately 1.5m in width). To the south of its junction with Lodge Lane there is a layby provided on both sides of the carriageway.

A458 Stourbridge Road

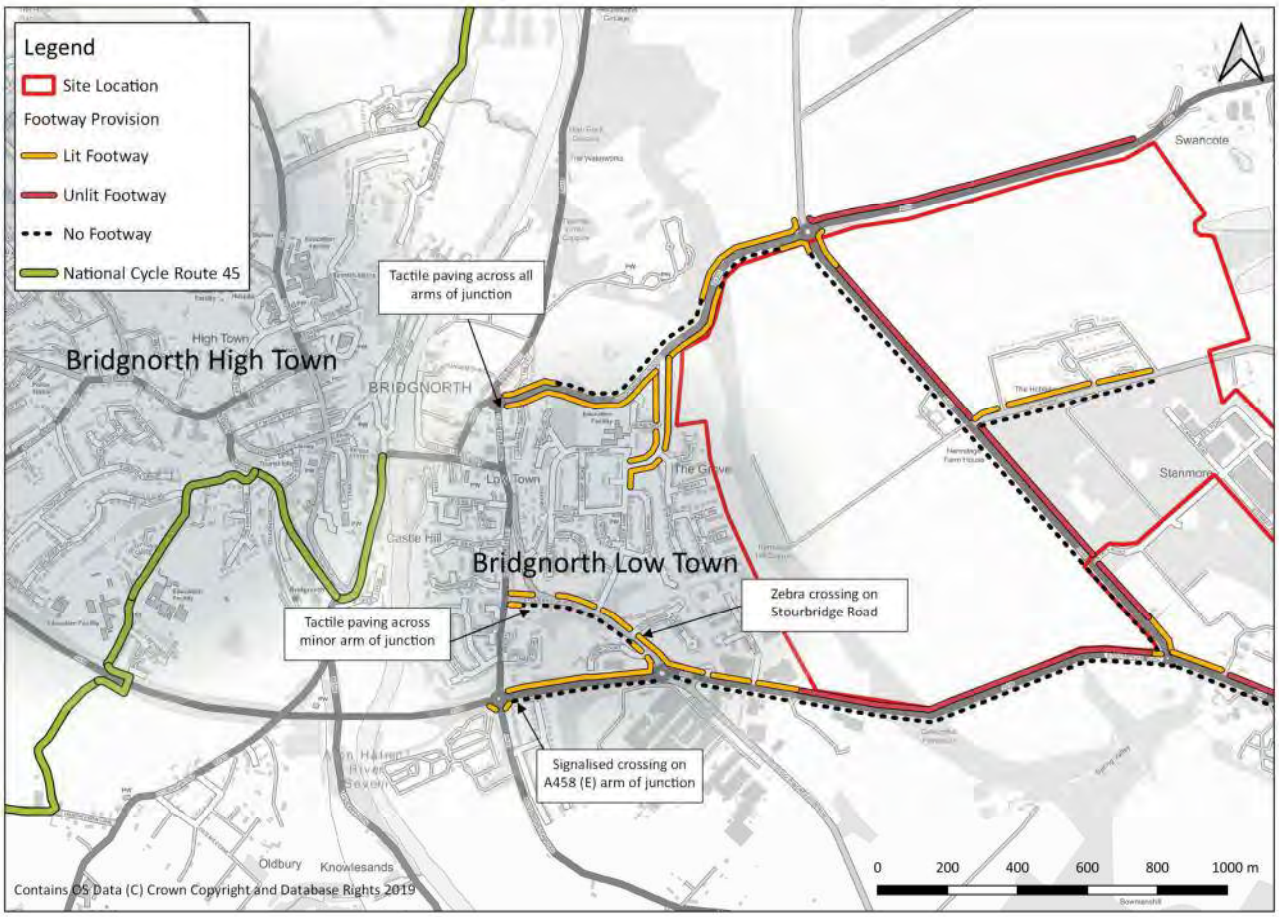
2.2.3 The A458 Stourbridge Road is a single carriageway road which provides access between Bridgnorth and Stourbridge to the east, and Shrewsbury in the west. In the vicinity of the site, the A458 has a speed limit of 60mph (national speed limit). There is a narrow footway intermittently provided on alternating sides the carriageway (<1m in width). It forms a three-arm roundabout with the A454 to the south of the site.

2.3 Sustainable Transport

Walking and Cycling

2.3.1 A summary of the footway provision and crossing points on the local highway network is provided in Figure 2-1. The provision for non-motorised users has been considered between the site and Bridgnorth town centre via A454, Wolverhampton Road and A458.

Figure 2-1: Local footway provision, crossing points and cycle routes



2.3.2 There is no specific provision for cyclists in the direct vicinity of the site, however, as shown in Figure 2-1, National Cycle Route 45 routes through Bridgnorth High Town.

2.3.3 The A454 has an unlit, narrow footway provided on the southbound side of the carriageway. There are limited existing crossing facilities on the A454, with no tactile paving provided at its junction with either the A458 or Wolverhampton Road. There is no footway provided to access bus stops on the northbound side of the carriageway.

2.3.4 Wolverhampton Road has an intermittent lit footway, which is very narrow and of poor quality between its junction with A454 and Lodge Lane. South of this point, the quality of the footway

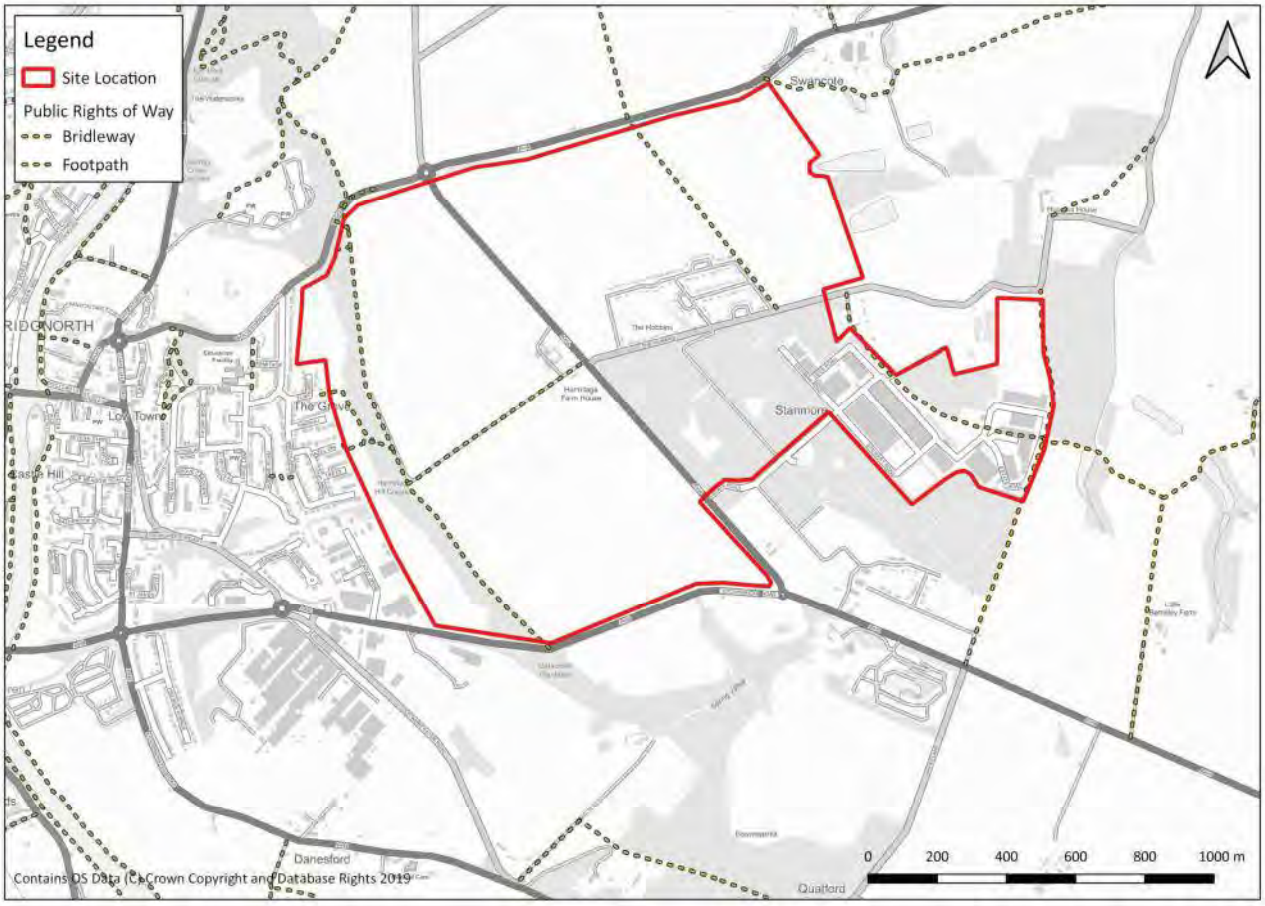
improves and at the junction with A442 Mill Street, tactile crossing is provided on all arms of the roundabout facilitating access into the Low Town and surrounding residential areas.

2.3.5 The A458 has a narrow, unlit footway within the vicinity of the site. South of the junction with Faraday Drive, the footway widens and is lit. A zebra crossing is provided on Stourbridge Road facilitating access into to Low Town, supermarket and surrounding residential areas.

Public Rights of Way

2.3.6 There are a number of public rights of way (PRoW) within the vicinity of the site as shown in Figure 2-2. Of particular interest is the PRoW which links the A454 with Elmhurst and Hazel View to the west of the site. This provides an opportunity for sustainable linkages (walking and cycling) from the site into Bridgnorth Low Town and beyond.

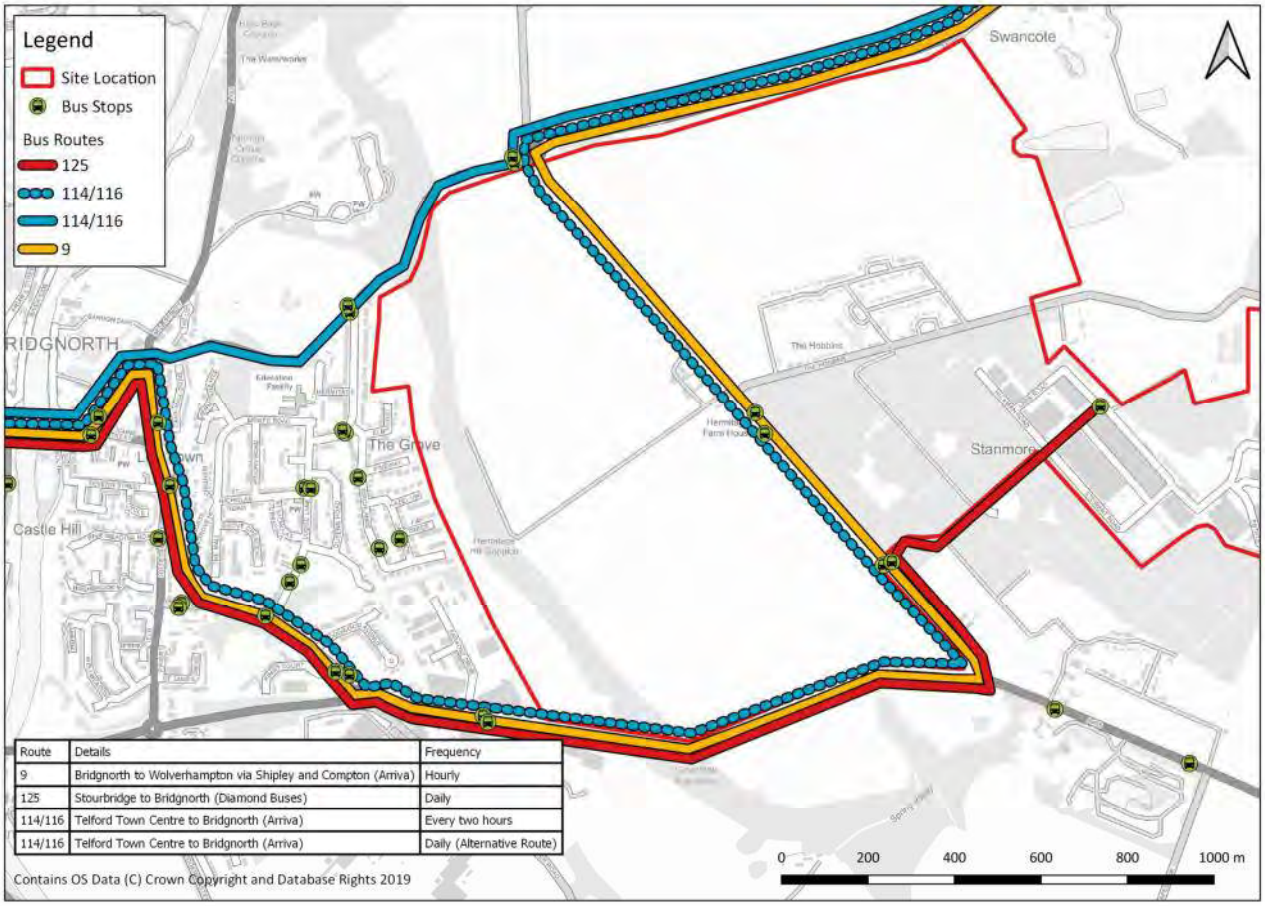
Figure 2-2: Public rights of way (PRoW)



Public Transport

2.3.7 Figure 2-3 shows the nearest bus stops to the development site and the bus routes serving these stops. The 125 and 114/116 services are infrequent services, and the number 9 runs on an hourly basis, which currently terminates at Stanmore Industrial Estate.

Figure 2-3: Public transport provision



2.3.8 The bus stops located on A454 adjacent to the access to Stanmore County Park (Estate Road) are both flag and pole bus stops, with timetable information. As stated previously, there is no footway or crossing provision to link those on the northbound side of the carriageway to surrounding facilities. In the southbound direction, the bus stop is located at the mouth of the junction with Estate Road.

2.3.9 The eastbound bus stop located on the A454 adjacent to The Hobbins is a shelter with timetable provision.

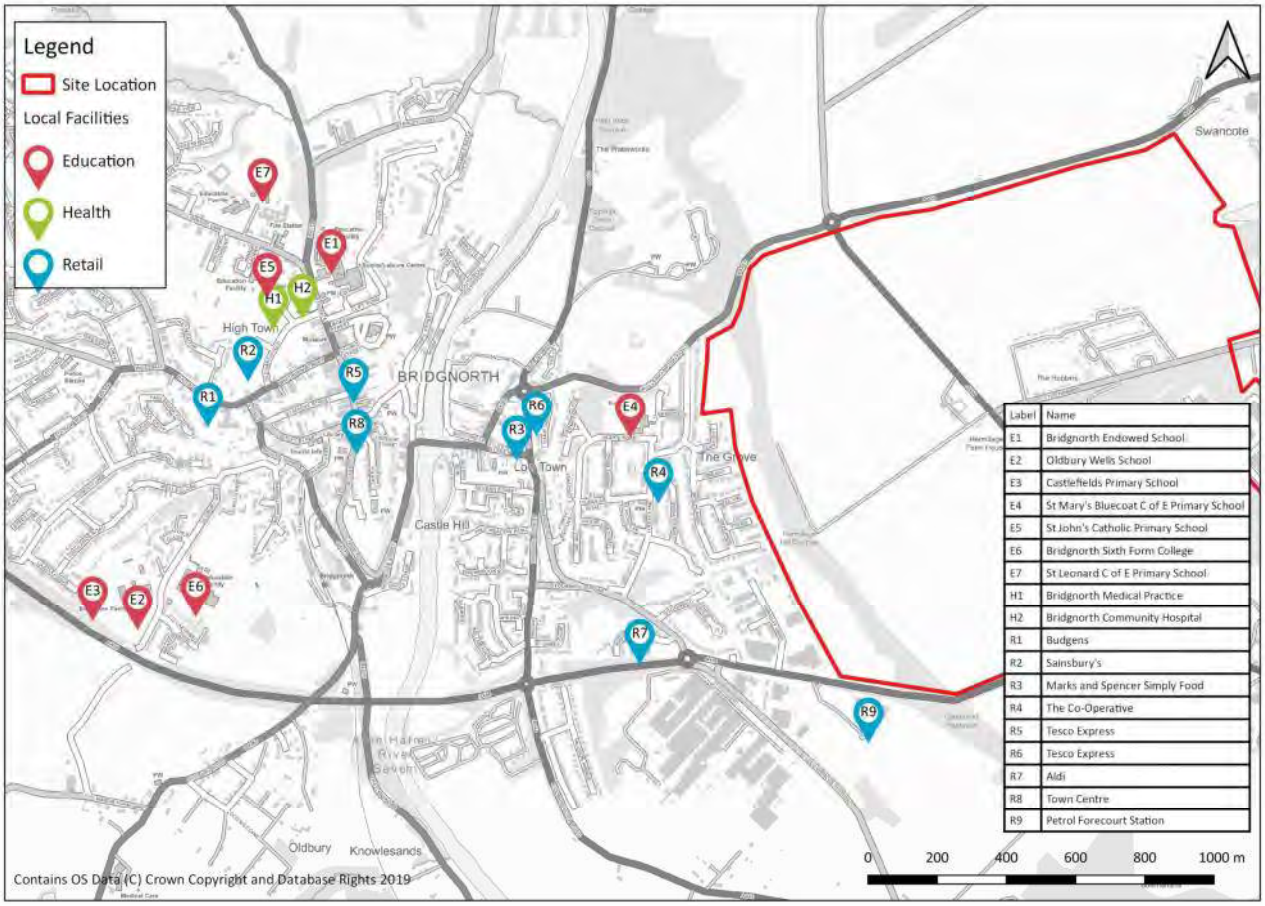
Park and Ride

2.3.10 It is understood that a key local issue in Bridgnorth is the perceived lack of car parking in the town centre, particularly on summer weekends. Currently a Park & Ride site operates from the Nock Deighton Auction Yard (WV16 4QR) on Saturday's between April and October[1]. The bus service from this site operates between 9:30am and 4:30pm on a 20-minute frequency.

2.4 Local Facilities

2.4.1 Figure 2-4 shows the location of the nearest local facilities (education, health and retail). As shown in Figure 2-4 most of the facilities are in Bridgnorth Town Centre. The nearest primary school is St Mary's Bluecoat C of E Primary School on Morfe Road, approximately 2km from the site.

Figure 2-4: Local facilities (education, health and retail)



[1] http://www.bridgnorthcofc.co.uk/park-ride/

2.4.2 It is important to note that the site will be a mixed-use development with local employment opportunities as well as local facilities as part of a local centre.

2.5 Highway Safety

2.5.1 Collision data has been requested from SCC for a five-year period within the vicinity of the site. A summary of the collisions by link and junction (excluding those with less than one collision reported) is provided in Table 2-1. The raw data is presented in **Appendix A.**

2.5.2 The information presented in Table 2-1 shows that on the majority of links and junctions there is an average of less than one collision per year. In addition, no fatal collisions have been recorded across the whole study area.

Table 2-1: Collision data summary; last 5 years.

Location	Type	Accident Severity			
		Slight	Serious	Fatal	Total
A454 / Wolverhampton Road Roundabout	Junction	1	1	0	2
A454 / A458 Roundabout	Junction	1	1	0	2
A442 / A458 Roundabout	Junction	2	2	0	4
A442 / Wolverhampton Road / Mill Street Roundabout	Junction	2	0	0	2
Mill Street / St Johns Street	Junction	2	0	0	2
A454	Link	2	0	0	2
A458 Stourbridge Road	Link	2	2	0	4
B4363 Wolverhampton Road	Link	7	1	0	8
A442 Hospital Street	Link	2	0	0	2
A442 Cann Hall Road	Link	5	2	0	7

2.5.3 Based on the last five-years of collision data there was a cluster of collisions reported in two locations:

- B4363 Wolverhampton Road; and
- A442 Cann Hall Road.

2.5.4 On the B4263 Wolverhampton Road, there is a cluster of six collisions (five slight, one serious) that were recorded on the bend in the road to the north of its junction with Lodge Lane.

- Three of these collisions are reported to have involved a vehicle travelling southbound losing control and colliding with another vehicle travelling northbound. Common contributory factors between these collisions were listed as loss of control and road layout.
- Three collisions are reported to have involved a vehicle travelling northbound colliding with another vehicle travelling southbound. One of these involved a HGV travelling northbound on B4263, disobeying the weight restriction in place restricting use for vehicles over 7.5t, stopping

whilst going up the hill, and the vehicle behind which was reported to have been exceeding the speed limit, colliding with an oncoming vehicle in the opposite direction. A common contributory factor between these collisions was listed as 'failure to look properly'.

- No collisions involved non-motorised road users.

2.5.5 On A442 Cann Hall Road there is a cluster of seven collisions (five slight, two serious) in the vicinity of the junction with Cann Hall Drive

- Two of the collisions in this location are reported to have involved a vehicle colliding with a pedestrian crossing the road. One of these is reported to have involved a pedestrian crossing the road, who crossing into the path of an oncoming vehicle. The second collision involved a pedestrian being hit by a wing mirror of a turning vehicle. Both of the collisions were classified as serious and occurred in the same location on A442 Cann Hall Road.
- Three of the collisions in this location involved vehicles turning into, or out of the petrol station, one of these was reported to be a rear shunt incident involving two vehicles travelling southbound on A422 and two involved a vehicle turning right onto A442 (N) into the path of another oncoming vehicle. A common contributory factor between these collisions was listed as failure to judge another person's path or speed. One of these collisions involved a motorcyclist.
- The other two collisions in this location were not reported to involve common movements, nor non-motorised users. They were both classified as slight.

2.5.6 On the B4263 Wolverhampton Road, there is a clustering of collisions with common movements and contributory factors within the five-year study period. However, given that these have occurred over a five-year study period and the severity of the collisions is low, it is not considered that there is an existing road safety issue. In addition, the distribution presented later in this report suggests that the development will not considerably increase traffic on this link during peak periods.

2.5.7 On A442 Cann Hall Road, the collision severity and frequency of collisions is low. There is not a high occurrence of collisions with common movements or contributory factors. Therefore, it is not considered that there are any existing road safety issues which could be exacerbated by the proposed development in this location.

2.5.8 Two collisions were reported on A454, from which it is proposed to take principal access. One of these collisions is reported to have involved a vehicle exceeding the speed limit and losing control, resulting in the vehicle leaving the carriageway. The second collision is reported to have involved a motorcyclist overtaking a vehicle on A454 without seeing an approaching vehicle travelling in the opposite direction in a dip in the road. These two collisions were both classified as slight. Therefore, based on the information available, it is not considered that there is are any existing road safety issues which would be exacerbated by introduction of a junction to access the site.

2.5.9 Notwithstanding the above conclusion, the development would facilitate significant changes to the A454, including reduced speed limits. Any proposed changes to the highway network would be subject to detailed design and independent road safety audits at the appropriate time.

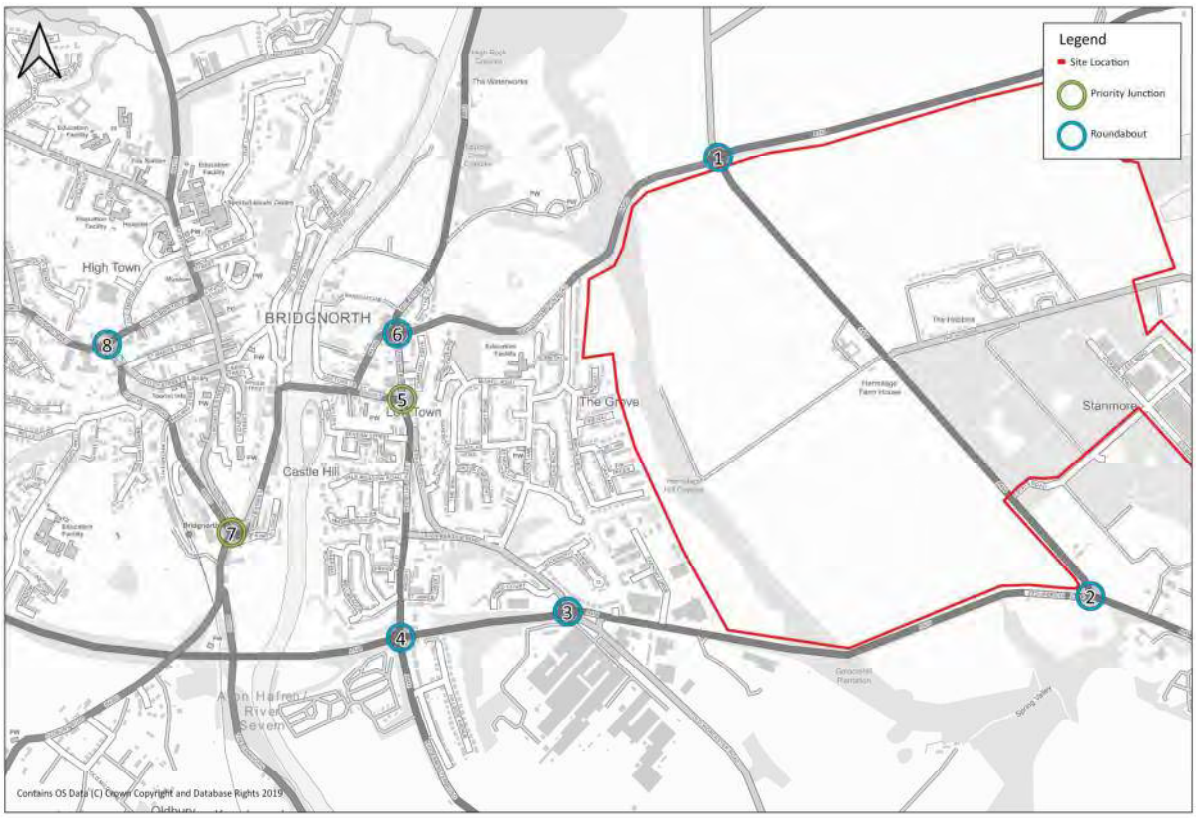
3 Travel Demand

3.1 Introduction

3.1.1 This section of the report sets out the likely vehicle trip generation, distribution and assignment for the site, as well as the impact this may have on the local highway network.

3.1.2 The study area for the assessment has been agreed with SCC and, is shown in Figure 3-1.

Figure 3-1: Study Area



3.2 Trip Generation

3.2.1 To calculate the travel demand for the site, trip rates have been extracted from the TRICs database and resultant indicative trip generation calculated using the following development mix:

- 850 dwellings; and
- 68,000m^2 of employment buildings.

3.2.2 The TRICs outputs are provided in **Appendix B.**

3.2.3 It is assumed that the trips generated by the local centre will be internalised, and therefore have not been included for within the vehicle trip generation. From the *'Shropshire Local Plan Review: Consultation on Preferred Sites'* document it is understood that expansion space for existing

occupiers of Stanmore Industrial Estate is a local priority, and so the travel demand has been calculated for the employment element of the site based on this land use assumption.

Table 3-1: Vehicle trip rates and trip generation

Land Use	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Trip Rates									
Residential (Houses Privately Owned)	0.128	0.380	0.508	0.332	0.140	0.472	0.135	0.185	0.32
Employment (Industrial Estate)	0.125	0.048	0.173	0.034	0.120	0.154	0	0	0
Trip Generation									
Residential	109	323	432	282	119	401	115	157	272
Employment	85	33	118	23	82	105	0	0	0
Total	**194**	**356**	**550**	**305**	**201**	**506**	**115**	**157**	**272**

3.2.4 The information presented in Table 3-1 shows that as a whole the site is forecast to generate 550 two-way vehicle trips in the AM peak and 506 two-way vehicle trips in the PM peak. During the Saturday peak, the site is forecast to generate 272 two-way vehicle trips.

3.3 Trip Distribution

3.3.1 A trip distribution for the residential and employment elements of the site has been calculated using 2011 census journey to work data and online route planning software which considers congestion on the local highway network. It is recognised that drivers will utilise the route with the least congestion, which may introduce rat running on parallel, alternative routes. A manual check of the distribution has been conducted to ensure the most appropriate routes have been selected for the purposes of this assessment. The full distribution is shown in **Appendix C.**

3.3.2 For the purposes of this assessment, it is assumed that the whole site is accessed from a new junction(s) onto A454 (though in reality much of the new employment provision will use the existing, improved, Estate Road junction to the A454). A summary of the distribution for the residential and employment elements of the site is provided in Figure 3-2 and Figure 3-3, respectively.

Figure 3-2: Residential vehicle trip distribution

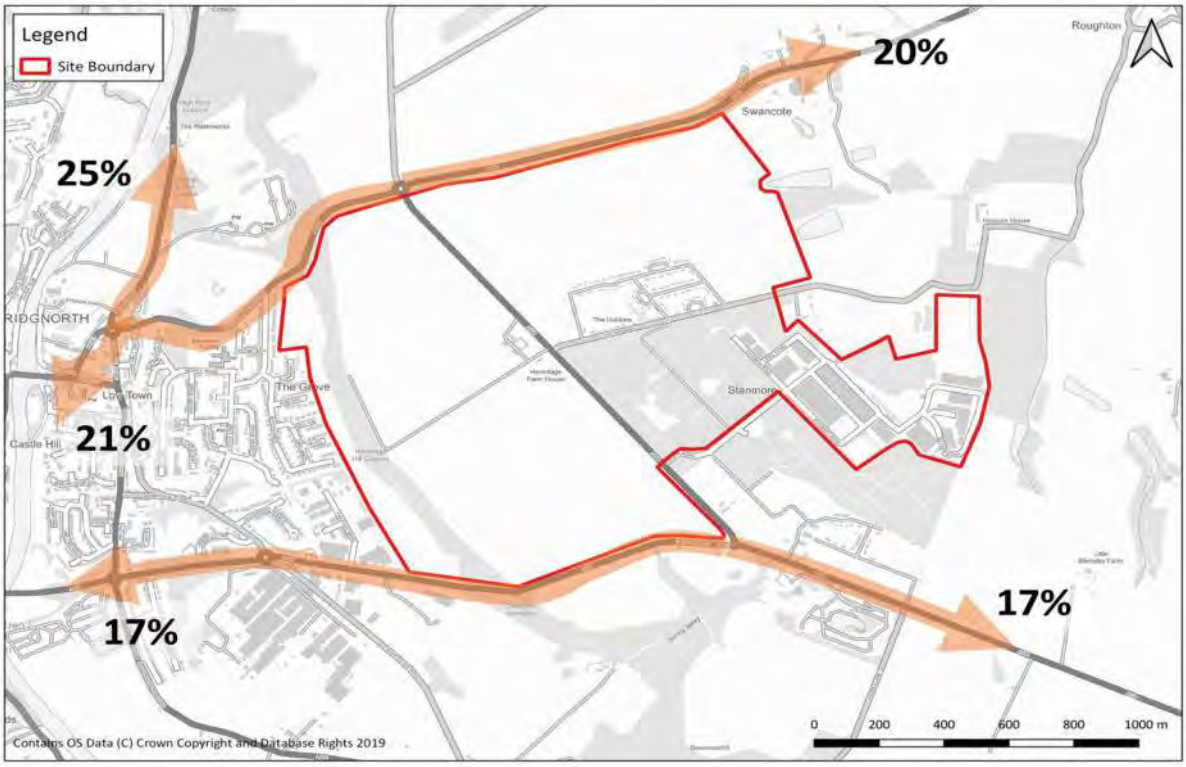
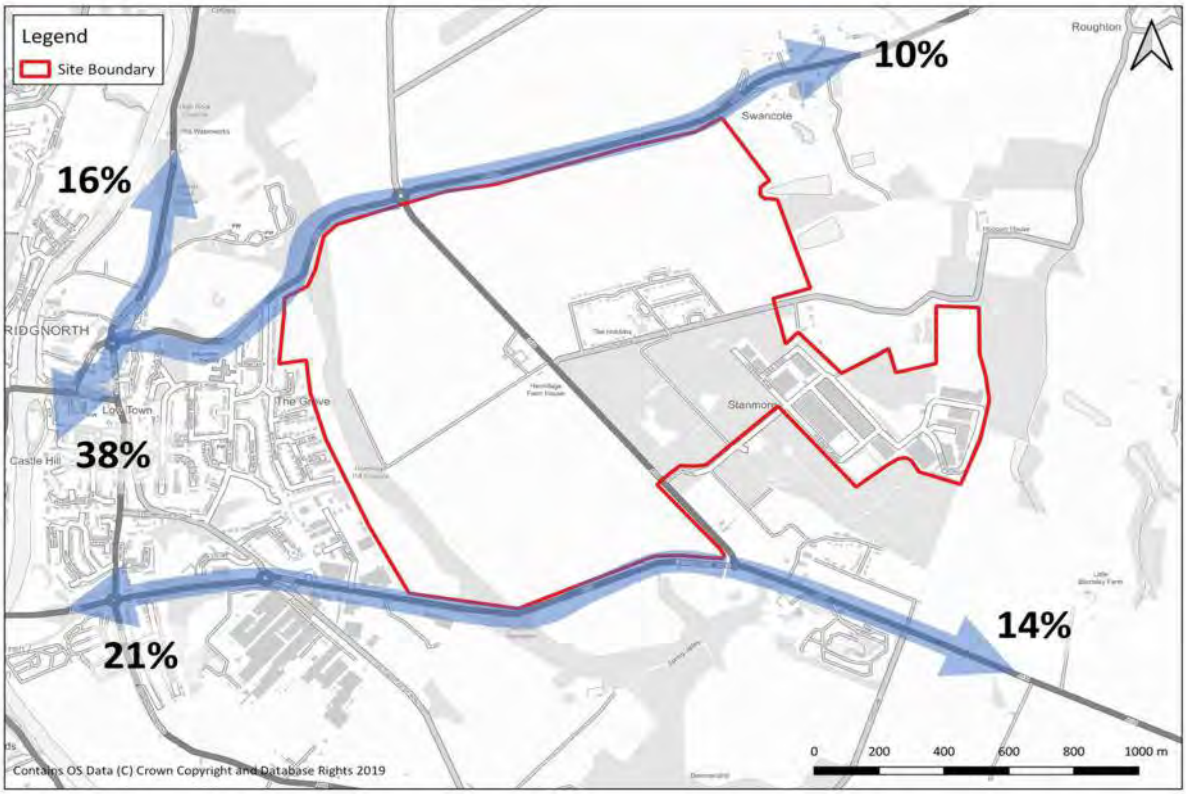


Figure 3-3: Employment vehicle trip distribution



3.4 Trip Assignment

3.4.1 Based on the distribution in Figure 3-2 and Figure 3-3 for each land use, the trip generation presented in Table 3-1 has been assigned onto the local highway network. The resultant assignment is shown in **Appendix C.** A summary of the number of two-way vehicle trips through each local key junction (as agreed with SCC) is provided in Table 3-2, for the AM, PM and Saturday peak periods.

Table 3-2: Trip assignment through key junctions

Junction Location		AM Peak	PM Peak	Saturday Peak
1	A454 / Wolverhampton Road	360	331	179
2	A454 / A458 Stourbridge Road / A458	189	174	94
3	Stourbridge Road / A458 / Old Worcester Road / A458 Stourbridge Road	98	90	47
4	A442 Cann Hall Road / A458 Stourbridge Road / A442 Kidderminster Road / A458	98	90	47
5	A442 Cann Hall Road / St John Street	110	110	53
6	A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street	263	242	126
7	B4363 / B4373	42	38	7
8	Whitburn Street / B4373 / B4364	15	13	0

3.5 Off-Site Impacts

3.5.1 Traffic counts were conducted at junctions 1 to 8 listed in Table 3-2 on the following dates/time periods:

- Thursday 12th September 2019 (07:00 – 10:00, 16:00 – 18:00)
- Saturday 17th August 2019 (10:00 – 16:00)

3.5.2 Table 3-3 sets out the flows through each junction for the AM, PM and Saturday peak periods , for the 2019 baseline and also the traffic forecast to be generated by the development. The % increase in traffic flow as a result of the development has been colour coded as follows:

- 0 – 10% increase – **green**
- 10 – 20% increase – **orange**
- 20% + increase – **red**

3.5.3 It is important to note that a high percentage impact does not indicate a congestion issue that needs to be addressed and it can simply reflect a low base level of traffic. Equally a low percentage impact does not necessarily indicate there are no issues.

Table 3-3: Off-site traffic impact

Junction	Weekday AM Peak (08:00 – 09:00)			Weekday PM Peak (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	2019 Base	Development	% Impact	2019 Base	Development	% Impact	2019 Base	Development	% Impact
J1	1,051	360	34%	1,162	331	28%	1,066	179	17%
J2	749	189	25%	922	174	19%	838	94	11%
J3	887	98	11%	1,117	90	8%	1,066	47	4%
J4	1,992	98	5%	2,368	90	4%	2,111	47	2%
J5	1,776	110	6%	2,122	110	5%	1,814	53	3%
J6	2,157	263	12%	2,345	242	10%	2,061	126	6%
J7	1,369	42	3%	1,431	38	3%	1,399	7	1%
J8	1,348	15	1%	1,572	13	1%	1,583	0	0%

3.5.4 This shows that the largest increase is forecast at junction 1 and 2, this is unsurprising given that these are the roundabouts on the A454 from which access to the development will be provided.

3.5.5 The development is forecast to have less than a 3% increase in traffic flows on all approaches to junction 7 and 8.

3.5.6 Junction 3, 4, 5 and 6 are in Bridgnorth Town Centre. It is proposed for the development to have a comparable impact at junctions 4 and 5, of between 4 – 6% in the weekday peaks and up to 3% in the weekend peak, and also at junction 3 and 6 of between 8-11% in the weekday peaks and 4 – 6% in the weekend peak.

3.5.7 On the basis of the above, junction capacity modelling for all three peak periods has been conducted at the following junctions:

- **Junction 3** - Stourbridge Road / A458 / Old Worcester Road / A458 Stourbridge Road
- **Junction 4** - A442 Cann Hall Road / A458 Stourbridge Road / A442 Kidderminster Road / A458
- **Junction 5 -** A442 Cann Hall Road / St John Street
- **Junction 6** - A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street

4 Junction Capacity Modelling

4.1 Introduction

4.1.1 This section provides details of junction capacity modelling undertaken at the following junctions:

- Junction 3 - Stourbridge Road / A458 / Old Worcester Road / A458 Stourbridge Road
- Junction 4 - A442 Cann Hall Road / A458 Stourbridge Road / A442 Kidderminster Road / A458
- Junction 5 - A442 Cann Hall Road / St John Street
- Junction 6 - A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street

4.2 Junction Capacity Assessments

4.2.1 The above named junctions have been modelled in Junctions 9 modelling software used to understand the operation of non-signalised junction in terms of vehicle queueing, capacity and delay. These models have been built using traffic count data collected in 2019, the trip generation/distribution presented in Section 3 of this note and observations made on site.

4.2.2 This section reports in queue lengths in vehicles and Ratio of Flow to Capacity (RFC) on each arm of the junction. RFC relates to the capacity for traffic to enter a junction and is provided for each arm of an unsignalized junction. An RFC of below 0.85 indicates that a junction operates within capacity for the assessed flows, and RFC of over 1.0 indicates that a junction is operating at capacity. A summary of the modelling results for each junction are presented in this section, with full outputs provided in **Appendix D.**

4.2.3 All junctions have been modelled in the following scenarios for the weekday AM, weekday PM and weekend peak periods:

- 2019 Base; and
- 2019 Base + Development.

4.2.4 This modelling provides an indication of the impact of the development for the purposes of initial, high-level discussions. As part of the planning application for the site, further consideration regarding the impact of the development on queueing and delay for a future year would need to be undertaken. A future year would be agreed in advance with SCC.

Junction 3 - Stourbridge Road / A458 / Old Worcester Road / A458 Stourbridge Road

4.2.5 This four-arm roundabout has been modelled using the ARCADY module of Junctions 9 (v9.5). Geometries have been taken from OS mapping. A summary of the results are provided in Table 4-1.

Table 4-1: Modelling results summary - Junction 3 - Stourbridge Road / A458 / Old Worcester Road / A458 Stourbridge Road

Lane	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)
2019 Base									
Stourbridge Road	0.21	0	4	0.21	0	4	0.24	0	4
A458 Stourbridge Road (East)	0.32	1	5	0.59	1	8	0.51	1	7
Old Worcester Road	0.05	0	4	0.08	0	4	0.03	0	4
A458 Stourbridge Road (West)	0.22	0	3	0.16	0	2	0.17	0	2
2019 Base + Development									
Stourbridge Road	0.22	0	4	0.22	0	4	0.24	0	4
A458 Stourbridge Road (East)	0.39	1	6	0.65	2	9	0.54	1	7
Old Worcester Road	0.05	0	4	0.08	0	4	0.03	0	4
A458 Stourbridge Road (West)	0.24	0	3	0.20	0	3	0.18	0	2

4.2.6 The results presented in Table 4-1 show that the junction currently operates within capacity on all approaches during all three peak periods. The maximum RFC is experienced on A458 Stourbridge Road (East) during the weekday PM peak, with an associated queue of one vehicle and eight second delay per vehicle.

