

### Ilke Homes Ltd

### HOLMER INDUSTRIAL ESTATE, HEREFORD

**Transport Assessment** 



CONFIDENTIAL

Ilke Homes Ltd

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**Transport Assessment** 

CONFIDENTIAL

PROJECT NO. 70062561 REF NO. 001

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### 1 INTRODUCTION

### 1.1 BACKGROUND

- 1.1.1. WSP have been commissioned by Ilke Homes Ltd. to prepare a Transport Assessment (TA) in support of a planning application for 120 dwellings within the Holmer Industrial Estate at the northern extent of the city of Hereford.
- 1.1.2. The site benefits from a permitted scheme for up to 115 residential units, employment, retail and associated infrastructure, including a mini-roundabout access onto College Road.

### 1.2 EXISTING SITE OVERVIEW

- 1.2.1. The application site is located within Holmer Industrial Estate in Northern Hereford. The site is approximately 3.5 hectares and is bordered to the north by the Welsh Marches railway line, and to the south by the Herefordshire and Gloucestershire canal. Further industrial units are located east of the site, served by a separate access from the A4103. The site's location is shown in Figure 1-1.
- 1.2.2. Access to the site is currently obtained via a priority junction from College Road. College Road borders the site to the west, providing key links to the A4103 in the north and Hereford City Centre in the south.
- 1.2.3. The development site includes all the existing industrial units served from the College Road access, with the exception of iRG Hereford, formally known as Cavanaugh's Car Body Repair Shop which does not form part of the site.



### Figure 1-1 - Indicative Site Boundary

Holmer Industrial Estate, Hereford Project No.: 70062561 ref no. 001 Ilke Homes Ltd

### 1.3 PREVIOUS WORKS AND PLANNING APPLICATIONS

1.3.1. Details are provided in Table 1-1 of previous planning applications relating to Holmer Industrial Estate. Further information on the previous applications for the development site, as well as the nearby development at Bridge Inn, west of the application site, are provided in following sections.

Planning Reference	Decision Date	Application	Decision
CE1999/3278/F	02/02/2000	Planning application for proposed industrial units for B2 use.	Approved with Conditions
DCCE2004/1110/F	19/03/2004	Planning application for the renewal of permission number CE1999/3278/F for proposed industrial units of B2 use.	Approved with Conditions
DCCE2007/1655/O	03/09/2008 Appeal Decision: 24/10/2009	Outline planning application for a mixed- use development comprising of residential (115 units), employment (office, industrial and warehousing), retail and supporting infrastructure, including new access off college road, roads footpaths, open spaces, landscaping, parking and reopening part of canal.	Allowed on Appeal
S121750/O	-	Planning application for permitted planning permission to extend time limit on application DCCE2007/1655/O.	-

Table 1-1 – Planning History at Holmer Industrial Estate

### DETAILS OF EXISTING PLANNING PERMISSION (DCCE2007/1655/O)

- 1.3.2. The site benefits from a planning permission for the redevelopment of the site for up to 115 residential units, employment, retail and warehousing uses. This was permitted at appeal on 21 August 2009 (LPA Ref: DCCE2007/1655/O). Details of this application are outlined in the following paragraphs.
- 1.3.3. The proposed access for this application is via a mini roundabout junction from College Road. Signals were proposed over the bridge, on either side of the railway line, to allow controlled one-way working over the railway bridge. This one-way working would allow the road to be narrowed to provide space to extend the footway on the western side of College Road, thereby providing safe connectivity between the southern and northern sides of the railway for pedestrians.
- 1.3.4. Access proposals set out within the permitted application included the introduction of part time signals on the access road to control traffic movements from the access roads. These signals would only operate during peak traffic periods.
- 1.3.5. Additional crossing points were proposed on College Road at the following locations: south of the proposed mini roundabout access, to the south of the Legion Way / Centurion Way junction, and to the south of the railway bridge. The crossings to the south of the proposed mini roundabout and to the south of the Legion Way / Centurion Way junction were planned to be 'D' island crossings. The proposed crossing to the south of the railway bridge would be signal controlled as part of the signalisation of the bridge to facilitate one-way movement over the bridge.

1.3.6. The permitted scheme has been assessed to consider the likely traffic impact compared to the proposals set out within this TA.

### **BRIDGE INN DEVELOPMENT**

- 1.3.7. The Bridge Inn development comprised the construction of 13 dwellings on a site west of the application site, on land previously occupied by the Bridge Inn. The site, now named Bridge Court, was completed in 2016 and is now occupied by 13 terraced houses. Access for Bridge Court is located opposite the existing access for Holmer Industrial Estate, off College Road.
- 1.3.8. This site was considered as a 'committed development' in the previous application submission; however, it has now been constructed and trips associated with this development have been counted as part of updated traffic surveys obtained in February 2020.

### 1.4 SCOPING

### TRANSPORT ASSESSMENT CONTENT

1.4.1. WSP have engaged with Ilke Homes Ltd. and the Local Highway Authority to determine and agree a scope for the TA.

### **Existing Conditions**

- Undertake a detailed site visit to review the local area and appraise the sustainable travel options that are currently available;
- Review the existing conditions including the site scale, surroundings, local highway network, existing accesses and potential restrictions;
- Provide an amended summary of the accessibility of the site. Existing cycle and pedestrian links will be assessed, along with the locations of bus stops and associated bus services to encourage sustainable travel; and,
- Obtain and review collision data for the most recent five-year period to ensure that the development will not exacerbate any highway safety issues.

#### **Planning Policy and Context**

- Review the site planning history; and,
- Review and amend the planning policy context with any updates to planning policy.

### **Development Proposals**

- Provide a description of the development proposals including site composition and scale;
- Detail and provide justification, as appropriate, for the level of car and cycle parking;
- Detail and provide justification, as appropriate, for the proposed access arrangements; and,
- Detail the servicing arrangements.

#### **Trip Generation and Distribution**

- Summarise the existing and proposed multi-modal trip generation; and,
- Highlight the net person impact the proposed development is likely to create on the local highway network.

#### Impacts on the Highway Network

 Provide a commentary on the impacts of the development on the local highway network and on sustainable modes of travel; and,

 Amend the junction modelling to include the new proposed site access arrangements and amended traffic surveys.

### 1.5 REPORT STRUCTURE

- 1.5.1. The remainder of this report is structured as follows:
  - Chapter 2: Policy Review A review of the relevant National, Regional and Local planning policies and objectives.
  - Chapter 3: Baseline Conditions Local Highway Network A review of the existing highway conditions.
  - Chapter 4: Baseline Conditions Sustainable Transport Network A review of the existing sustainable transport infrastructure.
  - Chapter 5: Development Proposals An overview of the development proposals for the site.
  - Chapter 6: Traffic Assessment A review of the impact of the proposed development on the traffic network.
  - Chapter 7: Sustainable Transport Impact A review of the impact of the proposed development on the sustainable Transport Network.
  - Chapter 8: Outline Travel Plan Details of the proposed Travel Plan for this development.
  - Chapter 9: Summary and Conclusions Provides a summary and conclusion.

### 2 POLICY REVIEW

### 2.1 INTRODUCTION

- 2.1.1. This chapter of the TA details the relevant transport related policies at a national, regional and local level, including relevant car and cycle parking standards and details of any proposed schemes in the wider area. An overview of the following documents has been provided:
  - National Planning Policy Framework (2019);
  - The Marches LEP Strategic Economic Plan (2019);
  - Herefordshire Local Transport Plan (2016);
  - Hereford Local Plan Core Strategy (2015); and,
  - Herefordshire Council Environmental Directorate Highways Design Guide for New Developments (2006).
- 2.1.2. Relevant aspects of each of the above documents are discussed, in turn, below.

### 2.2 NATIONAL POLICY

### NATIONAL PLANNING POLICY FRAMEWORK

- 2.2.1. The National Planning Policy Framework (NPPF), revised in February 2019, sets out the Government's planning policies in England and provides guidance as to how these should be applied. The NPPF replaces the previous framework published in March 2012.
- 2.2.2. The document states "All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

#### Section 9

2.2.3. Section 9 of the NPPF related to Promoting Sustainable Transport. Paragraph 102 states:

*"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:* 

- a) the potential impacts of development on transport networks can be addressed;
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."
- 2.2.4. The NPPF outlines that significant development should be focused on locations which are, or can be made, sustainable, through reducing the need to travel and offering genuine alternatives in transport modes. This will, in turn, improve congestion and emission levels, benefitting air quality and public health.

2.2.5. The framework recognises that opportunities to promote sustainable travel vary from development to development, and this should be considered when planning and reviewing proposals in both urban and rural areas.

### Section 10

- 2.2.6. Section 10, focusing on the consideration of development proposals, states
- 2.2.7. "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- *b)* address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- c) create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

### 2.3 REGIONAL POLICY

### THE MARCHES LEP STRATEGIC ECONOMIC PLAN (2019)

- 2.3.1. The Marches LEP Strategic Economic Plan sets out a vision for the Marches to become a £23.8bn economy with 5,200 more businesses and 58,700 new jobs by 2038.
- 2.3.2. The Plan identifies transport infrastructure as a fundamental component to a modern, successful, productive, growing and sustainable economy. The plan recognises that transport links *"support the development of new housing and employment sites and connect the area to surrounding economies".*
- 2.3.3. The following scheme is highlighted within the Marches LEP Strategic Economic Plan (2019):

### The Hereford Transport Package

- 2.3.4. The application site falls within the geographical scope of the Hereford Transport Package. Proposals set out in the Hereford Transport Package include the Hereford bypass and associated improvements to walking, cycling, bus and public spaces. These proposals are designed to make it easier to move around the area and give people more choice about how they travel.
- 2.3.5. "It is a key infrastructure project that will:
  - Improve local and regional connectivity by providing an alternative route to the existing A49 through the city;



- Encourage new business and job creation by making Hereford a more attractive place to locate with improved road connections and more reliable journey times;
- Enable the delivery of future housing and educational development, attracting people to live and study in the city;
- Reduce the impact of accidents and breakdowns on the city's roads by providing an alternative crossing for the River Wye;
- Reduce the impacts of transport on air quality and noise within the city, and improve road safety; and,
- Encourage healthy lifestyles by improving public spaces and encouraging more people to walk and cycle."
- 2.3.6. The Hereford Transport Package is also identified as a priority within the Hereford Local Transport Plan and Hereford Local Plan Core Strategy, discussed below.

### 2.4 LOCAL POLICY

### HEREFORD LOCAL TRANSPORT PLAN 2016-2031 (2016)

2.4.1. The Hereford Local Transport Plan (2016) sets out the transport strategy for the county. The document, which was first adopted in March 2013 and revised in March 2016, includes a number of policies providing guidance on a number of transport related issues.

### Policy LTP DC1

2.4.2. Policy LTP DC1 is considered the most relevant in regard to the development site at Holmer Industrial Estate. The policy is outlined below:

#### "Policy LTP DC1 - Planning for Developments

We will ensure that the impacts of development on the transport network including rail are fully considered and mitigated for new sites or re-development of existing sites. This will be achieved by working with developers to ensure:

- Those planning new developments must follow national and locally adopted guidance, including Manual for Streets 1 and 2 and Herefordshire Council's Highways Design Guide and Specification for New Developments.
- The inclusion of sustainable transport infrastructure is to be prioritised within the design of new and re-developments so that active travel is the natural choice for short journeys.
- The network can be pressurised by the implementation of unsuitable parking standards.
- Car parking requirements for developments must be designed on the need and use of the proposed site and locality.
- The hierarchy of transport modes is used to inform the design for new sites and the redevelopment of sites. This hierarchy is not an order or precedence for actual provision, but simply an order of consideration that seeks to ensure that decisions regarding development design are consistent with delivering the objectives of the LTP.

#### Highest

- 1. Pedestrians and people with mobility difficulties
- 2. Cyclists and public transport users
- 3. Commercial / business users and powered two wheelers
- 4. Car borne shoppers / visitors and coach borne visitors

5. Car borne commuters

Lowest

- Development of existing sites are to be designed and constructed in a way that does not impact on the safety of highway users, and where located adjacent to existing problematic sites, incorporate solutions into the design.
- The inclusion of sustainable transport infrastructure is to be encouraged within the design of new and re-developments.
- Development of existing sites should always avoid disrupting and cutting through routes used by cyclists or pedestrians or affecting negatively the accessibility of walking or cycling. If development proposals do impact on the walking or cycling network then an alternative route must be provided by developers. The quality of alternative routes must be of equal or better quality then the one impacted by development without incurring on-going additional revenue costs to Herefordshire Council. Protect and incorporate into the design, historic transport routes such as dismantled railways to be used as sustainable transport links.
- Sustainable Urban Drainage principles will be applied to all developments where they are practical and technically feasible to manage surface water runoff and alleviate the risk of flooding
- We will support rural diversification in line with the Core Strategy Policy RA6, as long as the development is not detrimental to the highway network."

### HEREFORD LOCAL PLAN CORE STRATEGY 2011-2031 (2015)

2.4.3. The Hereford Local Plan Core Strategy replaced the Hereford Unitary Development Plan (2007) in 2015. The Hereford Local Plan sets out the spatial planning strategy for Herefordshire.