4.2.7 It is forecast for the junction to continue to operate within capacity following addition of the trips generated by the proposed development. The development is forecast to have a no impact on queueing, with the maximum increase in delay of one section per vehicle forecast on A458 Stourbridge Road (East) during the weekday PM peak. It is therefore concluded that the development will be unlikely to have a detrimental impact on the operation of this junction albeit further future year assessments would be required at the appropriate time.

Junction 4 - A442 Cann Hall Road / A458 Stourbridge Road / A442 Kidderminster Road / A458

4.2.8 This four-arm roundabout has been modelled using the ARCADY module of Junctions 9 (v9.5). Geometries have been taken from OS mapping. A summary of the results are provided in Table 4-2.

Table 4-2: Modelling results summary - Junction 4 - A442 Cann Hall Road / A458 Stourbridge Road / A442 Kidderminster Road / A458

Lane	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)
2019 Base									
A442 (North)	0.60	2	10	0.74	3	14	0.54	1	8
A458 (East)	0.33	1	5	0.63	2	9	0.42	1	5
A442 (South)	0.44	1	6	0.57	1	9	0.44	1	6
A458 (West)	0.55	1	5	0.49	1	5	0.37	1	4
2019 Base + Development									
A442 (North)	0.62	2	11	0.76	3	16	0.54	1	8
A458 (East)	0.39	1	5	0.67	2	10	0.44	1	5
A442 (South)	0.45	1	6	0.59	1	10	0.45	1	6
A458 (West)	0.58	1	6	0.53	1	5	0.38	1	4

4.2.9 The results presented in Table 4-2 show that the junction currently operates within capacity on all approaches during all three peak periods. The maximum RFC is experienced on A442 (North) during the weekday PM peak, with an associated queue of three vehicles and 14 seconds of delay per vehicle.

4.2.10 It is forecast for the junction to continue to operate within capacity following addition of the trips generated by the proposed development. It is therefore concluded that the development will be unlikely to have a detrimental impact on the operation of this junction albeit further future year assessments would be required at the appropriate time.

Junction 5 - A442 Cann Hall Road / St John Street

4.2.11 This three-arm junction has been modelled using the PICADY module of Junctions 9 (v9.5). Geometries have been taken from OS mapping. A summary of the results are provided in Table 4-3.

Table 4-3: Modelling results summary - Junction 5 - A442 Cann Hall Road / St John Street

Lane	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)
2019 Base									
A442 Cann Hall Road (North)	1.12	52	322	1.45	284	1,866	0.87	6	48
2019 Base + Development									
A442 Cann Hall Road (North)	1.18	83	539	1.55	367	2,203	0.88	7	54

4.2.12 The results presented in Table 4-3 show that the junction currently operates at capacity in both weekday peak periods and, is approaching theoretical capacity in the weekend peak. The model shows that during the weekday peak periods, the queueing would extend back from A442 Cann Hall Road (North) beyond the junction with B4364 / Mill Street / Wolverhampton Road.

4.2.13 During the PM peak site observations, this queuing back was observed to occur on numerous occasions, however the interaction between junctions and crossings in this area is complex and this cannot be replicated in the modelling presented. The key site observations were:

- The pedestrian crossing to the south of the junction provided gaps to allow queues to clear. This was called relatively frequently in the PM peak hour; and
- St Johns Street itself became blocked on a number of occasions with queues occasionally blocking back to the A442. This was observed to be a result of either vehicles parallel parking on St Johns Street or vehicles turning right onto Mill Street (any more than one vehicle making this manoeuvre blocks the ahead lane).

4.2.14 It is forecast for this junction to continue to operate at capacity in both weekday peak periods and, approaching theoretical capacity in the weekday peak following addition of the development traffic. The development is forecast to double the length of the queue and delay per vehicle in both weekday peak periods. It is however important to note that at a junction operating at capacity (above an RFC of 1) queues and delays increase exponentially and may therefore not represent reality. The model considerably overestimates the queueing.

4.2.15 It is therefore considered that as part of any forthcoming planning application, more detailed consideration should be given as to the impact of the development in this location. It is likely that mitigation will be required and due to the interaction between junctions and pedestrian crossings

it would be recommended that a Microsimulation (VISSIM) model is prepared to test the impact of the development and any proposed mitigation measures.

Junction 6 - A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street

4.2.16 This four arm junction has been modelled using the ARCADY module of Junctions 9 (v9.5). Geometries have been taken from OS mapping. A summary of the results are provided in Table 4-4.

Table 4-4: Modelling results summary - Junction 6 - A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street

Lane	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)			Saturday Peak (11:00 – 12:00)		
	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)	RFC	Queue (vehs)	Delay (secs)
2019 Base									
Mill Street	0.49	1	6	0.61	2	8	0.36	1	5
Wolverhampton Road	0.40	1	5	0.53	1	7	0.42	1	5
A442 Cann Hall Street	0.35	1	4	0.29	0	3	0.20	0	3
Mill Street	0.50	1	5	0.48	1	4	0.44	1	4
2019 Base + Development									
Mill Street	0.51	1	7	0.71	2	11	0.38	1	5
Wolverhampton Road	0.55	1	7	0.63	2	9	0.48	1	6
A442 Cann Hall Street	0.39	1	4	0.33	1	4	0.21	0	3
Mill Street	0.55	1	5	0.52	1	5	0.45	1	4

4.2.17 The results presented in Table 4-4 show that in isolation, this junction currently operates within capacity in the base scenario in all peak periods, with minimum queueing and delay. Following addition of the development traffic, the junction continues to operate within capacity. The largest increases in RFC are forecast during the weekday PM peak hour, however this is associated with only minor increases in queueing and delay.

4.2.18 During a weekday PM peak site visit, queueing back from the A442 Cann Hall Road / St John Street junction was observed. This queued back onto the roundabout circulatory, resulting on queueing on the Mill Street (North) and Wolverhampton Road approaches to the roundabout.

4.2.19 It is therefore considered that as part of any forthcoming planning application, more detailed consideration should be given as to the impact of the development in this location and this junction should form part of a Microsimulation (VISSIM) model prepared to test the impact of the development and any proposed mitigation measures. Such an exercise would also take into consideration any change in traffic at the Tesco Express Petrol Filling Station on A441 Cann Hall

Road as result of the opening of a second petrol forecourt station (PFS) by Euro Garages on A458 Stourbridge Road at Chartwell Park.

4.3 Recommendations

4.3.1 Given the high level of interaction with adjacent junctions and site frontages along A442 Cann Hall Road, it is considered that a VISSIM model is required to understand this interaction in more detail covering at least A442 Mill Street / A442 Cann Hall Road / B4363 Mill Street (junction 6) roundabout, A442 Cann Hall Road / St John Street (junction 5) and St John Street/Mill Street. It is likely that this would be required to understand the impact of the development for purposes of a planning application.

4.3.2 At junctions 3 and 4, the development is not forecast to have a detrimental impact on the operation of the junctions during peak periods albeit further future year assessments would be required at the appropriate time.

4.3.3 It is likely that detailed junction modelling of junctions 1 and 2 will also be required for the purposes of a planning application, once details of access arrangements to the site have been confirmed.

4.3.4 The scope of assessment would be agreed in advance of submission with SCC.

5 Development and Access Proposals

5.1 Introduction

5.1.1 This section sets out the development and access proposals, by mode. In recognition that there is limited parking within the town centre the strategy for the development is two-fold:

- Reducing the need to travel by providing key amenities within the site itself; and
- Providing opportunities to travel by modes other than the private car for both residents of the site and those coming into Bridgnorth from the east.

5.2 Development Aspirations

5.2.1 From a transport perspective, it is envisaged that the development will become a recognisable place with an offer of different and connected transport modes, supplemented with enhanced facilities and information features to both attract, and benefit the traveller. The site will be designed such that the focus is not placed on the private car, rather on providing public realm spaces that optimise access to and between sustainable transport modes. This will ensure that there is a reduced need to travel for all users of the site.

5.2.2 Not only will the development provide access to traditional forms of transport i.e. bus and cycle, but also shared modes of mobility including electric/bikes and scooters, car club provision, e-cargo bikes etc.

5.2.3 In addition, information will be provided to those using the development site, signposting mobility options, preferably in a digital format. Given the number of tourists visiting Bridgnorth, mobility services on site should be easy to register for, and well-integrated with journey planning and wider ticketing services.

5.2.4 An example of appropriate mobility provision on site could be as follows:

Mobility component: public transport	Mobility components: non-public transport	Mobility related components	Non mobility & urban realm
• Local bus • Taxi	• Car Club bay with a choice of van/estate car • Bike/scooter share • E-cargo bike share/trailers	• Bike repair stand • Electric vehicle charging bays • Secure cycle parking • Digital pillar (transport info, ticketing, way finding, walk distances, local services)	• Covered waiting area • Package delivery lockers • Traffic calming • Community exercise equipment

5.2.5 It is considered that should the development come forward in this manner, it will offer the following benefits:

- **Mode choice –** travellers to and from the development will have a real mode choice for different journeys and needs. It encourages people to think multi-modally, and therefore reduce reliance on car use and associated impacts;
- **Convenience –** travellers to and from the development will have convenient choices of alternative multi-modal trips allowing for seamless transitions between modes;
- **Focus on public realm –** development will be organised so space is organised for the benefit of pedestrians and cyclists, creating a pleasant urban realm; and
- **Density –** providing a real mode choice for travellers to and from the development means that less car parking will be required on-site.

5.3 Park and Choose

5.3.1 In order to encourage residents on the site, and other visitors from the east of Bridgnorth (e.g. Stourbridge and Wolverhampton), to travel into the town centre by means other than private car, it is proposed to provide a '*Park and Choose'* facility at the site. The site is located adjacent to multiple key routes into Bridgnorth, so is likely to reduce vehicular traffic in Bridgnorth Town Centre, as trips would be intercepted prior to reaching the town centre.

5.3.2 It is envisaged the 'Park and Choose' site would include the following provision:

- Cycle parking and cycle hire facilities;
- Pool cars for hire;
- Electric bike/scooter hire; and
- High-quality bus service into Bridgnorth with existing bus routes serving the facility and enhanced frequencies.

5.3.3 This would be located centrally within the development, near to the local centre (and the A454) to maximise visibility and opportunities for use.

5.3.4 A number of existing bus routes, with varying frequencies, currently route along the A454. Opportunities to re-route these buses through the site could be explored, linking in with the Park and Choose site. The proximity of local centre amenities and access to the Country Park will make the '*Park and Choose'* facility a more attractive location for visitors waiting to catch a bus.

5.4 Pedestrian and Cycle Access

5.4.1 There is an existing PRoW which links A454 with Elmhurst and Hazel View to the west of the site. In order to improve pedestrian and cycle access from the site it is recommended that options to upgrade this route are explored. This would also provide a direct route to residential areas to the west. There are opportunities to provide this link through a less-wooded section of the Hermitage

Ridge woodland, to the west of the site. The exact details of this route would be agreed prior to submission of an application.

5.4.2 Intuitively, the enhancement of attractive direct routes to Bridgnorth town from the development through the Hermitage Ridge woodland and open space, via dedicated 'green corridors', will provoke more use by both pedestrians and cyclists despite gradients to the West of the Ridge.

5.4.3 It is currently proposed to provide 30m wide green corridors providing a public footpath along the ridge, with a 40m wide green corridor from Hermitage Ridge to eastern edge of site.

5.4.4 As part of the '*Park and Choose'* provision, electric bikes will be provided to encourage the uptake of cycling amongst residents, employees and visitors. Given the topography of Bridgnorth electric powered bikes are considered to be more appropriate than traditional pedal powered bikes.

5.4.5 As part of the planning application, a site wide Travel Plan would be produced detailing a range of sustainable travel initiatives for the site to encourage the use of sustainable alternative to a single occupancy private car for journeys to, and from the site.

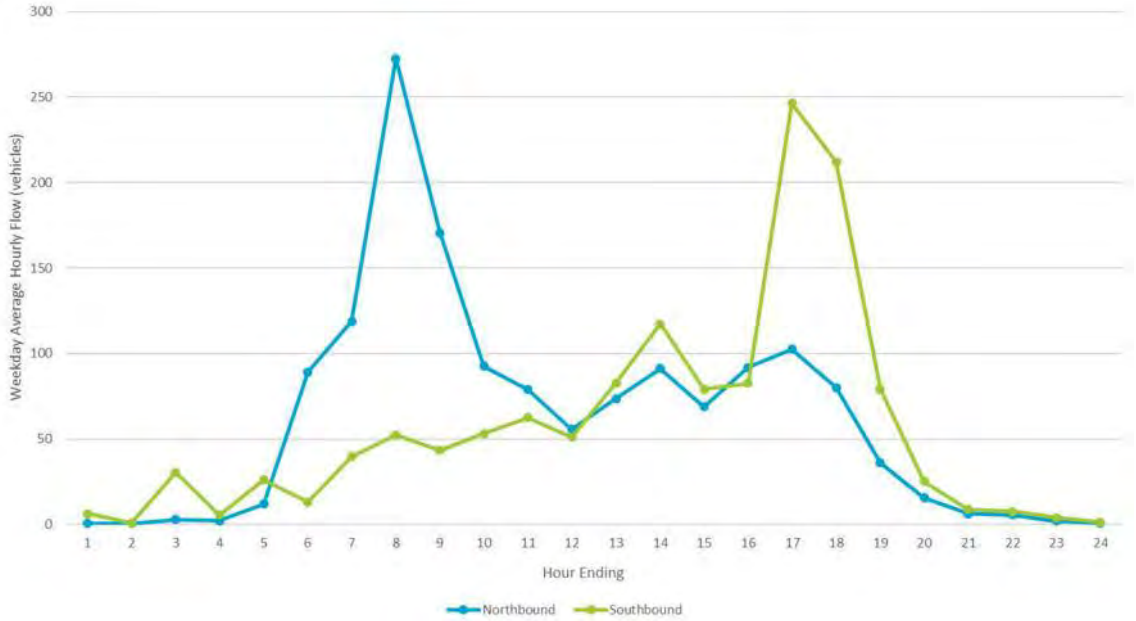
5.5 Vehicle Access

5.5.1 It is proposed to provide access to the site from the A454. The overall transport function of A454 will remain as existing however it will be re-designed with an appropriate speed limit, passing through the local centre with new footpaths, cycleways, pedestrian crossings and appropriately designed access junctions to reduce speed and severance. As it passes through the site it will be essential that the A454 adopts a place function with a more urbanised feel attributed to the built development frontage, particularly where it dissects the local centre. The road will be made suitable for all travel modes providing off carriageway provision for pedestrians and cyclists.

5.5.2 It is understood there is currently evidence of queueing on Estate Road, during the PM peak period, as vehicles leave Stanmore Business Park. An ATC was conducted for a five day period in September 2019, demonstrating that in terms of two-way traffic the peak hour was identified as 16:00 to 17:00. A profile of average weekday traffic on Estate Road is provided in Figure 5-1.

5.5.3 It is proposed to provide a two lane exit from Estate Road to support the additional trips generated by the development proposals, and to reduce the levels of queueing currently experienced during the PM peak.

Figure 5-1: Average weekday traffic (by direction) – Estate Road



5.5.4 Any proposed improvements would be reviewed by the local highway authority at the planning application stage and subject to independent Road Safety Audits.

5.6 Public Transport

5.6.1 A development of this size will provide a critical mass of residents able to use and increase viability of improved bus services as part of an overall movement strategy for the site. At the appropriate time it will be necessary to identify new options for bus routing and services from the development and the type of service that would be required in terms of capacity and frequency. As part of this it will be necessary to assess the potential build-out rates for the development to understand how the services proposed could be introduced over the lifespan of the redevelopment.

5.6.2 A request has been made to the current bus operator to consider running existing services into the Business Park.

5.6.3 It will be necessary to assess the ability of the current services to become or remain commercially viable with diversion(s) into the site (if required) through estimation of income levels. A level of pump priming from the development through a S106 contribution is likely to be required in the early phases of development.

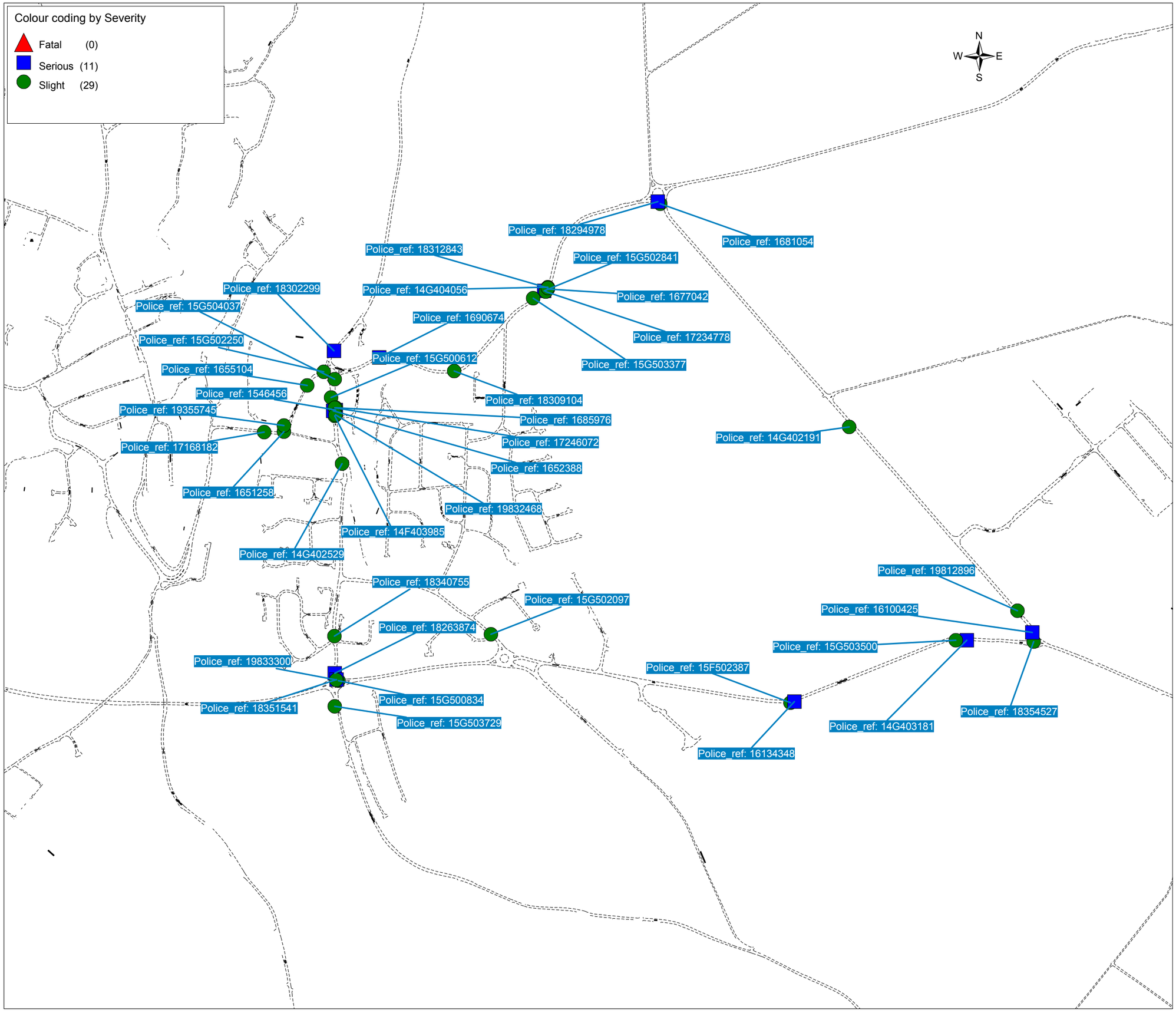
5.7 Parking Provision

5.7.1 Parking provision for the employment element of the site would be provided in line with relevant local car parking standards.

5.7.2 Based on 2011 census data, the average level of car ownership in Bridgnorth is 1.3 cars per household. When determining parking provision for the residential element of the site, this will be taken into consideration, as well as local car parking standards.

5.7.3 A 'fabric first' approach is proposed whereby development proposals incorporate high quality facilities for walking and cycling and providing good access to public transport, while minimising parking provision to supress car ownership.

Appendix A Road Safety Data



Bridgnorth

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
Shropshire Council
Licence No: 100001980 2015

Accidents between dates 12/05/2014 and 12/05/2019

Shropshire Council

DRAWING TITLE

SCALE	1 : 9840
DATE	19/06/2019
DRAWING No.	01
DRAWN BY	Geoff Brough

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Selected Polygon:Bridgnorth

14G403181 22/08/2014 Time 1900 Vehicles 1 Casualties 1 Serious
E:373860 N: 292430 First Road: A 458 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Loss of control	Vehicle 1	Possible
2nd:	Sudden braking	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

V001 HAS BEEN TRAVELLING ALONG THE A458, FOR REASONS UNKNOWN HE HAS LOST CONTROL (POSSIBLY HITTING KERB) AND SLID ALONG THE ROAD. NO DAMAGE TO ANY OTHER PROPERTY. TAKEN TO ROYAL SHREWSBURY HOSPITAL.

Occurred on A458, STANMORE APPROX 170 M W JW A454.

Vehicle Reference 1 Motorcycle over 500cc Going ahead other
Vehicle movement from E to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 25 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 25 Male Driver/rider Severity: Serious
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G502841 14/08/2015 Time 1305 Vehicles 2 Casualties 1 Serious
E:372710 N: 293380 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Travelling too fast for conditions	Vehicle 2	Possible
2nd:	Slippery road (due to weather)	Vehicle 2	Possible
3rd:	Loss of control	Vehicle 2	Very Likely
4th:	Road layout (eg bend, hill etc.)	Vehicle 2	Very Likely
5th:			
6th:			

V1 TRAV NE DIRECTION UP AN INCLINE IN THE NS LANE OF THE T WO LANE CARRIAGEWAY. V2 APP IN A SW DIRECTION DOWN THE INC LINE AND IN APP RH BEND HAS VEERED FOR UNKNOWN REASON INTO THE OS LANE AND HAD HEAD ON COLL/W V1

Occurred on B4363 AT HERMITAGE HILL,AT QUEENS PARLOUR BRIDGNORTH,

Vehicle Reference 1 Car Going ahead left bend
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 68 Female
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 68 Female Driver/rider Severity: Serious
Not a pupil Seatbelt

Vehicle Reference 2 Car Going ahead right bend
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 24 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1546456 10/11/2015 Time 2130 Vehicles 1 Casualties 1 Serious

E:372143 N: 293056 First Road: A 442 Road Type Single carriageway

Speed limit: 30 Junction Detail: Other Give way or controlled Unclassified

Crossing: Control None Facilities: None within 50m Road surface Wet/Damp

Darkness: street lights present and lit Fine without high winds

Special Conditions at Site None Carriageway Hazards: None

Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

VEH01 HAS CLIPPED PEDESTRIAN WITH NEARSIDE WINGMIRROR WHILST PEDESTRIAN WAS CROSING ROAD. PEDESTRIAN HAD VIRTUALLY CROSSED AND WAS KNOCKED TO THE GROUND HALF ON ROADWAY HALF ON FOOTPATH.

Occurred on CANN HALL ROAD BRIDGNORTH A442 TESCO EXPRESS FORECOURT

Vehicle Reference 1 Car Turning left

Vehicle movement from E to S No tow / articulation

On main carriageway No skidding, jack-knifing or overturning

Location at impact Entering main road First impact Nearside Hit vehicle:

Hit object in road None Off road: None

Did not leave carr Age of Driver 45 Female

Not hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 1 Age: 72 Male Pedestrian Severity: Serious

Seatbelt

In carr elsewhere E bound

Driver's offside

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1652388 18/02/2016 Time 1735 Vehicles 1 Casualties 1 Serious

E:372136 N: 293054 First Road: A 442 Road Type Single carriageway

Speed limit: 30 Junction Detail: Other Give way or controlled Unclassified

Crossing: Control None Facilities: None within 50m Road surface Dry

Daylight:street lights present Fine without high winds

Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Casualty 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

THE CASUALTY IS A PEDESTRIAN WHO HAD JUST BEEN TO THE ESSO GARAGE TO BUY GROCERIES. HAVING LEFT THE GARAGE HE ATTEMPTS TO CROSS THE ROAD. THERE ARE TWO LANES OF TRAFFIC HEADING SOUTH AWAY FROM TELFORD AND ONE LANE HEADING NORTH TOWARDS TELFORD. THE PE DESTRIAN MANAGES TO NEGOTIATE THE TWO SOUBOUND LANES AS TRAFFIC IS VERY SLOW / STATIC. HE PAUSES IN FRONT OF A STATIC CAR IN THE CENTRE LANE BEFORE DARTING OUT INTO THE FINAL LANE. IT APPEARS HE HAS MISJUDGED HIS CROSSING AND STEPPED INTO THE PATH OF V

Occurred on CANN HALL ROAD BRIDGNORTH A442 OFF ESSO GARAGE

Vehicle Reference 1 Car Going ahead other

Vehicle movement from S to N No tow / articulation

On main carriageway No skidding, jack-knifing or overturning

Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:

Hit object in road None Off road: None

Did not leave carr Age of Driver 32 Male

Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 84 Male Pedestrian Severity: Serious

Seatbelt

In carr elsewhere W bound

Driver's offside masked

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

16100425 12/06/2016 Time 1630 Vehicles 1 Casualties 1 Serious

E:374038 N: 292451 First Road: A 454 Road Type Single carriageway

Speed limit: 60 Junction Detail: Roundabout Give way or controlled A 458

Crossing: Control None Facilities: None within 50m Road surface Wet/Damp

Daylight:street lights present Fine without high winds

Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Loss of control	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH01 HAD TRAVELLED ALONG THE A458 TOWARDS THE STANMORE ROUNDABOUT JUNCTION AND WAS TAKING THE FIRST EXIT ALONG THE A454. HAVING LEFT THE ROUNDABOUT IT APPEARS THAT THE STAND FOR THE MOTORCYCLE HAS FALLEN MAKING CONTACT WITH THE ROAD SURFACE. AS A RESU LT THIS HAS THROWN THE RIDER OFF THE VEHICLE CAUSING THE INJURIES STATED, NO OTHER VEHICLE INVOLVED

Occurred on AT STANMORE NR BRIDGNORTH A454 STANMORE ISLAND A458

Vehicle Reference 1 Motor Cycle over 50 cc and up to 125cc Turning left

Vehicle movement from W to NW No tow / articulation

On main carriageway No skidding, jack-knifing or overturning

Location at impact Leaving roundabout First impact Offside Hit vehicle:

Hit object in road None Off road: None

Did not leave carr Age of Driver 44 Female

Not hit and run Breath test Not requested

Casualty Reference: 1 Vehicle: 1 Age: 44 Female Driver/rider Severity: Serious

Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1690674 19/07/2016 Time 0330 Vehicles 1 Casualties 1 Serious
E:372261 N: 293199 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Road layout (eg bend, hill etc.)	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:	Inexperienced or learner driver/rider	Vehicle 1	Very Likely
4th:	Travelling too fast for conditions	Vehicle 1	Very Likely
5th:			
6th:			

VEH01 WAS BEING RIDDEN ALONG THE B4363 TOWARDS THE JUNCTION OF BRIDGNORTH TOWN. AS THE VEHICLE TRAVELLED DOWNHILL IT FAILED TO NEGOTIATE A REASONABLY TIGHT LEFT HAND BEND, THE RIDER HAS BECOME UNSEATED AS THE MACHINE SLID FROM UNDER HIM AND THEN BOTH RI DER AND VEHICLE SLID ACROSS THE ROAD AND ONTO THE OPPOSING LANE

Occurred on O/S THE COACH HOUSE WOLVERHAMPTON ROAD BRIDGNORTH B4363

Vehicle Reference 1 Motor Cycle over 50 cc and up to 125cc Going ahead left bend
Vehicle movement from E to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 19 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 19 Male Driver/rider Severity: Serious
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

16134348 26/11/2016 Time 2045 Vehicles 1 Casualties 1 Serious
E:373391 N: 292263 First Road: A 458 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:	Impaired by alcohol	Vehicle 1	Very Likely
4th:	Aggressive driving	Vehicle 1	Very Likely
5th:			
6th:			

VEH 01 HAS BEEN TRAVELLING ALONG THE A458 STOURBRIDGE ROAD FROM THE BRIDGNORTH DIRECTION TOWARDS STOURBRIDGE. VEH 01 HAS BEEN IN THE PROCESS OF NEGOTIATING A LEFT HAND BEND, FAILED TO DO SO AND COLLIDED WITH A SOLID ROCK WALL ON HIS OFFSIDE AND RE BOUNDED TO THE NEARSIDE. RIDER HAS BECOME DETACHED FROM HIS MOTORCYCLE. ALCOHOL SUSPECTED.

Occurred on STOURBRIDGE ROAD,STANMORE A458

Vehicle Reference 1 Motorcycle over 500cc Going ahead left bend
Vehicle movement from NW to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Offside Hit vehicle:
Hit object in road None Off road: 11
O/S & rebounded Age of Driver 36 Male
Not hit and run Breath test Not applicable

Casualty Reference: 1 Vehicle: 1 Age: 36 Male Driver/rider Severity: Serious
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months
Selection: **Notes:**
; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18263874 30/01/2018 Time 1245 Vehicles 2 Casualties 2 Serious
E:372140 N: 292340 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Roundabout Give way or controlled A 458
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Illness or disability, mental or physical	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

V001 TRAVELLING TOWARDS BRIDGNORTH, DRIVER IS BELIEVED TO HAVE HAD A HEART ATTACK CAUSING HIM TO LOSE CONTROL AND STRAY ONTO THE WRONG SIDE OF THE ROAD. SUBSEQUENTLY GONE HEAD ON WITH V002.

Occurred on KIDDERMINSTER ROAD A442 AT JN WITH A458

Vehicle Reference 1 Goods vehicle - unknown weight Going ahead other
Vehicle movement from S to N No tow / articulation
On main carriageway Skidded
Location at impact Cleared junction or waiting/parke First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 70 Male
Not hit and run Breath test Not applicable

Casualty Reference: 3 Vehicle: 1 Age: 61 Female Passenger Severity: Serious
Seatbelt
Not car passenger

Vehicle Reference 2 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 60 Male
Not hit and run Breath test Negative

Casualty Reference: 2 Vehicle: 2 Age: 60 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18294978 18/05/2018 Time 1725 Vehicles 2 Casualties 1 Serious
E:373019 N: 293623 First Road: A 454 Road Type Single carriageway
Speed limit: 60 Junction Detail: Roundabout Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

V001 HAS BEEN APPROACHING THE ISLAND AND HAS NOT SEEN CYCLIST. V001 HAS THEN COLLIDED WITH THE CYCLIST AT VERY LOW SPEED, CAUSING THE CYCLIST TO BE THROWN FROM HIS BIKE.

Occurred on WOLVERHAMPTON ROAD A454 AT JN WITH B4363

Vehicle Reference 1 Car Starting
Vehicle movement from S to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 55 Male
Not hit and run Breath test Not requested

Vehicle Reference 2 Pedal Cycle Going ahead other
Vehicle movement from E to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 48 Male
Not hit and run Breath test

Casualty Reference: 1 Vehicle: 2 Age: 48 Male Driver/rider Severity: Serious
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18302299 12/06/2018 Time 1355 Vehicles 3 Casualties 2 Serious
E:372138 N: 293217 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: T & Stag Jct Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
4th:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
5th:			
6th:			

VEHICLE ONE TRAVELLING FROM TELFORD DIRECTION TOWARDS BRIDGNORTH IN LINE OF TRAFFIC APPROACHING ROUNDABOUT WITH B4363 ATTEMPTS TO OVERTAKE ARTICULATED LORRY VEHICLE 2 IN FRONT OF IT CROSSING WHITE HATCH MARKINGS IN CENTRE OF ROAD AND INTO THE PATH, H EAD ON OF VEHICLE 3. VEHICLE 3 ATTEMPTS TO SWERVE OUT OF THE PATH OF VEHICLE 1 CAUSING VEHICLE 3 TO CLIP THE REAR OF VEHICLE 2 CAUSING A SPIN AND SUBSEQUENT COLLISION WITH VEHICLE 1. ALL THREE VEHICLES STOPPED AT SCENE AND HAVE COLLISION DAMAGE. D

Occurred on MILL STREET A442 AT JN WITH BANDON LANE

Vehicle Reference 1 Car Overtaking moving vehicle O/S
Vehicle movement from NE to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: Oth perm objects
O/S Age of Driver 52 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 52 Male Driver/rider Severity: Slight
Seatbelt

Vehicle Reference 2 Goods vehicle - unknown weight Going ahead other
Vehicle movement from NE to SW Articulated
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 68 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 3 Car Going ahead other
Vehicle movement from SW to NE No tow / articulation
On main carriageway Skidded
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: Oth perm objects
Nearside Age of Driver 32 Male
Not hit and run Breath test Not requested

Casualty Reference: 2 Vehicle: 3 Age: 31 Male Passenger Severity: Serious
Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18351541 09/12/2018 Time 1115 Vehicles 2 Casualties 2 Serious
E:372145 N: 292323 First Road: A 458 Road Type 1
Speed limit: 30 Junction Detail: Roundabout Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
2nd:	Dazzling sun	Vehicle 1	Possible
3rd:	Exceeding speed limit	Vehicle 1	
4th:			
5th:			
6th:			

V1 WAS TRAVELLING ALONG HOSPITAL STREET TOWARDS THE ISLAND WITH THE A458 INTENDING TO TAKE THE SECOND EXIT TO KIDDERMINSTER. AS V1 ENTERS THE ISLAND IT COLLIDED WITH V2 WHICH HAD ENTERED THE ISLAND HAVING TRAVELLED DOWN THE A458 FROM THE DIRECTION OF SHR EWSBURY

Occurred on BRIDGNORTH BYPASS ROUNDABOUT A458 AT JN WITH A442 HOSPITAL STREET

Vehicle Reference 1 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 89 Male
Not hit and run Breath test Not requested

Casualty Reference: 1 Vehicle: 1 Age: 89 Male Driver/rider Severity: Slight
Seatbelt

Vehicle Reference 2 Motorcycle over 500cc Going ahead other
Vehicle movement from W to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 57 Male
Not hit and run Breath test Not requested

Casualty Reference: 2 Vehicle: 2 Age: 57 Male Driver/rider Severity: Serious
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

14G402191 05/06/2014 Time 1728 Vehicles 2 Casualties 1 Slight
E:373540 N: 293010 First Road: A 454 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Careless/Reckless/In a hurry	Vehicle 1	Possible
2nd:	Aggressive driving	Vehicle 1	Possible
3rd:	Failed to look properly	Vehicle 1	Very Likely
4th:	Loss of control	Vehicle 1	Very Likely
5th:			
6th:			

VEH001 HAS BEEN TRAVELLING ALONG STANMORE STRAIGHT AND HAS COMMENCED A LEGAL OVERTAKE ON HAZARD LINES. VEH002 TRAVELLING IN THE OPPOSITE DIRECTION IN A DIP IN THE ROAD, VEH001 HAS SPOTTED VEH002 COMING AND HAS APPLIED FIRM BRAKES, CLIPPING 'CATS EYE' IN PROCESS. VEH001 REAR WAS DISMOUNTED PRIOR TO COLLISION AND BIKE HAS SUBSEQUENTLY SKID INTO VEH002.

Occurred on A454 STANMORE STRAIGHT BRIDGNORTH,NR HERMITAGE FARM HOUSE,

Vehicle Reference 1 Motorcycle over 500cc Overtaking moving vehicle O/S
Vehicle movement from NW to SE No tow / articulation
On main carriageway Skidded
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 24 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 24 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Vehicle Reference 2 Car Going ahead other
Vehicle movement from SE to NW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 65 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

14G402529 07/07/2014 Time 2330 Vehicles 1 Casualties 1 Slight
E:372160 N: 292910 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction
Crossing: Control None Facilities: Pelican, puffin, toucan etc. Road surface Dry
Darkness: street lights present and lit Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:	Disobeyed pedestrian crossing facility	Vehicle 1	
4th:			
5th:			
6th:			

IP WAS WALKING TO THE CHINESE TAKEAWAY. STOPPED AT THE PELICAN CROSSING. AFTER PRESSING THE BUTTON TO STOP TRAFFIC AND WHEN ALERTED TO CROSS HE STEPPED INTO THE ROAD AS A CAR FAILED TO STOP AND CAUGHT HIS LEG KNOCKING HIM TO THE GROUND. CAR FAILED TO STOP

Occurred on A442 HOSPITAL ST BRIDGNORTH,25 M N J/W BERNARD ST,

Vehicle Reference 1 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver Not traced
Hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 1 Age: 18 Male Pedestrian Severity: Slight
Not a pupil Seatbelt
On Ped Crossing W bound
Driver's nearside

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

14F403985 21/10/2014 Time 0530 Vehicles 2 Casualties 1 Slight
E:372140 N: 293040 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: T & Stag Jct Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Darkness: street lights present and lit Raining with high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Very Likely
2nd:	Rain, sleet, snow, or fog	Vehicle 1	Possible
3rd:	Spray from other vehicles	Vehicle 1	Possible
4th:	Vehicle blind spot	Vehicle 1	Possible
5th:			
6th:			

BOTH V001 AND V002 HAVE COME FROM THE DIRECTION OF THE µBA NDON ARMSã ISLAND TRAVELLING ALONG THE A442 TOWARDS KIDDER MINSTER. V001 HAS PULLED OVER INTO THE BUS STOP ON THE LEF T HAND SIDE OF THE ROAD BEFORE PROCEEDING TO DO A µUã TURN IN THE PATH OF V002. AS V001 WAS SIDE ON ACROSS THE CARRI AGEWAY V002 HAS HIT THE SIDE OF V001. RIDER OF V002 HAS FA LLEN OFF HIS BIKE INTO THE CARRIAGEWAY.

Occurred on A442,CANN HALL ROAD ,BRIDGNORTH,JW CANN HALL DRIVE, BRIDGNORTH.

Vehicle Reference 1 Car U-turn
Vehicle movement from N to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering main road First impact Offside Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 22 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Motorcycle over 500cc Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 44 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 2 Age: 44 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

14G404056 29/10/2014 Time 1230 Vehicles 4 Casualties 2 Slight
E:372720 N: 293390 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Exceeding speed limit	Vehicle 3	Possible
3rd:	Travelling too fast for conditions	Vehicle 3	
4th:			
5th:			
6th:			

V001 HGV CONTRAVENES MAXIMUM WEIGHT RESTRICTION OF 7.5T ON HERMITAGE HILL. V001 COMES TO A STOP. V002 COMES TO A STO P BEHIND V001. V003 COMES AROUND THE BLIND BEND AND SWERVE S ONTO WRONG SIDE OF THE ROAD TO AVOID COLLISION WITH V002 . V003 THEN C OLLIDES HEAD ON WITH V004.

Occurred on B 4363,WOLVERHAMPTON ROAD,BRIDGNORTH 200 M NE JW LODGE LANE.

Vehicle Reference 1 Goods 7.5 tonnes mgw and over Stopping
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 40 Not traced
Not hit and run Breath test Driver not contacted

Vehicle Reference 2 Car Stopping
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 73 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 3 Car Going ahead left bend
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 4
Hit object in road None Off road: None
Did not leave carr Age of Driver 75 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 3 Age: 75 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Vehicle Reference 4 Car Going ahead right bend
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 3
Hit object in road None Off road: None
Nearside Age of Driver 75 Male
Not hit and run Breath test Negative

Casualty Reference: 2 Vehicle: 4 Age: 75 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G500612 06/02/2015 Time 1935 Vehicles 2 Casualties 1 Slight
E:372130 N: 293090 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Other Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: street lights present and lit Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Exceeding speed limit	Vehicle 1	Possible
2nd:	Following too close	Vehicle 1	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 1	
4th:			
5th:			
6th:			

VEH002 WAS TRAVELLING FROM THE DIRECTION OF MILL STREET AL ONG CANN HILL ROAD AND HAS THE INTENTION OF TURNING LEFT I NTO THE ESSO GARAGE. VEH001 HAS COLLIDED WITH THE REAR OF VEH002 CAUSING DAMAGE AND THEN HAS DRIVEN OFF TOWARDS HOSP ITAL ST WITHO UT STOPPING.