### Policy MT1

2.4.4. Policy MT1 considers traffic management, highway safety and promoting active travel. Policy MT1 states that:

*"Development proposals should incorporate the following principle requirements covering movements and transportation:* 

- 1. demonstrate that the strategic and local highway network can absorb the traffic impacts of the development without adversely affecting the safe and efficient flow of traffic on the network or that traffic impacts can be managed to acceptable levels to reduce and mitigate any adverse impacts from the development;
- 2. promote and, where possible, incorporate integrated transport connections and supporting infrastructure (depending on the nature and location of the site), including access to services by means other than private motorised transport;
- 3. encourage active travel behaviour to reduce numbers of short distance car journeys through the use of travel plans and other promotional and awareness raising activities;
- 4. ensure that developments are designed and laid out to achieve safe entrance and exit, have appropriate operational and manoeuvring space, accommodate provision for all modes of transport, the needs of people with disabilities and provide safe access for the emergency services;
- 5. protect existing local and long distance footways, cycleways and bridleways unless an alternative route of at least equal utility value can be used, and facilitate improvements to



existing or provide new connections to these routes, especially where such schemes have been identified in the Local Transport Plan and/or Infrastructure Delivery Plan; and

6. have regard to with both the Council's Highways Development Design Guide and cycle and vehicle parking standards as prescribed in the Local Transport Plan - having regard to the location of the site and need to promote sustainable travel choices.

Where traffic management measures are introduced, they should be designed in a way which respects the character of the surrounding area including its landscape character. Where appropriate, the principle of shared spaces will be encouraged."

### 2.5 PREVAILING PARKING STANDARDS

### HEREFORDSHIRE COUNCIL ENVIRONMENT DIRECTORATE HIGHWAYS DESIGN GUIDE FOR NEW DEVELOPMENTS (2006)

2.5.1. Prevailing car and cycle standards are set out within Herefordshire Council's Highways Design Guide for New Developments (2006). The parking standards set out a minimum provision for cycle parking and parking for disabled people. Car parking standards are a maximum provision. The parking standards are summarised Table 2-1 and Table 2-2.

Land Use	Parking Standard
C3 – Residential	One bed unit: one space per dwelling.
(Dwelling houses)	Two or three bed unit: 2 spaces per dwelling.
	Three or more bed unit: an average of 3 spaces per dwelling.
	Disabled parking: In grouped residential parking with less than 20 standard spaces there should be 1 space per group. Above this there should be one space for every 10 standard spaces.

#### Table 2-1 – Herefordshire Council Residential Car Parking Standards

#### Table 2-2 – Herefordshire Council Residential Cycle Parking Standards

Land Use	Cycle Parking Standard (Long Stay)	Cycle Parking Standard (Short Stay)
C3 – Residential (Dwelling houses)	One bed unit: one locker per dwelling (may be provided by a garage). Two or three bed unit: one space per bedroom (may be provided by a locker or garage). Three or more bed unit: one space per bedroom (may be provided by a locker of garage).	One bed unit: one space per unit. Two or three bed unit: one space per unit. Three or more bed unit: one space per unit.

### 2.6 SUMMARY

2.6.1. The policies identified and outlined within this chapter are those considered to be fundamental to the successful implementation of the proposed development at Holmer Industrial Estate from a transport perspective. The development proposals have been designed to comply with these policy requirements.

### **3 BASELINE CONDITIONS – LOCAL HIGHWAY NETWORK**

### 3.1 INTRODUCTION

3.1.1. This chapter provides a description of the existing highway conditions in the vicinity of the site, including highway safety.

### 3.2 LOCAL HIGHWAY NETWORK

- 3.2.1. The local highway network is illistrated in Figure 3-1.
- 3.2.2. College Road, the main access road to the site, is a two-way single carriageway C road, approximately 1.17km in length. The road extends from the A4103 at its northern extent to the roundabout of Burcott Road and Bars Court Road at its southern extent. College Road is on the western boundary of the application site. The road has a 30mph speed limit, with a 20mph speed limit adjacent to St Francis Xavier's Primary School.
- 3.2.3. North of the site lies the A4103 (Roman Road). The A4103 is a major A-road connecting the east and west midlands. The road operates with a 40mph speed limit, with a restricted road speed limit from a point 512m west of the A49 junction to a point 113m west of Kempton Avenue junction, implemented in July 2018. This was introduced to avoid danger to persons and/or other users if the highway. The restricted speed zone also aims to preserve the amenity of the area through which the road runs.



### Figure 3-1 - Map of Local Highway Network Road Classes

Source: Herefordshire Council



### 3.3 EXISTING TRAFFIC CONDITIONS

### **EXISTING TRAFFIC FLOWS**

- 3.3.1. Traffic survey data has been obtained to establish the baseline traffic conditions on the local highway network for the area surrounding the site.
- 3.3.2. Automatic Traffic Counts (ATCs) were undertaken for a 7-day period commencing 6 February 2020 on College Road. The weekday average traffic flows for all vehicles are shown in Table 3-1.

Table	3-1 -	College	Road	Traffic	Survey	/ Summary	v
Tubic	0-1	Concge	Nouu	nume	ourvej	Guinnar	y

Direction	Total Vehicles	5-Day Average	7-Day Average	Mean Speed	85 Percentile Speed
Northbound	11762	1865	1680	29.2	33.4
Southbound	16580	2733	2369	26.1	30.9
Two-Way	28342	4598	4049	27	32

- 3.3.3. Manual Classified Counts (MCCs) were undertaken for the periods of 07:00 –10:00 and 16:00 -19:00 on 12 February 2020. These surveyed hours correspond with the recognised peak periods during a normal working weekday. The survey captured turning movements by vehicular class at 15minute intervals during the surveyed period.
- 3.3.4. Counts for 'All Trips' are summarised in Figure 3-2 and Figure 3-3 for the observed network AM and PM Peaks, respectively. The AM peak hour was observed to be 07:45 08:45 and the PM peak hour was observed to be 16:15 17:15.

Figure 3-2 - MCC Summary (AM Peak)







### JOURNEY TO WORK

3.3.5. Journey to work data has been obtained from 2011 Census data for residents within Herefordshire. Table 3-2 shows the calculated modal split of journeys to work made by residents within Herefordshire. It should also be noted that 80% of commutes are within Herefordshire, therefore, most residents stay within the county when working.

#### Table 3-2 – Journey to Work Modal Split (Census 2011)

Method of Travel	Modal Split (%)			
Underground/Metro/Light Rail/Tram	0%			
Train	1%			
Bus/Minibus/Coach	2%			
Taxi	0%			
Motorcycle	1%			
Driver Car/Van	69%			
Passenger Car/Van	6%			
Bicycle	5%			
Pedestrian	16%			
Other	0%			

### 3.4 EXISTING HIGHWAY SAFETY

### PERSONAL INJURY COLLISION DATA

- 3.4.1. Personal Injury Collision (PIC) data has been obtained from CrashMap for the area within 500m of the existing site access to Holmer Industrial Estate. This area includes the stretch of College Road, up to and including, the traffic junctions of Munstone Road, Roman Road, Venns Lane and Old School Lane. This traffic data, which includes records for the most recent five-year period, is included in Appendix A, and is summarised in Table 3-3 below.
- 3.4.2. It should be noted that consideration was also given to the junction of Roman Road and A465 / A4103, east of the site; however, it was concluded that this junction presented no concerning or abnormal trends which warranted further investigation. On this basis, any collisions outside of the 500m radius have not been included within the summary below.

Casualty	Year							
Туре	2014	2015	2016	2017	2018	2019		
Fatal	0	0	0	0	0	0		
Serious	0	0	0	1	0	0		
Slight	3	3	2	2	1	0		
Total	3	3	2	3	1	0		

#### Table 3-3 – Personal Injury Collision Data Summary

3.4.3. Figure 3-4 shows the location of the collisions outlined Table 3-3.



Figure 3-4 - Personal Injury Collisions 2014-2019

3.4.4. The review of the PIC data does not identify any issues with the highway that could be exacerbated by any additional trips on the network. Therefore, it is the view of this TA that there are no inherent road safety issues in the immediate area surrounding the site.

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### 4 BASELINE CONDITIONS – SUSTAINABLE TRANSPORT NETWORK

### 4.1 INTRODUCTION

4.1.1. This chapter considers the accessibility of the application site via sustainable modes of travel, including public transport, walking and cycling.

### 4.2 PUBLIC TRANSPORT

### BUS

- 4.2.1. The nearest bus stops to the site, Holmer Industrial Estate, are located at Victoria Park on College Road. There are additional bus stops on College Road, Venns Lane and Old School Lane, within 150m to 450m from the site. Bus stops within 450m from the site are listed below:
  - Victoria Park;
  - Centurion Way;
  - St Francis Xavier School (on both sides of the road); and,
  - Old School Lane (on both sides of the road).
- 4.2.2. The bus stop at Victoria Park includes a shelter and service information.
- 4.2.3. Services are operated by Yeomans Travel and Lugg Valley Travel.
- 4.2.4. Table 4-1 outlines the bus services that are provided from the stops listed above. The table shows the approximate frequency of services, illustrating that there are relatively frequent public transport services stopping in the vicinity of the site, providing links to key areas in the surrounding area.
- 4.2.5. Service timetables for these routes have been obtained from Traveline, and are included in Appendix B of this TA.

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Service Number	Route	Approximate Frequency (Monday to Friday)	Approximate Frequency (Saturday and Sunday)
77	Hereford – Holmer (Circular)	Hourly	Saturday only - hourly
77 <b>A</b>	Hereford – Holmer (Circular)	Hourly	Saturday only - hourly
77B	Hereford – Holmer (Circular)	Hourly	Saturday only - hourly
77C	Hereford – Holmer (Circular)	1 service a day – school days only	Not operational
81A	Hereford – College Green	Hourly	Saturdays only - hourly
426	Hereford – Bodenham - Leominister	7 services a day towards Hereford 5 services a day towards Leominster	Saturdays only – 5 services a day
477	Hereford – Canon Pyon	2 services a day	Saturdays only – 2 services a day
502	Hereford – Leominster	1 service a day towards Hereford 1 service a day towards Leominster	Not operational
802	Hereford – Leintwardine	1 service a day towards Hereford 1 service a day towards Leintwardine	Not operational

### Table 4-1 – Frequency of Bus Services

### RAIL

- 4.2.6. The nearest railway station to Holmer Industrial Estate is Hereford Railway Station (HFD), located 1.4 miles (2.2km) south of the site.
- 4.2.7. A number of services operate from Hereford Railway Station, including services to Holyhead (via Shrewsbury), Milford Haven, Birmingham New Street, Manchester Piccadilly, Cardiff Central, Carmarthen and London Paddington.
- 4.2.8. Approximately 5 services per day travel to London Paddington from Hereford Station. 15 services on average travel to Birmingham New Street and 15 services travel to Manchester Piccadilly. The central location of Hereford Railway Station has ensured its connectivity to the key destinations in the United Kingdom.
- 4.2.9. The following bus routes currently provide services from the site at Holmer Industrial Estate to Hereford Railway Station:
  - 77B Hereford Holmer (Circular); and,
  - 81A Hereford College Green.
- 4.2.10. The station is fully accessible, with full step-free access coverage, wheelchairs, ramp access for trains, and staff help available.

- 4.2.11. Two car parks with parking provision for 175 cars are located outside the station, both of which offer an appropriate level of accessible parking.
- 4.2.12. Hereford Railway Station can be reached from the site at Holmer Industrial Estate via an approximate 8 to 9-minute cycle. A total of 50 sheltered cycle spaces are provided at the station.

### 4.3 WALKING

### Walking Infrastructure

- 4.3.1. There is currently no pedestrian infrastructure to the north of the access on College Road. However, a pedestrian footway is located south of the existing access, along College Road. The footway provides a connection to public transport infrastructure and other facilities south of the development site.
- 4.3.2. Traffic calming improvements on College Road and Venns Lane, south of the development, have reduced traffic speeds (to 20mph) and thus improved pedestrian safety within the area.
- 4.3.3. An assessment of local amenities and facilities accessible by foot from the application site is provided in Section 4.5.

### **Public Rights of Way**

- 4.3.4. There are several Public Rights of Way (PRoWs) located near to the site. These include the following:
  - Footpath 11 (HER11): Old School Lane southeast side of Rhy Bridge to College Road south of Bridge Inn;
  - Footpath 41 (HER41): Mortimer Road to Old School Lane south of Newlands; and,
  - Footpath 9 (HER9): Holmer Road south of The Priory to Footpath 41.
- 4.3.5. The PRoWs are accessible within an acceptable walking distance of the site. The location of the PRoWs and other walking infrastructure are demonstrated on Figure 4-1.

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Figure 4-1 - Public Rights of Way



Source: Herefordshire Council (2020)

4.3.6. The site is reasonably well connected by walking infrastructure; however, there is room for improvement connecting to the north which would be addressed by the proposed development.

### 4.4 CYCLING

### Cycling Infrastructure

- 4.4.1. There are currently over 20 miles of dedicated traffic-free shared-use paths across Hereford. A number of these routes link to the City Centre, with others providing leisure routes to rural areas. Herefordshire Council is committed to providing new traffic-free cycle and pedestrian routes throughout the area. A number of routes run within close proximity of the site; these are shown in Figure 4-2. The full version of this figure is provided as Appendix C.
- 4.4.2. A dedicated offsite traffic-free cycle and pedestrian route is located south of the development site, on the southern side of the canal. This path is accessible from the footway that runs south of the existing site access on the eastern side of College Road. This route is shown in Figure 4-2.
- 4.4.3. Herefordshire Council is committed to providing more walking and cycling routes throughout the area, including new paths along the west of Roman Road. This would connect new housing developments to the existing traffic free network.



Figure 4-2 - Hereford Area Cycle Routes

Source: Herefordshire Council (2020)

### National Cycle Network (NCN)

- 4.4.4. There are no National Cycle Network (NCN) routes within close proximity of the site.
- 4.4.5. NCN Route 46 is the nearest, accessible NCN route to Holmer Industrial Estate. NCN Route 46 is an 88.3mile (142.1km) long route, connecting Bromsgrove to Neath, running through Hereford town centre. The route is located approximately 1.4 miles (2.2km) from the application site (a 9-minute cycle).
- 4.4.6. NCN Route 46 can be reached by following College Road south of the site, onto Burcott Road and Farriers Way, using Edgar Street to connect to Penhaligon Way and ultimately Route 46.