Occurred on CANN HALL ROAD,BRIDGNORTH,OUTSIDE ESSO GARAGE,

Vehicle Reference 1 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 44 Not traced
Hit and run Breath test Driver not contacted

Vehicle Reference 2 Car Turning left
Vehicle movement from N to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 28 Female
Not hit and run Breath test Not requested

Casualty Reference: 1 Vehicle: 2 Age: 28 Female Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G500834 27/02/2015 Time 0805 Vehicles 2 Casualties 1 Slight
E:372150 N: 292320 First Road: A 458 Road Type Single carriageway
Speed limit: 30 Junction Detail: Roundabout Give way or controlled A 442
Crossing: Control None Facilities: Ped. phase at traffic signal junction Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Inexperienced or learner driver/rider	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

VEH001 WHO IS FAMILIAR WITH THE AREA HAS TRAVELLED AROUND RUNDABOUT WWITH INTENTION OF TRAVELLING UP A458. THERE ARE TRAFFIC LIGHTS AT THE EXIT WHICH FORM A PEDESTRIAN CROSSI NG. ON THIS OCCASSION THEY WERE ON RED AND VEH002 WAS STAT IONARY AT THE SE LIGHTS. VEH001 DID NOT SEE VEH002 STATIONA RY AT THE TIME AND COLLIDED WITH THE REAR OF HER CAUSING M INOR INJURIES CONSISTENT WITH WHIPLASH.

Occurred on A458 BRIDGNORTH BYPASS ,J/W A442 KIDDERMINSTER RD ISLAND.

Vehicle Reference 1 Car Turning right
Vehicle movement from S to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving roundabout First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 21 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Car Going ahead but held up
Vehicle movement from W to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving roundabout First impact Back Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 42 Female
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 2 Age: 42 Female Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G502097 10/06/2015 Time 1806 Vehicles 2 Casualties 1 Slight
E:372565 N: 292446 First Road: U Road Type Single carriageway
Speed limit: 40 Junction Detail: Other Stop sign Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: street lights present and lit Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Exceeding speed limit	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely
3rd:	Inexperienced or learner driver/rider	Vehicle 1	
4th:			
5th:			
6th:			

VEH 1 HAS EXITED THE ROUNDABOUT OF A458 FROM OLD WORCESTER ROAD, HAVING EXITED THE ROUNDABOUT AT A SPEED DEEMED EXCE SSIVE BY WITNESS, VEH 1 HAS COLLIDED WITH VEH 2 OUTSIDE T HE JUNCTION TO AUDI SUPERMARKET. VEH 1 HS THEN DRIVEN OFF FROM THE SCE NE , LATER LOCATED BY POLICE

Occurred on STOURBRIDGE ROAD BRIDGNORTH,J/W ALDI SUPERMARKET TURN,

Vehicle Reference 1 Car Going ahead other
Vehicle movement from SE to NW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 25 Male
Hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 25 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Vehicle Reference 2 Car Waiting to turn right
Vehicle movement from SW to SE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 36 Female
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months
Selection: **Notes:**
; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G502250 28/06/2015 Time 1745 Vehicles 2 Casualties 1 Slight
E:372110 N: 293160 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Roundabout Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:	Poor turn or manoevre	Vehicle 1	
4th:			
5th:			
6th:			

VEHICLE 001 HAS PULLED OUT ON A ISLAND AND CAUSED IP TO SW ERVE ON HIS BIKE AND FALL OFF. INJURY TO IP A LOT OF BRUI SING BUT NO BROKEN BONES. IP HAS TWO WITNESS DETAILS, BOT H PARTIES EXCHANGED DETAILS.

Occurred on A442 TR/ISLAND,BRIDGNORTH,J/W B4363 MILL ST,

Vehicle Reference 1 Car Starting
Vehicle movement from SW to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 48 Female
Not hit and run Breath test Driver not contacted

Vehicle Reference 2 Motor Cycle over 50 cc and up to 125cc Going ahead left bend
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 17 Male
Not hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 2 Age: 17 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15F502387 05/07/2015 Time 1120 Vehicles 2 Casualties 2 Slight
E:373380 N: 292260 First Road: A 458 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Road layout (eg bend, hill etc.)	Vehicle 1	Very Likely
2nd:	Exceeding speed limit	Vehicle 1	Very Likely
3rd:	Travelling too fast for conditions	Vehicle 1	Very Likely
4th:	Sudden braking	Vehicle 1	Very Likely
5th:	Inexperienced or learner driver/rider	Vehicle 1	Very Likely
6th:	Loss of control	Vehicle 1	Very Likely

V1 M/CYCLE TRAV EB TOWARDS TIGHT LH BEND. THE RIDER HAS L OCKED THE FRONT BRAKE AND SKIDDED TOWARDS THE CORNER. WHIL ST OUT OF CONTROL V1 HAS CROSSED THE SOLID DOUBLE WHITE LI NES INTO THE OPP CARRIAGWAY. THIS HAS CAUSED ONCOMING V2 M/CYCLE TRAV WEST TO TRY ALTER COURSE TO AVOID COLL. V1 S TILL COLL/W V2 , V2 LEAVES RD TO O/S COLL/W THE BANK CAUSI NG INJURY TO THE RIDER

Occurred on A458 STOURBRIDGE RD BRIDGNORTH,APPROX 680 MT SW A454,

Vehicle Reference 1 Motor Cycle over 125 cc and up to 500cc Going ahead left bend
Vehicle movement from W to NE No tow / articulation
On main carriageway Skidded
Location at impact Not at, or within 20M of Jct First impact Offside Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 22 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 22 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Vehicle Reference 2 Motorcycle over 500cc Going ahead right bend
Vehicle movement from NE to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Nearside Hit vehicle: 1
Hit object in road None Off road: Oth perm objects
O/S Age of Driver 51 Male
Not hit and run Breath test Negative

Casualty Reference: 2 Vehicle: 2 Age: 51 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G503377 31/08/2015 Time 1800 Vehicles 1 Casualties 2 Slight
E:372680 N: 293360 First Road: B 4363 Road Type Single carriageway
Speed limit: 40 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Road layout (eg bend, hill etc.)	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:	Tyres illegal, defective or under inflated	Vehicle 1	Very Likely
4th:	Travelling too fast for conditions	Vehicle 1	Very Likely
5th:			
6th:			

V1 WAS TRAVELLING ALONG THE B4363 HERMITAGE HILL, V1 WAS H EADING TOWARDS THE TOWN ON A DOWNWARD GRADIENT, AND NEGOTI ATING A TIGHT RIGHT HAND BEND, V1 HAS THEN FOR SOME UNKNOW N REASON LOST CONTROL, TRAVELLED ACROSS THE OPPOSING CARRA IGEWAY, AND S TRUCK THE ARMCO BARRIER.

Occurred on B4363,THE HERMITAGE,BRIDGNORTH,100 MT NE J/W LODGE LANE,

Vehicle Reference 1 Car Going ahead right bend
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: Near / off crash barrier
O/S & rebounded Age of Driver 30 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 30 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Casualty Reference: 2 Vehicle: 1 Age: 34 Female Passenger Severity: Slight
Not a pupil Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G503500 10/09/2015 Time 1840 Vehicles 1 Casualties 1 Slight
E:373830 N: 292430 First Road: A 458 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Impaired by drugs (illicit or medicinal)	Vehicle 1	Possible
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:	Poor turn or manoevre	Vehicle 1	Possible
4th:	Road layout (eg bend, hill etc.)	Vehicle 1	Possible
5th:			
6th:			

V001 WAS TRAVELLING FROM BRIDGNORTH TOWARDS STOURBRIDGE AN D HIT THE ARMCO BANNER ON THE NEARSIDE ON THE BEND AND SPU N THE CAR ENDING UP ACROSS CARRIAGEWAY WITH FRONT END ON N EARSIDE VERGE.

Occurred on A 458,STOURBRIDGE RD, STANMORE,APPROX 202 M W JW A454,

Vehicle Reference 1 Car Going ahead right bend
Vehicle movement from SW to E No tow / articulation
On main carriageway Skidded
Location at impact Not at, or within 20M of Jct First impact Nearside Hit vehicle:
Hit object in road None Off road: Near / off crash barrier
Nearside & rebounded Age of Driver 43 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 43 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G503729 26/09/2015 Time 1056 Vehicles 3 Casualties 1 Slight
E:372140 N: 292250 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: street lights present and lit Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Dazzling sun	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

V2 HAS BEEN PARKED UN-OCCUPIED ON N/S OF CARRIAGEWAY/KERB AS POSTMAN WAS DELIVERING POST. V001 HAS BEEN TRAVELING ON A442 BRIDGNORTH - KIDDERMINSTER AND HAS COLLIEDED WITH RE AR V002 AS DAZZLED BY LOW SUN. AFTER IMPACT V001 HAS RICKO SHAED INTO V3 CAUSING MINOR DAMAGE - INJURY ONLY TO OCCUPA NT OF V001.

Occurred on A442 KIDDERMINSTER RD BRIDGNORTH,O/S NO. 9, 40 MT S A458 ISLAN D.

Vehicle Reference 1 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle: 2
Hit object in road Parked Vehicle Off road: None
Did not leave carr Age of Driver 72 Female
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 72 Female Driver/rider Severity: Slight
Not a pupil Seatbelt

Vehicle Reference 2 Goods 3.5 tonnes mgw and under Parked
Vehicle movement from Park to Parked No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Back Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 32 Male
Not hit and run Breath test Not requested

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 3 Car Going ahead other
Vehicle movement from S to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Offside Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 50 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

15G504037 17/10/2015 Time 1620 Vehicles 2 Casualties 1 Slight
E:372140 N: 293140 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Roundabout Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 2	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 2	Very Likely
3rd:	Poor turn or manoevre	Vehicle 2	
4th:			
5th:			
6th:			

CYCLIST HAD TRAVELLED ALONG A442 TOWARD TELFORD ALONG CANN HALL ROAD ON REACHING THE ISLAND WITH THE B4363. THE CYC LIST WENT ROUND AND WENT TO RETURN ALONG THE A442 IN THE O PPOSITE DIRECTION TOWARDS KIDDERMINSTER. VEH01 WAS TRAVEL LING DOWN THE B4363 (THE HERMITAGE) TO TURN LEFT AT THE BO TTOM ONTO THE A442 TOWARDS KIDDERMINSTER WHRE TWO LANE LEA D TOWARD LOW TURN. CYCLIST APPEARS TO HAVE VEERED IN FRON T OF VEH01 FROM THE OFFSIDE LANE INTO THE NEARSIDE LANE WH ERE THE CYCLIST WAS STRUCK AS H

Occurred on A442,CANN HALL RD,BRIDGNORTH,J/W B4363 HERMITAGE HILL,

Vehicle Reference 1 Car Turning left
Vehicle movement from E to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving roundabout First impact Front Hit vehicle: 2
Hit object in road None Off road: None
Did not leave carr Age of Driver 24 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Pedal Cycle Changing lane to left
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving roundabout First impact Back Hit vehicle: 1
Hit object in road None Off road: None
Did not leave carr Age of Driver 73 Male
Not hit and run Breath test Not applicable

Casualty Reference: 1 Vehicle: 2 Age: 73 Male Driver/rider Severity: Slight
Not a pupil Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1651258 04/02/2016 Time 1110 Vehicles 1 Casualties 1 Slight
E:372002 N: 292997 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: T & Stag Jct Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

MALE ON BICYCLE LOST CONTROL AND FELL OFF, GRAZING HIS RIGHT KNEE.

Occurred on BRIDGE STREET LOW TOWN BRIDGNORTH B4363 MILL STREET B4363

Vehicle Reference 1 Pedal Cycle Turning left
Vehicle movement from W to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving main road First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 41 Male
Not hit and run Breath test

Casualty Reference: 1 Vehicle: 1 Age: 41 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1655104 12/02/2016 Time 1145 Vehicles 2 Casualties 2 Slight
E:372065 N: 293123 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:	Following too close	Vehicle 1	Possible
4th:	Sudden braking	Vehicle 2	Possible
5th:			
6th:			

DRIVER V1 RAN INTO REAR OF V2 WHEN DRIVER V2 BRAKED

Occurred on MILL STREET BRIDGNORTH B4363

Vehicle Reference 1 Car Going ahead other
Vehicle movement from SW to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 64 Male
Not hit and run Breath test Driver not contacted

Vehicle Reference 2 Car Stopping
Vehicle movement from SW to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 26 Male
Not hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 2 Age: 26 Male Driver/rider Severity: Slight
Seatbelt

Casualty Reference: 2 Vehicle: 2 Age: 25 Female Passenger Severity: Slight
Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1677042 16/04/2016 Time 1815 Vehicles 2 Casualties 1 Slight
E:372720 N: 293385 First Road: B 4363 Road Type Single carriageway
Speed limit: 40 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Disobeyed double white line	Vehicle 2	Very Likely
2nd:	Loss of control	Vehicle 2	Very Likely
3rd:	Careless/Reckless/In a hurry	Vehicle 2	Very Likely
4th:	Road layout (eg bend, hill etc.)	Vehicle 2	Very Likely
5th:	Poor turn or manoevre	Vehicle 2	Very Likely
6th:			

V001 WAS TRAVELLING TOWARDS BRIDGNORTH, V002 WAS TRAVELLING TOWARDS WOLVERHAMPTON. V002 HAS CROSSED THE DOUBLE SOLID WHITE LINES ON THE OPPOSING CARRIAGEWAY CAUSING V001 TO SWERVE. V002 HIT THE R/O/S WHEEL CAUSING BOTH VEHS TO BE BADLY DAMAGED. DRIVER & TWO PASSENGERS OF V002 RAN FROM VEH.

Occurred on AT QUEEN'S PARLOUR HERMITAGE HILL BRIDGNORTH B4363

Vehicle Reference 1 Car Going ahead right bend
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 43 Male
Not hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 1 Age: 43 Male Driver/rider Severity: Slight
Seatbelt

Vehicle Reference 2 Car Going ahead left bend
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 22 Not traced
Hit and run Breath test Driver not contacted

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1681054 11/05/2016 Time 0850 Vehicles 2 Casualties 1 Slight
E:373026 N: 293617 First Road: A 454 Road Type Single carriageway
Speed limit: 60 Junction Detail: Roundabout Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight:street lights present Raining without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
3rd:	Careless/Reckless/In a hurry	Vehicle 1	Possible
4th:	Rain, sleet, snow, or fog	Vehicle 1	Possible
5th:			
6th:			

VEH-1 WAS APPROACHING ROUNDABOUT ON A454 WITH B4363. VEH02 WAS STATIONARY AT THE ROUNDABOUT. VEH01 DID NOT STOP AND COLLIDED AT LOW SPEED WITH REAR OF VEH02. DETAILS EXCHANGED BETWEEN PARTIES PRIOR TO POLICE ARRIVAL HOWEVER DRIVER OF VEH02 SUSTAIN ED MINOR WHIPLASH INJURIES, DID NOT ATTEND HOSPITAL, MINOR DAMAGE TO VEH02, N/K DAMAGE TO VEH01

Occurred on HERMITAGE HILL BRIDGNORTH A454 B4363

Vehicle Reference 1 Car Going ahead other
Vehicle movement from SE to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 45 Male
Not hit and run Breath test Driver not contacted

Vehicle Reference 2 Car Going ahead but held up
Vehicle movement from SE to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 42 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 2 Age: 42 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

1685976 03/06/2016 Time 1810 Vehicles 2 Casualties 1 Slight
E:372143 N: 293062 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Other Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 2	Possible
3rd:			
4th:			
5th:			
6th:			

VEH02 HAD EXITED ROUNDABOUT AND WAS PROCEEDING PAST GARAGE FORECOURT. VEH01 HAS BEEN EXITING GARAGE FORECOURT AND HAS CUT IN FRONT OF VEH02. THIS HAS CAUSED VEH02 TO BRAKE SHARPLY AND THE RIDER HAS FALLEN FROM VEHICLE CAUSING INJURY AND DAMAGE TO VEH02 . BOTH PARTIES HAVE EXCHANGED DETAILS AT SCENE

Occurred on CANN HALL ROAD A442 ENT TO TESCO PETROL SERV

Vehicle Reference 1 Car Starting
Vehicle movement from E to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering main road First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 31 Male
Not hit and run Breath test Driver not contacted

Vehicle Reference 2 Motor Cycle over 50 cc and up to 125cc Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway Skidded
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 51 Male
Not hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 2 Age: 51 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months
Selection: **Notes:**
; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

17168182 19/03/2017 Time 1716 Vehicles 2 Casualties 1 Slight
E:371948 N: 292996 First Road: B 4363 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction
Crossing: Control None Facilities: Pelican, puffin, toucan etc. Road surface Wet/Damp
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
3rd:	Disobeyed pedestrian crossing facility	Vehicle 1	
4th:			
5th:			
6th:			

V001 HAS APPROACHED TRAFFIC LIGHTS AT CROSSING ON BRIDGE STREET. V001 HAS NOT NOTICED LIGHTS ON RED AND HAS CARRIED ON AND HIT CASUALTY ON CROSSING. V001 HAS THEN SWERVED AND HIT V002. V001 IS AT FAULT.

Occurred on BRIDGE STREET BRIDGNORTH B4363 53 METRES WEST OF JUNCTION WITH MILL ST B4363

Vehicle Reference 1 Car Going ahead other
Vehicle movement from E to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 64 Female
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 13 Male Pedestrian Severity: Slight
Seatbelt
On Ped Crossing S bound
Driver's offside

Vehicle Reference 2 Car Stopping
Vehicle movement from W to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 65 Female
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

17234778 18/10/2017 Time 1635 Vehicles 2 Casualties 4 Slight
E:372714 N: 293378 First Road: B 4363 Road Type Single carriageway
Speed limit: 40 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 1	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
3rd:	Disobeyed double white line	Vehicle 1	Very Likely
4th:	Loss of control	Vehicle 1	Very Likely
5th:			
6th:			

IT WOULD APPEAR THAT V001 WAS BEING DRIVEN UP THE HILL WHEN IT HAS CROSSED THEN DOUBLE-WHITE LINES SEPARATING THE LANES. THIS CAUSED TWO OUTER VEHICLES TO TAKE EVASIVE ACTION TO AVOID A COLLISION. A THIRD VEHICLE, V002, DID NOT HAVE TIME TO TAKE ACTION A ND THE TWO VEHICLES COLLIDED. V002 HAS BEEN TRAVELLING DOWN THE HLL IN THE OPPOSITE DIRECTION TO V001. AT THIS STAGE IT IS BELIEVED THE DRIVER OF V001 WAS ?? FROM ALCOHOL.

Occurred on HERMITAGE HILL B4363 NEAR JN WITH LODGE LANE

Vehicle Reference 1 Car Going ahead left bend
Vehicle movement from SW to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 66 Female
Not hit and run Breath test Positive

Casualty Reference: 1 Vehicle: 1 Age: 66 Female Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 2 Car Going ahead right bend
Vehicle movement from NE to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 47 Female
Not hit and run Breath test Negative

Casualty Reference: 2 Vehicle: 2 Age: 47 Female Driver/rider Severity: Slight
Seatbelt

Casualty Reference: 3 Vehicle: 2 Age: 8 Female Passenger Severity: Slight
Seatbelt
Back seat

Casualty Reference: 4 Vehicle: 2 Age: 10 Female Passenger Severity: Slight
Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

17246072 25/11/2017 Time 0950 Vehicles 4 Casualties 2 Slight
E:372140 N: 293062 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Other Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 1	
4th:			
5th:			
6th:			

V001 PULLED OUT OF TESCO FILLING STATION INTO ONCOMING TRAFFIC, COLLIDED WITH V002 WHICH THEN CAUSED FURTHER COLLISIONS WITH 2 OTHER VEHICLES.

Occurred on TESCO CANN HALL ROAD A442 NEAR JN WITH MILL STREET

Vehicle Reference 1 Car Turning right
Vehicle movement from E to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering main road First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 32 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 62 Male
Not hit and run Breath test Negative

Vehicle Reference 3 Taxi/Private hire car Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 45 Female
Not hit and run Breath test Positive

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 4 Car Going ahead other
Vehicle movement from S to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 52 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 4 Age: 52 Male Driver/rider Severity: Slight
Seatbelt

Casualty Reference: 2 Vehicle: 4 Age: 49 Female Passenger Severity: Slight
Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18309104 02/07/2018 Time 1520 Vehicles 3 Casualties 2 Slight
E:372465 N: 293162 First Road: B 4363 Road Type Single carriageway
Speed limit: 40 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Distraction in vehicle	Vehicle 1	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

V001 HAS BEEN TRAVELLING TOWARDS WOLVERHAMPTON ON THE B4363. ON A LEFT HAND BEND, IT HAS CROSSED THE SOLID WHITE LINES AND ENCROACHED INTO THE OPPOSITE CARRIAGEWAY MAKING CONTACT WITH THE O/S/F OF V002, WHICH WAS TRAVELLING IN THE OPPOSITE DIRECTION. THIS HAS CAUSED V002 TO SPIN AND COLLIDE WITH V003, WHICH WAS TRAVELLING BEHIND V001. DRIVER OF V001 APPEARS TO HAVE BEEN DISTRACTED. WITNESS REPORTS SEEING V001 SWERVING AROUND BEFORE THE COLLISION. WHILE UNDER CAUTION AT THE SCENE, ON BODY CAM, DR

Occurred on WOLVERHAMPTON ROAD B4363 NEAR JN WITH LODGE LANE

Vehicle Reference 1 Goods vehicle - unknown weight Going ahead left bend
Vehicle movement from W to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 28 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Car Going ahead right bend
Vehicle movement from NE to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 39 Female
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 3 Car Going ahead left bend
Vehicle movement from W to NE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 38 Female
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 3 Age: 38 Female Driver/rider Severity: Slight
Seatbelt

Casualty Reference: 2 Vehicle: 3 Age: 11 Male Passenger Severity: Slight
Seatbelt
Front seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18312843 13/07/2018 Time 0812 Vehicles 2 Casualties 1 Slight
E:372720 N: 293388 First Road: B 4363 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Poor turn or manoevre	Vehicle 1	Very Likely
3rd:	Fatigue	Vehicle 1	
4th:			
5th:			
6th:			

V1 WAS TRAVELLING UP THE HILL OF THE WOLVERHAMPTON ROAD AWAY FROM BRIDGNORTH, V2 WAS TRAVELLING IN THE OPPOSITE DIRECTION. FOR REASONS UNKNOWN (AT THIS TIME) V1 HAS CROSSED THE DOUBLE SOLID WHITE LINE SYSTEM AND COLLIDED WITH THE FRONT OF V2 CAUSING EXTE NSIVE DAMAGE

Occurred on WOLVERHAMPTON ROAD B4363

Vehicle Reference 1 Car Going ahead left bend
Vehicle movement from SW to N No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 45 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 45 Male Driver/rider Severity: Slight
Seatbelt

Vehicle Reference 2 Car Going ahead right bend
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 58 Male
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months
Selection: **Notes:**
; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18340755 12/10/2018 Time 1000 Vehicles 4 Casualties 2 Slight
E:372139 N: 292441 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: Crossroads Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight:street lights present Raining without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Following too close	Vehicle 1	Very Likely
3rd:	Slippery road (due to weather)	Vehicle 1	
4th:			
5th:			
6th:			

IT WOULD APPEAR V4 WAS STATIONARY AT THE JUNCTION, WAITING TO TURN RIGHT INTO WELL MEADOW. V2 & V3 WERE STATIONARY BEHIND V4 WAITING IN LINE. V1 HAS THEN COLLIDED INTO THE REAR OF V2, PUSHING IT INTO THE REAR OF V3, WHICH THEN PUSHED V3 INTO THE REAR OF V4

Occurred on KIDDERMINSTER ROAD A442 AT JN WITH WELL MEADON

Vehicle Reference 1 Goods vehicle - unknown weight Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 33 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Goods vehicle - unknown weight Going ahead but held up
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 29 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 2 Age: 29 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Vehicle Reference 3 Car Going ahead but held up
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 20 Male
Not hit and run Breath test Negative

Casualty Reference: 2 Vehicle: 3 Age: 20 Male Driver/rider Severity: Slight
Seatbelt

Vehicle Reference 4 Car Waiting to turn right
Vehicle movement from N to SW No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 54 Female
Not hit and run Breath test Negative

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

18354527 11/11/2018 Time 2250 Vehicles 1 Casualties 1 Slight
E:374042 N: 292426 First Road: A 458 Road Type Single carriageway
Speed limit: 40 Junction Detail: Roundabout Give way or controlled A 454
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Darkness: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Fatigue	Vehicle 1	Very Likely
2nd:	Loss of control	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

V1 WAS TRAVELLING ALONG THE A458 WHEN APPROACHING THE ISLAND WITH THE A454 WHEN HE HAS COLLIDED WITH THE ISLAND AND A TRAFFIC SIGN. HE HAS THEN CONTINUED TO A NEARBY CARAVAN PARK. THIS WAS DUE TO TIREDNESS BY THE DRIVER

Occurred on STOURBRIDGE ROAD A458 AT JN WITH A454

Vehicle Reference 1 90 Stopping
Vehicle movement from W to SE No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Front Hit vehicle:
Hit object in road Cent island of Rdbt Off road: None
Did not leave carr Age of Driver 72 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 71 Female Passenger Severity: Slight
Seatbelt
Not car passenger

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

19355745 20/01/2019 Time 1253 Vehicles 1 Casualties 1 Slight
E:372002 N: 293014 First Road: U Road Type Single carriageway
Speed limit: 30 Junction Detail: T & Stag Jct Give way or controlled B 4363
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Road layout (eg bend, hill etc.)	Vehicle 1	Very Likely
2nd:	Travelling too fast for conditions	Vehicle 1	Very Likely
3rd:	Poor turn or manoevre	Vehicle 1	Very Likely
4th:	Aggressive driving	Vehicle 1	Very Likely
5th:	Stolen vehicle	Vehicle 1	Very Likely
6th:	Vehicle in course of crime	Vehicle 1	Very Likely

IN MY OPINION V001 (STOLEN M/V) HAS BEEN DRIVING ALONG THE B4363 WHEN IT HAS BEEN SPOOKED BY A MARKED POLICE VEHICLE. THE POLICE VEHICLE HAS BEEN ONE VEHICLE BEHIND AND HAS NOT MADE ANY ATTEMPT TO STOP IT. V001 HAS SEEM AN OPPORTUNITY TO HIDE AND SPE
ED DOWN A NARROW LANE COLLIDING WITH A PEDESTRIAN AND PINNING THEM AGAINST A WALL. THE VEHICLE HAS DRIVEN ANOTHER 50 METRES BEFORE THREE U/K MALES HAVE DE-CAMPED .

Occurred on DOCTORS LANE AT JN WITH MILL ST B4363

Vehicle Reference 1 Car Turning left
Vehicle movement from S to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Leaving main road First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 19 Male
Hit and run Breath test Driver not contacted

Casualty Reference: 1 Vehicle: 1 Age: 50 Male Pedestrian Severity: Slight
Seatbelt
In carr not crossing Direction Unknown
Movement U/K

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

19812896 30/01/2019 Time 0230 Vehicles 1 Casualties 2 Slight
E:373998 N: 292510 First Road: A 454 Road Type Single carriageway
Speed limit: 60 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Darkness: no street lighting Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Exceeding speed limit	Vehicle 1	Very Likely
2nd:	Fatigue	Vehicle 1	Very Likely
3rd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
4th:	Loss of control	Vehicle 1	Very Likely
5th:			
6th:			

V001 TRAVELLING ALONG A454 (NATIONAL SPEED LIMIT) DRIVER LOST CONTROL, VEHICLE VEERED TO THE RIGHT AND LEFT THE CARRIAGEWAY DRIVING UP GRASS BANK AND ROLLING OVER SEVERAL TIMES BEFORE COMING TO A STOP ON CARRIAGEWAY. FRONT SEAT AND REAR PASSENGER SUFFERE D MINOR INJURIES. AMBULANCE AND FIRE SERVICE ON SCENE

Occurred on A454 STANMORE

Vehicle Reference 1 Car Going ahead other
Vehicle movement from SE to NW No tow / articulation
On main carriageway Skidded and overturned
Location at impact Not at, or within 20M of Jct First impact Front Hit vehicle:
Hit object in road None Off road: None
O/S & rebounded Age of Driver 45 Male
Not hit and run Breath test Negative

Casualty Reference: 1 Vehicle: 1 Age: 42 Female Passenger Severity: Slight
Seatbelt
Back seat

Casualty Reference: 2 Vehicle: 1 Age: 57 Female Passenger Severity: Slight
Seatbelt
Back seat

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

19832468 13/04/2019 Time 1040 Vehicles 2 Casualties 1 Slight
E:372142 N: 293043 First Road: A 442 Road Type Single carriageway
Speed limit: 30 Junction Detail: T & Stag Jct Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Sudden braking	Vehicle 1	Very Likely
2nd:	Poor turn or manoevre	Vehicle 1	Very Likely
3rd:	Following too close	Vehicle 2	
4th:			
5th:			
6th:			

IT IS BELIEVED THAT SOME SORT OF ALTERCATION HAS TAKEN PLACE BETWEEN THE DRIVER OF VEH1 AND A GROUP OF RIDERS AS THEY HAVE ENTERED BRIDGNORTH, THIS HAS RESULTED IN THE DRIVER OF VEH 1 SOUNDING HIS HORN AT THE GROUP. WITNESSES DESCRIBE AN INCIDENT WHE RE THE DRIVER OF VEH 1 HAS PERFORMED AN EMERGENCY STOP BUT HAS PULLED INTO THE KERB AT THE SAME TIME BLOCKING THE PATH OF THE CYCLIST WHO MAY HAVE BEEN TRAVELLING TOO CLOSE TO VEH 1. THIS HAS CAUSED THE CYCLIST AND VEH 1 TO COLLIDE CAUSING INJURIES T

Occurred on CANN HALL ROAD (A442) JUNCTION WITH CANN HALL DRIVE

Vehicle Reference 1 Car Stopping
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 42 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Pedal Cycle Going ahead other
Vehicle movement from N to S No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 47 Male
Not hit and run Breath test

Casualty Reference: 1 Vehicle: 2 Age: 47 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection: **Notes:**

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

19833300 16/04/2019 Time 0800 Vehicles 2 Casualties 1 Slight
E:372144 N: 292322 First Road: A 442 Road Type 1
Speed limit: 30 Junction Detail: Roundabout Give way or controlled A 458
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight:street lights present Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Disobeyed Give Way or Stop sign or markings	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

CYCLIST HA BEEN TURNING RIGHT ON THE ROUNDABOUT AND HAS COME FROM BRIDGNORTH BYPASS. AS HE IS TURNING RIGHT VEHICLE 001 HAS COME OUT FROM THE 1ST EXIT AND KNOCKED THE CYCLIST OFF HIS BIKE.

Occurred on KIDDERMINSTER ROAD ISLAND (A442) J/W A458 STOURBRIDGE RD BRIDGNORTH

Vehicle Reference 1 Goods 3.5 tonnes mgw and under Turning right
Vehicle movement from N to W No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Entering roundabout First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 29 Male
Not hit and run Breath test Negative

Vehicle Reference 2 Pedal Cycle Going ahead other
Vehicle movement from W to E No tow / articulation
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 55 Male
Not hit and run Breath test

Casualty Reference: 1 Vehicle: 2 Age: 55 Male Driver/rider Severity: Slight
Seatbelt

Accidents between dates **12/05/2014** **and** **12/05/2019** (60) months

Selection:

; Refined using Accidents within selected Polygons -Consultants ("Bridgnorth")

Notes:

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	5	20	25
2-wheeled motor vehicles	0	5	5	10
Pedal cycles	0	1	4	5
Horses & other	0	2	3	5
Total	0	11	29	40

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	0	1	21	22
Passenger	0	2	9	11
Motorcycle rider	0	5	6	11
Cyclist	0	1	4	5
Pedestrian	0	2	3	5
Other	0	0	0	0
Total	0	11	43	54

Appendix B TRICS outputs

Calculation Reference: AUDIT-231601-190606-0644

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
	EX	ESSEX	3 days
	KC	KENT	1 days
03	**SOUTH WEST**		
	DV	DEVON	2 days
04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
05	**EAST MIDLANDS**		
	NR	NORTHAMPTONSHIRE	1 days
06	**WEST MIDLANDS**		
	WK	WARWICKSHIRE	2 days
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	3 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	WY	WEST YORKSHIRE	5 days
08	**NORTH WEST**		
	LC	LANCASHIRE	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

Secondary 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: 1775 to 974258 (units: sqm)
Range Selected by User: 708 to 974258 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 17/10/18

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	6 days
Tuesday	3 days
Wednesday	5 days
Thursday	3 days
Friday	5 days

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

Selected survey types:

Manual count	22 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	22

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	11
Commercial Zone	1
Development Zone	1
Residential Zone	6
Out of Town	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.

Secondary Filtering selection:

Use Class:

Not Known	3 days
B1	6 days
B2	10 days
B8	2 days

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

Population within 1 mile:

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

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

Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	12 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	15 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	22 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	22 days

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

LIST OF SITES relevant to selection parameters

1 DV-02-D-06 INDUSTRIAL ESTATE DEVON
ST MODWEN ROAD
PLYMOUTH

Edge of Town
Industrial Zone
Total Gross floor area: 1775 sqm
Survey date: TUESDAY 17/07/12 Survey Type: MANUAL

2 DV-02-D-07 INDUSTRIAL ESTATE DEVON
BITTERN ROAD
EXETER
SOWTON IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 3600 sqm
Survey date: MONDAY 03/07/17 Survey Type: MANUAL

3 ES-02-D-06 INDUSTRIAL ESTATE EAST SUSSEX
COURTLANDS ROAD
EASTBOURNE

Edge of Town
Residential Zone
Total Gross floor area: 7525 sqm
Survey date: MONDAY 21/10/13 Survey Type: MANUAL

4 EX-02-D-03 INDUSTRIAL ESTATE ESSEX
WYNCOLLS ROAD
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 4876 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

5 EX-02-D-04 INDUSTRIAL ESTATE ESSEX
PASTURE ROAD
WITHAM

Edge of Town
Industrial Zone
Total Gross floor area: 37130 sqm
Survey date: THURSDAY 10/05/18 Survey Type: MANUAL

6 EX-02-D-05 INDUSTRIAL ESTATE ESSEX
HECKWORTH CLOSE
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 7280 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

7 KC-02-D-02 INDUSTRIAL ESTATE KENT
SOUTHWELL ROAD
DEAL

Edge of Town
Residential Zone
Total Gross floor area: 10715 sqm
Survey date: WEDNESDAY 28/11/12 Survey Type: MANUAL

8 LC-02-D-07 INDUSTRIAL ESTATE LANCASHIRE
CHAIN CAUL WAY
PRESTON
ASHTON-ON-RIBBLE
Edge of Town
Industrial Zone
Total Gross floor area: 4700 sqm
Survey date: FRIDAY 17/11/17 Survey Type: MANUAL

9 NF-02-D-03 INDUSTRIAL ESTATE NORFOLK
BIDEWELL CLOSE
NORWICH

Edge of Town
Residential Zone
Total Gross floor area: 6000 sqm
Survey date: MONDAY 08/10/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10 NR-02-D-01 INDUSTRIAL ESTATE NORTHAMPTONSHIRE
ROBINSON WAY
KETTERING

Edge of Town
Industrial Zone
Total Gross floor area: 12900 sqm
Survey date: THURSDAY 23/10/14 Survey Type: MANUAL

11 TW-02-D-07 INDUSTRIAL ESTATE TYNE & WEAR
SWALWELL BANK
GATESHEAD
WHICKHAM
Edge of Town
Residential Zone
Total Gross floor area: 6800 sqm
Survey date: FRIDAY 04/10/13 Survey Type: MANUAL

12 WK-02-D-01 INDUSTRIAL ESTATE WARWICKSHIRE
CASTLE MOUND WAY
RUGBY

Edge of Town
Industrial Zone
Total Gross floor area: 150564 sqm
Survey date: WEDNESDAY 27/06/18 Survey Type: MANUAL

13 WK-02-D-02 INDUSTRIAL ESTATE WARWICKSHIRE
OVERVIEW WAY
RUGBY

Edge of Town
Industrial Zone
Total Gross floor area: 974258 sqm
Survey date: WEDNESDAY 27/06/18 Survey Type: MANUAL

14 WM-02-D-02 INDUSTRIAL ESTATE WEST MIDLANDS
DUNLOP WAY
BIRMINGHAM

Edge of Town
Residential Zone
Total Gross floor area: 23480 sqm
Survey date: WEDNESDAY 07/11/12 Survey Type: MANUAL

15 WO-02-D-01 INDUSTRIAL ESTATE WORCESTERSHIRE
SANDY LANE
STOURPORT-ON-SEVERN

Edge of Town
Commercial Zone
Total Gross floor area: 2758 sqm
Survey date: FRIDAY 23/05/14 Survey Type: MANUAL

16 WO-02-D-02 INDUSTRIAL ESTATE WORCESTERSHIRE
WEIR LANE
WORCESTER

Edge of Town
Residential Zone
Total Gross floor area: 9500 sqm
Survey date: MONDAY 14/11/16 Survey Type: MANUAL

17 WO-02-D-03 INDUSTRIAL ESTATE WORCESTERSHIRE
MILLENNIUM WAY
EVESHAM

Edge of Town
Out of Town
Total Gross floor area: 84575 sqm
Survey date: TUESDAY 26/06/18 Survey Type: MANUAL

18 WY-02-D-04 INDUSTRIAL ESTATE WEST YORKSHIRE
LAW STREET
CLECKHEATON

Edge of Town
Industrial Zone
Total Gross floor area: 23226 sqm
Survey date: THURSDAY 15/09/16 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

19 WY-02-D-05 INDUSTRIAL ESTATE WEST YORKSHIRE
CARR WOOD ROAD
CASTLEFORD

Edge of Town
Development Zone
Total Gross floor area: 1776 sqm
Survey date: MONDAY 22/05/17 Survey Type: MANUAL

20 WY-02-D-06 INDUSTRIAL ESTATE (PART) WEST YORKSHIRE
PIONEER WAY
CASTLEFORD

Edge of Town
Industrial Zone
Total Gross floor area: 4328 sqm
Survey date: TUESDAY 23/05/17 Survey Type: MANUAL

21 WY-02-D-07 INDUSTRIAL ESTATE WEST YORKSHIRE
THUNDERHEAD RIDGE RD
CASTLEFORD
GLASSHOUGHTON
Edge of Town
No Sub Category
Total Gross floor area: 3191 sqm
Survey date: MONDAY 15/05/17 Survey Type: MANUAL

22 WY-02-D-08 INDUSTRIAL ESTATE WEST YORKSHIRE
MILL LANE
HALIFAX

Edge of Town
No Sub Category
Total Gross floor area: 11305 sqm
Survey date: WEDNESDAY 17/10/18 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.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	22	63285	0.099	22	63285	0.026	22	63285	0.125
08:00 - 09:00	**22**	**63285**	**0.125**	22	63285	0.048	**22**	**63285**	**0.173**
09:00 - 10:00	22	63285	0.091	22	63285	0.056	22	63285	0.147
10:00 - 11:00	22	63285	0.072	22	63285	0.059	22	63285	0.131
11:00 - 12:00	22	63285	0.073	22	63285	0.067	22	63285	0.140
12:00 - 13:00	22	63285	0.074	22	63285	0.085	22	63285	0.159
13:00 - 14:00	22	63285	0.092	22	63285	0.080	22	63285	0.172
14:00 - 15:00	22	63285	0.064	22	63285	0.086	22	63285	0.150
15:00 - 16:00	22	63285	0.058	22	63285	0.084	22	63285	0.142
16:00 - 17:00	22	63285	0.054	22	63285	0.100	22	63285	0.154
17:00 - 18:00	22	63285	0.034	**22**	**63285**	**0.120**	22	63285	0.154
18:00 - 19:00	22	63285	0.025	22	63285	0.048	22	63285	0.073
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.861			0.859			1.720