### Park and Cycle Scheme

4.4.7. Herefordshire Council have introduced a Park and Cycle service in order to encourage cycling throughout the area. Park and Cycle points are provided at multiple convenient locations to help people break up their journey by parking their car for free and continuing on bicycle, making the most of traffic-free routes highlighted within Figure 4-2.

- 4.4.8. Information on Park and Cycle locations, routes, and cycle storage can be found on the Herefordshire Council website (<u>https://www.herefordshire.gov.uk/info/200136/travel\_and\_transport/311/travel\_planning/3</u>).
- 4.4.9. Other cycle schemes offered within Hereford include:
  - Free Bike Loans;
  - Free Cycle Lessons and Bikeability;
  - Beryl Bikes;
  - Free 'Dr Bike' Surgeries and Bike Marking;
  - Bike Exchange;
  - Electric Bikes; and,
  - Cycle to Work.

### 4.5 LOCAL FACILITIES AND AMENITIES

- 4.5.1. This section of the report considers the location of the site in relation to key local facilities, amenities and destinations that future residents may choose to use on a day-to-day basis. This assists in an assessment of the likely need to travel from the site by car.
- 4.5.2. Manual for Streets (MfS) guidance suggest that walkable neighbourhoods are typically characterised by having facilities located within 800m walking distance (approximately 10 minutes). However, MfS also states that 'this is not the upper limit and walking distances offers the greatest potential to replace short car trips, particular those under 2km'.
- 4.5.3. In addition to the above, the CIHT guidance on suggested acceptable walking distances set out in "Providing for Journeys on Foot, 2000" states that the average length of a walk journey is 1km (0.6 miles) and that this differs little by age.
- 4.5.4. The CIHT guidance acknowledges that "acceptable" walking distances will vary between individuals and circumstances. These identify "desirable", "acceptable" and "preferred maximum" distances as reproduced in Table 4-2.

Distance Class	Town Centre (m)	Commuting / Education (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

#### Table 4-2 – Acceptable Walking Distances to Key Facilities and Amenities (Source: MfS)

- 4.5.5. Differences in the propensity to walk by journey purpose may relate to individuals being more willing to walk further on foot to locations they have the greatest need to reach and/or where longer may be spent upon arrival (e.g. work or school).
- 4.5.6. An accessibility study has been undertaken to establish what facilities and amenities are available in the local area. The walk/cycle distances from the development to these facilities have been measured using existing footways, foot/cycle paths, footbridges and local roads (in case of cyclists).
- 4.5.7. Approximate walk times are based on the Institution of Highways and Transportation's guidance within the 'Providing Journey's on Foot' document, which states that an average walking speed of



1.4m/s can be assumed for most pedestrians. This measurement equates to approximately 400m every 5 minutes. The time required to cycle to a facility/amenity has been based on a "comfortable cycle speed" of 4.44 metres per second (10 miles per hour) as suggested in Sustrans' 'Cycle Friendly Employers' Information Sheet.

4.5.8. Table 4-3 provides a summary of the local facilities and amenities and their respective distances, as well as the walk and cycle time from the application site. The table demonstrates that a significant number of facilities are located within walking and cycling distance from the application site. On this basis, it is reasonable to assume that there is significant opportunity for a number of these journeys to be undertaken by foot or bicycle.

Facility	Approximate DistanceApproximate Walkfrom Site (km)Time (mins)		Approximate Cycle Time (mins)					
	Public Tr	ansport						
Closest Bus Stop – Hereford Victoria Park	0.15	1-2	1					
Hereford Railway Station	2.2	27-28	8-9					
	Educa	ation						
St Francis Xavier's Primary School	0.2	2-3	1-2					
Hereford Sixth Form College	1.3	19-20	4-5					
Holmer Primary School	1.7	21-22	6-7					
	Health							
Nuffield Hospital	1.05	13-14	4-5					
	Leis	ure						
Victoria Park	0.55	6-7	2-3					
Hereford Leisure Centre	1.6	20-21	6-7					
	Ret	ail						
Three Mills Trading Estate	0.65	8-9	2-3					
College Green Road Local Shops	0.75	9-10	3-4					
Cooperative Food College Road	0.85	10-11	3-4					
Folly Lane Local Shops	1.6	20-21	6-7					

#### Table 4-3 – Summary of Connectivity to Key Local Facilities

### 4.6 SUMMARY

4.6.1. The site is considered to be sustainably located, being within walking distance from a range of key facilities, as well as public transport links.

#### DEVELOPMENT PROPOSAL 5

#### 5.1 INTRODUCTION

- 5.1.1. This chapter provides details of the proposed development, including a review of the proposed access arrangements for all modes of travel.
- 5.1.2. An illustrative masterplan for the proposed development has been prepared which presents the proposed vehicle, pedestrian and cycle access for the site. Car and cycle parking provision has also been discussed; this is included in Section 5.4.

#### 5.2 DEVELOPMENT PROPOSALS

- 5.2.1. This application is made in outline for the redevelopment of the site at Holmer Industrial Estate to provide up to 120 residential units. All matters are to be reserved, except for access.
- 5.2.2. The proposed development is set out in Figure 5-1 below. The masterplan was submitted as part of the original application; however, the proposed access arrangements are intended to change to a priority junction rather than the mini-roundabout demonstrated in Figure 5-1.

#### Figure 5-1 - Proposed Development Masterplan Drawing

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### 5.3 ACCESS STRATEGY

### **VEHICULAR ACCESS**

- 5.3.1. It is proposed to provide a new vehicle access arrangement to the site directly from College Road.
- 5.3.2. The access will take the form of a priority T-junction, which will link to an internal network of streets built to adoptable standards.
- 5.3.3. Detailed design plans for the junction can be found in Appendix D and is shown in Figure 5-2.



#### Figure 5-2 - Proposed Access Arrangement

- 5.3.4. It is proposed that the access will include signalised elements for the railway bridge, as well as 'keep clear' markings to prevent blocking back occurring across the access when signals are red for northbound vehicles. It is anticipated that the signals proposed at the railway bridge will have a positive impact on traffic speeds.
- 5.3.5. In line with the guidelines set out by the Manual for Streets (MfS), new junctions should aim to achieve 43m visibility in both directions 2.4m back from the junction entrance on all 30mph roads. The proposed site access plan demonstrates that the proposed junction can achieve visibility in excess of this at 45m in each direction (see drawings contained in Appendix D).

### SWEPT PATH ASSESSMENT

5.3.6. Swept path assessments have been undertaken to demonstrate that a large refuse vehicle can access and egress the site via the proposed site access junction.



- 5.3.7. Swept path assessments have been undertaken for each of the proposed access arrangements, these are shown in Appendix E. The following vehicles have been used to assess the viability of the proposed access arrangements:
  - Large Articulated Vehicle (15.400m x 2.500m);
  - Dennis Sabre Fire Tender (WMB) (7.350m x 2.430m); and,
  - Phoenix 2-09N Refuse Vehicle (8.145m x 2.230m).
- 5.3.8. The swept path assessment drawing demonstrates that the proposed access is safely accessible by all vehicles requiring access.