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

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

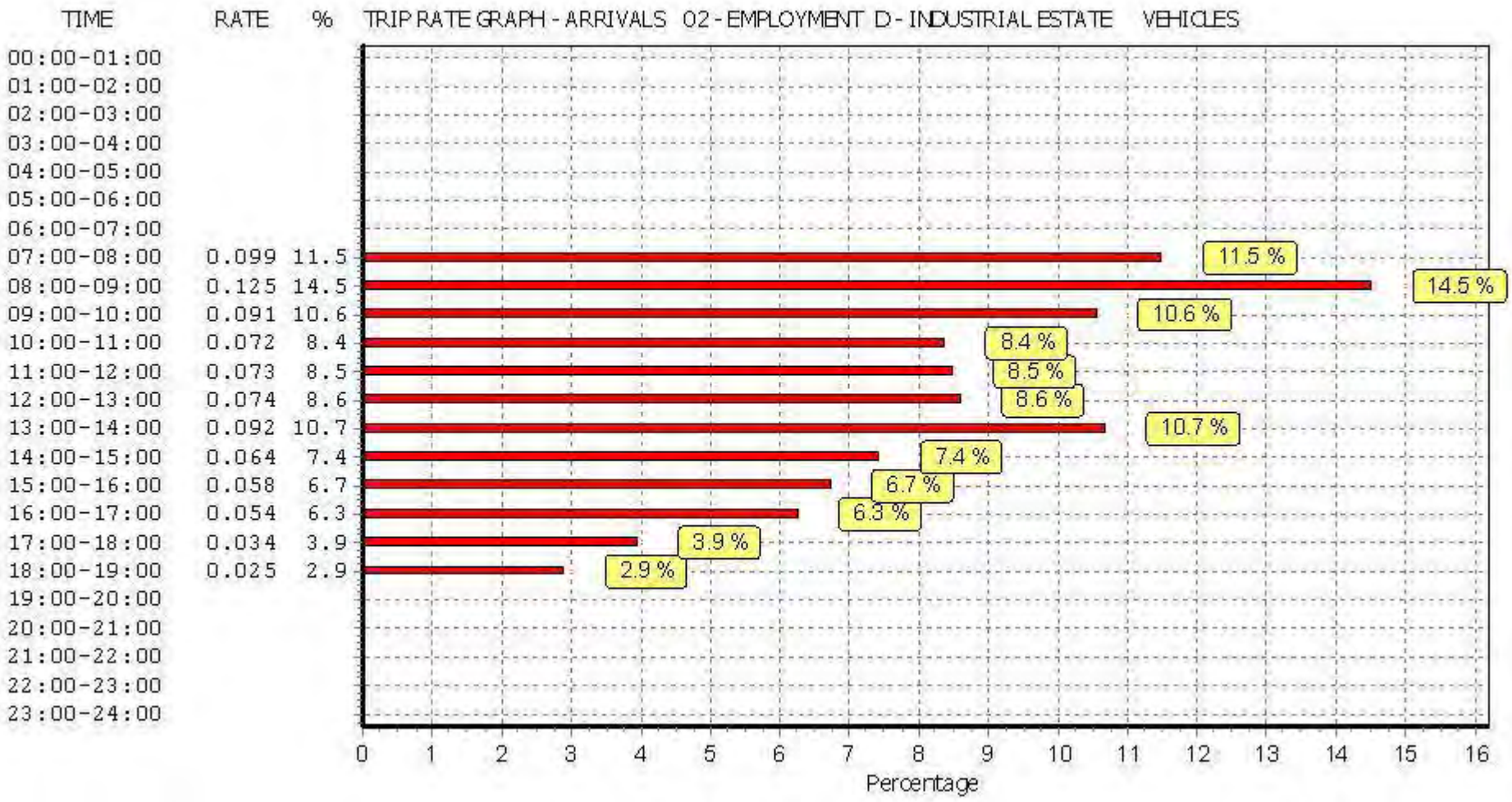
The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	1775 - 974258 (units: sqm)
Survey date date range:	01/01/11 - 17/10/18
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

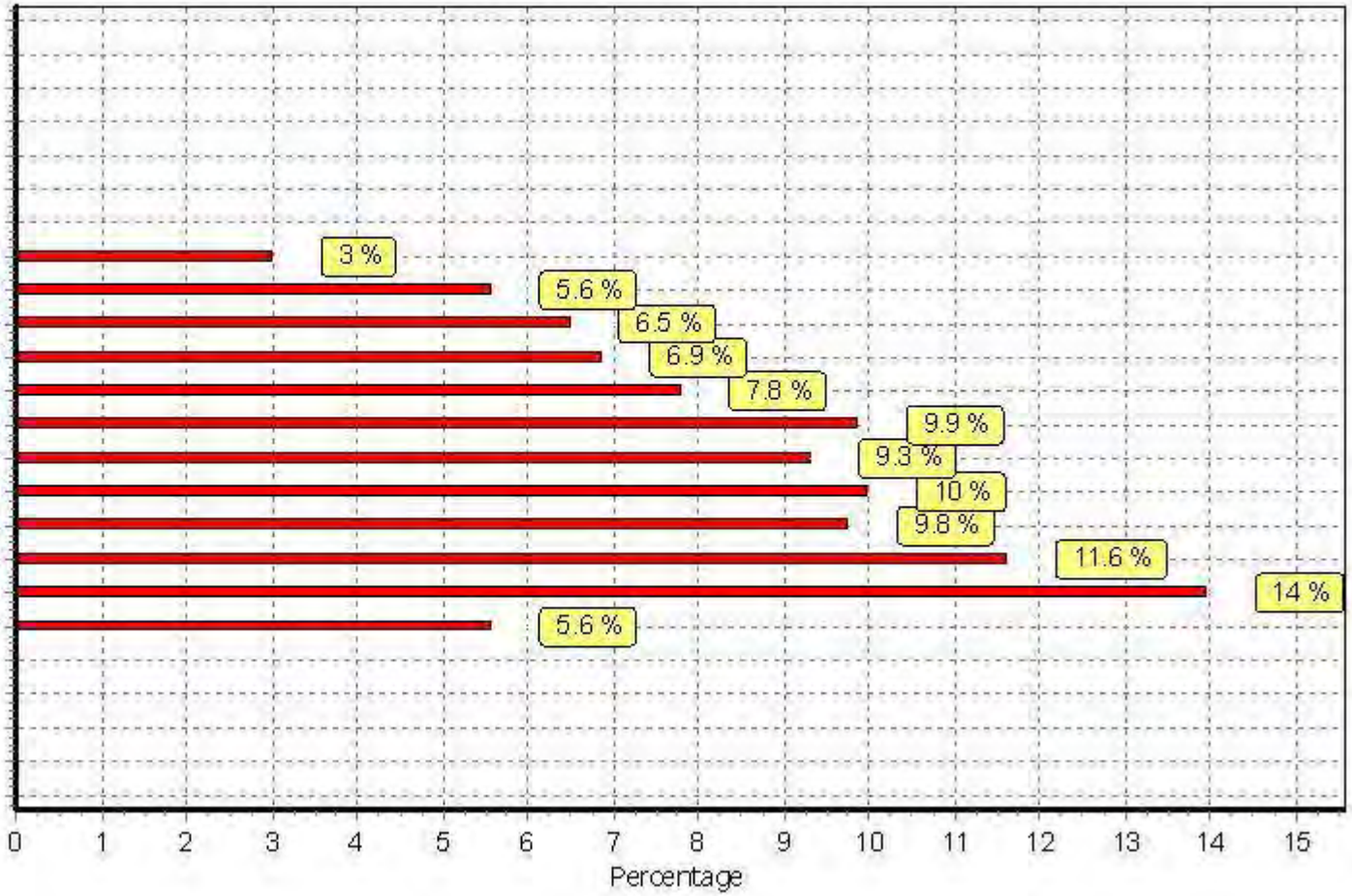
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



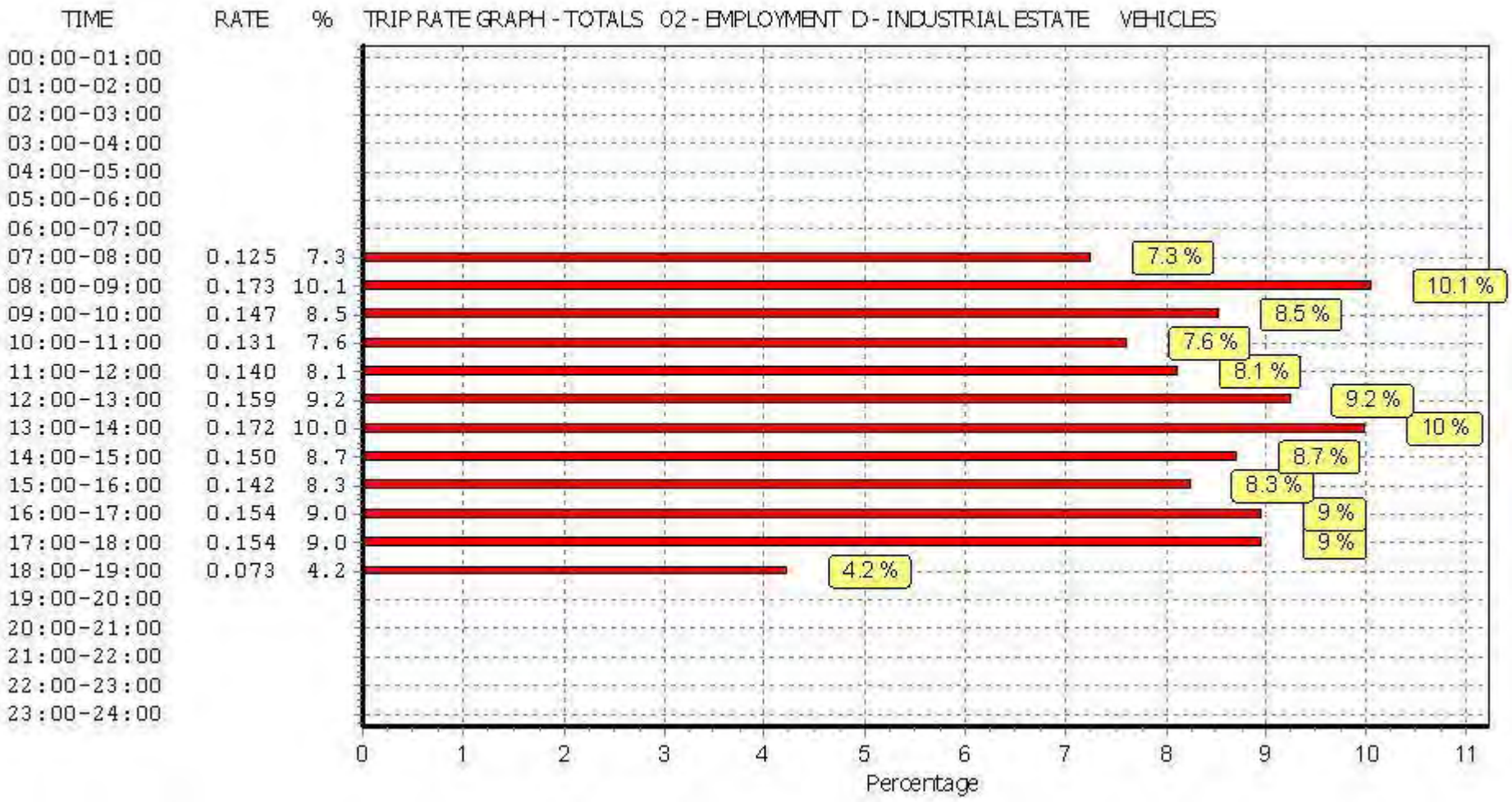
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 02 - EMPLOYMENT D - INDUSTRIAL ESTATE VEHICLES

TIME	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	0.026	3.0
08:00-09:00	0.048	5.6
09:00-10:00	0.056	6.5
10:00-11:00	0.059	6.9
11:00-12:00	0.067	7.8
12:00-13:00	0.085	9.9
13:00-14:00	0.080	9.3
14:00-15:00	0.086	10.0
15:00-16:00	0.084	9.8
16:00-17:00	0.100	11.6
17:00-18:00	0.120	14.0
18:00-19:00	0.048	5.6
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

TAXIS

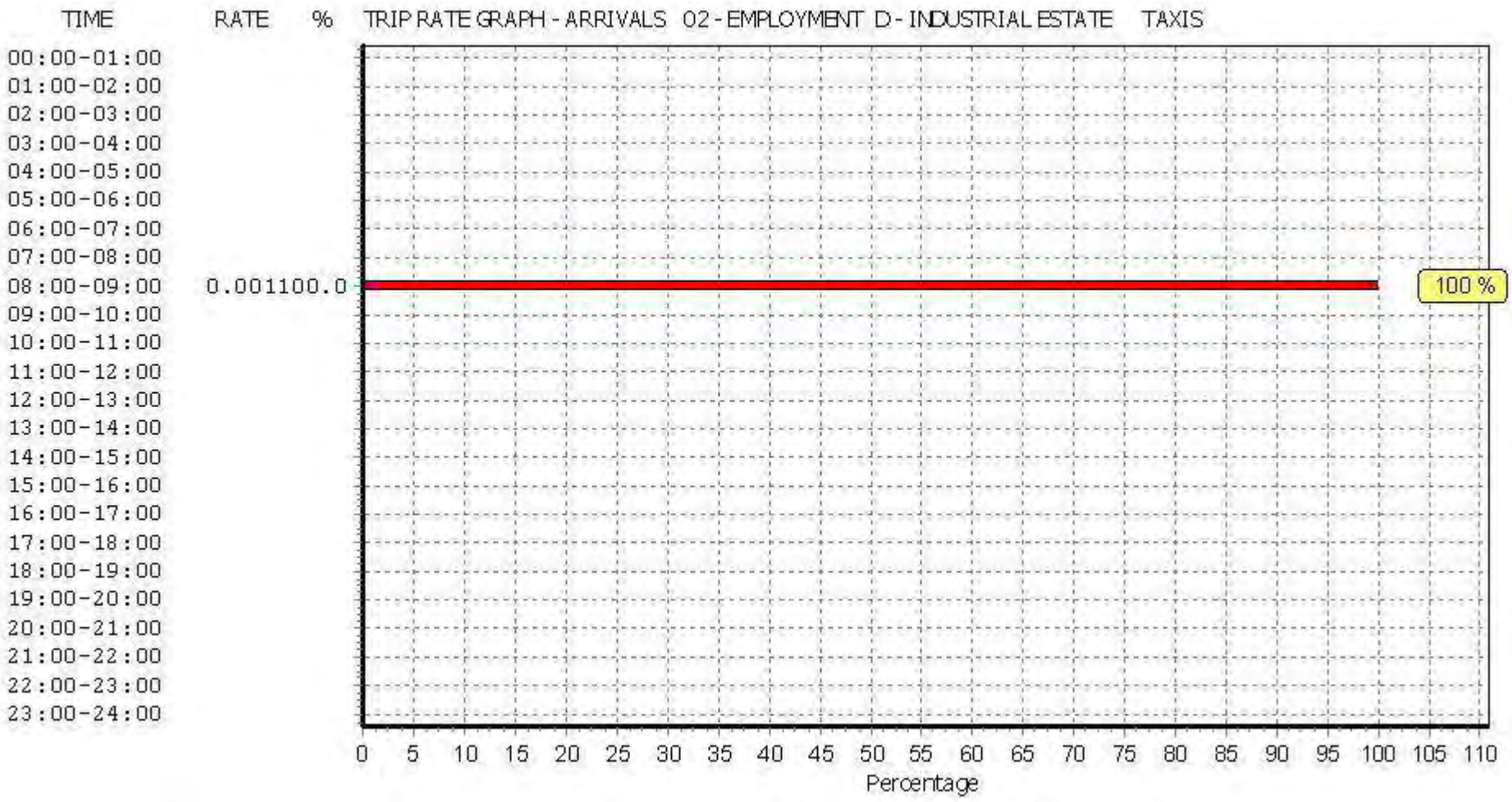
Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

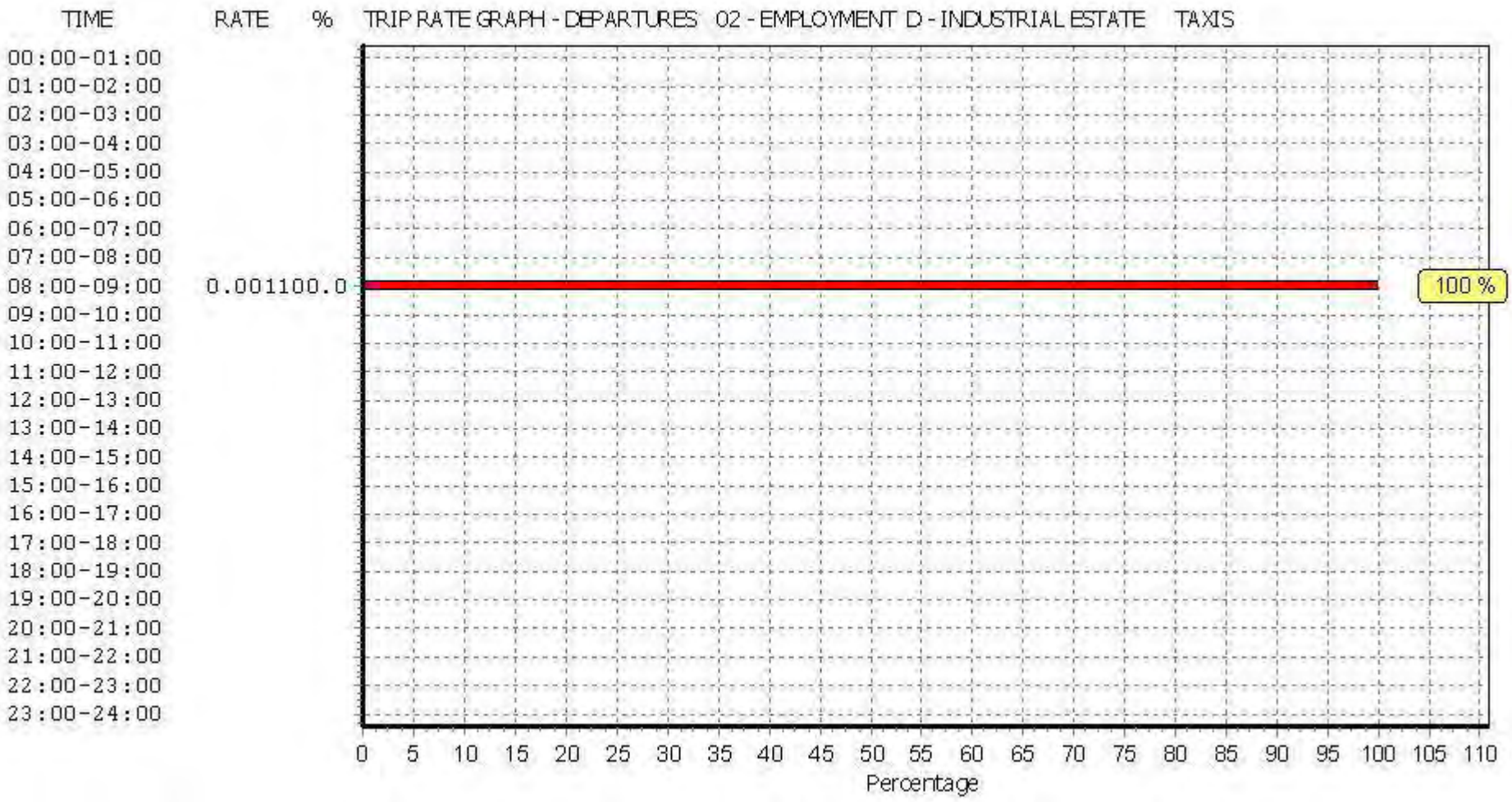
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
08:00 - 09:00	**22**	**63285**	**0.001**	**22**	**63285**	**0.001**	**22**	**63285**	**0.002**
09:00 - 10:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
10:00 - 11:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
11:00 - 12:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
12:00 - 13:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
13:00 - 14:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
14:00 - 15:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
15:00 - 16:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
16:00 - 17:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
17:00 - 18:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
18:00 - 19:00	22	63285	0.000	22	63285	0.000	22	63285	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			0.001			0.002

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

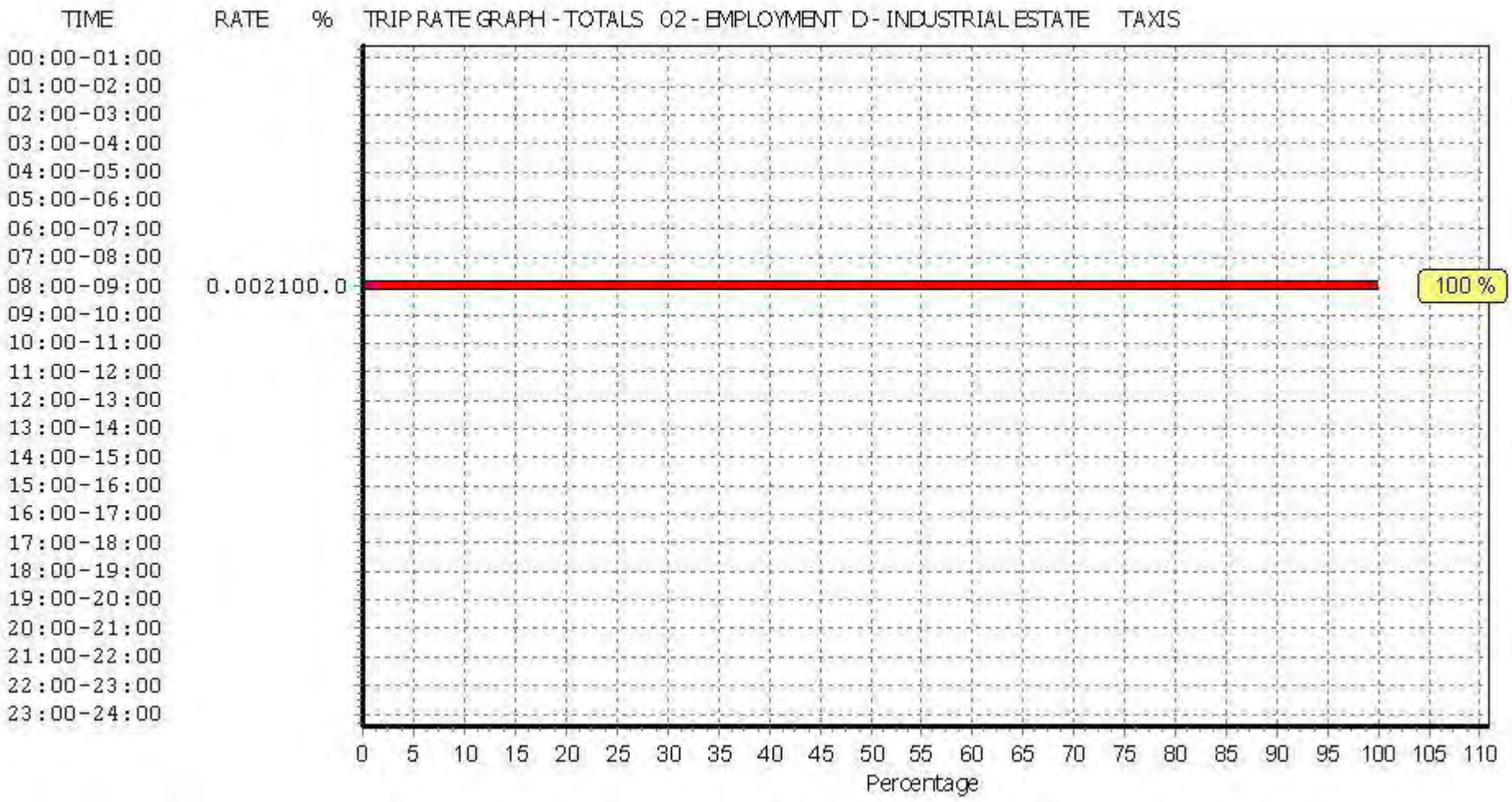
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

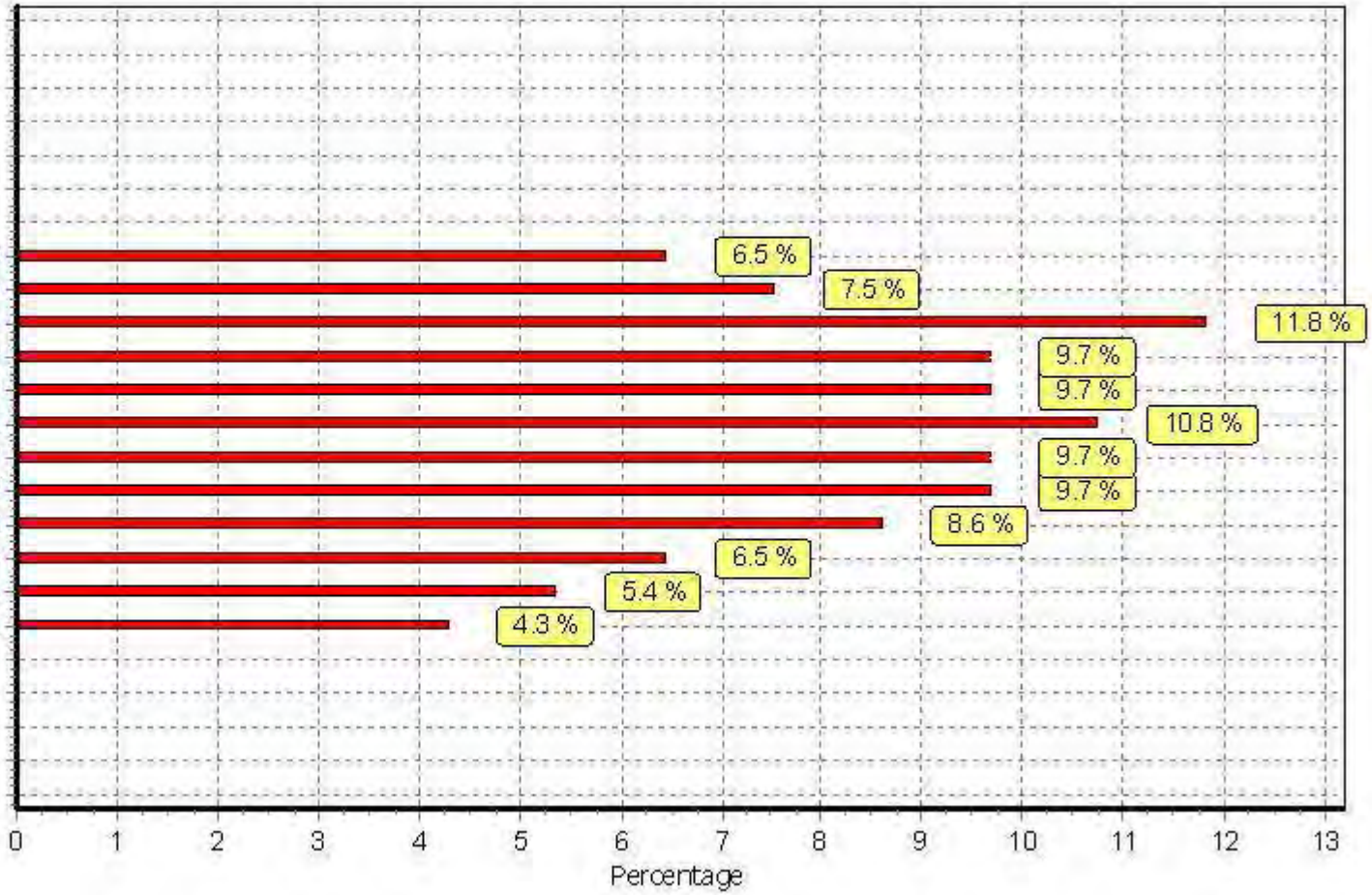
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	22	63285	0.006	22	63285	0.004	22	63285	0.010
08:00 - 09:00	22	63285	0.007	22	63285	0.008	22	63285	0.015
09:00 - 10:00	**22**	**63285**	**0.011**	22	63285	0.009	**22**	**63285**	**0.020**
10:00 - 11:00	22	63285	0.009	22	63285	0.009	22	63285	0.018
11:00 - 12:00	22	63285	0.009	22	63285	0.009	22	63285	0.018
12:00 - 13:00	22	63285	0.010	**22**	**63285**	**0.010**	22	63285	0.020
13:00 - 14:00	22	63285	0.009	22	63285	0.008	22	63285	0.017
14:00 - 15:00	22	63285	0.009	22	63285	0.008	22	63285	0.017
15:00 - 16:00	22	63285	0.008	22	63285	0.009	22	63285	0.017
16:00 - 17:00	22	63285	0.006	22	63285	0.007	22	63285	0.013
17:00 - 18:00	22	63285	0.005	22	63285	0.004	22	63285	0.009
18:00 - 19:00	22	63285	0.004	22	63285	0.004	22	63285	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.093			0.089			0.182

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

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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 GRAPH - ARRIVALS 02 - EMPLOYMENT D - INDUSTRIAL ESTATE OGVS

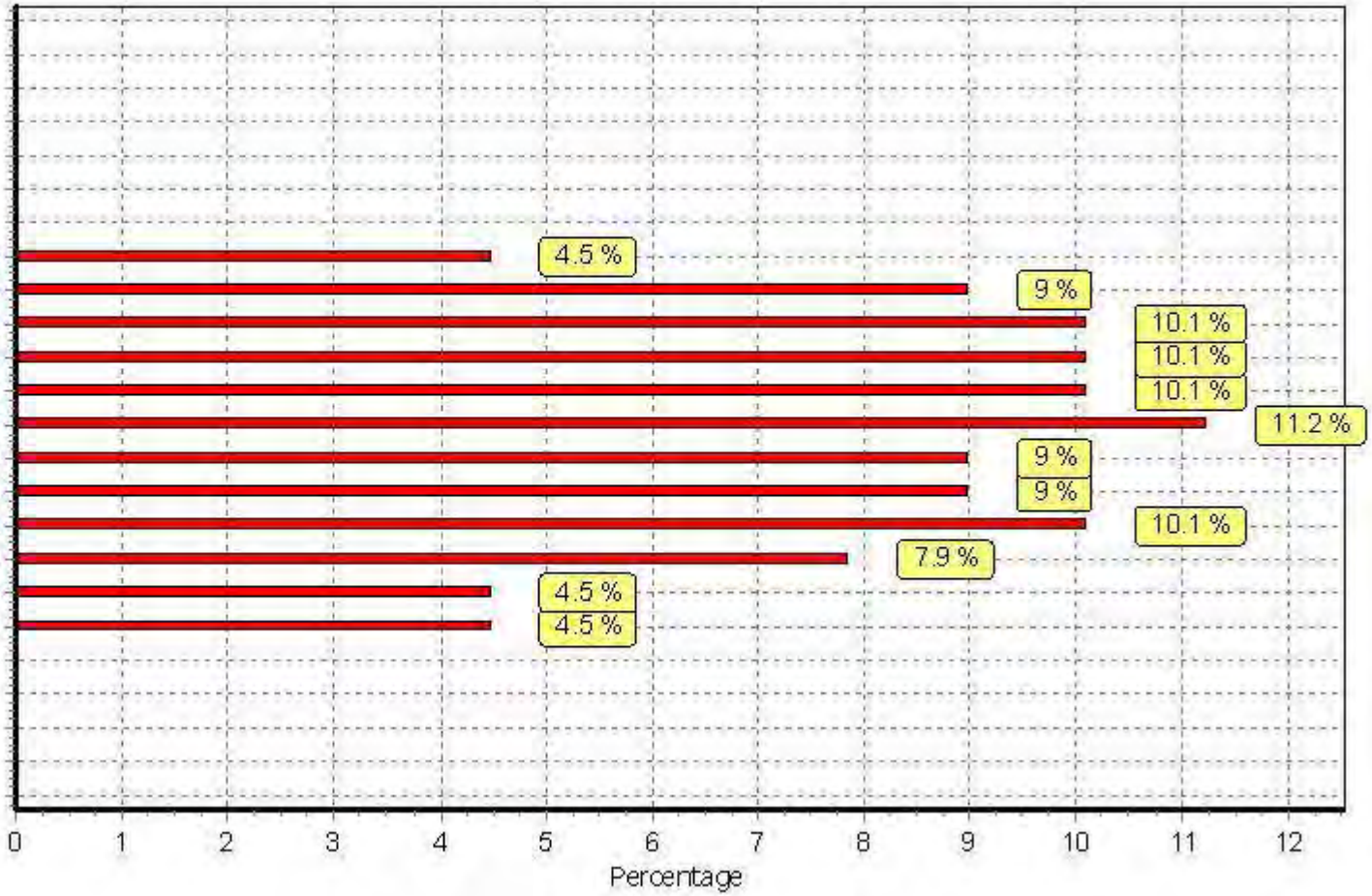
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.006	6.5
08:00-09:00	0.007	7.5
09:00-10:00	0.011	11.8
10:00-11:00	0.009	9.7
11:00-12:00	0.009	9.7
12:00-13:00	0.010	10.8
13:00-14:00	0.009	9.7
14:00-15:00	0.009	9.7
15:00-16:00	0.008	8.6
16:00-17:00	0.006	6.5
17:00-18:00	0.005	5.4
18:00-19:00	0.004	4.3
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



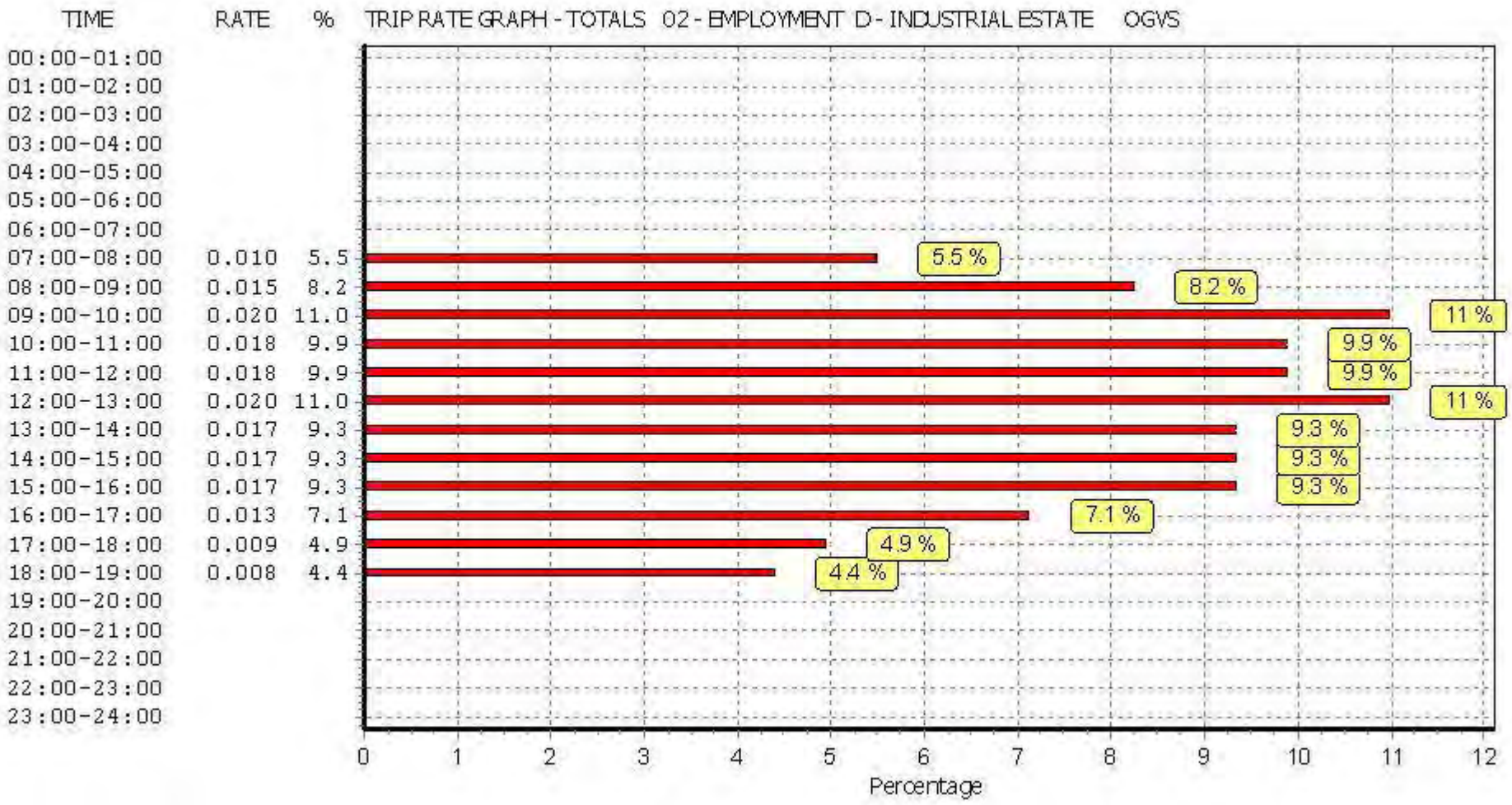
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 02 - EMPLOYMENT D - INDUSTRIAL ESTATE OGVS

TIME	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	0.004	4.5
08:00-09:00	0.008	9.0
09:00-10:00	0.009	10.1
10:00-11:00	0.009	10.1
11:00-12:00	0.009	10.1
12:00-13:00	0.010	11.2
13:00-14:00	0.008	9.0
14:00-15:00	0.008	9.0
15:00-16:00	0.009	10.1
16:00-17:00	0.007	7.9
17:00-18:00	0.004	4.5
18:00-19:00	0.004	4.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

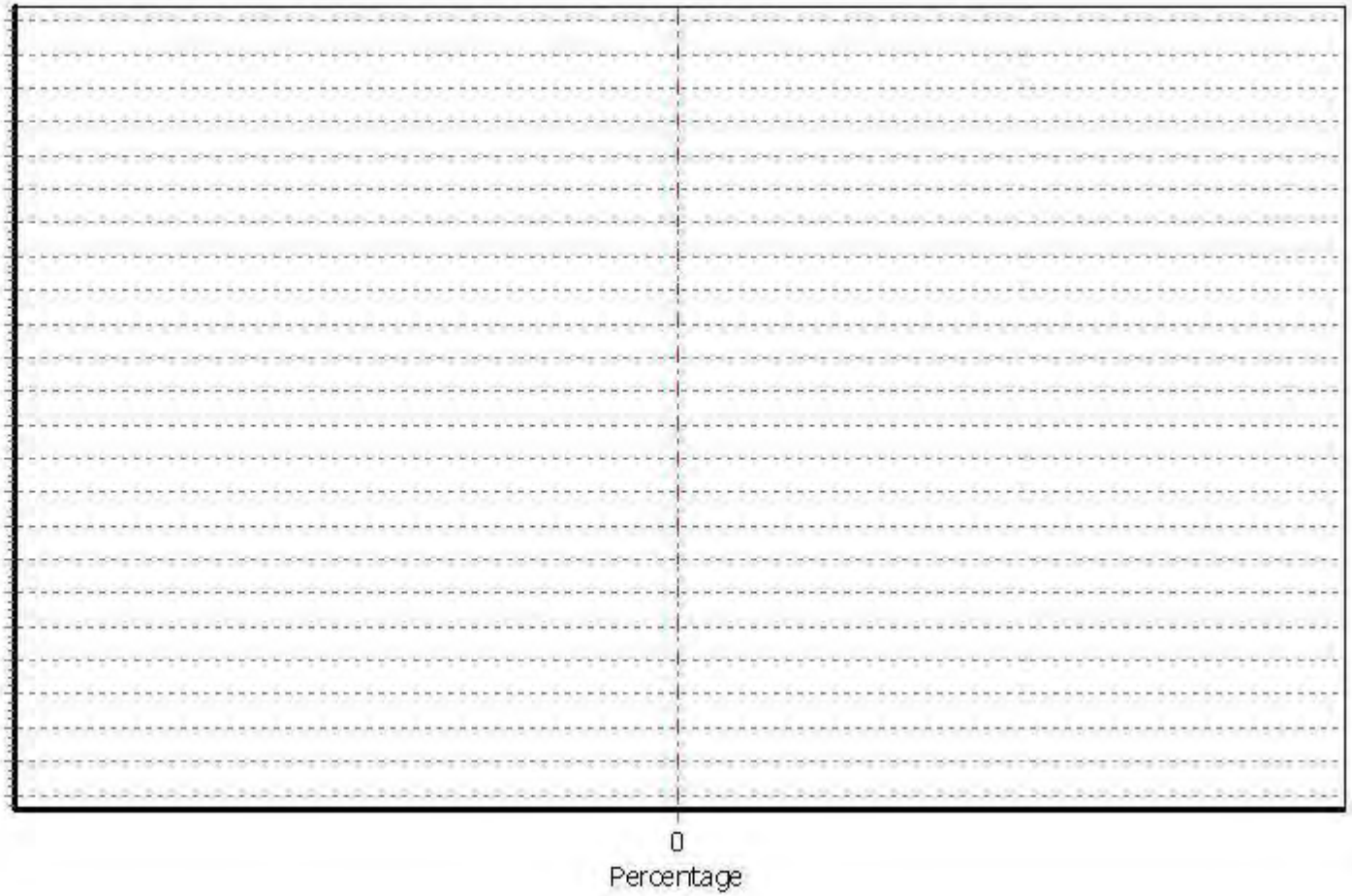
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	22	63285	0.000	**22**	**63285**	**0.000**	22	63285	0.000
08:00 - 09:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
09:00 - 10:00	**22**	**63285**	**0.000**	22	63285	0.000	22	63285	0.000
10:00 - 11:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
11:00 - 12:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
12:00 - 13:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
13:00 - 14:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
14:00 - 15:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
15:00 - 16:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
16:00 - 17:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
17:00 - 18:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
18:00 - 19:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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