### **EMERGENCY ACCESS**

5.3.9. Emergency vehicles will be able to access the site via the proposed vehicle access outlined above. It is proposed that emergency vehicles would access the site from College Road, via the main access.

### **REFUSE COLLECTION**

- 5.3.10. Refuse collection vehicles will access the site via the proposed vehicle access off College Road.
- 5.3.11. The refuse strategy will comply with standards set out within Herefordshire Council Environmental Directorate Highways Design Guide for New Developments. Further consideration will be given to standards outlined within Manual for Streets (2007).

### **PEDESTRIAN ACCESS**

- 5.3.12. The main pedestrian access point will be via the vehicle access off College Road. The access will include pedestrian footways, 2m in width, on both sides of the carriageway. This is shown in the proposed access drawings provided in Appendix D.
- 5.3.13. The site will be designed so that it is fully permeable, with pedestrian access provided through the site.
- 5.3.14. Street lighting will be provided throughout the site to maintain a safe pedestrian environment.
- 5.3.15. Dropped kerbs and tactile paving will be provided through the development to ensure that safe access is achievable for the most vulnerable users.

### **CYCLE ACCESS**

5.3.16. Cyclists would also be able to access the site via the proposed access arrangements from College Road. Cyclists are expected to access the site via the highway.

### 5.4 PARKING STRATEGY

- 5.4.1. The proposed level of car parking and cycle parking will be in accordance with the relevant parking guidance document, namely the 'Herefordshire Council Environment Directorate Highways Design Guide for New Developments', published in July 2006. Parking standards stated within this document have been outlined within Prevailing Parking Standards (Section 2.5).
- 5.4.2. As the application is outline, parking has not been detailed within the assessment.

### 6 MULTIMODAL TRIP GENERATION

### 6.1 INTRODUCTION

- 6.1.1. This chapter assesses the proposed development's peak multimodal trip generation. In addition, multimodal trip generation of the existing site and permitted uses have been calculated in order to forecast net trip generation profiles to determine the likely transport impact of the proposed development.
- 6.1.2. Methodology used throughout this chapter is consistent with that of the Holmer Industrial Transport Assessment submitted in 2015 by Waterman to support the permitted scheme which is for up to 115 residential units, employment, and retail land uses, as well as support infrastructure. However, TRICS parameters and associated trip rates have been updated to reflect changes since 2015.

### 6.2 EXISTING TRIP GENERATION

- 6.2.1. The trip generation has been calculated for the existing site using comparative survey sites within the TRICS database. The following parameters were used in the TRICS interrogation:
  - 02 Employment D Industrial Estate;
  - 5000 to 20000 (units: sqm);
  - Monday to Friday;
  - South East and West, East Anglia, West Midlands, North England, Wales;
  - Sub-urban Area and Edge of Town; and,
  - Industrial Zone, Residential Zone and No Subcategory.
- 6.2.2. The typical peak hour (08:00 09:00 and 17:00 18:00) vehicle trip rates per 100 sqm are shown in Table 6-1. Full outputs from the TRICS database are included as Appendix F.

#### Table 6-1 – Existing Site Peak Hour Vehicle Trip Rates (per 100 sqm)

	AM Peak		PM Peak		
Arrivals	Departures	Total	Arrivals	Departures	Total
0.432	0.179	0.611	0.192	0.413	0.605

6.2.3. Daily multimodal trip rates (two-way) have been calculated using data extracted from the same TRICS sites used to calculated vehicle trip generation, shown previously. These daily multimodal trip rates are shown in Table 6-2.

#### Table 6-2 – Existing Site Multimodal Daily Trip Rates

Mode	Daily Trip Rate (Two-Way)
Total People	10.004
Vehicles	6.952
Vehicle Occupants	9.068
Pedestrians	0.666
Public Transport	0.191
Cyclist	0.074

6.2.4. The trip rates shown in Table 6-2 have been used to calculate the modal split for the proposed development, as shown in Table 6-3.

Table	6-3 –	Existing	Site	Modal	Split
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Mode	Percentage Modal Split		
Total People	100%		
Vehicles	70%		
Vehicle Occupants	91%		
Pedestrians	7%		
Public Transport	2%		
Cyclist	1%		

 $\ensuremath{^{\ast\ast}\text{Errors}}$  in arithmetic is due to TRICS trip rates.

6.2.5. The percentage modal split, shown in Table 6-3, and vehicle movements, shown in Table 6-2, have been used estimate the multimodal peak hour trip generation for the existing site. This is displayed in Table 6-4.

### Table 6-4 – Existing Site Multimodal Trip Generation (Approx. 7000sqm)

Mada	AM Peak			PM Peak			
Mode	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	39	17	56	17	38	55	
Vehicles	30	13	43	13	29	42	
Vehicle Occupants	36	16	52	16	35	51	
Pedestrians	3	2	5	2	3	5	
Public Transport	1	1	2	1	1	2	
Cyclist	1	1	2	1	1	2	

\*\*Errors in arithmetic is due to rounding.

### 6.3 PERMITTED DEVELOPMENT TRIP GENERATION

### OVERALL FORECAST TRAFFIC GENERATION

- 6.3.1. Details of forecasted traffic generation for the permitted development have been sourced from the Transport Assessment which was submitted by Waterman in support of the scheme in 2015. Waterman obtained these figures from the Transport Assessment submitted as part of a planning application for the site in 2007. Traffic generation figures displayed within this section were accepted as part of the previous 2015 application.
- 6.3.2. As highlighted within the Waterman Transport Assessment submitted in 2015, it was assumed that the retail element of the scheme would not generate additional network trips. However, it is accepted that the retail element would be likely to cause trip diversions which would subsequently result in a localised impact on the highway network. Any diversions have been accounted for within the final traffic flows shown for the permitted development.

6.3.3. A summary of the forecasted traffic generation for each of the permitted land uses has been provided within Table 6-5.

### Table 6-5 – Permitted Development Vehicle Trip Generation

		AM Peak			PM Peak	M Peak	
	Arrivals	Departures	Total	Arrivals	Departures	Total	
Residential	9	29	38	30	15	45	
Industrial / Warehouse	25	11	36	8	30	31	
Office	36	4	40	6	23	36	
Total	70	44	114	44	15	112	

6.3.4. As part of the Waterman TA submitted in 2015, a multimodal trip generation of the permitted residential element was provided. This was determined using modal split percentage data for the existing and proposed uses as outlined in the TA, along with vehicle trip data shown in Table 6-5. The results of this analysis are presented within the following sections.

### **RESIDENTIAL MULTIMODAL TRIP GENERATION**

6.3.5. Table 6-6 shows the multimodal trip generation of the permitted residential use.

### Table 6-6 – Permitted Multimodal Trip Generation – Residential

Mode		AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	15	47	62	49	24	73	
Vehicles	9	29	38	30	15	45	
Vehicle Occupants	12	38	50	39	20	59	
Pedestrians	2	8	10	8	4	12	
Public Transport	0	1	1	1	0	1	
Cyclist	0	1	1	1	1	2	

\*\*Errors in arithmetic is due to rounding.

### INDUSTRIAL USE MULTIMODAL TRIP GENERATION

6.3.6. Table 6-7 shows the multimodal trip generation of the permitted industrial / warehousing use.

Mode	AM Peak			PM Peak			
	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	31	14	45	10	28	38	
Vehicles	25	11	36	8	23	31	
Vehicle Occupants	30	13	43	10	27	37	
Pedestrians	1	0	1	0	1	1	
Public Transport	0	0	0	0	0	0	
Cyclist	0	0	0	0	0	0	

#### Table 6-7 - Permitted Multimodal Trip Generation – Industrial / Warehousing

\*\*Errors in arithmetic is due to rounding.

### OFFICE MULTIMODAL TRIP GENERATION

6.3.7. Table 6-8 shows the multimodal trip generation of the permitted office use. The results of this analysis have been based on data obtained from TRICS comparative sites.

#### Table 6-8 – Permitted Multimodal Trip Generation - Office

Mode	AM Peak			PM Peak			
	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	49	5	54	8	40	49	
Vehicles	36	4	40	6	30	36	
Vehicle Occupants	43	5	48	7	36	43	
Pedestrians	4	0	5	1	4	4	
Public Transport	1	0	1	0	1	1	
Cyclist	0	0	1	0	0	0	

\*\*Errors in arithmetic is due to rounding.

### TOTAL PERMITTED MULTIMODAL TRIP GENERATION

6.3.8. Figures within Table 6-6, Table 6-7 and Table 6-8 have been combined to calculate the overall multimodal trip generation for permitted development at the site. This is summarised in Table 6-9.

#### Table 6-9 – Total Permitted Multimodal Trip Generation

Mode	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Total People	94	66	160	67	93	160
Vehicles	70	44	114	44	68	112
Vehicle Occupants	84	56	140	56	83	138
Pedestrians	8	8	16	9	8	17
Public Transport	1	1	2	1	1	2
Cyclist	1	1	2	1	1	2

\*\*Errors in arithmetic is due to rounding.
6.3.9. Table 6-9 represents an overall net increase in trips on the network. However, it does not account for localised impacts of potential trip diversions that may occur as a result of the proposed permitted retail uses.

# 6.4 PROPOSED DEVELOPMENT TRIP GENERATION

- 6.4.1. The trip generation has been calculated for the proposed residential development using comparative survey sites within the TRICS database. The following parameters were used:
  - 03 Residential A Houses Privately Owned;
  - 50 to 200 Units;
  - Monday to Friday;
  - South East and West, East Anglia, West Midlands, North England, Wales;
  - Sub-urban Area and Edge of Town; and,
  - Residential Zone and No Subcategory.
- 6.4.2. The typical peak hour (08:00 09:00 and 17:00 18:00) vehicle trip rates are shown in Table 6-10. Full outputs from the TRICS database are included as Appendix F.

### Table 6-10 – Proposed Peak Hour Vehicle Trip Rates (per dwelling)

AM Peak			PM Peak		
Arrivals	Departures	Total	Arrivals	Departures	Total
0.110	0.343	0.453	0.304	0.144	0.448

6.4.3. The trip rates shown above have been used to forecast traffic generation of the proposed 120 dwelling development at Holmer Industrial Estate. This has been summarised in Table 6-11.

#### Table 6-11 – Proposed Peak Vehicle Trip Generation (120 dwellings)

AM Peak			PM Peak			
Arrivals	Departures	Total	Arrivals	Departures	Total	
14	42	55	37	18	54	

\*\*Errors in arithmetic is due to rounding.

6.4.4. Daily multimodal trip rates (two-way) have been calculated using data extracted from the same TRICS sites used to calculated vehicle trip generation, shown previously. These daily multimodal trip rates are shown in Table 6-12.

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Mode	Daily Trip Rate (Two-Way)
Total People	8.023
Vehicles	4.384
Vehicle Occupants	6.211
Pedestrians	1.373
Public Transport	0.236
Cyclist	0.199

#### Table 6-12 – Proposed Development Multimodal Daily Trip Rates

\*\*Errors in arithmetic is due to TRICS trip rates.

6.4.5. The trip rates shown in Table 6-12 have been used to calculate the modal split for the proposed development, as shown in Table 6-13.

### Table 6-13 – Proposed Development Modal Split

Mode	Percentage Modal Split
Total People	100%
Vehicles	55%
Vehicle Occupants	77%
Pedestrians	17%
Public Transport	3%
Cyclist	2%

\*\*Errors in arithmetic is due to TRICS trip rates.

6.4.6. The percentage modal split, shown in Table 6-13, and forecasted vehicle movements, shown in Table 6-11, have been used to forecast the multimodal peak hour trip generation for the proposed development. This is displayed in Table 6-14. It is noted that the methodology used to calculate the multimodal trip generation is consistent with that used to calculate that of the existing and permitted development.

#### Table 6-14 – Proposed Development Multimodal Trip Generation

Mada	AM Peak			PM Peak			
Wode	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	26	74	100	68	33	99	
Vehicles	14	42	55	37	18	54	
Vehicle Occupants	20	57	77	53	26	77	
Pedestrians	5	13	17	12	6	17	
Public Transport	1	3	3	3	1	3	
Cyclist	1	2	2	2	1	2	

\*\*Errors in arithmetic is due to rounding.

6.4.7. It is noted that the trip generation assumes that the entire development proposed at Holmer Industrial Estate will comprise of privately-owned units. It therefore ignores that some of the

dwellings within the development will be affordable units, which generally have lower vehicle trip generations. Furthermore, the assessment has not taken account that some of the proposed units will be apartments, which also generally have lower vehicle trip generations.

- 6.4.8. Any possible reduction in vehicle trip generation, as a result of the introduction of travel plan measures, has not been considered within the above analysis. Details on possible travel plan measures that could be implemented are outlined within Chapter 9.
- 6.4.9. It is therefore reasonable to assume, because of the reasons identified above, that the forecasted trip generation for the proposed development have been calculated based on robust principles.

# 6.5 NET IMPACT

# Existing Land Use(s)

6.5.1. The trip generation figures of the existing use, shown in Table 6-4, and the proposed development trip generation figures, shown in Table 6-14, have been used to calculate the net impact of the proposed development. This has been summarised within Table 6-15.

Mada	AM Peak			PM Peak			
WOUE	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	-13	+57	+44	+51	-5	+44	
Vehicles	-16	+29	+13	+24	-11	+12	
Vehicle Occupants	-16	+41	+25	+37	-9	+26	
Pedestrians	+2	+11	+12	+10	+3	+12	
Public Transport	0	+2	+1	+2	0	+1	
Cyclist	0	+1	0	+1	0	0	

#### Table 6-15 – Net Trip Generation Impact - Existing

\*\*Errors in arithmetic is due to rounding.

6.5.2. It is demonstrated in Table 6-15 that the proposed development would likely result in an increase in trip generation over the existing land uses.