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

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00		
08:00-09:00		
09:00-10:00		
10:00-11:00		
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		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		

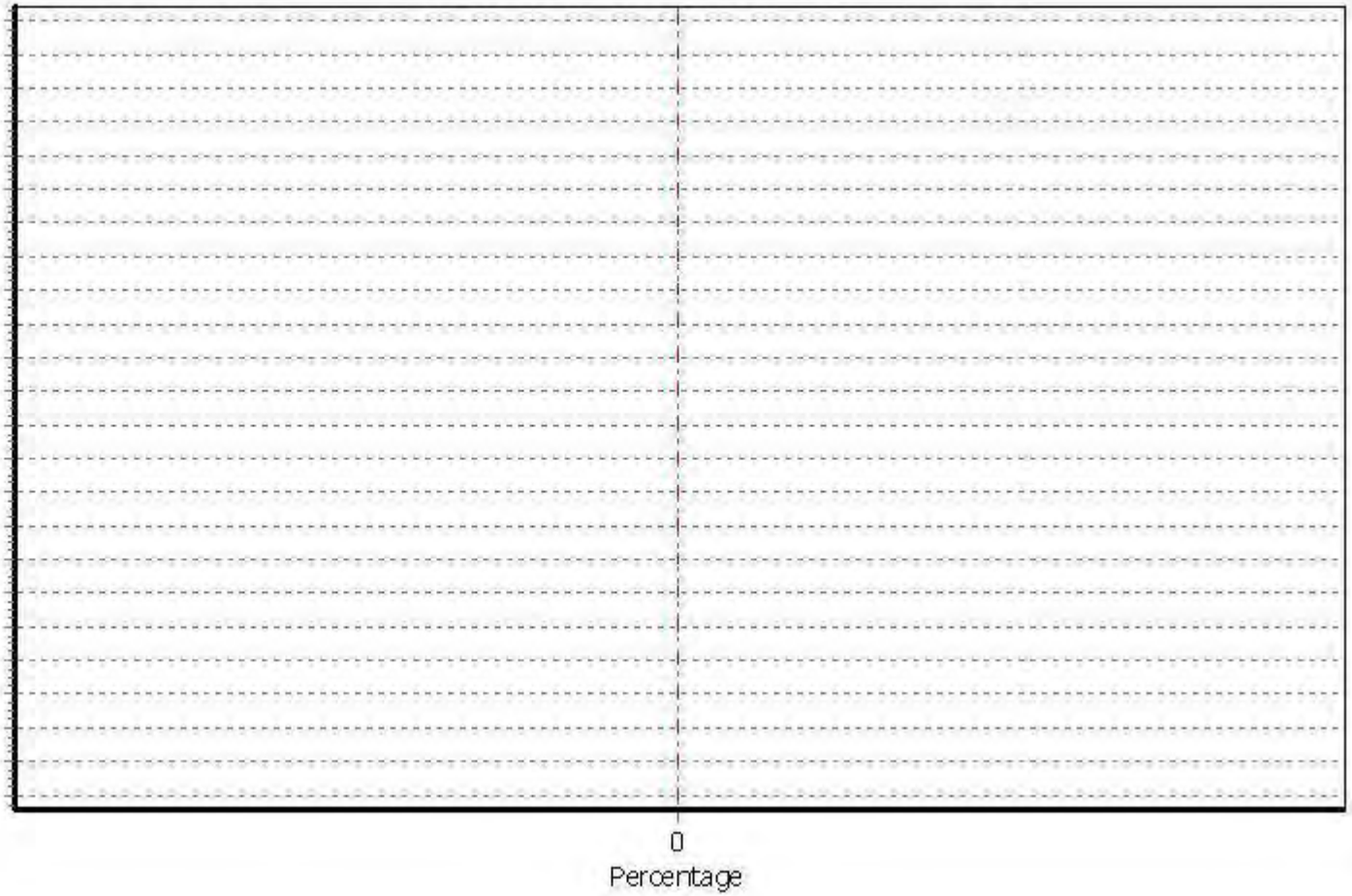
TRIP RATE GRAPH - ARRIVALS 02 - EMPLOYMENT D - INDUSTRIAL ESTATE PSVS



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 02 - EMPLOYMENT D - INDUSTRIAL ESTATE PSVS

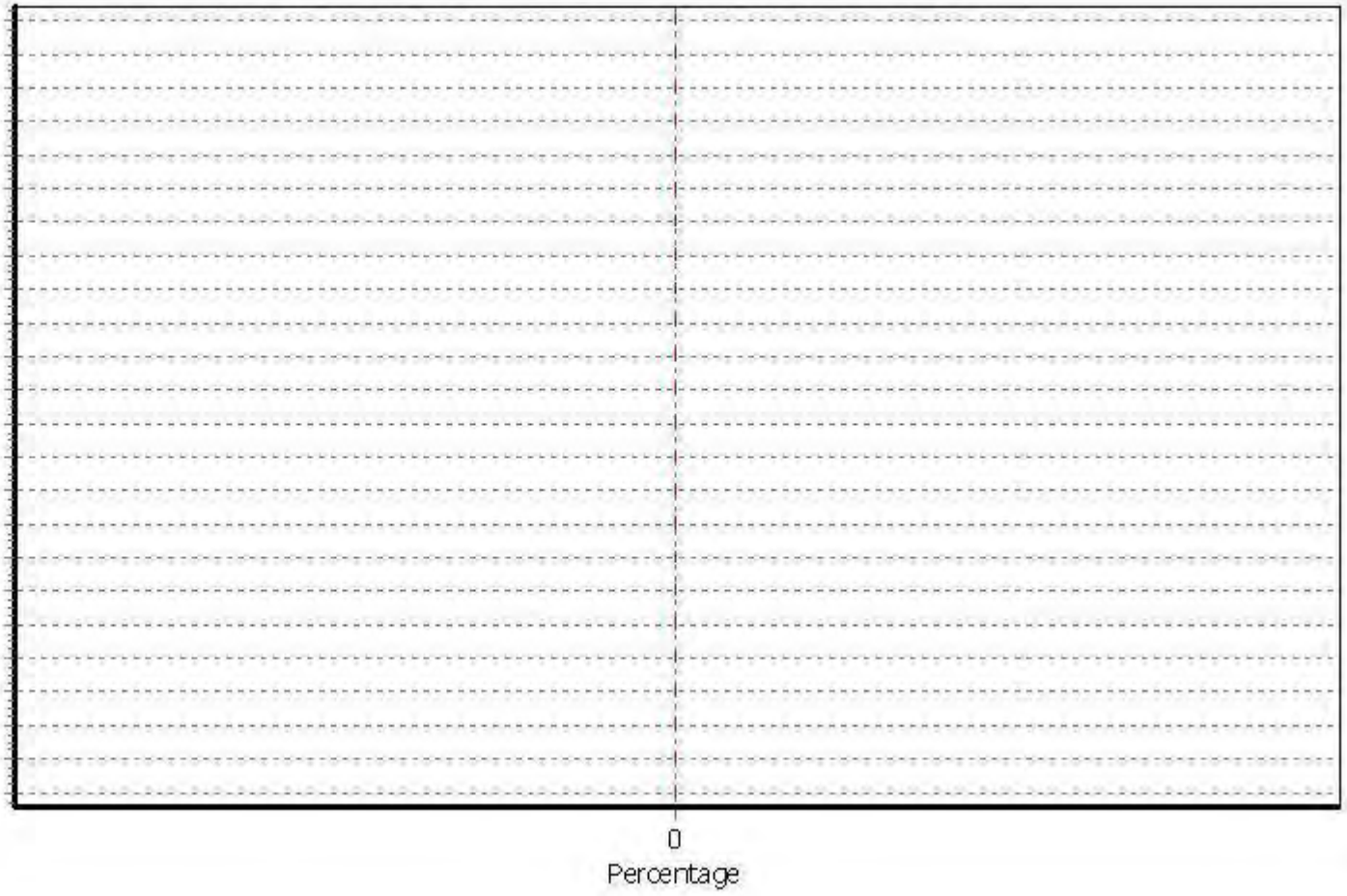
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00		
08:00-09:00		
09:00-10:00		
10:00-11:00		
11:00-12:00		
12:00-13:00		
13:00-14:00		
14:00-15:00		
15:00-16:00		
16:00-17:00		
17:00-18:00		
18:00-19:00		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - TOTALS 02 - EMPLOYMENT D - INDUSTRIAL ESTATE PSVS

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00		
08:00-09:00		
09:00-10:00		
10:00-11:00		
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		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

CYCLISTS

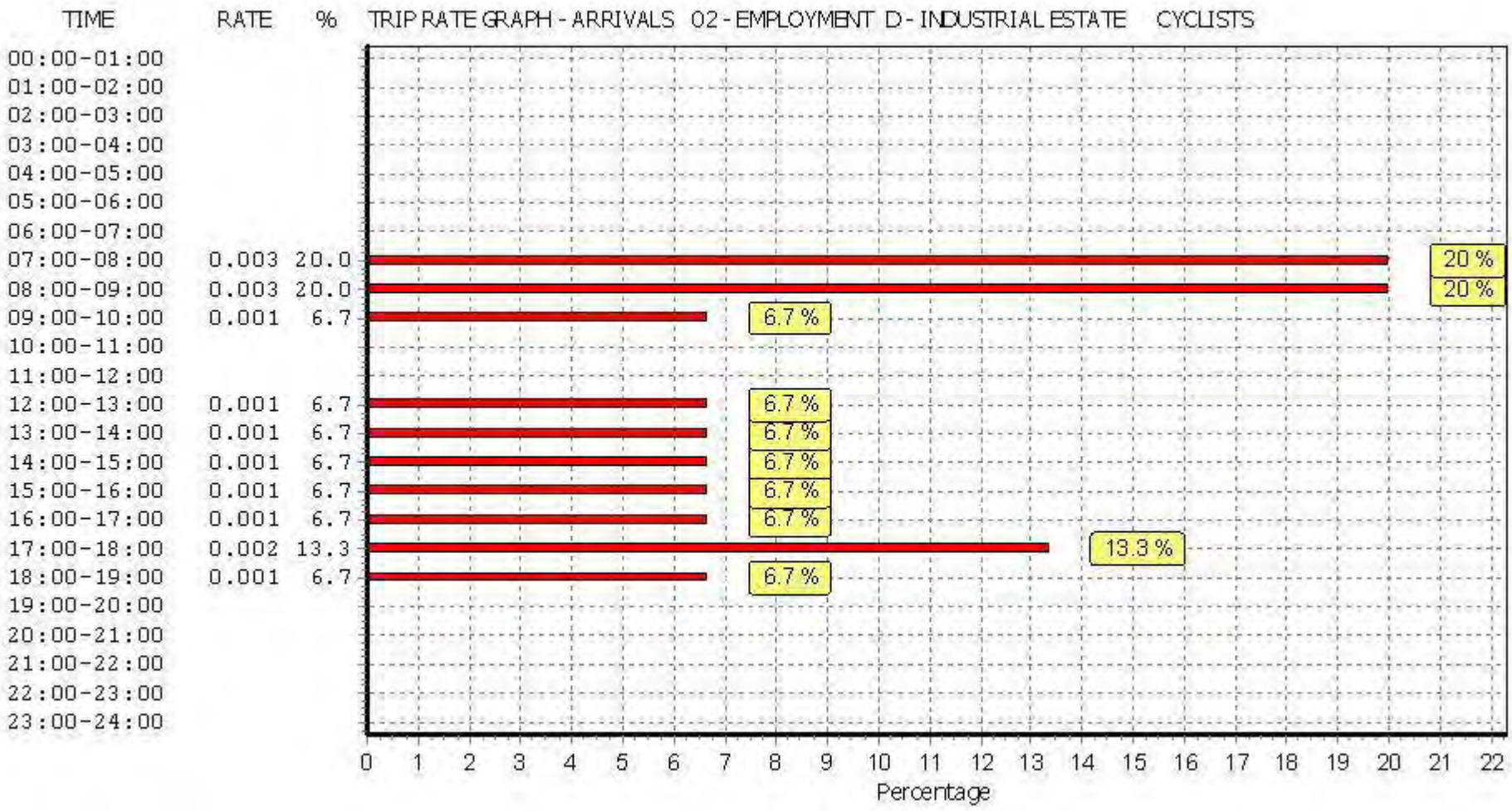
Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

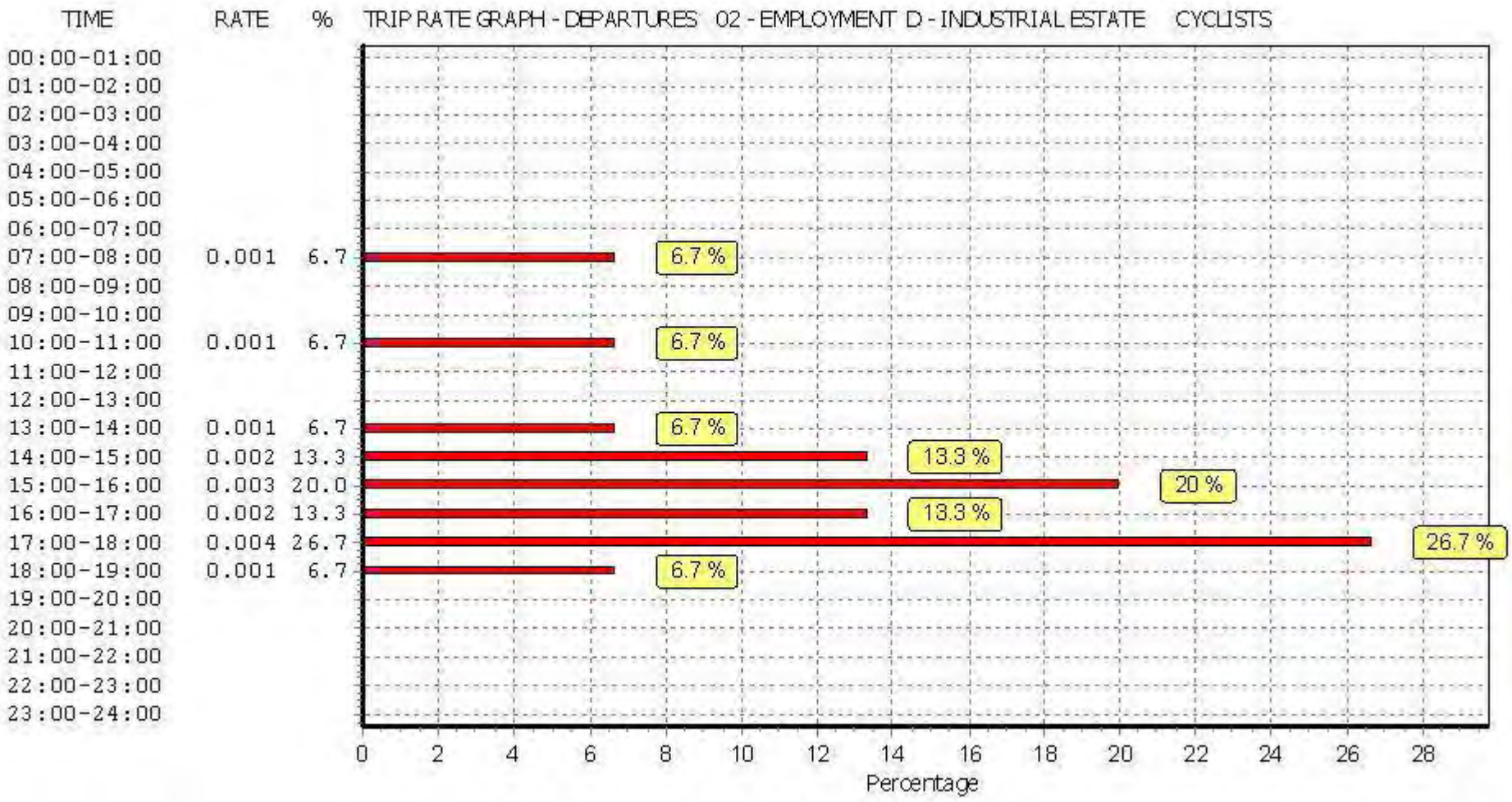
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	22	63285	0.003	22	63285	0.001	22	63285	0.004
08:00 - 09:00	**22**	**63285**	**0.003**	22	63285	0.000	22	63285	0.003
09:00 - 10:00	22	63285	0.001	22	63285	0.000	22	63285	0.001
10:00 - 11:00	22	63285	0.000	22	63285	0.001	22	63285	0.001
11:00 - 12:00	22	63285	0.000	22	63285	0.000	22	63285	0.000
12:00 - 13:00	22	63285	0.001	22	63285	0.000	22	63285	0.001
13:00 - 14:00	22	63285	0.001	22	63285	0.001	22	63285	0.002
14:00 - 15:00	22	63285	0.001	22	63285	0.002	22	63285	0.003
15:00 - 16:00	22	63285	0.001	22	63285	0.003	22	63285	0.004
16:00 - 17:00	22	63285	0.001	22	63285	0.002	22	63285	0.003
17:00 - 18:00	22	63285	0.002	**22**	**63285**	**0.004**	**22**	**63285**	**0.006**
18:00 - 19:00	22	63285	0.001	22	63285	0.001	22	63285	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.015			0.030

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

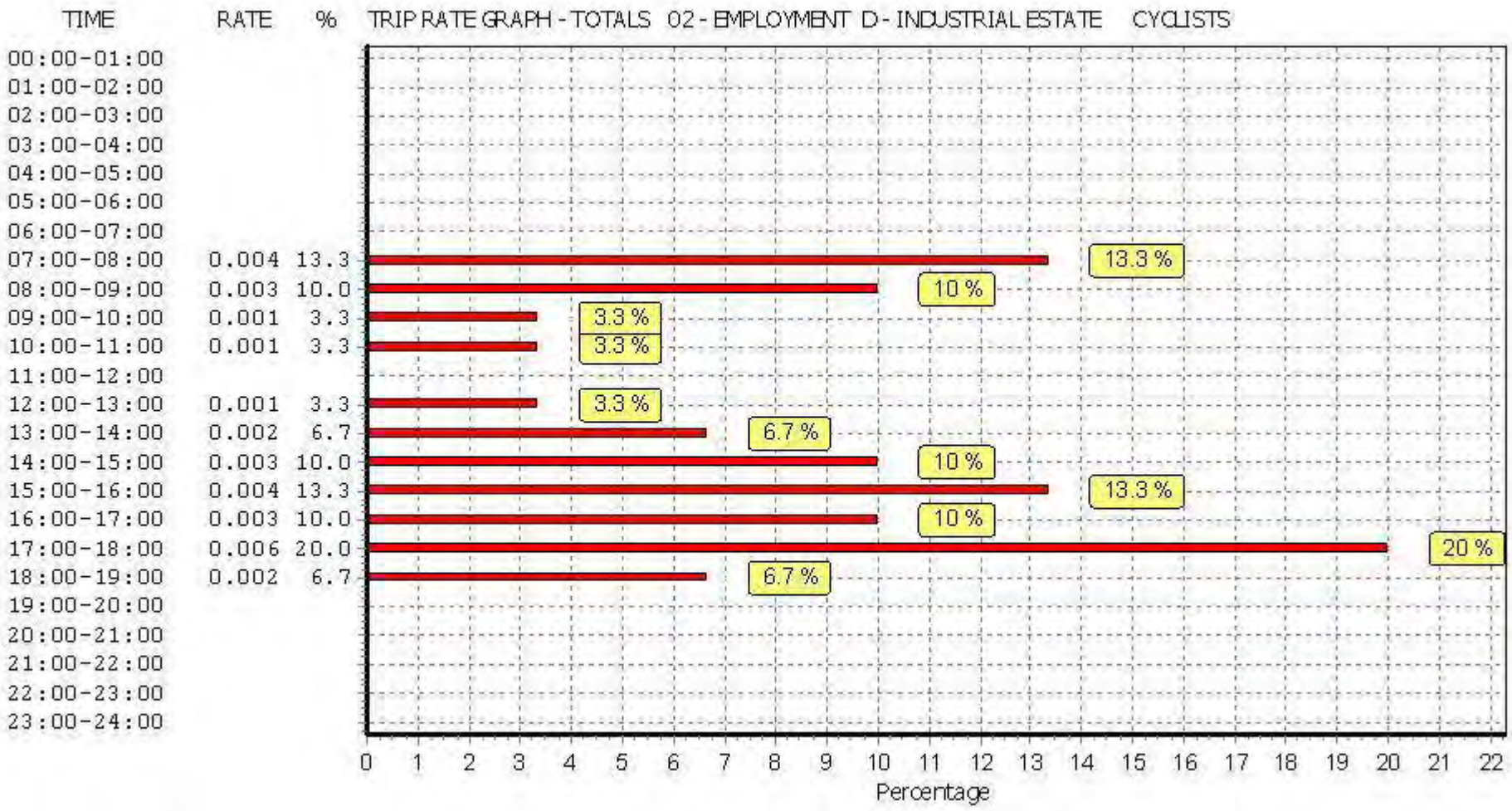
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Calculation Reference: AUDIT-231601-200219-0226

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
05	**EAST MIDLANDS**		
	NR	NORTHAMPTONSHIRE	1 days

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

Secondary 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 dwellings
Actual Range: 102 to 297 (units:)
Range Selected by User: 6 to 4334 (units:)

Parking Spaces 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: 01/01/11 to 25/09/19

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:

Saturday	1 days
Sunday	1 days

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

Selected survey types:

Manual count	1 days
Directional ATC Count	1 days

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

Selected Locations:

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

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

Selected Location Sub Categories:

Residential Zone	1
Out of Town	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.

Secondary Filtering selection:

Use Class:

C3	2 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

25,001 to 50,000	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:

1.1 to 1.5	2 days

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

Travel Plan:

Yes	1 days
No	1 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	2 days

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

LIST OF SITES relevant to selection parameters

1	**NF-03-A-07**	**MIXED HOUSES & FLATS**		**NORFOLK**
	SILFIELD ROAD			
	WYMONDHAM			
	Edge of Town			
	Out of Town			
	Total Number of dwellings:		297	
	Survey date: SUNDAY		*22/09/19*	*Survey Type: DIRECTIONAL ATC COUNT*
2	**NR-03-A-01**	**HOUSES**		**NORTHAMPTONSHIRE**
	BOUGHTON GREEN ROAD			
	NORTHAMPTON			
	KINGSTHORPE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		102	
	Survey date: SATURDAY		*22/09/12*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	200	0.023	2	200	0.050	2	200	0.073
08:00 - 09:00	2	200	0.050	2	200	0.125	2	200	0.175
09:00 - 10:00	2	200	0.065	2	200	0.153	2	200	0.218
10:00 - 11:00	2	200	0.143	2	200	0.165	2	200	0.308
11:00 - 12:00	2	200	0.135	2	200	0.185	2	200	0.320
12:00 - 13:00	2	200	0.133	2	200	0.193	2	200	0.326
13:00 - 14:00	2	200	0.201	**2**	**200**	**0.211**	**2**	**200**	**0.412**
14:00 - 15:00	2	200	0.218	2	200	0.183	2	200	0.401
15:00 - 16:00	2	200	0.193	2	200	0.133	2	200	0.326
16:00 - 17:00	**2**	**200**	**0.228**	2	200	0.118	2	200	0.346
17:00 - 18:00	2	200	0.165	2	200	0.135	2	200	0.300
18:00 - 19:00	2	200	0.128	2	200	0.113	2	200	0.241
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.682			1.764			3.446

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

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

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	102 - 297 (units:)
Survey date date range:	01/01/11 - 25/09/19
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	1
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Calculation Reference: AUDIT-231601-190606-0601

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	3 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	2 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	5 days
03	**SOUTH WEST**		
	DC	DORSET	1 days
	SM	SOMERSET	1 days
04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	3 days
08	**NORTH WEST**		
	CH	CHESHIRE	1 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days

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

Secondary 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 dwellings
Actual Range: 10 to 805 (units:)
Range Selected by User: 6 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 20/11/18

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	5 days
Tuesday	4 days
Wednesday	9 days
Thursday	9 days
Friday	4 days

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

Selected survey types:

Manual count	31 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	31

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

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

Secondary Filtering selection:

Use Class:

C3	31 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	5 days
10,001 to 15,000	13 days
15,001 to 20,000	5 days
20,001 to 25,000	3 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	2 days
50,001 to 75,000	4 days
75,001 to 100,000	9 days
100,001 to 125,000	1 days
125,001 to 250,000	8 days
250,001 to 500,000	3 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	23 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	8 days
No	23 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	30 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY 24/11/14 Survey Type: MANUAL

2 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 24/03/14 Survey Type: MANUAL

3 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total Number of dwellings: 371
Survey date: TUESDAY 10/07/18 Survey Type: MANUAL

4 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD
PEACEHAVEN

Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

5 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY 11/07/16 Survey Type: MANUAL

6 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY 15/07/16 Survey Type: MANUAL

7 EX-03-A-02 DETACHED & SEMI-DETACHED ESSEX
MANOR ROAD
CHIGWELL
GRANGE HILL
Edge of Town
Residential Zone
Total Number of dwellings: 97
Survey date: MONDAY 27/11/17 Survey Type: MANUAL

8 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
MANCHESTER
PRESTWICH
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9 **HC-03-A-21** **TERRACED & SEMI-DETACHED** **HAMPSHIRE**
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

10 **HC-03-A-22** **MIXED HOUSES** **HAMPSHIRE**
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

11 **KC-03-A-04** **SEMI-DETACHED & TERRACED** **KENT**
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

12 **KC-03-A-07** **MIXED HOUSES** **KENT**
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

13 **LC-03-A-31** **DETACHED HOUSES** **LANCASHIRE**
GREENSIDE
PRESTON
COTTAM
Edge of Town
Residential Zone
Total Number of dwellings: 32
Survey date: FRIDAY *17/11/17* *Survey Type: MANUAL*

14 **NE-03-A-02** **SEMI DETACHED & DETACHED** **NORTH EAST LINCOLNSHIRE**
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

15 **NF-03-A-03** **DETACHED HOUSES** **NORFOLK**
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

16 **NY-03-A-07** **DETACHED & SEMI DET.** **NORTH YORKSHIRE**
CRAVEN WAY
BOROUGHBRIDGE

Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY 17/09/13 Survey Type: MANUAL

18 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

19 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

20 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

21 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY 24/10/13 Survey Type: MANUAL

22 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

23 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

24 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

25 ST-03-A-08 DETACHED HOUSES STAFFORDSHIRE
SILKMORE CRESCENT
STAFFORD
MEADOWCROFT PARK
Edge of Town
Residential Zone
Total Number of dwellings: 26
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

26 **WK-03-A-02** **BUNGALOWS** **WARWICKSHIRE**
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

27 **WS-03-A-04** **MIXED HOUSES** **WEST SUSSEX**
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

28 **WS-03-A-06** **MIXED HOUSES** **WEST SUSSEX**
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY *02/03/17* *Survey Type: MANUAL*

29 **WS-03-A-08** **MIXED HOUSES** **WEST SUSSEX**
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

30 **WS-03-A-09** **MIXED HOUSES & FLATS** **WEST SUSSEX**
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

31 **WS-03-A-10** **MIXED HOUSES** **WEST SUSSEX**
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *07/11/18* *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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	31	126	0.079	31	126	0.314	31	126	0.393
08:00 - 09:00	31	126	0.128	**31**	**126**	**0.380**	**31**	**126**	**0.508**
09:00 - 10:00	31	126	0.141	31	126	0.167	31	126	0.308
10:00 - 11:00	31	126	0.125	31	126	0.149	31	126	0.274
11:00 - 12:00	31	126	0.134	31	126	0.150	31	126	0.284
12:00 - 13:00	31	126	0.150	31	126	0.142	31	126	0.292
13:00 - 14:00	31	126	0.156	31	126	0.149	31	126	0.305
14:00 - 15:00	31	126	0.159	31	126	0.180	31	126	0.339
15:00 - 16:00	31	126	0.256	31	126	0.178	31	126	0.434
16:00 - 17:00	31	126	0.270	31	126	0.160	31	126	0.430
17:00 - 18:00	**31**	**126**	**0.332**	31	126	0.140	31	126	0.472
18:00 - 19:00	31	126	0.300	31	126	0.162	31	126	0.462
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.323			2.344			4.667

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

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

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

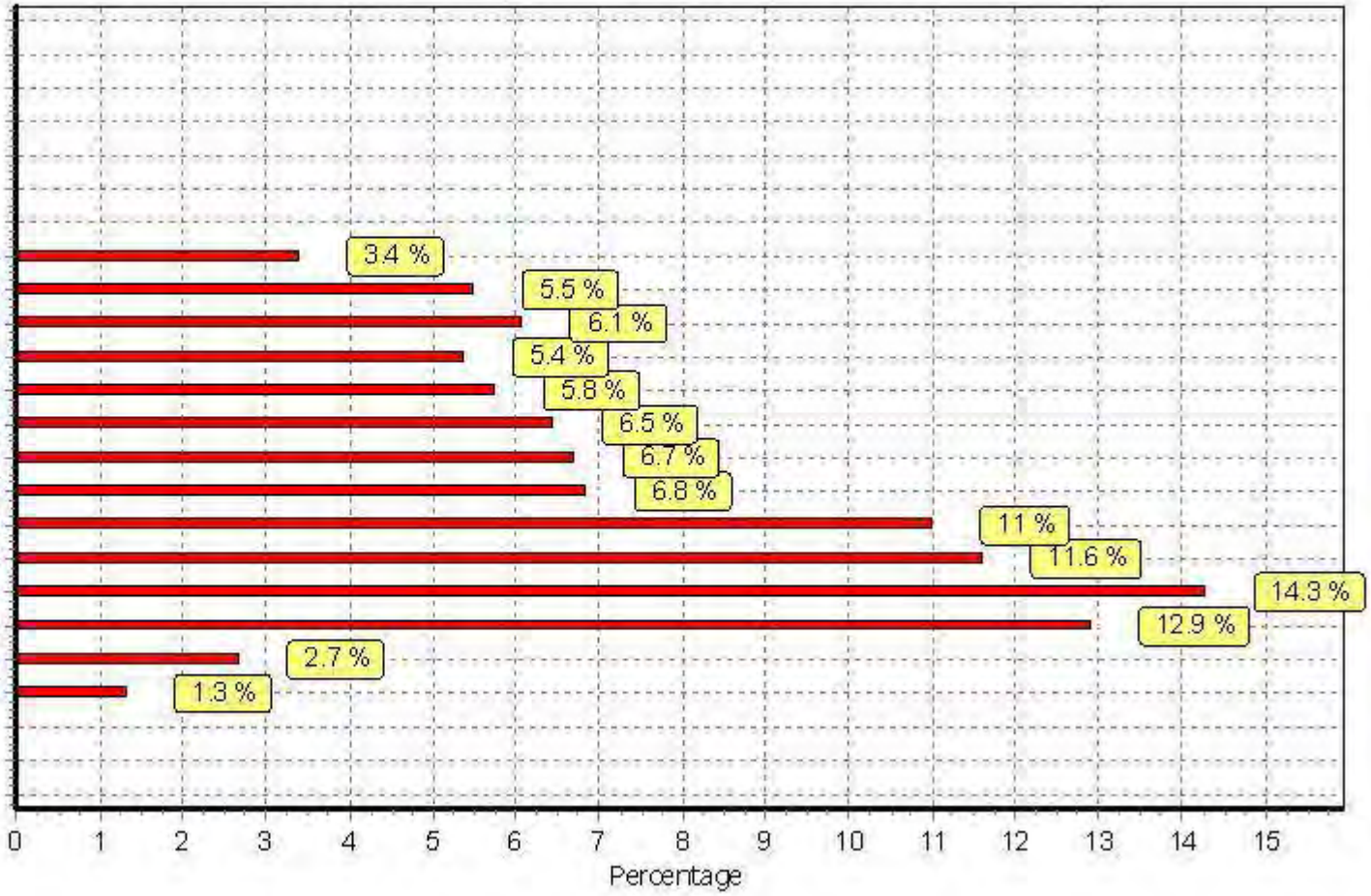
Parameter summary

Trip rate parameter range selected:	10 - 805 (units:)
Survey date date range:	01/01/11 - 20/11/18
Number of weekdays (Monday-Friday):	31
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

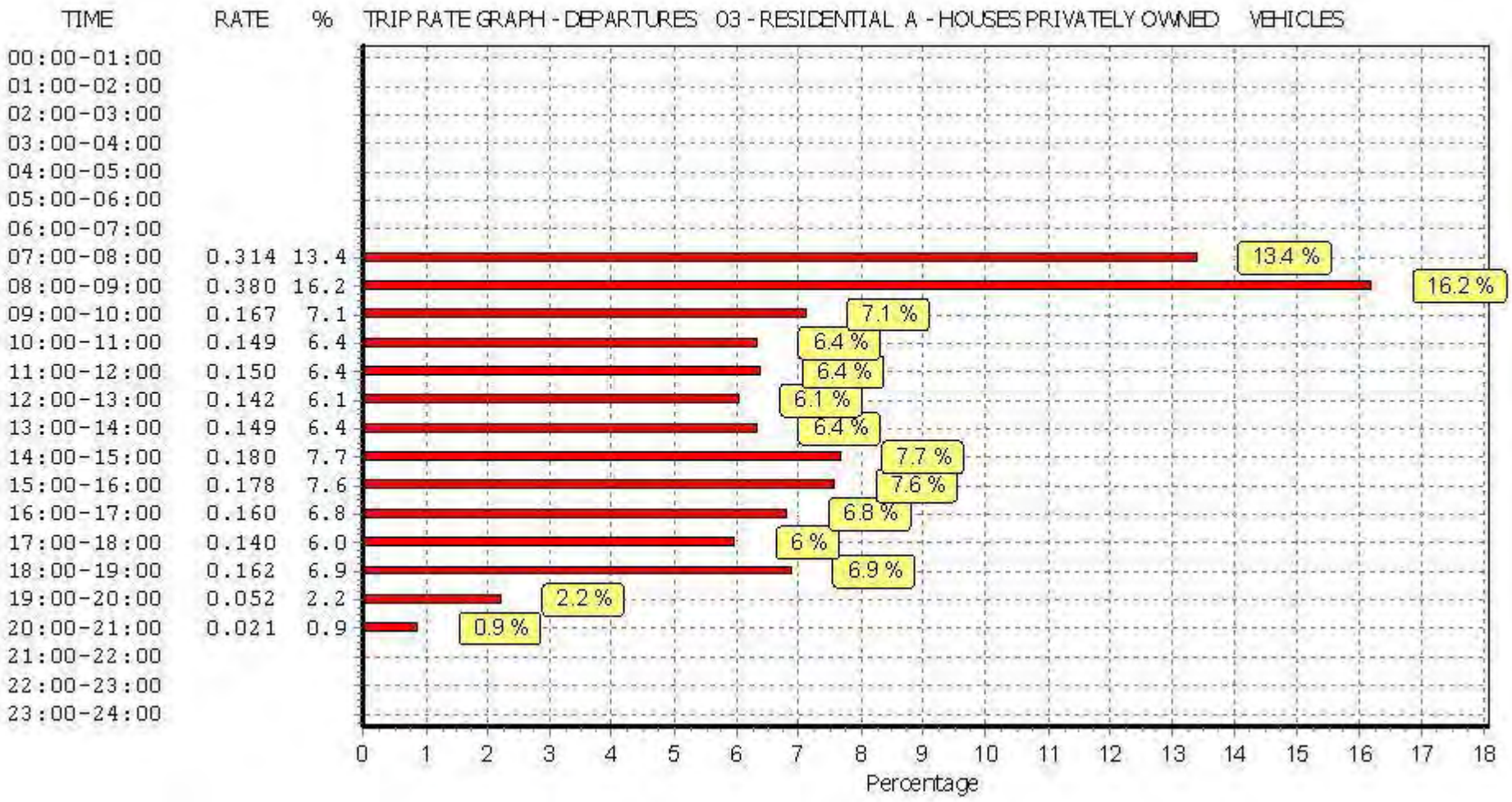
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED VEHICLES

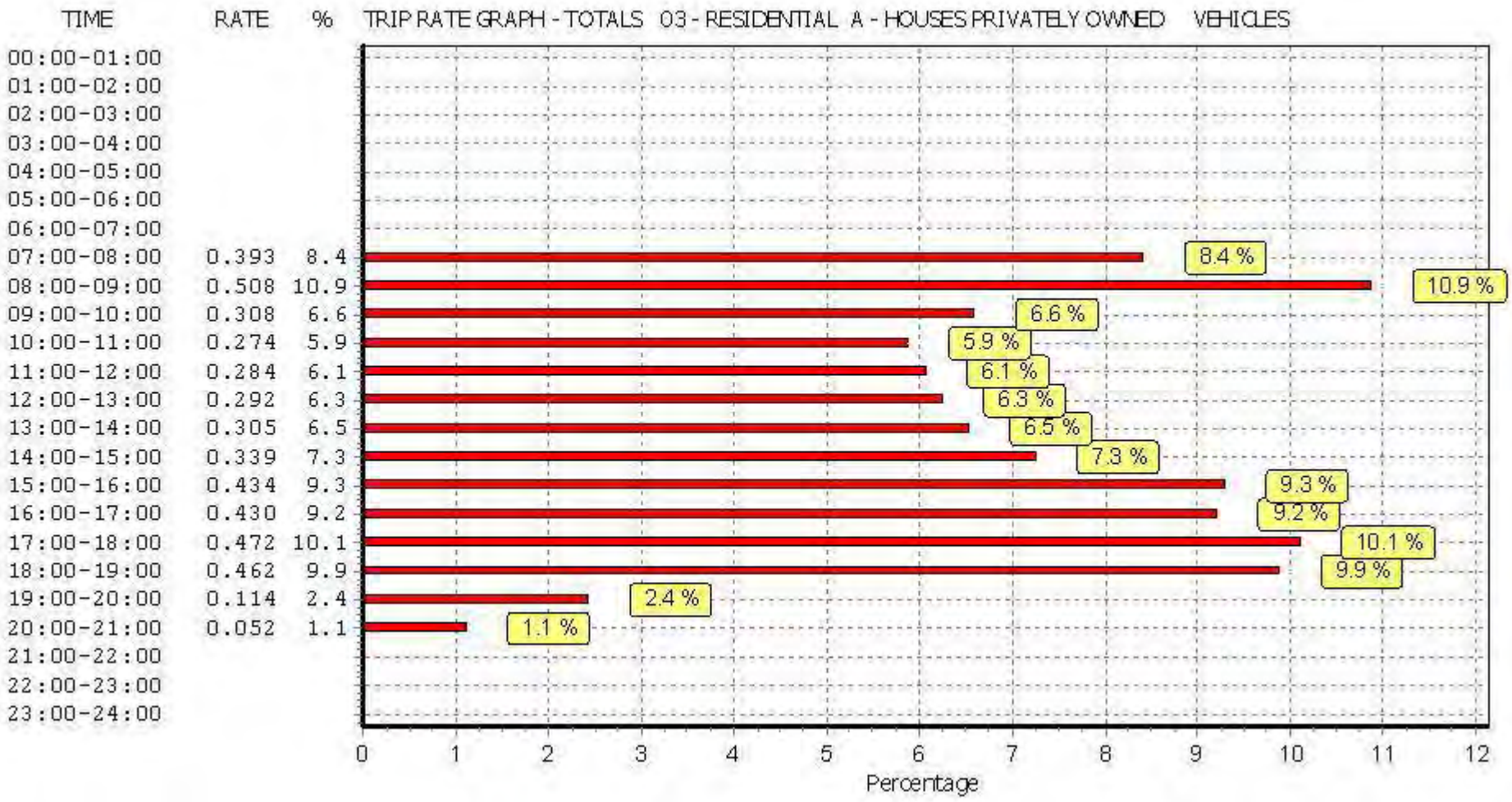
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.079	3.4
08:00-09:00	0.128	5.5
09:00-10:00	0.141	6.1
10:00-11:00	0.125	5.4
11:00-12:00	0.134	5.8
12:00-13:00	0.150	6.5
13:00-14:00	0.156	6.7
14:00-15:00	0.159	6.8
15:00-16:00	0.256	11.0
16:00-17:00	0.270	11.6
17:00-18:00	0.332	14.3
18:00-19:00	0.300	12.9
19:00-20:00	0.062	2.7
20:00-21:00	0.031	1.3
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

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	31	126	0.003	31	126	0.003	31	126	0.006
08:00 - 09:00	31	126	0.004	31	126	0.003	31	126	0.007
09:00 - 10:00	31	126	0.002	31	126	0.002	31	126	0.004
10:00 - 11:00	31	126	0.003	31	126	0.003	31	126	0.006
11:00 - 12:00	31	126	0.002	31	126	0.002	31	126	0.004
12:00 - 13:00	31	126	0.002	31	126	0.002	31	126	0.004
13:00 - 14:00	31	126	0.002	31	126	0.002	31	126	0.004
14:00 - 15:00	31	126	0.003	31	126	0.003	31	126	0.006
15:00 - 16:00	31	126	0.005	31	126	0.005	31	126	0.010
16:00 - 17:00	31	126	0.004	31	126	0.004	31	126	0.008
17:00 - 18:00	31	126	0.002	31	126	0.002	31	126	0.004
18:00 - 19:00	31	126	0.002	31	126	0.002	31	126	0.004
19:00 - 20:00	**1**	**97**	**0.031**	**1**	**97**	**0.041**	**1**	**97**	**0.072**
20:00 - 21:00	1	97	0.021	1	97	0.010	1	97	0.031
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.084			0.170

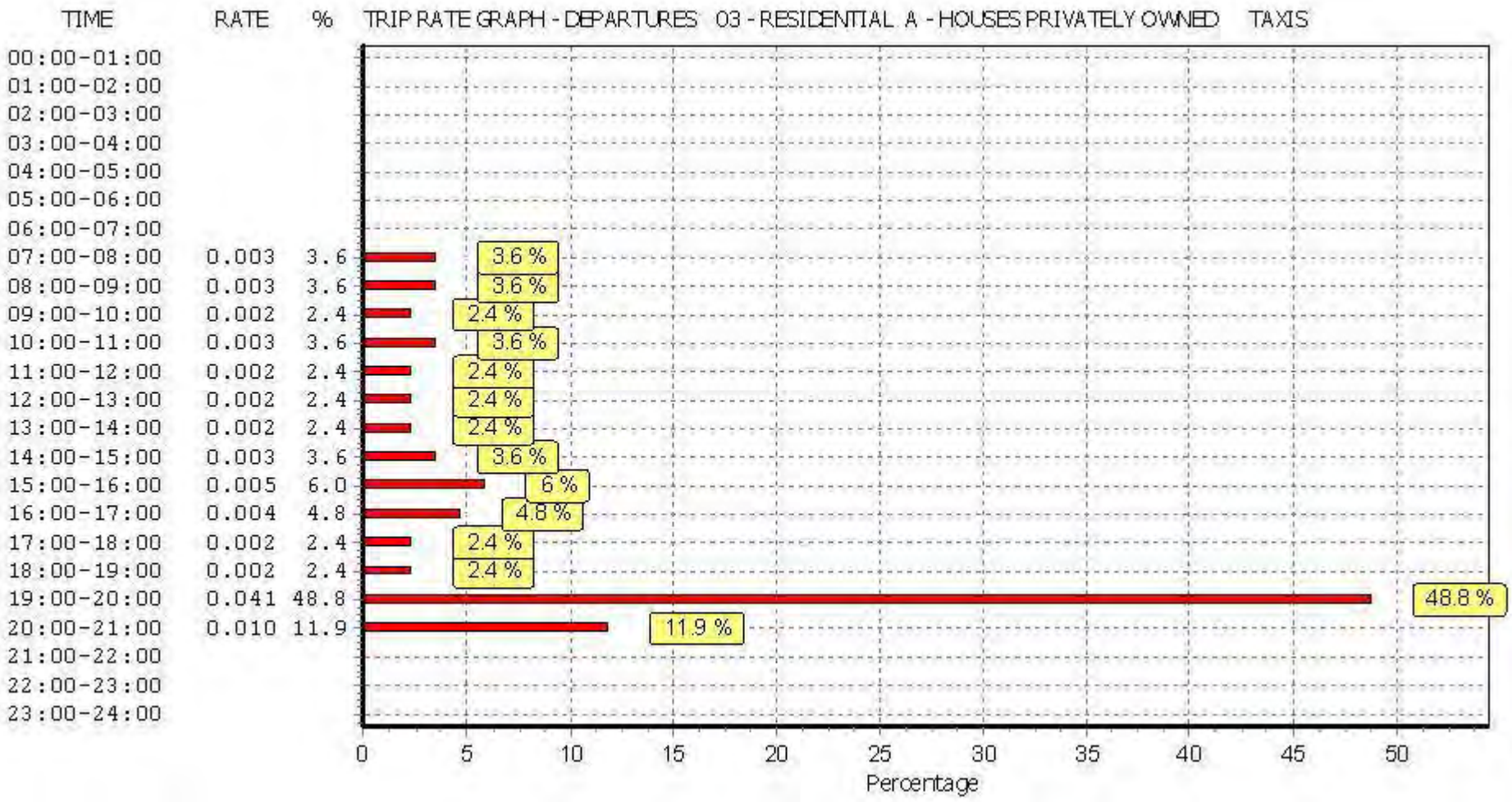
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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

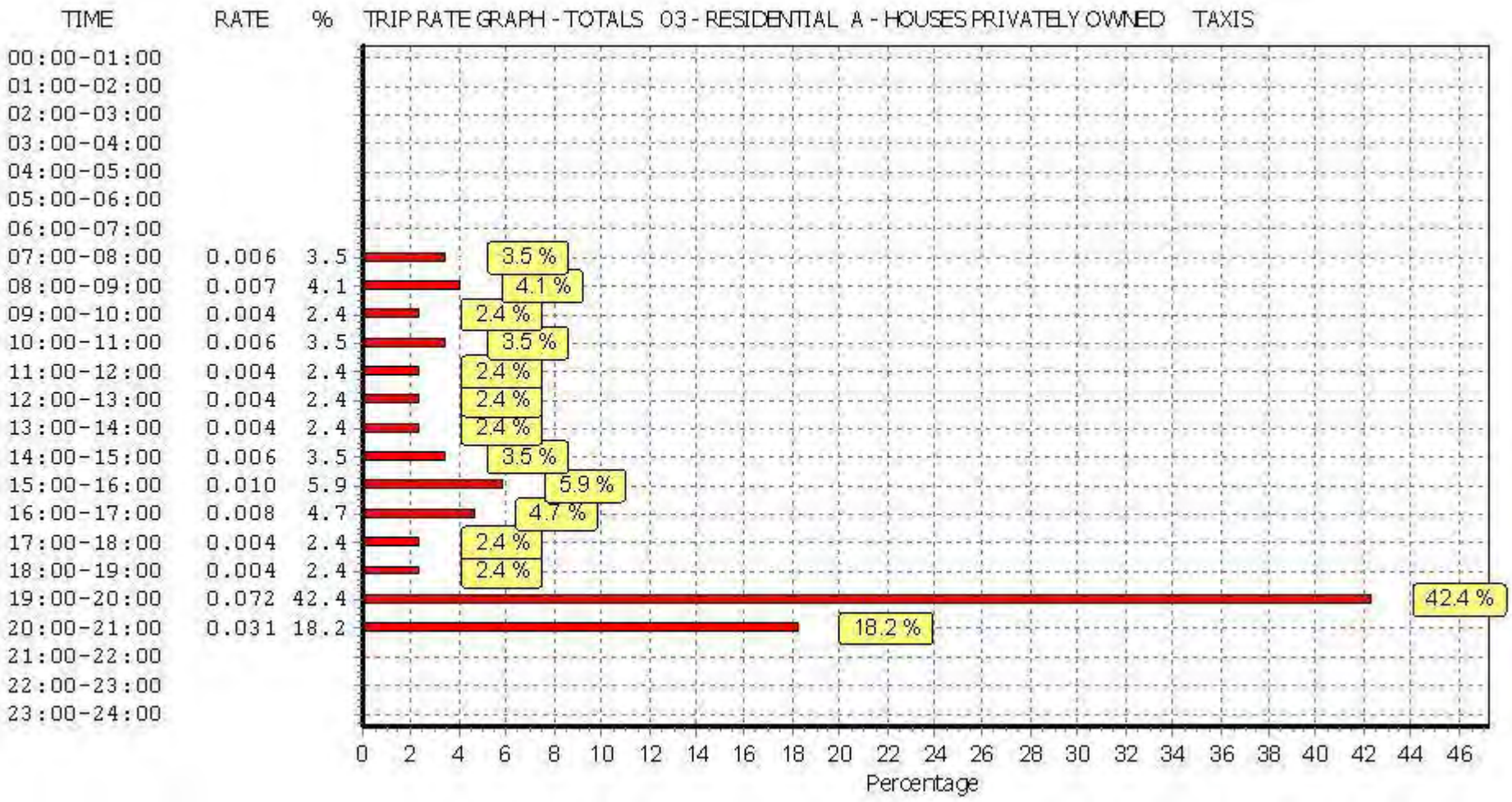
TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED TAXIS

TIME	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	0.003	3.5
08:00-09:00	0.004	4.7
09:00-10:00	0.002	2.3
10:00-11:00	0.003	3.5
11:00-12:00	0.002	2.3
12:00-13:00	0.002	2.3
13:00-14:00	0.002	2.3
14:00-15:00	0.003	3.5
15:00-16:00	0.005	5.8
16:00-17:00	0.004	4.7
17:00-18:00	0.002	2.3
18:00-19:00	0.002	2.3
19:00-20:00	0.031	36.0
20:00-21:00	0.021	24.4
21:00-22:00		
22:00-23:00		
23:00-24:00		

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

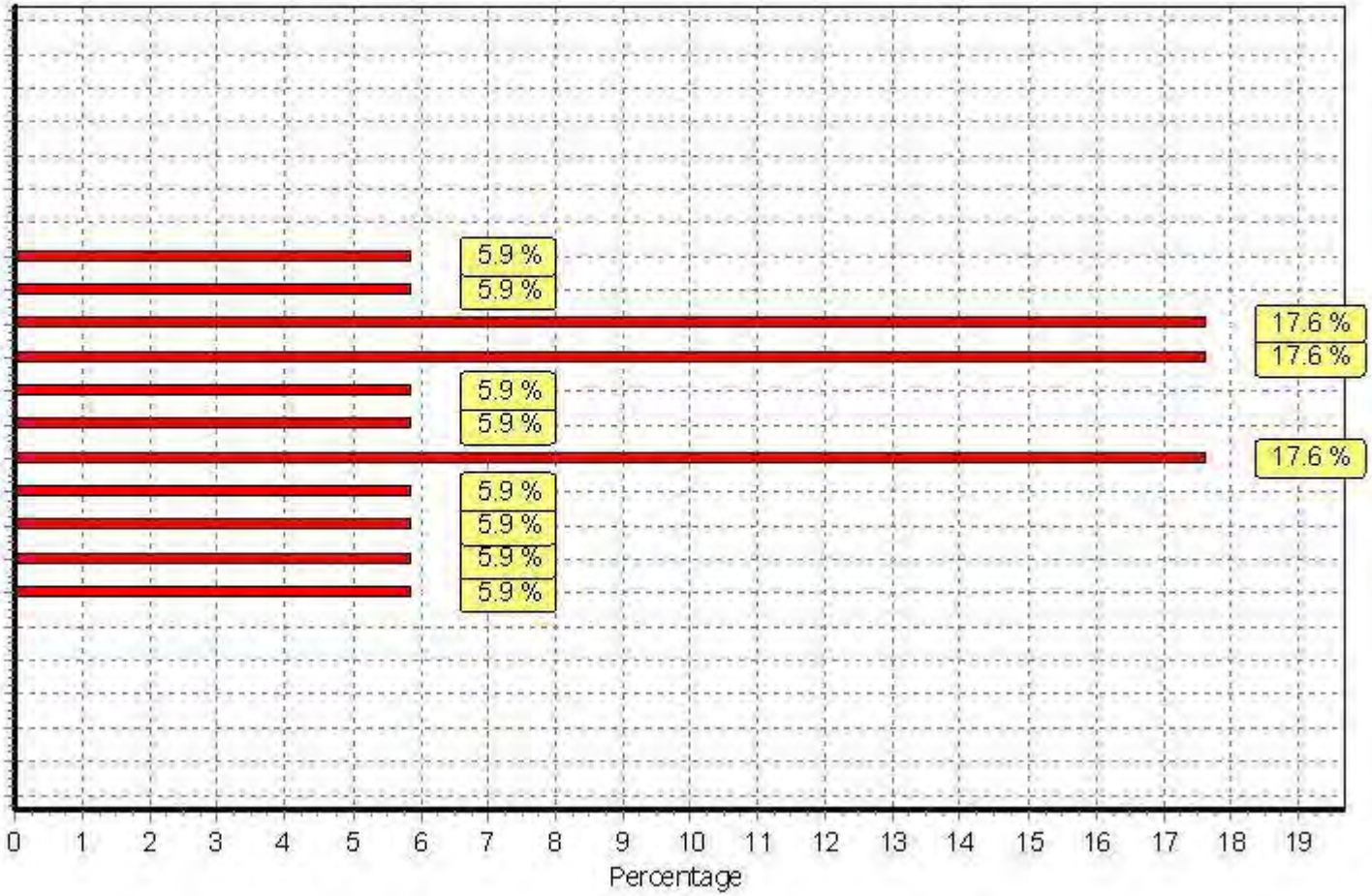
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	31	126	0.001	31	126	0.001	31	126	0.002
08:00 - 09:00	31	126	0.001	31	126	0.000	31	126	0.001
09:00 - 10:00	31	126	0.003	31	126	0.002	**31**	**126**	**0.005**
10:00 - 11:00	**31**	**126**	**0.003**	**31**	**126**	**0.002**	31	126	0.005
11:00 - 12:00	31	126	0.001	31	126	0.002	31	126	0.003
12:00 - 13:00	31	126	0.001	31	126	0.002	31	126	0.003
13:00 - 14:00	31	126	0.003	31	126	0.001	31	126	0.004
14:00 - 15:00	31	126	0.001	31	126	0.002	31	126	0.003
15:00 - 16:00	31	126	0.001	31	126	0.001	31	126	0.002
16:00 - 17:00	31	126	0.001	31	126	0.001	31	126	0.002
17:00 - 18:00	31	126	0.001	31	126	0.000	31	126	0.001
18:00 - 19:00	31	126	0.000	31	126	0.000	31	126	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.014			0.031

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

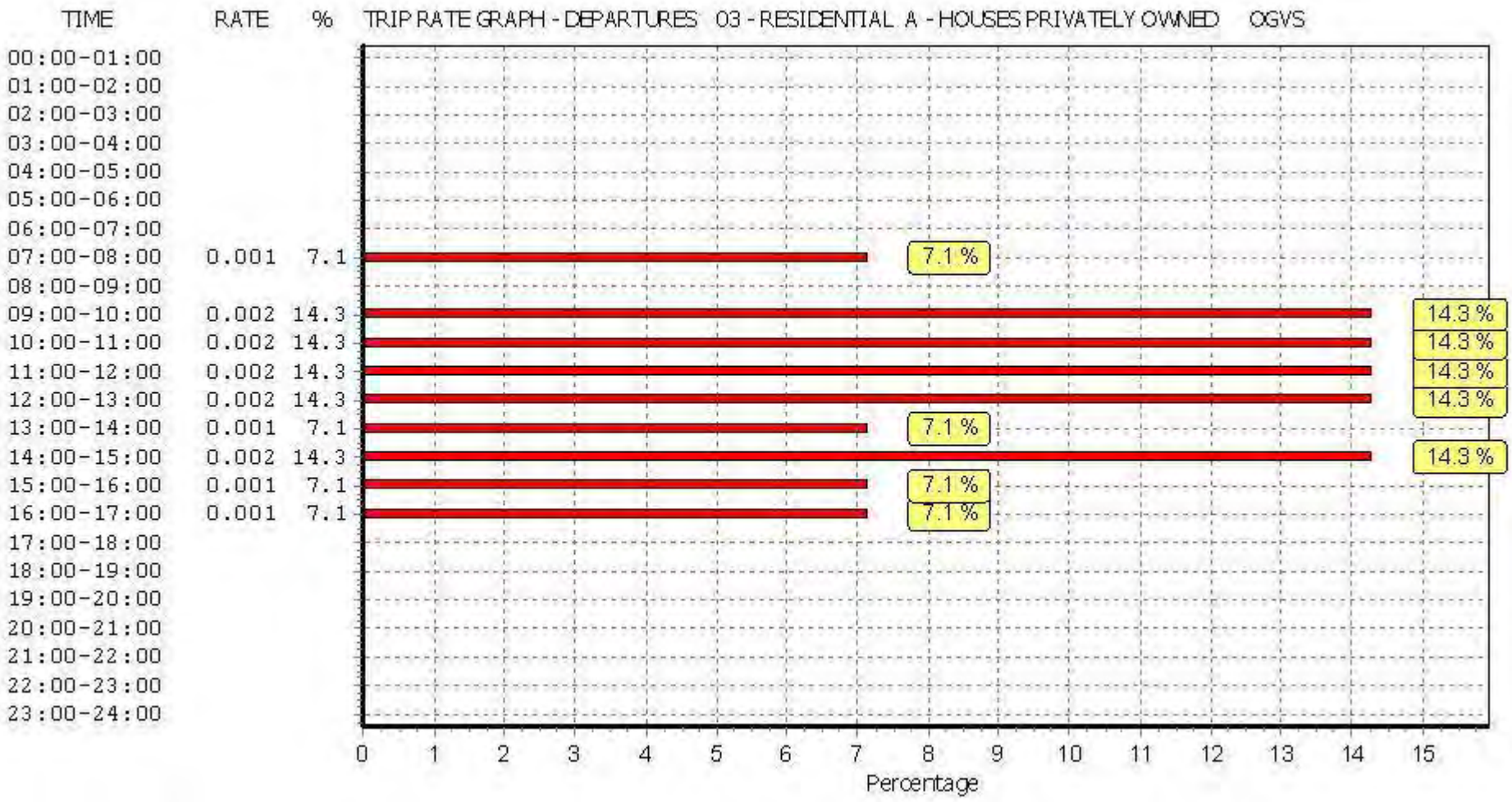
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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

TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED OGVS

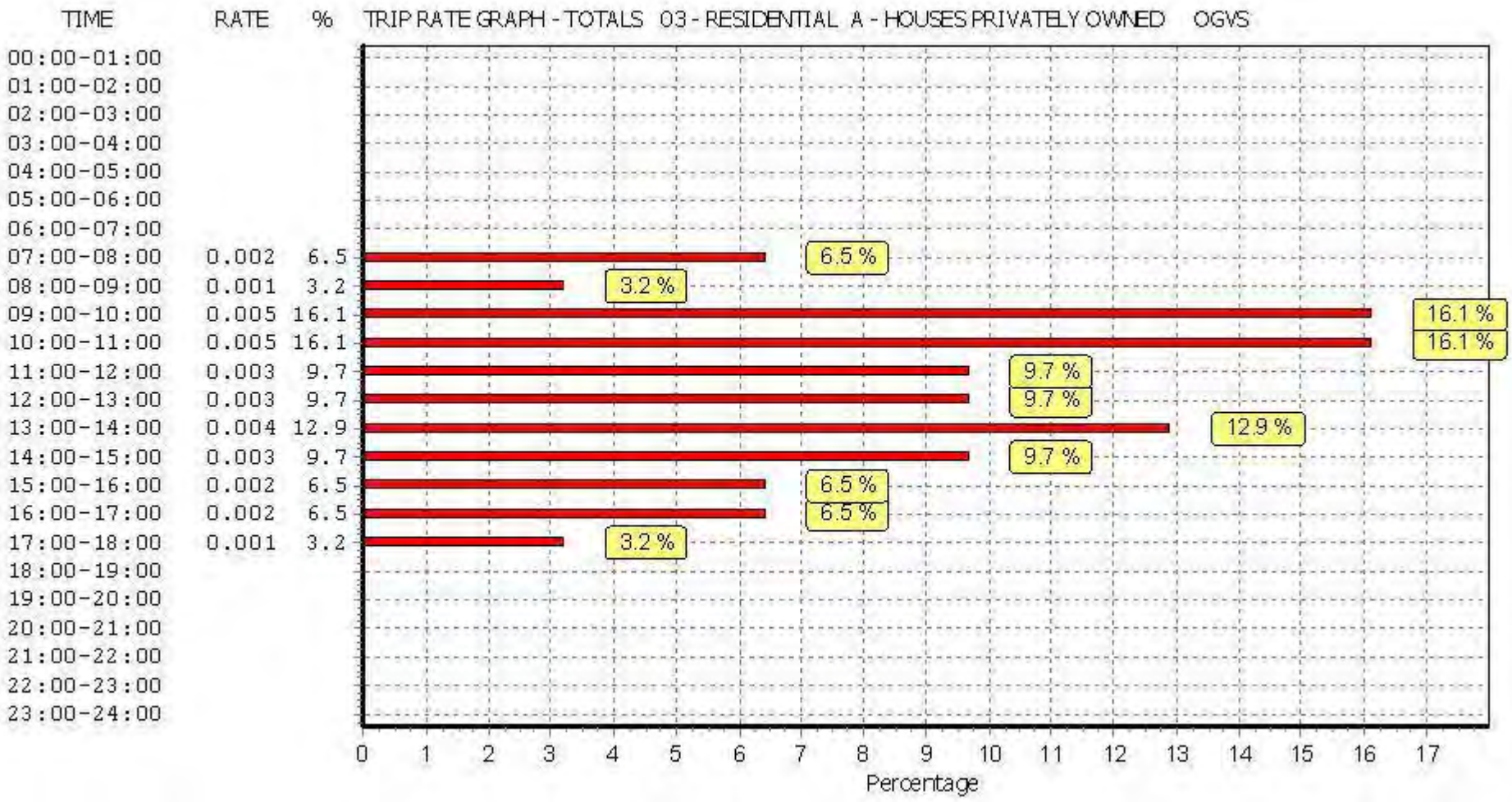
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.001	5.9
08:00-09:00	0.001	5.9
09:00-10:00	0.003	17.6
10:00-11:00	0.003	17.6
11:00-12:00	0.001	5.9
12:00-13:00	0.001	5.9
13:00-14:00	0.003	17.6
14:00-15:00	0.001	5.9
15:00-16:00	0.001	5.9
16:00-17:00	0.001	5.9
17:00-18:00	0.001	5.9
18:00-19:00		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

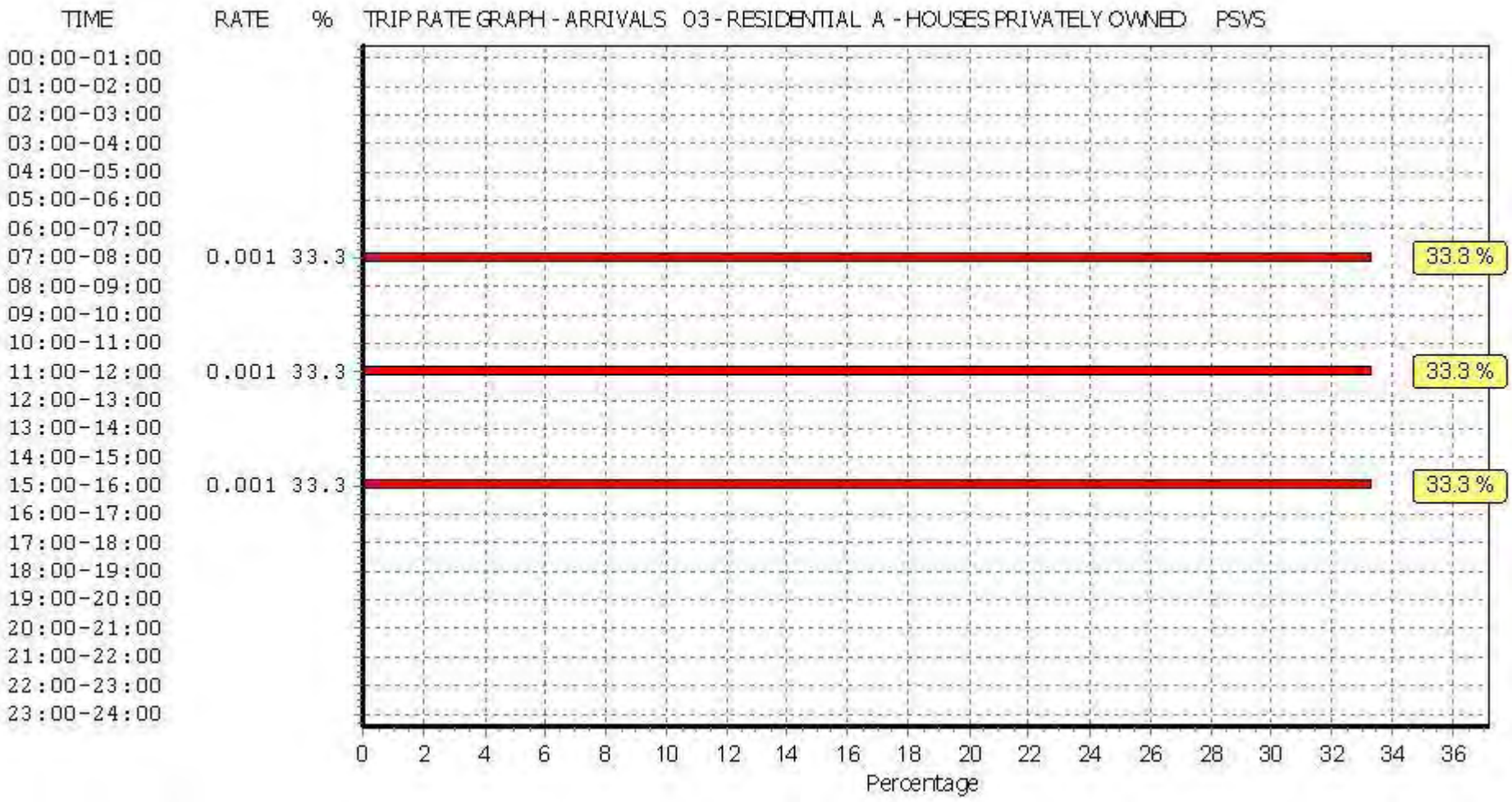
Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

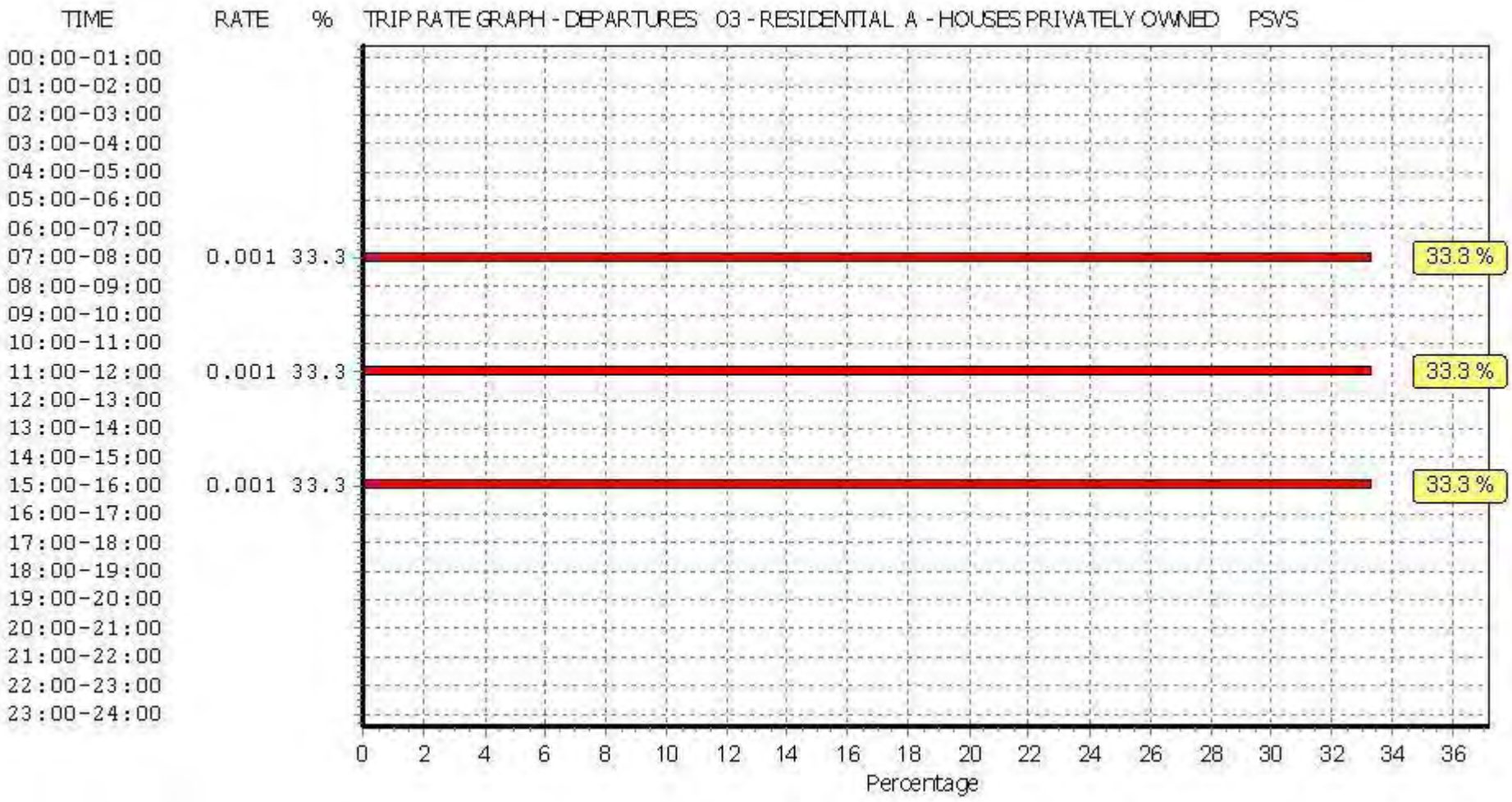
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**31**	**126**	**0.001**	**31**	**126**	**0.001**	**31**	**126**	**0.002**
08:00 - 09:00	31	126	0.000	31	126	0.000	31	126	0.000
09:00 - 10:00	31	126	0.000	31	126	0.000	31	126	0.000
10:00 - 11:00	31	126	0.000	31	126	0.000	31	126	0.000
11:00 - 12:00	31	126	0.001	31	126	0.001	31	126	0.002
12:00 - 13:00	31	126	0.000	31	126	0.000	31	126	0.000
13:00 - 14:00	31	126	0.000	31	126	0.000	31	126	0.000
14:00 - 15:00	31	126	0.000	31	126	0.000	31	126	0.000
15:00 - 16:00	31	126	0.001	31	126	0.001	31	126	0.002
16:00 - 17:00	31	126	0.000	31	126	0.000	31	126	0.000
17:00 - 18:00	31	126	0.000	31	126	0.000	31	126	0.000
18:00 - 19:00	31	126	0.000	31	126	0.000	31	126	0.000
19:00 - 20:00	1	97	0.000	1	97	0.000	1	97	0.000
20:00 - 21:00	1	97	0.000	1	97	0.000	1	97	0.000
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.

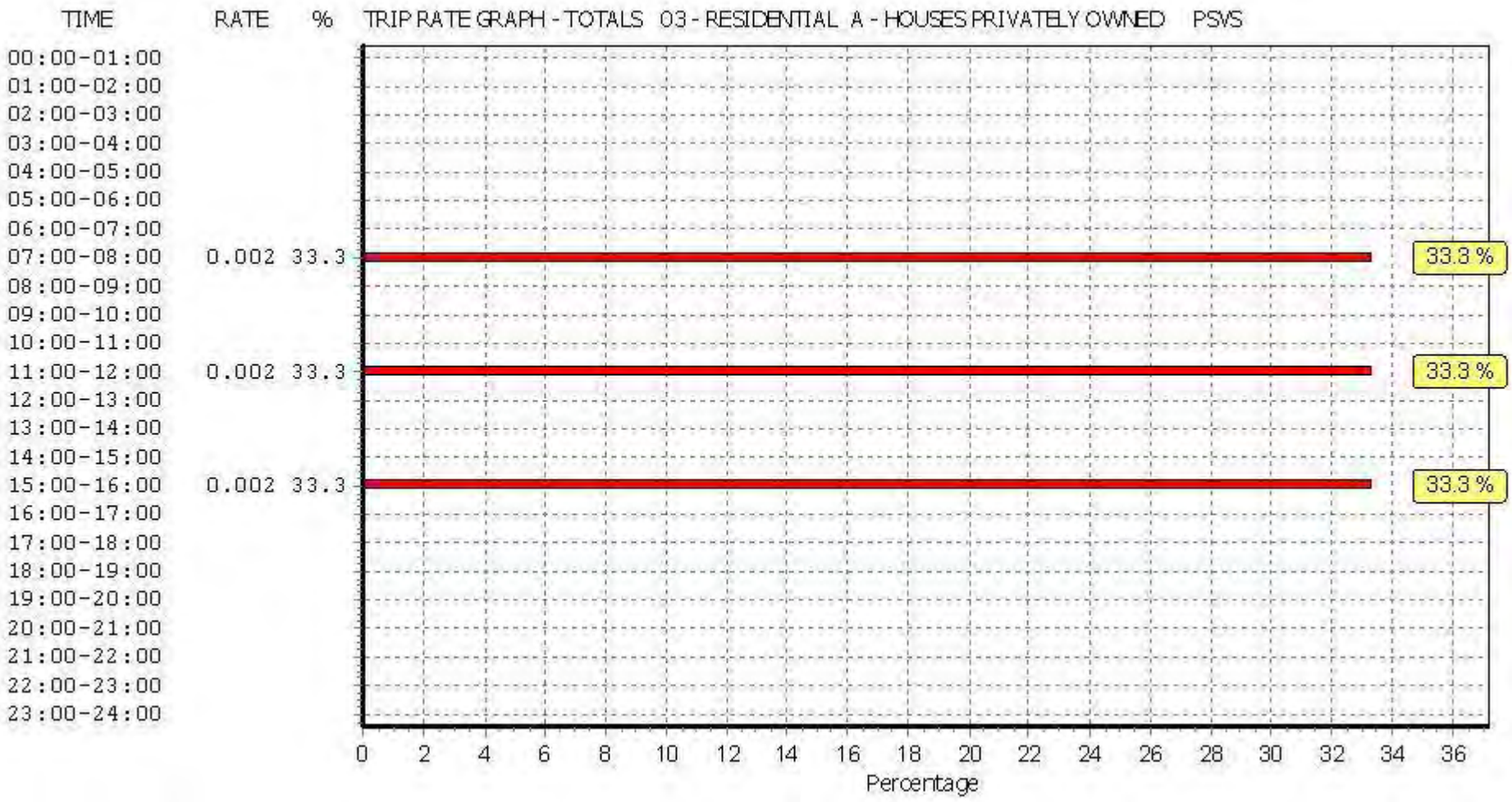
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

CYCLISTS

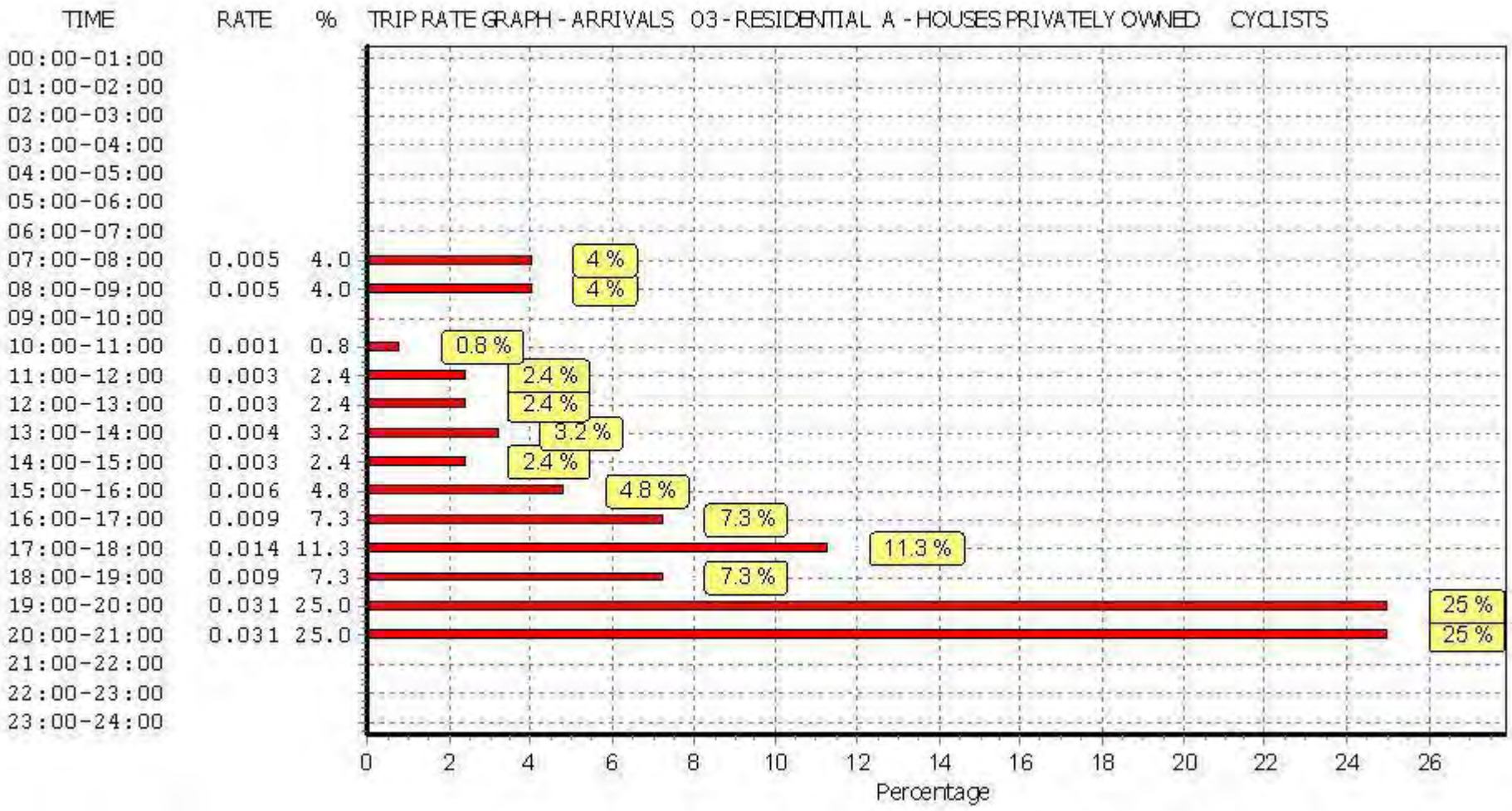
Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

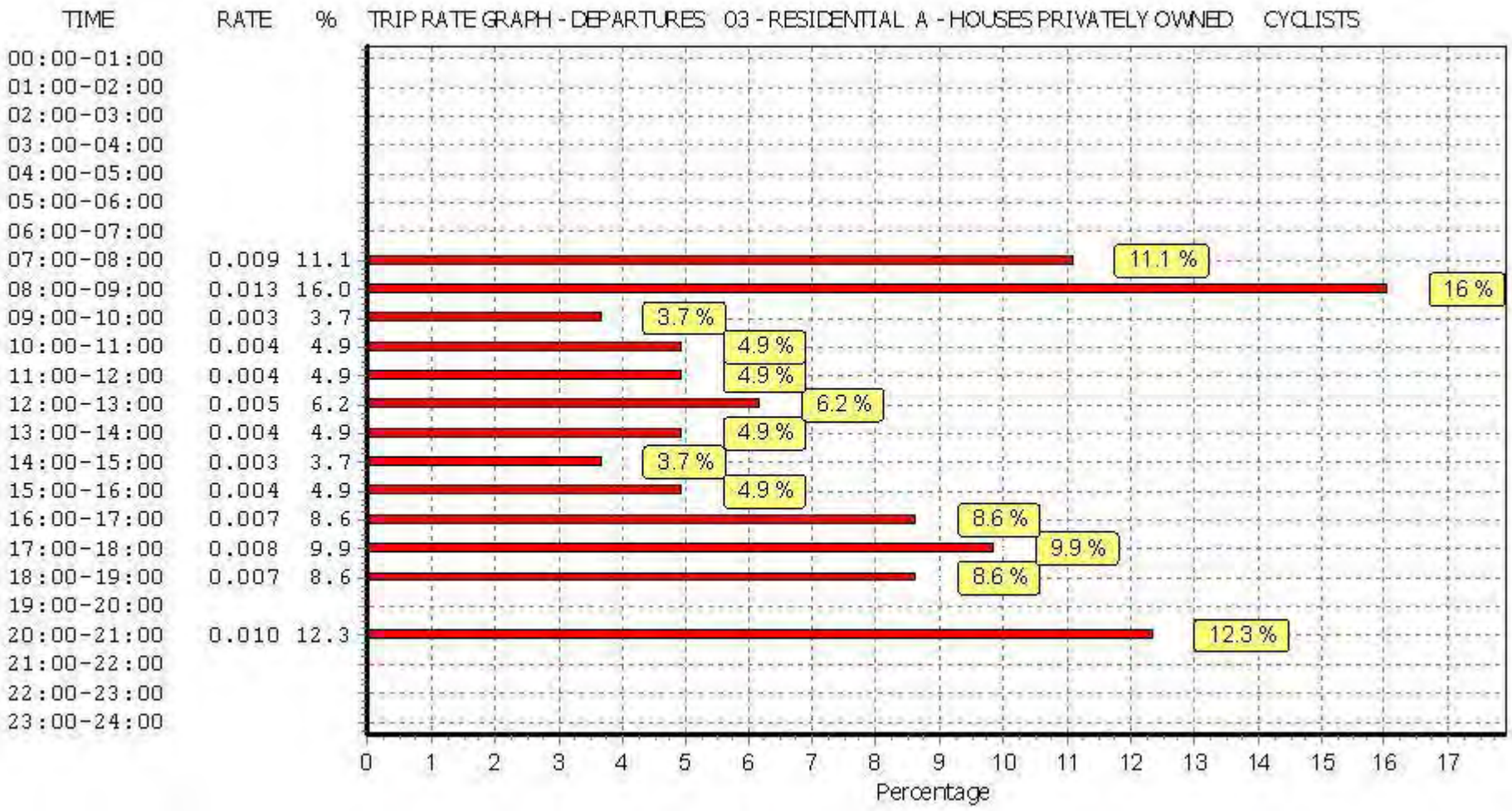
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	31	126	0.005	31	126	0.009	31	126	0.014
08:00 - 09:00	31	126	0.005	**31**	**126**	**0.013**	31	126	0.018
09:00 - 10:00	31	126	0.000	31	126	0.003	31	126	0.003
10:00 - 11:00	31	126	0.001	31	126	0.004	31	126	0.005
11:00 - 12:00	31	126	0.003	31	126	0.004	31	126	0.007
12:00 - 13:00	31	126	0.003	31	126	0.005	31	126	0.008
13:00 - 14:00	31	126	0.004	31	126	0.004	31	126	0.008
14:00 - 15:00	31	126	0.003	31	126	0.003	31	126	0.006
15:00 - 16:00	31	126	0.006	31	126	0.004	31	126	0.010
16:00 - 17:00	31	126	0.009	31	126	0.007	31	126	0.016
17:00 - 18:00	31	126	0.014	31	126	0.008	31	126	0.022
18:00 - 19:00	31	126	0.009	31	126	0.007	31	126	0.016
19:00 - 20:00	**1**	**97**	**0.031**	1	97	0.000	1	97	0.031
20:00 - 21:00	1	97	0.031	1	97	0.010	**1**	**97**	**0.041**
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.124			0.081			0.205

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

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



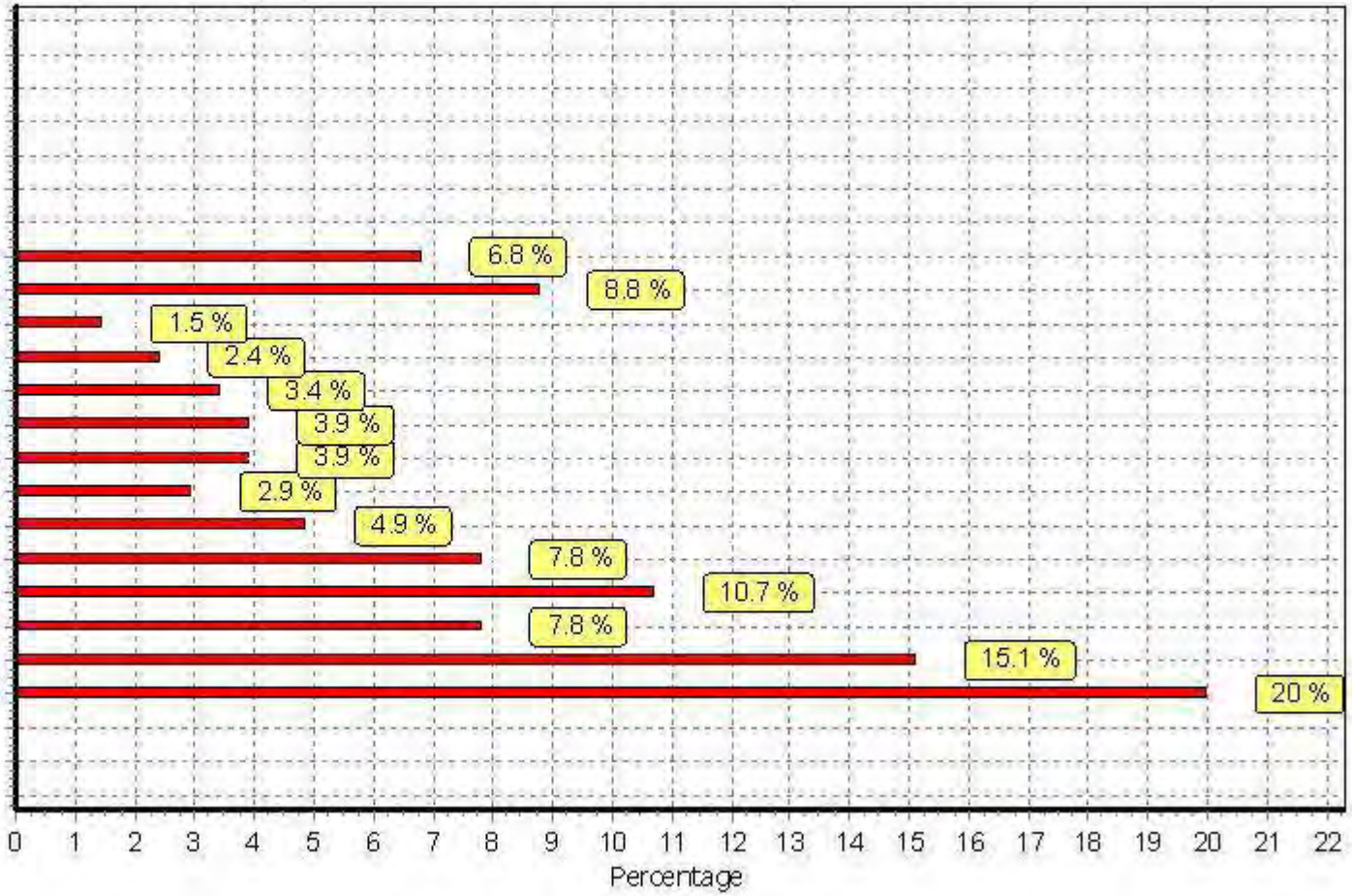
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED CYCLISTS

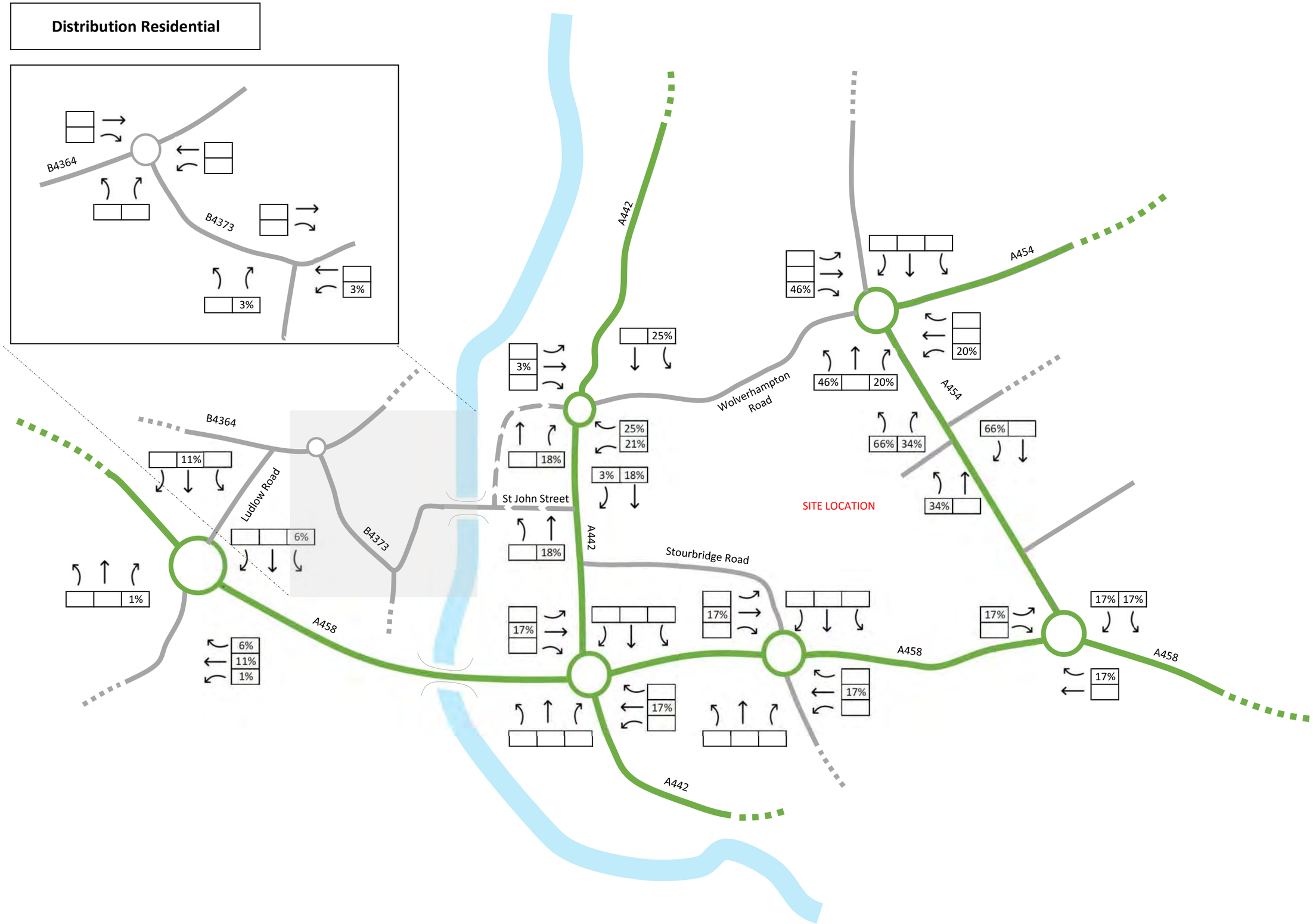
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.014	6.8
08:00-09:00	0.018	8.8
09:00-10:00	0.003	1.5
10:00-11:00	0.005	2.4
11:00-12:00	0.007	3.4
12:00-13:00	0.008	3.9
13:00-14:00	0.008	3.9
14:00-15:00	0.006	2.9
15:00-16:00	0.010	4.9
16:00-17:00	0.016	7.8
17:00-18:00	0.022	10.7
18:00-19:00	0.016	7.8
19:00-20:00	0.031	15.1
20:00-21:00	0.041	20.0
21:00-22:00		
22:00-23:00		
23:00-24:00		



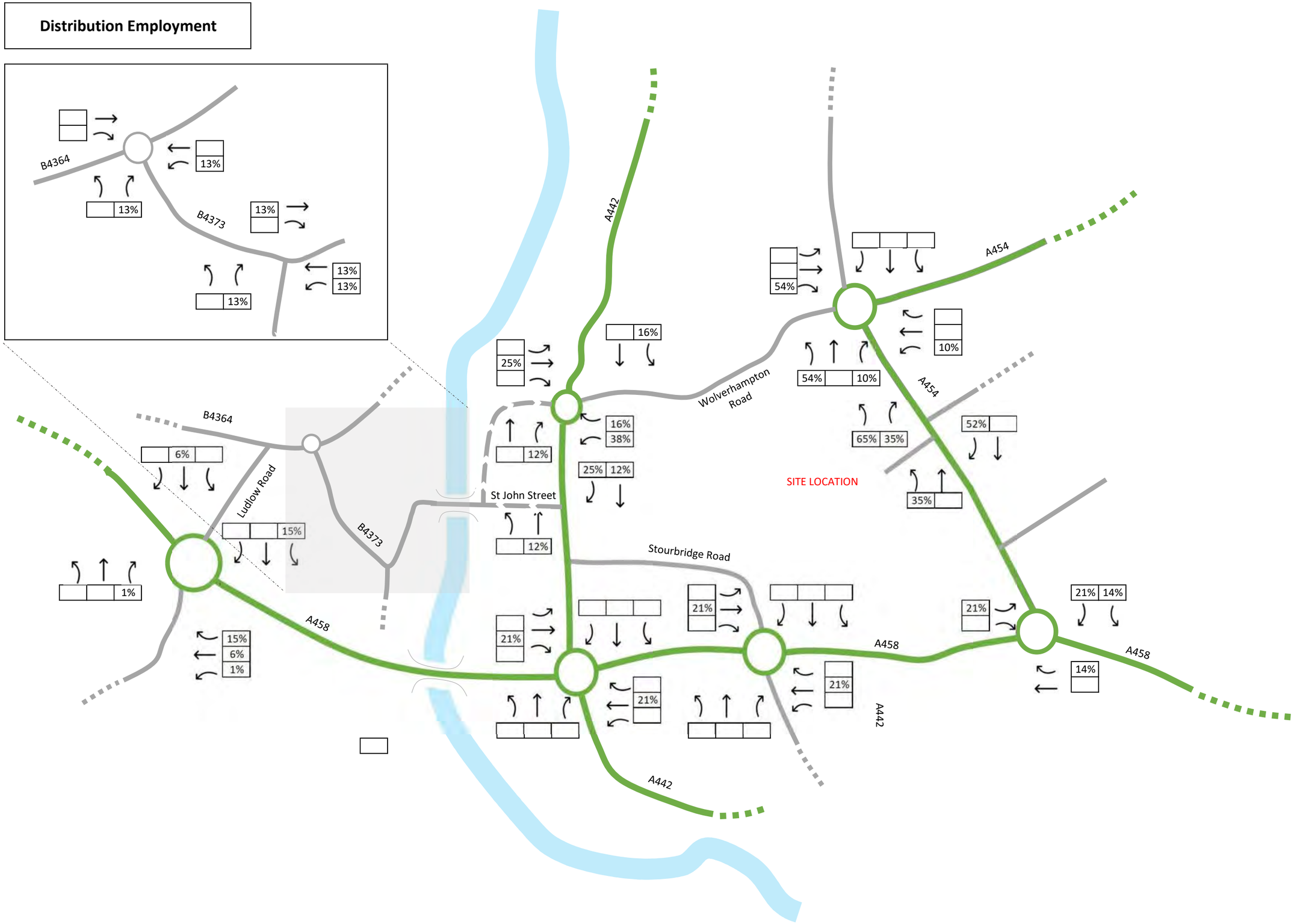
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Appendix C Trip Distribution and Assignment

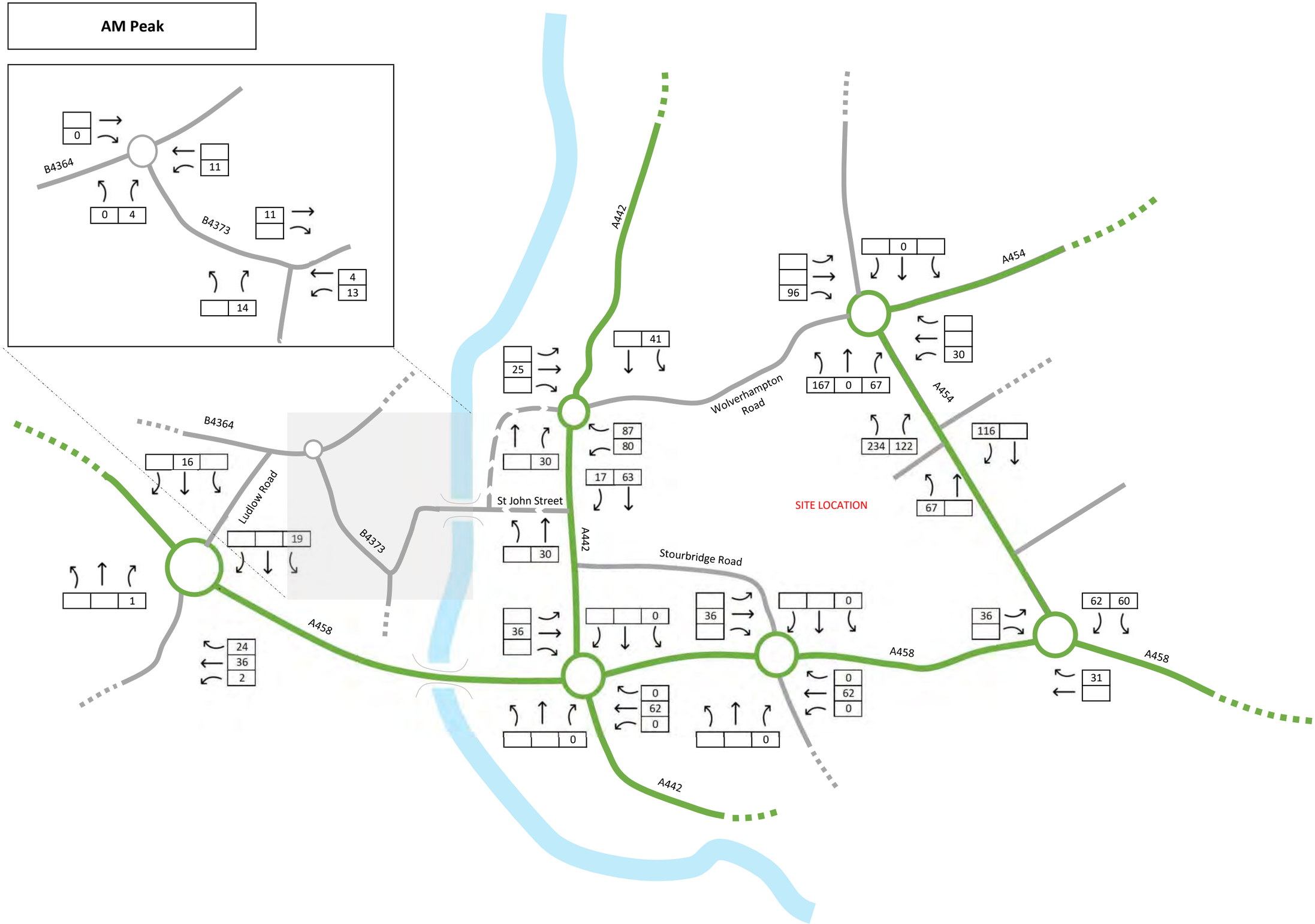
Distribution Residential



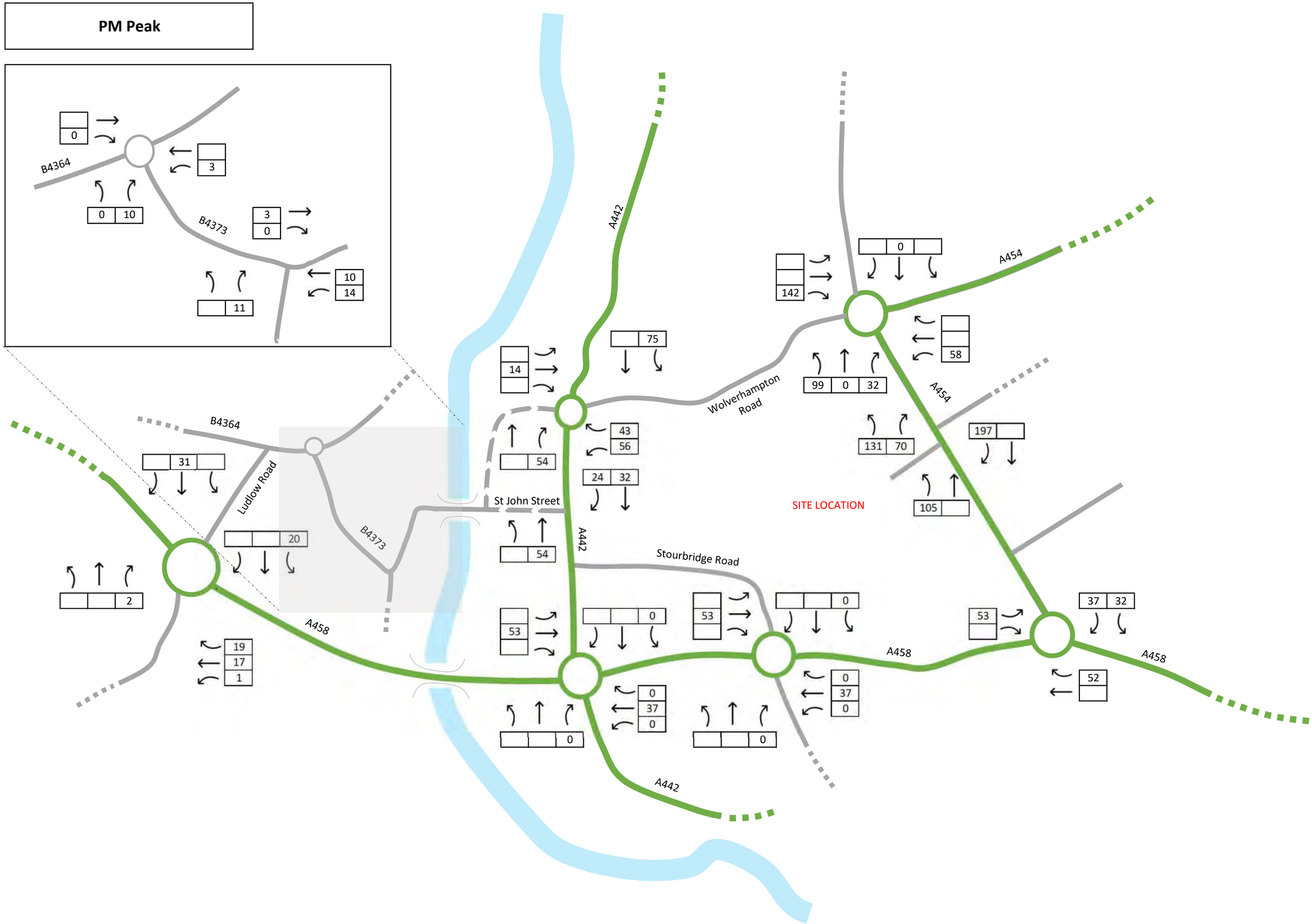
Distribution Employment



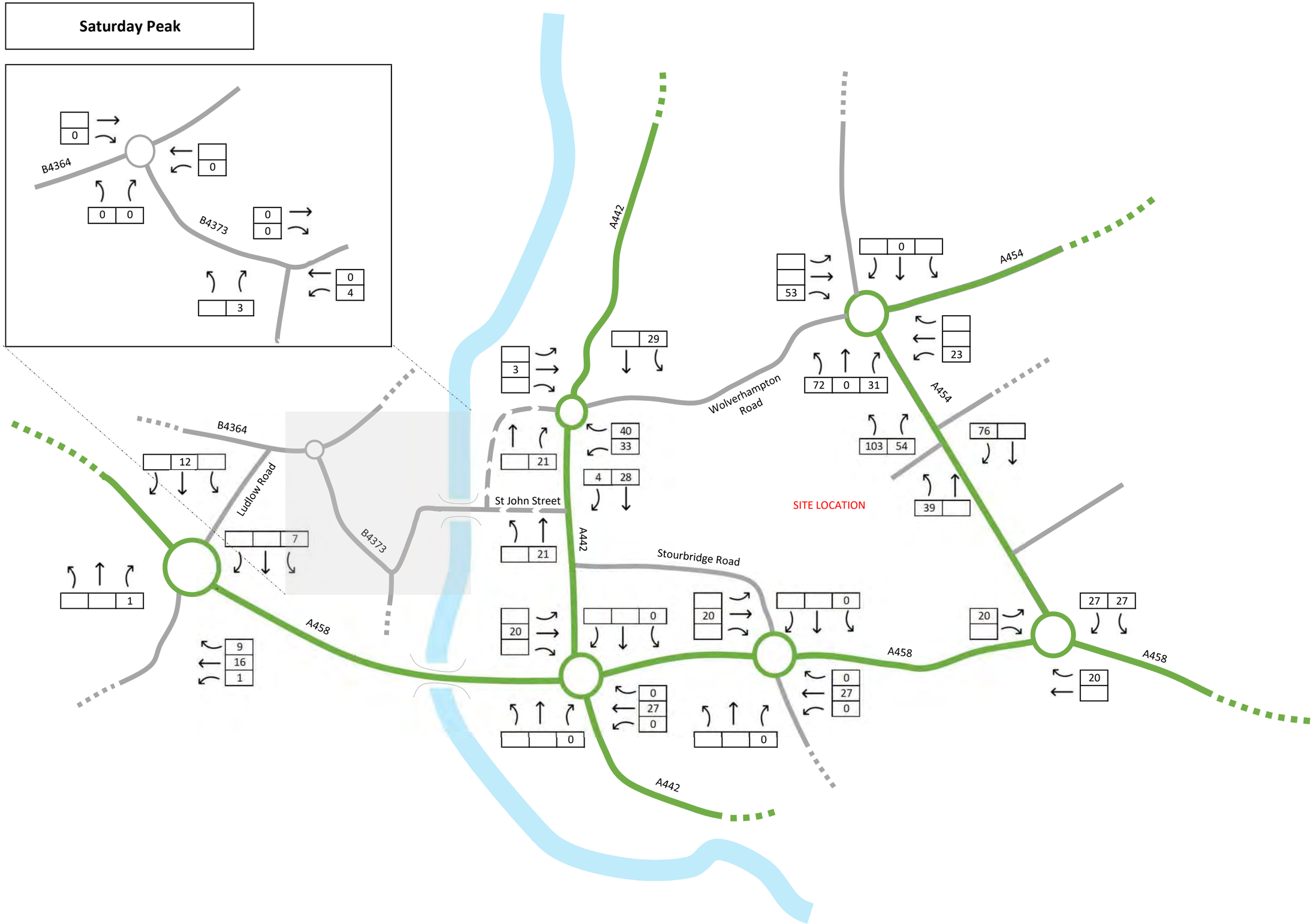
AM Peak


B4364
0
11
0
4
B4373
11
4
13
14
A442
0
A454
96
41
25
Wolverhampton Road
167
0
67
30
A454
87
80
30
234
122
116
17
63
67
SITE LOCATION
St John Street
B4364
16
Ludlow Road
19
B4373
A442
30
Stourbridge Road
1
A458
36
0
36
0
36
62
60
A458
A458
24
36
2
0
62
0
0
62
0
31
0
A442

PM Peak


B4364
0
0
10
3
B4373
3
0
10
14
11
A442
75
14
142
0
A454
58
99
0
32
Wolverhampton Road
A454
197
131
70
105
43
56
54
24
32
St John Street
SITE LOCATION
54
A442
Stourbridge Road
B4364
31
Ludlow Road
20
B4373
2
A458
19
17
1
53
0
53
0
37
0
0
0
53
0
37
0
A458
53
37
32
A458
52
A442

Saturday Peak



Appendix D Junction Modelling Outputs

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J3 A442 A458 Stourbridge Rd.j9
Path: C:\PJA\Phil Jones Associates\SharedData - 04151 Stanmore Garden Village, Bridgnorth\3. Technical\3.2 Modelling
Report generation date: 11/03/2020 08:57:22

»2019 Base, AM
»2019 Base, PM
»2019 Base, Saturday
»2019 + Dev, AM
»2019 + Dev, PM
»2019 + Dev, Saturday

Summary of junction performance

	AM				PM				Saturday			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base											
Arm 1	0.3	4.13	0.21	A	0.3	3.91	0.21	A	0.3	4.01	0.24	A
Arm 2	0.5	5.34	0.32	A	1.4	8.28	0.59	A	1.0	6.89	0.51	A
Arm 3	0.1	4.24	0.05	A	0.1	4.03	0.08	A	0.0	3.62	0.03	A
Arm 4	0.3	2.64	0.22	A	0.2	2.49	0.16	A	0.2	2.37	0.17	A
	2019 + Dev											
Arm 1	0.3	4.24	0.22	A	0.3	4.05	0.22	A	0.3	4.06	0.24	A
Arm 2	0.6	5.95	0.39	A	1.7	9.14	0.63	A	1.2	7.31	0.54	A
Arm 3	0.1	4.41	0.05	A	0.1	4.14	0.08	A	0.0	3.68	0.03	A
Arm 4	0.3	2.72	0.24	A	0.2	2.61	0.20	A	0.2	2.41	0.18	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\jane.overton
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2019 Base	AM	ONE HOUR	07:45	09:15	15
D2	2019 Base	PM	ONE HOUR	16:45	18:15	15
D3	2019 Base	Saturday	ONE HOUR	10:45	12:15	15
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15	15
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15	15
D6	2019 + Dev	Saturday	ONE HOUR	10:45	12:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2019 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	untitled	
2	untitled	
3	untitled	
4	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.30	9.60	4.4	66.5	50.6	44.8	
2	3.70	9.80	11.4	3.2	50.6	61.9	
3	4.10	4.70	2.1	357.0	50.6	17.5	
4	3.50	9.10	17.5	31.0	50.6	34.2	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.529	1319
2	0.395	1140
3	0.586	1457
4	0.645	1904

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2019 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	215	100.000
2		✓	284	100.000
3		✓	42	100.000
4		✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	131	23	61
	2	38	0	0	246
	3	8	15	0	19
	4	44	273	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	4	0
	2	8	0	0	11
	3	0	33	0	53
	4	0	8	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.21	4.13	0.3	A
2	0.32	5.34	0.5	A
3	0.05	4.24	0.1	A
4	0.22	2.64	0.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	237	1171	0.138	161	0.2	3.565	A
2	214	84	1001	0.214	213	0.3	4.563	A
3	32	258	952	0.033	31	0.0	3.911	A
4	260	46	1759	0.148	259	0.2	2.398	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	284	1144	0.169	193	0.2	3.785	A
2	255	101	995	0.257	255	0.3	4.864	A
3	38	310	928	0.041	38	0.0	4.043	A
4	310	55	1753	0.177	310	0.2	2.494	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	348	1108	0.214	236	0.3	4.130	A
2	313	123	987	0.317	312	0.5	5.335	A
3	46	379	895	0.052	46	0.1	4.239	A
4	380	67	1745	0.218	380	0.3	2.637	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	348	1108	0.214	237	0.3	4.133	A
2	313	123	987	0.317	313	0.5	5.341	A
3	46	380	895	0.052	46	0.1	4.240	A
4	380	67	1745	0.218	380	0.3	2.637	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	284	1144	0.169	194	0.2	3.788	A
2	255	101	995	0.257	256	0.3	4.876	A
3	38	311	927	0.041	38	0.0	4.046	A
4	310	55	1753	0.177	310	0.2	2.497	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	238	1170	0.138	162	0.2	3.573	A
2	214	84	1001	0.214	214	0.3	4.580	A
3	32	260	951	0.033	32	0.0	3.916	A
4	260	46	1759	0.148	260	0.2	2.402	A

2019 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2019 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	224	100.000
2		✓	568	100.000
3		✓	70	100.000
4		✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	97	18	109
	2	100	0	0	468
	3	20	20	0	30
	4	64	180	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	6	1
	2	1	0	0	2
	3	0	5	0	7
	4	0	6	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.21	3.91	0.3	A
2	0.59	8.28	1.4	A
3	0.08	4.03	0.1	A
4	0.16	2.49	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	169	158	1208	0.140	168	0.2	3.459	A
2	428	103	1079	0.396	425	0.6	5.482	A
3	53	507	1106	0.048	53	0.0	3.416	A
4	191	105	1754	0.109	191	0.1	2.303	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	201	189	1191	0.169	201	0.2	3.636	A
2	511	123	1071	0.477	510	0.9	6.401	A
3	63	608	1049	0.060	63	0.1	3.650	A
4	228	126	1741	0.131	228	0.2	2.379	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	247	231	1168	0.211	246	0.3	3.906	A
2	625	151	1060	0.590	623	1.4	8.205	A
3	77	743	971	0.079	77	0.1	4.025	A
4	280	154	1723	0.162	279	0.2	2.492	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	247	231	1168	0.211	247	0.3	3.908	A
2	625	151	1060	0.590	625	1.4	8.281	A
3	77	745	970	0.079	77	0.1	4.030	A
4	280	154	1723	0.162	280	0.2	2.493	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	201	189	1191	0.169	202	0.2	3.638	A
2	511	123	1071	0.477	513	0.9	6.471	A
3	63	611	1047	0.060	63	0.1	3.658	A
4	228	126	1741	0.131	229	0.2	2.382	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	169	158	1208	0.140	169	0.2	3.467	A
2	428	103	1079	0.396	429	0.7	5.545	A
3	53	511	1104	0.048	53	0.1	3.424	A
4	191	106	1754	0.109	191	0.1	2.304	A

2019 Base, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2019 Base	Saturday	ONE HOUR	10:45	12:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	256	100.000
2		✓	502	100.000
3		✓	26	100.000
4		✓	277	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	152	2	102
	2	94	0	1	407
	3	13	9	0	4
	4	73	203	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	1	0	0	2
	3	0	11	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.24	4.01	0.3	A
2	0.51	6.89	1.0	A
3	0.03	3.62	0.0	A
4	0.17	2.37	0.2	A

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	160	1219	0.158	192	0.2	3.503	A
2	378	79	1089	0.347	376	0.5	5.031	A
3	20	452	1145	0.017	20	0.0	3.198	A
4	209	87	1847	0.113	208	0.1	2.196	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	230	191	1203	0.191	230	0.2	3.700	A
2	451	94	1083	0.417	451	0.7	5.683	A
3	23	541	1094	0.021	23	0.0	3.362	A
4	249	104	1836	0.136	249	0.2	2.268	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	282	234	1180	0.239	282	0.3	4.005	A
2	553	115	1075	0.514	551	1.0	6.854	A
3	29	662	1024	0.028	29	0.0	3.615	A
4	305	127	1821	0.168	305	0.2	2.374	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	282	235	1180	0.239	282	0.3	4.007	A
2	553	116	1075	0.514	553	1.0	6.890	A
3	29	664	1023	0.028	29	0.0	3.618	A
4	305	128	1820	0.168	305	0.2	2.375	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	230	192	1203	0.191	230	0.2	3.702	A
2	451	95	1083	0.417	453	0.7	5.721	A
3	23	544	1092	0.021	23	0.0	3.369	A
4	249	105	1836	0.136	249	0.2	2.270	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	160	1219	0.158	193	0.2	3.510	A
2	378	79	1089	0.347	379	0.5	5.071	A
3	20	455	1143	0.017	20	0.0	3.203	A
4	209	87	1847	0.113	209	0.1	2.199	A

2019 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	215	100.000
2		✓	346	100.000
3		✓	42	100.000
4		✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	131	23	61
	2	38	0	0	308
	3	8	15	0	19
	4	44	309	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	4	0
	2	8	0	0	11
	3	0	33	0	53
	4	0	8	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.22	4.24	0.3	A
2	0.39	5.95	0.6	A
3	0.05	4.41	0.1	A
4	0.24	2.72	0.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	264	1155	0.140	161	0.2	3.620	A
2	260	84	1000	0.260	259	0.3	4.850	A
3	32	305	930	0.034	31	0.0	4.007	A
4	287	46	1757	0.163	286	0.2	2.446	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	316	1126	0.172	193	0.2	3.860	A
2	311	101	994	0.313	311	0.5	5.263	A
3	38	365	901	0.042	38	0.0	4.168	A
4	343	55	1751	0.196	342	0.2	2.556	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	387	1085	0.218	236	0.3	4.239	A
2	381	123	986	0.386	380	0.6	5.938	A
3	46	447	863	0.054	46	0.1	4.408	A
4	419	67	1742	0.241	419	0.3	2.721	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	388	1085	0.218	237	0.3	4.242	A
2	381	123	986	0.386	381	0.6	5.950	A
3	46	448	862	0.054	46	0.1	4.410	A
4	419	67	1742	0.241	419	0.3	2.721	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	317	1125	0.172	194	0.2	3.865	A
2	311	101	994	0.313	312	0.5	5.283	A
3	38	367	901	0.042	38	0.0	4.173	A
4	343	55	1750	0.196	343	0.2	2.559	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	265	1155	0.140	162	0.2	3.629	A
2	260	84	1000	0.261	261	0.4	4.875	A
3	32	307	929	0.034	32	0.0	4.014	A
4	287	46	1757	0.163	287	0.2	2.449	A

2019 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	224	100.000
2		✓	605	100.000
3		✓	70	100.000
4		✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	97	18	109
	2	100	0	0	505
	3	20	20	0	30
	4	64	233	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	6	1
	2	1	0	0	2
	3	0	5	0	7
	4	0	6	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.22	4.05	0.3	A
2	0.63	9.14	1.7	A
3	0.08	4.14	0.1	A
4	0.20	2.61	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	169	197	1186	0.142	168	0.2	3.534	A
2	455	103	1079	0.422	453	0.7	5.722	A
3	53	534	1090	0.048	52	0.1	3.468	A
4	231	105	1750	0.132	231	0.2	2.367	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	201	236	1165	0.173	201	0.2	3.735	A
2	544	123	1071	0.508	543	1.0	6.801	A
3	63	641	1030	0.061	63	0.1	3.722	A
4	276	126	1737	0.159	276	0.2	2.463	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	247	289	1136	0.217	246	0.3	4.047	A
2	666	151	1060	0.629	664	1.6	9.026	A
3	77	783	948	0.081	77	0.1	4.131	A
4	338	154	1720	0.197	338	0.2	2.605	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	247	290	1135	0.217	247	0.3	4.049	A
2	666	151	1060	0.629	666	1.7	9.137	A
3	77	786	947	0.081	77	0.1	4.138	A
4	338	154	1719	0.197	338	0.2	2.605	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	201	237	1165	0.173	202	0.2	3.738	A
2	544	123	1071	0.508	546	1.0	6.899	A
3	63	644	1028	0.061	63	0.1	3.731	A
4	276	126	1737	0.159	276	0.2	2.466	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	169	198	1186	0.142	169	0.2	3.542	A
2	455	103	1079	0.422	457	0.7	5.798	A
3	53	539	1088	0.048	53	0.1	3.477	A
4	231	106	1750	0.132	231	0.2	2.370	A

2019 + Dev, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2019 + Dev	Saturday	ONE HOUR	10:45	12:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	256	100.000
2		✓	529	100.000
3		✓	26	100.000
4		✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	152	2	102
	2	94	0	1	434
	3	13	9	0	4
	4	73	223	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	1	0	0	2
	3	0	11	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.24	4.06	0.3	A
2	0.54	7.31	1.2	A
3	0.03	3.68	0.0	A
4	0.18	2.41	0.2	A

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	175	1211	0.159	192	0.2	3.530	A
2	398	79	1089	0.366	396	0.6	5.176	A
3	20	472	1133	0.017	20	0.0	3.231	A
4	224	87	1847	0.121	223	0.1	2.217	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	230	209	1193	0.193	230	0.2	3.736	A
2	476	94	1083	0.439	475	0.8	5.909	A
3	23	565	1080	0.022	23	0.0	3.407	A
4	267	104	1836	0.145	267	0.2	2.294	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	282	256	1169	0.241	282	0.3	4.057	A
2	582	115	1075	0.542	581	1.2	7.261	A
3	29	692	1007	0.028	29	0.0	3.677	A
4	327	127	1821	0.180	327	0.2	2.409	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	282	257	1169	0.241	282	0.3	4.059	A
2	582	116	1075	0.542	582	1.2	7.307	A
3	29	694	1006	0.028	29	0.0	3.681	A
4	327	128	1820	0.180	327	0.2	2.410	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	230	210	1193	0.193	230	0.2	3.742	A
2	476	95	1083	0.439	477	0.8	5.956	A
3	23	568	1078	0.022	23	0.0	3.412	A
4	267	105	1836	0.145	267	0.2	2.297	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	193	176	1211	0.159	193	0.2	3.535	A
2	398	79	1089	0.366	399	0.6	5.224	A
3	20	475	1131	0.017	20	0.0	3.239	A
4	224	87	1847	0.121	224	0.1	2.219	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4 A442 A458 Rdbt.j9
Path: C:\PJA\Phil Jones Associates\SharedData - 04151 Stanmore Garden Village, Bridgnorth\3. Technical\3.2 Modelling
Report generation date: 11/03/2020 09:07:45

»2019 Base, AM
»2019 Base, PM
»2019 Base, Saturday
»2019 + Dev, AM
»2019 + Dev, PM
»2019 + Dev, Saturday

Summary of junction performance

	AM				PM				Saturday			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base											
Arm 1	1.5	10.14	0.60	B	2.8	14.44	0.74	B	1.2	7.88	0.54	A
Arm 2	0.5	4.86	0.33	A	1.7	9.03	0.63	A	0.7	5.03	0.42	A
Arm 3	0.8	5.85	0.44	A	1.3	9.31	0.57	A	0.8	5.93	0.44	A
Arm 4	1.2	5.48	0.55	A	0.9	4.97	0.49	A	0.6	3.68	0.37	A
	2019 + Dev											
Arm 1	1.6	10.71	0.62	B	3.1	16.36	0.76	C	1.2	8.06	0.54	A
Arm 2	0.6	5.31	0.39	A	2.0	10.05	0.67	B	0.8	5.22	0.44	A
Arm 3	0.8	6.26	0.45	A	1.4	9.92	0.59	A	0.8	6.09	0.45	A
Arm 4	1.4	5.83	0.58	A	1.1	5.41	0.53	A	0.6	3.75	0.38	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\jane.overton
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base	AM	ONE HOUR	07:45	09:15		15	✓
D2	2019 Base	PM	ONE HOUR	16:45	18:15		15	✓
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15	✓
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15		15	✓
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15		15	✓
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	untitled	
2	untitled	
3	untitled	
4	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.30	7.90	6.9	8.1	40.0	53.9	
2	3.20	7.00	25.3	17.4	40.0	37.3	
3	4.10	7.70	6.4	18.7	40.0	47.4	
4	4.20	7.50	10.9	44.1	40.0	35.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1221
2	0.630	1690
3	0.588	1528
4	0.663	1795

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	489	100.000
2		ONE HOUR	✓	337	100.000
3		ONE HOUR	✓	432	100.000
4		ONE HOUR	✓	731	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	25	241	223
	2	109	0	29	199
	3	230	22	0	180
	4	276	291	164	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	32	6	3
	2	14	0	21	8
	3	4	32	0	6
	4	3	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.60	10.14	1.5	B	449	673
2	0.33	4.86	0.5	A	309	464
3	0.44	5.85	0.8	A	396	595
4	0.55	5.48	1.2	A	671	1006

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	368	92	358	976	0.377	366	461	0.0	0.6	5.878	A
2	254	63	470	1243	0.204	253	253	0.0	0.3	3.630	A
3	325	81	398	1202	0.271	324	325	0.0	0.4	4.093	A
4	550	138	271	1550	0.355	548	451	0.0	0.5	3.585	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	440	110	428	941	0.467	439	552	0.6	0.9	7.149	A
2	303	76	563	1188	0.255	303	303	0.3	0.3	4.065	A
3	388	97	477	1155	0.336	388	389	0.4	0.5	4.688	A
4	657	164	324	1513	0.434	656	540	0.5	0.8	4.199	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	538	135	524	894	0.602	536	676	0.9	1.5	9.988	A
2	371	93	689	1114	0.333	370	371	0.3	0.5	4.837	A
3	476	119	583	1092	0.436	475	476	0.5	0.8	5.821	A
4	805	201	397	1462	0.551	803	661	0.8	1.2	5.449	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	538	135	525	893	0.603	538	677	1.5	1.5	10.135	B
2	371	93	691	1112	0.334	371	372	0.5	0.5	4.855	A
3	476	119	585	1091	0.436	476	478	0.8	0.8	5.848	A
4	805	201	397	1461	0.551	805	663	1.2	1.2	5.481	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	440	110	430	940	0.468	442	554	1.5	0.9	7.261	A
2	303	76	567	1186	0.255	304	305	0.5	0.3	4.084	A
3	388	97	479	1154	0.337	389	392	0.8	0.5	4.717	A
4	657	164	325	1512	0.435	659	543	1.2	0.8	4.228	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	368	92	360	975	0.378	369	464	0.9	0.6	5.954	A
2	254	63	474	1241	0.204	254	255	0.3	0.3	3.650	A
3	325	81	401	1200	0.271	326	328	0.5	0.4	4.120	A
4	550	138	272	1549	0.355	551	454	0.8	0.6	3.613	A

2019 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	623	100.000
3		ONE HOUR	✓	474	100.000
4		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	28	268	343
	2	159	0	67	397
	3	264	17	0	193
	4	213	205	208	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	11	1	3
	2	3	0	1	2
	3	3	0	0	2
	4	3	4	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.74	14.44	2.8	B	586	880
2	0.63	9.03	1.7	A	572	858
3	0.57	9.31	1.3	A	435	652
4	0.49	4.97	0.9	A	574	862

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	322	1028	0.468	478	477	0.0	0.9	6.501	A
2	469	117	613	1267	0.370	467	187	0.0	0.6	4.486	A
3	357	89	673	1095	0.326	355	406	0.0	0.5	4.854	A
4	471	118	330	1515	0.311	469	698	0.0	0.4	3.437	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	144	386	996	0.577	573	571	0.9	1.3	8.467	A
2	560	140	734	1190	0.471	559	224	0.6	0.9	5.694	A
3	426	107	806	1016	0.419	425	487	0.5	0.7	6.080	A
4	563	141	395	1472	0.382	562	837	0.4	0.6	3.954	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	704	176	472	952	0.739	698	698	1.3	2.7	13.884	B
2	686	171	896	1088	0.631	683	275	0.9	1.7	8.826	A
3	522	130	984	911	0.573	520	595	0.7	1.3	9.128	A
4	689	172	482	1414	0.487	688	1021	0.6	0.9	4.946	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	704	176	473	952	0.739	703	700	2.7	2.8	14.443	B
2	686	171	901	1084	0.633	686	275	1.7	1.7	9.030	A
3	522	130	990	908	0.575	522	598	1.3	1.3	9.309	A
4	689	172	484	1413	0.488	689	1027	0.9	0.9	4.973	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	144	387	995	0.577	580	574	2.8	1.4	8.779	A
2	560	140	742	1185	0.473	563	225	1.7	0.9	5.816	A
3	426	107	814	1012	0.421	429	491	1.3	0.7	6.197	A
4	563	141	398	1470	0.383	564	845	0.9	0.6	3.979	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	324	1027	0.468	483	480	1.4	0.9	6.640	A
2	469	117	619	1263	0.371	470	189	0.9	0.6	4.547	A
3	357	89	679	1091	0.327	358	410	0.7	0.5	4.917	A
4	471	118	332	1513	0.311	472	705	0.6	0.5	3.461	A

2019 Base, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	530	100.000
2		FLAT	✓	518	100.000
3		FLAT	✓	475	100.000
4		FLAT	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	26	235	269
	2	120	0	55	343
	3	193	27	0	255
	4	161	224	188	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	1	2
	2	2	0	0	1
	3	2	0	0	0
	4	2	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.54	7.88	1.2	A	530	795
2	0.42	5.03	0.7	A	518	777
3	0.44	5.93	0.8	A	475	712
4	0.37	3.68	0.6	A	573	860

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	437	987	0.537	525	471	0.0	1.1	7.719	A
2	518	130	687	1237	0.419	515	276	0.0	0.7	4.966	A
3	475	119	727	1085	0.438	472	475	0.0	0.8	5.846	A
4	573	143	338	1553	0.369	571	861	0.0	0.6	3.653	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	439	987	0.537	530	474	1.1	1.1	7.881	A
2	518	130	692	1234	0.420	518	277	0.7	0.7	5.025	A
3	475	119	732	1082	0.439	475	478	0.8	0.8	5.931	A
4	573	143	340	1552	0.369	573	867	0.6	0.6	3.677	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	439	987	0.537	530	474	1.1	1.2	7.885	A
2	518	130	692	1234	0.420	518	277	0.7	0.7	5.025	A
3	475	119	732	1082	0.439	475	478	0.8	0.8	5.931	A
4	573	143	340	1552	0.369	573	867	0.6	0.6	3.677	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	439	987	0.537	530	474	1.2	1.2	7.885	A
2	518	130	692	1234	0.420	518	277	0.7	0.7	5.025	A
3	475	119	732	1082	0.439	475	478	0.8	0.8	5.931	A
4	573	143	340	1552	0.369	573	867	0.6	0.6	3.677	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	439	987	0.537	530	474	1.2	1.2	7.885	A
2	518	130	692	1234	0.420	518	277	0.7	0.7	5.025	A
3	475	119	732	1082	0.439	475	478	0.8	0.8	5.931	A
4	573	143	340	1552	0.369	573	867	0.6	0.6	3.677	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	439	987	0.537	530	474	1.2	1.2	7.885	A
2	518	130	692	1234	0.420	518	277	0.7	0.7	5.025	A
3	475	119	732	1082	0.439	475	478	0.8	0.8	5.931	A
4	573	143	340	1552	0.369	573	867	0.6	0.6	3.677	A

2019 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	489	100.000
2		ONE HOUR	✓	399	100.000
3		ONE HOUR	✓	432	100.000
4		ONE HOUR	✓	767	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	25	241	223
	2	109	0	29	261
	3	230	22	0	180
	4	276	327	164	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	32	6	3
	2	14	0	21	8
	3	4	32	0	6
	4	3	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.62	10.71	1.6	B	449	673
2	0.39	5.31	0.6	A	366	549
3	0.45	6.26	0.8	A	396	595
4	0.58	5.83	1.4	A	704	1056

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	368	92	385	963	0.382	366	461	0.0	0.6	6.005	A
2	300	75	470	1249	0.241	299	280	0.0	0.3	3.785	A
3	325	81	444	1174	0.277	324	325	0.0	0.4	4.225	A
4	577	144	271	1550	0.372	575	497	0.0	0.6	3.682	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	440	110	461	925	0.475	438	552	0.6	0.9	7.377	A
2	359	90	563	1193	0.301	358	336	0.3	0.4	4.309	A
3	388	97	532	1122	0.346	388	389	0.4	0.5	4.899	A
4	690	172	324	1513	0.456	689	596	0.6	0.8	4.361	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	538	135	563	875	0.616	536	676	0.9	1.6	10.536	B
2	439	110	688	1119	0.393	438	411	0.4	0.6	5.284	A
3	476	119	651	1051	0.452	474	476	0.5	0.8	6.227	A
4	844	211	397	1462	0.578	842	729	0.8	1.3	5.788	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	538	135	565	874	0.616	538	677	1.6	1.6	10.714	B
2	439	110	691	1117	0.393	439	412	0.6	0.6	5.310	A
3	476	119	653	1050	0.453	476	478	0.8	0.8	6.263	A
4	844	211	397	1462	0.578	844	731	1.3	1.4	5.832	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	440	110	463	924	0.476	442	554	1.6	0.9	7.504	A
2	359	90	567	1191	0.301	360	337	0.6	0.4	4.336	A
3	388	97	535	1120	0.347	390	392	0.8	0.5	4.934	A
4	690	172	325	1512	0.456	692	599	1.4	0.8	4.398	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	368	92	387	962	0.383	369	464	0.9	0.6	6.090	A
2	300	75	474	1246	0.241	301	282	0.4	0.3	3.808	A
3	325	81	447	1172	0.277	326	328	0.5	0.4	4.257	A
4	577	144	272	1549	0.373	578	501	0.8	0.6	3.711	A

2019 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.37	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	660	100.000
3		ONE HOUR	✓	474	100.000
4		ONE HOUR	✓	679	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	28	268	343
	2	159	0	67	434
	3	264	17	0	193
	4	213	258	208	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	11	1	3
	2	3	0	1	2
	3	3	0	0	2
	4	3	4	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.76	16.36	3.1	C	586	880
2	0.67	10.05	2.0	B	606	908
3	0.59	9.92	1.4	A	435	652
4	0.53	5.41	1.1	A	623	935

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	362	1008	0.477	477	476	0.0	0.9	6.741	A
2	497	124	613	1267	0.392	494	227	0.0	0.6	4.644	A
3	357	89	700	1079	0.331	355	406	0.0	0.5	4.962	A
4	511	128	329	1515	0.338	509	726	0.0	0.5	3.572	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	144	434	972	0.591	572	571	0.9	1.4	8.966	A
2	593	148	734	1190	0.499	592	272	0.6	1.0	6.004	A
3	426	107	839	997	0.427	425	487	0.5	0.7	6.286	A
4	610	153	395	1472	0.415	610	870	0.5	0.7	4.173	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	704	176	531	923	0.762	697	697	1.4	3.0	15.538	C
2	727	182	895	1088	0.668	723	333	1.0	1.9	9.748	A
3	522	130	1024	888	0.588	519	594	0.7	1.4	9.688	A
4	748	187	482	1414	0.529	746	1061	0.7	1.1	5.374	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	704	176	532	922	0.763	703	700	3.0	3.1	16.357	C
2	727	182	901	1084	0.670	726	334	1.9	2.0	10.048	B
3	522	130	1030	884	0.590	522	598	1.4	1.4	9.918	A
4	748	187	484	1413	0.529	748	1068	1.1	1.1	5.412	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	144	435	971	0.592	581	575	3.1	1.5	9.378	A
2	593	148	743	1185	0.501	597	273	2.0	1.0	6.170	A
3	426	107	848	991	0.430	429	492	1.4	0.8	6.426	A
4	610	153	398	1469	0.415	612	879	1.1	0.7	4.207	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	364	1007	0.478	483	480	1.5	0.9	6.906	A
2	497	124	619	1263	0.393	498	229	1.0	0.7	4.717	A
3	357	89	707	1075	0.332	358	410	0.8	0.5	5.032	A
4	511	128	332	1513	0.338	512	733	0.7	0.5	3.599	A

2019 + Dev, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	530	100.000
2		FLAT	✓	545	100.000
3		FLAT	✓	475	100.000
4		FLAT	✓	593	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	26	235	269
	2	120	0	55	370
	3	193	27	0	255
	4	161	244	188	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	1	2
	2	2	0	0	1
	3	2	0	0	0
	4	2	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.54	8.06	1.2	A	530	795
2	0.44	5.22	0.8	A	545	818
3	0.45	6.09	0.8	A	475	712
4	0.38	3.75	0.6	A	593	890

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	457	978	0.542	525	471	0.0	1.2	7.881	A
2	545	136	687	1238	0.440	542	296	0.0	0.8	5.152	A
3	475	119	754	1069	0.444	472	475	0.0	0.8	5.998	A
4	593	148	338	1554	0.382	591	888	0.0	0.6	3.728	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	459	977	0.543	530	474	1.2	1.2	8.055	A
2	545	136	692	1234	0.442	545	297	0.8	0.8	5.221	A
3	475	119	759	1066	0.446	475	478	0.8	0.8	6.091	A
4	593	148	340	1552	0.382	593	894	0.6	0.6	3.751	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	459	977	0.543	530	474	1.2	1.2	8.057	A
2	545	136	692	1234	0.442	545	297	0.8	0.8	5.221	A
3	475	119	759	1066	0.446	475	478	0.8	0.8	6.091	A
4	593	148	340	1552	0.382	593	894	0.6	0.6	3.752	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	459	977	0.543	530	474	1.2	1.2	8.059	A
2	545	136	692	1234	0.442	545	297	0.8	0.8	5.221	A
3	475	119	759	1066	0.446	475	478	0.8	0.8	6.091	A
4	593	148	340	1552	0.382	593	894	0.6	0.6	3.752	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	459	977	0.543	530	474	1.2	1.2	8.059	A
2	545	136	692	1234	0.442	545	297	0.8	0.8	5.221	A
3	475	119	759	1066	0.446	475	478	0.8	0.8	6.091	A
4	593	148	340	1552	0.382	593	894	0.6	0.6	3.752	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	459	977	0.543	530	474	1.2	1.2	8.059	A
2	545	136	692	1234	0.442	545	297	0.8	0.8	5.221	A
3	475	119	759	1066	0.446	475	478	0.8	0.8	6.091	A
4	593	148	340	1552	0.382	593	894	0.6	0.6	3.752	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J5 St John Street_Cann Hall St.j9
Path: C:\PJA\Phil Jones Associates\SharedData - 04151 Stanmore Garden Village, Bridgnorth\3. Technical\3.2 Modelling
Report generation date: 11/03/2020 09:14:22

»2019 Base, AM
»2019 Base, PM
»2019 Base, Saturday
»2019 + Dev, AM
»2019 + Dev, PM
»2019 + Dev, Saturday

Summary of junction performance

	AM				PM				Saturday			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base											
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	52.1	321.56	1.12	F	284.0	1866.01	1.45	F	6.4	48.33	0.87	E
	2019 + Dev											
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	83.0	539.22	1.18	F	366.8	2202.80	1.55	F	7.4	53.74	0.88	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\jane.overton
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2019 Base	AM	ONE HOUR	07:45	09:15		15
D2	2019 Base	PM	ONE HOUR	16:45	18:15		15
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15		15
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15		15
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2019 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		123.08	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.70		✓	2.80	87.0	✓	22.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	440	0.074	0.187	0.118	0.268
1	B-C	574	0.081	0.206	-	-
1	C-B	665	0.239	0.239	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2019 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	750	100.000
B		✓	0	100.000
C		✓	1026	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	251	499
	B	0	0	0
	C	575	451	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	7	4
	B	0	10	0
	C	6	3	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	1.12	321.56	52.1	F
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	285	0.000	0	0.0	0.000	A
C-AB	340	508	0.668	332	1.9	19.663	C
C-A	433			433			
A-B	189			189			
A-C	376			376			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	233	0.000	0	0.0	0.000	A
C-AB	416	495	0.842	407	4.3	37.364	E
C-A	506			506			
A-B	226			226			
A-C	449			449			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	149	0.000	0	0.0	0.000	A
C-AB	1130	1008	1.121	1058	22.1	89.063	F
C-A	0			0			
A-B	276			276			
A-C	549			549			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	132	0.000	0	0.0	0.000	A
C-AB	1130	1012	1.116	1011	51.7	165.956	F
C-A	0			0			
A-B	276			276			
A-C	549			549			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	188	0.000	0	0.0	0.000	A
C-AB	416	497	0.832	493	32.7	321.559	F
C-A	506			506			
A-B	226			226			
A-C	449			449			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	249	0.000	0	0.0	0.000	A
C-AB	340	509	0.668	461	2.3	116.372	F
C-A	433			433			
A-B	189			189			
A-C	376			376			

2019 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1020.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2019 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	727	100.000
B		✓	0	100.000
C		✓	1395	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	302	425
	B	0	0	0
	C	817	578	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	5	16
	B	0	10	0
	C	12	3	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	1.45	1866.01	284.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	230	0.000	0	0.0	0.000	A
C-AB	458	531	0.863	439	4.8	34.210	D
C-A	592			592			
A-B	227			227			
A-C	320			320			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	150	0.000	0	0.0	0.000	A
C-AB	1254	1138	1.102	1191	20.7	77.278	F
C-A	0			0			
A-B	271			271			
A-C	382			382			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	4	0.000	0	0.0	0.000	A
C-AB	1536	1060	1.449	1067	138.0	281.222	F
C-A	0			0			
A-B	333			333			
A-C	468			468			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	1536	1060	1.449	1060	257.1	653.101	F
C-A	0			0			
A-B	333			333			
A-C	468			468			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	1254	1151	1.089	1151	282.9	1319.038	F
C-A	0			0			
A-B	271			271			
A-C	382			382			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	458	531	0.824	527	265.6	1866.012	F
C-A	592			592			
A-B	227			227			
A-C	320			320			

2019 Base, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		12.94	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	592	100.000
B		✓	0	100.000
C		✓	1165	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	271	321
	B	0	0	0
	C	714	451	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	3	2
	B	0	10	0
	C	2	0	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.87	48.33	6.4	E
C-A				
A-B				
A-C				

Main Results for each time segment

10:45 - 11:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	230	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	458	4.9	33.723	D
C-A	687			687			
A-B	271			271			
A-C	321			321			

11:00 - 11:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	224	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	475	5.6	44.654	E
C-A	687			687			
A-B	271			271			
A-C	321			321			

11:15 - 11:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	223	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	476	6.0	46.530	E
C-A	687			687			
A-B	271			271			
A-C	321			321			

11:30 - 11:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	223	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	477	6.1	47.433	E
C-A	687			687			
A-B	271			271			
A-C	321			321			

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	223	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	477	6.3	47.971	E
C-A	687			687			
A-B	271			271			
A-C	321			321			

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	222	0.000	0	0.0	0.000	A
C-AB	478	551	0.867	477	6.4	48.330	E
C-A	687			687			
A-B	271			271			
A-C	321			321			

2019 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		209.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	780	100.000
B		✓	0	100.000
C		✓	1106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	251	529
	B	0	0	0
	C	638	468	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	7	4
	B	0	10	0
	C	6	3	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	1.18	539.22	83.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	271	0.000	0	0.0	0.000	A
C-AB	353	503	0.701	344	2.2	21.582	C
C-A	480			480			
A-B	189			189			
A-C	398			398			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	213	0.000	0	0.0	0.000	A
C-AB	458	517	0.886	445	5.5	43.048	E
C-A	536			536			
A-B	226			226			
A-C	476			476			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	118	0.000	0	0.0	0.000	A
C-AB	1218	1029	1.184	1095	36.2	116.891	F
C-A	0			0			
A-B	276			276			
A-C	582			582			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	84	0.000	0	0.0	0.000	A
C-AB	1218	1032	1.179	1033	82.5	259.233	F
C-A	0			0			
A-B	276			276			
A-C	582			582			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	135	0.000	0	0.0	0.000	A
C-AB	458	518	0.876	513	68.9	539.224	F
C-A	536			536			
A-B	226			226			
A-C	476			476			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	188	0.000	0	0.0	0.000	A
C-AB	353	503	0.700	503	31.2	373.954	F
C-A	480			480			
A-B	189			189			
A-C	398			398			

2019 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1220.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	781	100.000
B		✓	0	100.000
C		✓	1451	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	302	479
	B	0	0	0
	C	849	602	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	5	13
	B	0	10	0
	C	12	3	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	1.55	2202.80	366.8	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	211	0.000	0	0.0	0.000	A
C-AB	538	589	0.914	512	6.5	38.576	E
C-A	554			554			
A-B	227			227			
A-C	361			361			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	122	0.000	0	0.0	0.000	A
C-AB	1304	1115	1.171	1184	36.6	110.261	F
C-A	0			0			
A-B	271			271			
A-C	431			431			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	1598	1029	1.553	1030	178.5	384.592	F
C-A	0			0			
A-B	333			333			
A-C	527			527			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	1598	1029	1.553	1029	320.8	846.097	F
C-A	0			0			
A-B	333			333			
A-C	527			527			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	1304	1126	1.159	1125	365.6	1285.717	F
C-A	0			0			
A-B	271			271			
A-C	431			431			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.000	0	0.0	0.000	A
C-AB	538	589	0.881	641	339.8	2202.799	F
C-A	554			554			
A-B	227			227			
A-C	361			361			

2019 + Dev, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		14.56	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	613	100.000
B		✓	0	100.000
C		✓	1197	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	271	342
	B	0	0	0
	C	742	455	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	3	2
	B	0	10	0
	C	2	0	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.88	53.74	7.4	F
C-A				
A-B				
A-C				

Main Results for each time segment

10:45 - 11:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	220	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	476	5.4	35.277	E
C-A	700			700			
A-B	271			271			
A-C	342			342			

11:00 - 11:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	213	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	494	6.4	48.199	E
C-A	700			700			
A-B	271			271			
A-C	342			342			

11:15 - 11:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	212	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	496	6.8	50.891	F
C-A	700			700			
A-B	271			271			
A-C	342			342			

11:30 - 11:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	211	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	496	7.1	52.281	F
C-A	700			700			
A-B	271			271			
A-C	342			342			

11:45 - 12:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	211	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	497	7.3	53.146	F
C-A	700			700			
A-B	271			271			
A-C	342			342			

12:00 - 12:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	211	0.000	0	0.0	0.000	A
C-AB	497	563	0.883	497	7.4	53.737	F
C-A	700			700			
A-B	271			271			
A-C	342			342			

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J6 Mill Street_B4364_A442_no lane sim.j9
Path: C:\PJA\Phil Jones Associates\SharedData - 04151 Stanmore Garden Village, Bridgnorth\3. Technical\3.2 Modelling
Report generation date: 11/03/2020 09:17:18

»2019 Base, AM
»2019 Base, PM
»2019 Base, Saturday
»2019 + Dev, AM
»2019 + Dev, PM
»2019 + Dev, Saturday

Summary of junction performance

	AM				PM				Saturday			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base											
Arm 1	0.9	6.01	0.49	A	1.6	8.01	0.61	A	0.6	4.56	0.36	A
Arm 2	0.7	5.02	0.40	A	1.1	7.21	0.53	A	0.7	5.20	0.42	A
Arm 3	0.5	3.59	0.35	A	0.4	3.27	0.29	A	0.2	2.84	0.20	A
Arm 4	1.0	4.54	0.50	A	0.9	4.10	0.48	A	0.8	3.54	0.44	A
	2019 + Dev											
Arm 1	1.0	6.57	0.51	A	2.4	11.14	0.71	B	0.6	4.83	0.38	A
Arm 2	1.2	6.77	0.55	A	1.7	9.25	0.63	A	0.9	5.82	0.48	A
Arm 3	0.6	3.95	0.39	A	0.5	3.55	0.33	A	0.3	2.95	0.21	A
Arm 4	1.2	5.34	0.55	A	1.1	4.59	0.52	A	0.8	3.71	0.45	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	02/03/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\jane.overton
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base	AM	ONE HOUR	07:45	09:15		15	✓
D2	2019 Base	PM	ONE HOUR	16:45	18:15		15	✓
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15	✓
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15		15	✓
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15		15	✓
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	untitled	
2	untitled	
3	untitled	
4	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.60	6.90	12.6	18.2	43.0	19.6	
2	3.80	6.90	18.2	27.2	43.0	44.9	
3	3.60	5.90	23.8	23.3	43.0	29.9	
4	6.50	6.50	0.0	23.8	43.0	12.2	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.641	1686
2	0.621	1691
3	0.623	1635
4	0.735	2107

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	513	100.000
2		ONE HOUR	✓	431	100.000
3		ONE HOUR	✓	493	100.000
4		ONE HOUR	✓	726	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	58	455	0
	2	58	0	373	0
	3	345	148	0	0
	4	243	283	200	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	3	6	0
	2	3	0	2	0
	3	4	1	0	0
	4	4	1	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.49	6.01	0.9	A	471	706
2	0.40	5.02	0.7	A	395	593
3	0.35	3.59	0.5	A	452	679
4	0.50	4.54	1.0	A	666	999

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	386	97	473	1301	0.297	385	485	0.0	0.4	3.920	A
2	324	81	491	1339	0.242	323	367	0.0	0.3	3.537	A
3	371	93	43	1559	0.238	370	771	0.0	0.3	3.026	A
4	547	137	413	1735	0.315	545	0	0.0	0.5	3.022	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	461	115	567	1243	0.371	461	580	0.4	0.6	4.596	A
2	387	97	588	1277	0.303	387	439	0.3	0.4	4.043	A
3	443	111	52	1553	0.285	443	923	0.3	0.4	3.242	A
4	653	163	495	1675	0.390	652	0	0.5	0.6	3.518	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	565	141	694	1164	0.485	563	710	0.6	0.9	5.980	A
2	475	119	720	1192	0.398	474	538	0.4	0.7	5.003	A
3	543	136	64	1546	0.351	542	1129	0.4	0.5	3.584	A
4	799	200	606	1593	0.502	798	0	0.6	1.0	4.516	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	565	141	695	1163	0.485	565	711	0.9	0.9	6.012	A
2	475	119	721	1191	0.398	475	538	0.7	0.7	5.022	A
3	543	136	64	1546	0.351	543	1132	0.5	0.5	3.587	A
4	799	200	607	1593	0.502	799	0	1.0	1.0	4.535	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	461	115	568	1242	0.371	463	582	0.9	0.6	4.625	A
2	387	97	590	1275	0.304	388	440	0.7	0.4	4.061	A
3	443	111	52	1553	0.285	444	927	0.5	0.4	3.248	A
4	653	163	496	1674	0.390	654	0	1.0	0.6	3.536	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	386	97	476	1300	0.297	387	487	0.6	0.4	3.947	A
2	324	81	494	1338	0.243	325	369	0.4	0.3	3.558	A
3	371	93	44	1559	0.238	372	775	0.4	0.3	3.033	A
4	547	137	415	1733	0.315	547	0	0.6	0.5	3.036	A

2019 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	645	100.000
2		ONE HOUR	✓	512	100.000
3		ONE HOUR	✓	405	100.000
4		ONE HOUR	✓	750	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	24	621	0
	2	50	0	462	0
	3	294	111	0	0
	4	172	309	269	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	3	0
	2	2	0	0	0
	3	4	2	0	0
	4	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.61	8.01	1.6	A	592	888
2	0.53	7.21	1.1	A	470	705
3	0.29	3.27	0.4	A	372	557
4	0.48	4.10	0.9	A	688	1032

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	486	121	517	1312	0.370	483	387	0.0	0.6	4.333	A
2	385	96	667	1262	0.305	384	333	0.0	0.4	4.090	A
3	305	76	37	1557	0.196	304	1013	0.0	0.2	2.871	A
4	565	141	341	1824	0.310	563	0	0.0	0.4	2.852	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	580	145	619	1248	0.465	579	463	0.6	0.9	5.374	A
2	460	115	799	1178	0.391	459	399	0.4	0.6	5.004	A
3	364	91	45	1553	0.234	364	1213	0.2	0.3	3.027	A
4	674	169	409	1773	0.380	674	0	0.4	0.6	3.272	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	710	178	758	1160	0.612	707	567	0.9	1.5	7.910	A
2	564	141	977	1065	0.530	562	488	0.6	1.1	7.133	A
3	446	111	55	1547	0.288	446	1484	0.3	0.4	3.269	A
4	826	206	500	1704	0.485	824	0	0.6	0.9	4.085	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	710	178	759	1159	0.613	710	568	1.5	1.6	8.012	A
2	564	141	980	1063	0.531	564	489	1.1	1.1	7.214	A
3	446	111	55	1547	0.288	446	1488	0.4	0.4	3.270	A
4	826	206	501	1704	0.485	826	0	0.9	0.9	4.099	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	580	145	620	1246	0.465	583	465	1.6	0.9	5.446	A
2	460	115	803	1175	0.392	462	400	1.1	0.6	5.062	A
3	364	91	45	1553	0.235	364	1220	0.4	0.3	3.032	A
4	674	169	410	1772	0.380	676	0	0.9	0.6	3.284	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	486	121	519	1310	0.371	487	389	0.9	0.6	4.376	A
2	385	96	671	1259	0.306	386	335	0.6	0.4	4.126	A
3	305	76	38	1557	0.196	305	1020	0.3	0.2	2.875	A
4	565	141	343	1822	0.310	565	0	0.6	0.5	2.864	A

2019 Base, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base	Saturday	FLAT	10:45	12:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	437	100.000
2		FLAT	✓	497	100.000
3		FLAT	✓	312	100.000
4		FLAT	✓	794	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	23	414	0
	2	62	0	435	0
	3	214	98	0	0
	4	184	244	366	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	1
	2	2	0	1	0
	3	1	1	0	0
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	4.56	0.6	A	437	656
2	0.42	5.20	0.7	A	497	745
3	0.20	2.84	0.2	A	312	468
4	0.44	3.54	0.8	A	794	1191

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	705	1229	0.356	435	458	0.0	0.5	4.524	A
2	497	124	776	1191	0.417	494	364	0.0	0.7	5.144	A
3	312	78	62	1580	0.197	311	1209	0.0	0.2	2.836	A
4	794	198	373	1813	0.438	791	0	0.0	0.8	3.513	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	708	1227	0.356	437	460	0.5	0.6	4.556	A
2	497	124	780	1189	0.418	497	365	0.7	0.7	5.201	A
3	312	78	62	1580	0.198	312	1215	0.2	0.2	2.839	A
4	794	198	374	1812	0.438	794	0	0.8	0.8	3.536	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	708	1227	0.356	437	460	0.6	0.6	4.556	A
2	497	124	780	1189	0.418	497	365	0.7	0.7	5.201	A
3	312	78	62	1580	0.198	312	1215	0.2	0.2	2.839	A
4	794	198	374	1812	0.438	794	0	0.8	0.8	3.536	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	708	1227	0.356	437	460	0.6	0.6	4.556	A
2	497	124	780	1189	0.418	497	365	0.7	0.7	5.201	A
3	312	78	62	1580	0.198	312	1215	0.2	0.2	2.839	A
4	794	198	374	1812	0.438	794	0	0.8	0.8	3.536	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	708	1227	0.356	437	460	0.6	0.6	4.556	A
2	497	124	780	1189	0.418	497	365	0.7	0.7	5.201	A
3	312	78	62	1580	0.198	312	1215	0.2	0.2	2.839	A
4	794	198	374	1812	0.438	794	0	0.8	0.8	3.536	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	708	1227	0.356	437	460	0.6	0.6	4.556	A
2	497	124	780	1189	0.418	497	365	0.7	0.7	5.201	A
3	312	78	62	1580	0.198	312	1215	0.2	0.2	2.839	A
4	794	198	374	1812	0.438	794	0	0.8	0.8	3.536	A

2019 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	526	100.000
2		ONE HOUR	✓	598	100.000
3		ONE HOUR	✓	523	100.000
4		ONE HOUR	✓	751	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	71	455	0
	2	145	0	453	0
	3	345	178	0	0
	4	243	308	200	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	3	6	0
	2	3	0	2	0
	3	4	1	0	0
	4	4	1	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.51	6.57	1.0	A	483	724
2	0.55	6.77	1.2	A	549	823
3	0.39	3.95	0.6	A	480	720
4	0.55	5.34	1.2	A	689	1034

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	396	99	515	1277	0.310	394	550	0.0	0.4	4.071	A
2	450	113	491	1338	0.336	448	418	0.0	0.5	4.036	A
3	394	98	109	1520	0.259	392	831	0.0	0.3	3.188	A
4	565	141	501	1672	0.338	563	0	0.0	0.5	3.242	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	473	118	616	1214	0.390	472	658	0.4	0.6	4.849	A
2	538	134	588	1276	0.421	537	500	0.5	0.7	4.865	A
3	470	118	130	1506	0.312	470	995	0.3	0.5	3.470	A
4	675	169	600	1600	0.422	674	0	0.5	0.7	3.887	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	579	145	754	1128	0.513	578	805	0.6	1.0	6.519	A
2	658	165	719	1191	0.553	656	612	0.7	1.2	6.708	A
3	576	144	159	1488	0.387	575	1217	0.5	0.6	3.942	A
4	827	207	734	1501	0.551	825	0	0.7	1.2	5.309	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	579	145	755	1127	0.514	579	807	1.0	1.0	6.569	A
2	658	165	721	1190	0.553	658	613	1.2	1.2	6.771	A
3	576	144	160	1488	0.387	576	1220	0.6	0.6	3.946	A
4	827	207	735	1500	0.551	827	0	1.2	1.2	5.345	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	473	118	618	1212	0.390	474	661	1.0	0.6	4.889	A
2	538	134	591	1274	0.422	540	502	1.2	0.7	4.914	A
3	470	118	131	1506	0.312	471	999	0.6	0.5	3.481	A
4	675	169	602	1598	0.422	677	0	1.2	0.7	3.915	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	396	99	517	1275	0.311	397	553	0.6	0.5	4.103	A
2	450	113	494	1336	0.337	451	420	0.7	0.5	4.073	A
3	394	98	109	1519	0.259	394	836	0.5	0.4	3.202	A
4	565	141	504	1670	0.339	566	0	0.7	0.5	3.262	A

2019 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	720	100.000
2		ONE HOUR	✓	611	100.000
3		ONE HOUR	✓	459	100.000
4		ONE HOUR	✓	764	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	99	621	0
	2	93	0	518	0
	3	294	165	0	0
	4	172	323	269	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	3	0
	2	2	0	0	0
	3	4	2	0	0
	4	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.71	11.14	2.4	B	661	991
2	0.63	9.25	1.7	A	561	841
3	0.33	3.55	0.5	A	421	632
4	0.52	4.59	1.1	A	701	1052

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	568	1283	0.422	539	419	0.0	0.7	4.819	A
2	460	115	667	1261	0.365	458	440	0.0	0.6	4.469	A
3	346	86	70	1540	0.224	344	1055	0.0	0.3	3.008	A
4	575	144	414	1770	0.325	573	0	0.0	0.5	3.002	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	680	1212	0.534	646	502	0.7	1.1	6.333	A
2	549	137	798	1177	0.467	548	527	0.6	0.9	5.713	A
3	413	103	83	1532	0.269	412	1263	0.3	0.4	3.216	A
4	687	172	496	1709	0.402	686	0	0.5	0.7	3.517	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	832	1116	0.710	788	614	1.1	2.4	10.810	B
2	673	168	975	1064	0.632	669	645	0.9	1.7	9.040	A
3	505	126	102	1520	0.332	505	1543	0.4	0.5	3.543	A
4	841	210	607	1626	0.517	840	0	0.7	1.1	4.568	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	833	1115	0.711	793	615	2.4	2.4	11.143	B
2	673	168	980	1062	0.634	673	646	1.7	1.7	9.249	A
3	505	126	102	1520	0.332	505	1550	0.5	0.5	3.547	A
4	841	210	608	1625	0.518	841	0	1.1	1.1	4.590	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	682	1211	0.534	652	504	2.4	1.2	6.498	A
2	549	137	805	1173	0.468	553	529	1.7	0.9	5.831	A
3	413	103	84	1531	0.269	413	1273	0.5	0.4	3.223	A
4	687	172	497	1708	0.402	688	0	1.1	0.7	3.538	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	571	1282	0.423	544	421	1.2	0.7	4.889	A
2	460	115	672	1258	0.366	461	443	0.9	0.6	4.527	A
3	346	86	70	1540	0.224	346	1063	0.4	0.3	3.015	A
4	575	144	416	1769	0.325	576	0	0.7	0.5	3.019	A

2019 + Dev, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2019 + Dev	Saturday	FLAT	10:45	12:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	466	100.000
2		FLAT	✓	570	100.000
3		FLAT	✓	333	100.000
4		FLAT	✓	797	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	52	414	0
	2	102	0	468	0
	3	214	119	0	0
	4	184	247	366	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	1
	2	2	0	1	0
	3	1	1	0	0
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	4.83	0.6	A	466	699
2	0.48	5.82	0.9	A	570	855
3	0.21	2.95	0.3	A	333	500
4	0.45	3.71	0.8	A	797	1196

Main Results for each time segment

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	729	1213	0.384	464	498	0.0	0.6	4.786	A
2	570	142	776	1191	0.479	566	416	0.0	0.9	5.733	A
3	333	83	101	1555	0.214	332	1241	0.0	0.3	2.940	A
4	797	199	433	1768	0.451	794	0	0.0	0.8	3.683	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	732	1212	0.385	466	500	0.6	0.6	4.828	A
2	570	142	780	1188	0.480	570	418	0.9	0.9	5.820	A
3	333	83	102	1554	0.214	333	1248	0.3	0.3	2.946	A
4	797	199	435	1767	0.451	797	0	0.8	0.8	3.711	A

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	732	1212	0.385	466	500	0.6	0.6	4.828	A
2	570	142	780	1188	0.480	570	418	0.9	0.9	5.820	A
3	333	83	102	1554	0.214	333	1248	0.3	0.3	2.946	A
4	797	199	435	1767	0.451	797	0	0.8	0.8	3.711	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	732	1212	0.385	466	500	0.6	0.6	4.828	A
2	570	142	780	1188	0.480	570	418	0.9	0.9	5.820	A
3	333	83	102	1554	0.214	333	1248	0.3	0.3	2.946	A
4	797	199	435	1767	0.451	797	0	0.8	0.8	3.711	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	732	1212	0.385	466	500	0.6	0.6	4.828	A
2	570	142	780	1188	0.480	570	418	0.9	0.9	5.820	A
3	333	83	102	1554	0.214	333	1248	0.3	0.3	2.946	A
4	797	199	435	1767	0.451	797	0	0.8	0.8	3.711	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	466	117	732	1212	0.385	466	500	0.6	0.6	4.828	A
2	570	142	780	1188	0.480	570	418	0.9	0.9	5.820	A
3	333	83	102	1554	0.214	333	1248	0.3	0.3	2.946	A
4	797	199	435	1767	0.451	797	0	0.8	0.8	3.711	A