# **Permitted Development**

6.5.3. The trip generation figures of the permitted development, shown in Table 6-9, and the proposed development trip generation figures, shown in Table 6-14, have been used to calculate the net impact of the proposed development. This has been summarised within Table 6-16.

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### Table 6-16 – Net Trip Generation Impact - Permitted

Mada	AM Peak			PM Peak			
Wode	Arrivals	Departures	Total	Arrivals	Departures	Total	
Total People	-68	+8	-60	+1	-60	-61	
Vehicles	-56	-2	-58	-7	-50	-58**	
Vehicle Occupants	-64	+1	-63	-3	-57	-61**	
Pedestrians	-3	+5	+1**	+3	-2	0**	
Public Transport	0	+2	+1**	+2	0	+1**	
Cyclist	0	+1	0**	+1	0	0**	

\*\*Errors in arithmetic is due to rounding.

6.5.4. It is demonstrated in Table 6-16 that the proposed development would likely result in a decrease in trip generation compared to the permitted development land uses.

# 7 TRAFFIC ASSESSMENT

# 7.1 INTRODUCTION

7.1.1. This chapter discusses details of traffic analysis undertaken for the proposed development. An outline of methodology used to create forecasted traffic scenarios at the site access junction is include, as well as information on further junction capacity assessments undertaken for access proposals.

# ASSESSMENT YEARS

- 7.1.2. In line with best practice, the following assessment years have been used for the impact assessments:
  - 2020 Base Year
  - 2025 Forecast Year

# 7.2 TRAFFIC GROWTH

- 7.2.1. Central traffic growth factors have been calculated using the Trip End Model Presentation Program (TEMPro) version 7.2 growth factors. This software allows users to view travel forecasts from the National Trip End Model (NTEM) datasets, which forecasts the growth in trip origin-destinations for use in transport modelling. The forecasts consider national projections of population, employment, housing, car ownership, and trip rates.
- 7.2.2. Growth rates have been extracted for the geographical area of Herefordshire County. TEMPro used the 2015 National Transport Model (NTM), which includes data from 2010 to 2040, to calculate the adjusted local growth figures used in this assessment.
- 7.2.3. The calculated growth factors for Herefordshire (car drivers only) are set out in **Table 7-1**.

Time	Origin	Destination	Average	
AM	1.0407	1.033	1.037	
РМ	1.0334	1.0383	1.036	

# Table 7-1 – TEMPro Growth Factors

# ASSESSMENT SCENARIOS

7.2.4. The traffic impact assessment has used the scenarios set out **Table 7-2**.

#### Table 7-2 – Assessment Scenarios

Scenario	Description
2020 Base Year	This scenario represents the network as it operates in 2020.
2025 Forecast Year	This scenario represents the network as it will operate in 2025, based on national traffic growth.
2025 Forecast Year with Development	This scenario represents the network as it will operate in 2025, based on national traffic growth, plus the full development traffic.

# **TRAFFIC FLOWS**

7.2.5. The vehicle flows for the AM and PM peaks for all three assessment scenarios are illustrated in the figures below.

## **Site Access Junction**

7.2.6. **Figure 7-1** and **Figure 7-2** show the vehicle flows for the 2020 Base Year in both AM and PM peak periods. The 2020 Base Year has been modelled to provide a comparison.

Figure 7-1 - 2020 Base Year Vehicle Flows (AM Peak)





#### Figure 7-2 - 2020 Base Year Vehicle Flows (PM Peak)

7.2.7. **Figure 7-3** and **Figure 7-4** show the vehicle flows for the 2025 Forecast Year in both AM and PM peaks.

#### Figure 7-3 - 2025 Forecast Year Vehicle Flows (AM Peak)





Figure 7-4 - 2025 Forecast Year Vehicle Flows (PM Peak)

7.2.8. **Figure 7-5** and **Figure 7-6** show vehicle flows for the 2025 Forecast Year with development, in both peaks.

Figure 7-5 - 2025 Forecast Year with Development Vehicle Flows (AM Peak)





#### Figure 7-6 - 2025 Forecast Year with Development Vehicle Flows (PM Peak)

# 7.3 OPERATIONAL ASSESSMENT

- 7.3.1. The theoretical operational capacity of the proposed site access and signalised bridge to the north of the access will be measured by the Degree of Saturation (DoS) and Mean Max Queue (MMQ).
- 7.3.2. The Degree of Saturation is defined as the ratio of Flow to Capacity for the Lane. 90% is generally taken as the maximum acceptable Degree of Saturation for a Lane to avoid significant performance issues on the Lane.
- 7.3.3. The Mean Max Queue is the sum of the Maximum Back of Uniform Queue (maximum extent of the uniform queue) and the Random & Oversaturation Queue (queue formed due to random arrival/departure profiles and steadily building queue over the period). MMQ represents the maximum queue within a typical cycle averaged over all the cycles within the considered period. When a Lane is oversaturated the Maximum Queue within each cycle will grow progressively over the modelled time period which means that the MMQ would be approximately half the final queue at the end of the modelled time period.

# SITE ACCESS JUNCTION CAPACITY

- 7.3.4. The proposed access junction and proposed signalisation of the bridge to the north of the access have been modelled using LinSig (V3) modelling software.
- 7.3.5. The junction modelling was run for the observed network morning and evening peak hours, which were observed to be 07:45 08:45 and 16:15 17:15, respectively.

- 7.3.6. For all AM peak hour modelled scenarios, signal timings have been optimised for a 72 second cycle time. For all PM peak hour modelled scenarios, a 64 second cycle time has been applied. The modelled cycle times were selected to reduce junction saturation and improve the operation of the network.
- 7.3.7. **Table 7-3** provides a summary of the theoretical junction capacity results for the 2020 Base Year, without development.

	AM I	Peak	PM Peak		
Lane Description	2020 Ba	ise Year	2020 Base Year		
	Degree of Sat Mean Max Queue		Degree of Sat	Mean Max Queue	
College Road (North of Bridge) Entry Ahead	69.1%	8.7	49.8%	4.2	
College Road North (JCT Entry) Left Ahead Right	24.9%	0.2	14.5%	0.2	
College Road (North of Bridge) Exit Lane 1	0.0%	0.0	0.0%	0.0	
College Road North (JCT exit) Lane 1	65.8%	4.3	50.1%	3.0	
Dev Access Road (Exit) Ahead	0.0%	0.0	0.0%	0.0	
Dev Access Road (Entry) Right Left Ahead	0.9%	0.0	10.6%	0.2	
College Road South (JCT Exit)	0.0%	0.0	0.0%	0.0	
College Road South (JCT Entry) Ahead Right Left	15.5%	1.2	11.9%	0.6	
Former Pub (JCT Exit)	0.0%	0.0	0.0%	0.0	
Former Pub (JCT Entry) Left Ahead Right	3.0%	0.1	0.2%	0.0	

 Table 7-3 – Junction Capacity Base Year Summary

- 7.3.8. The results of the junction modelling for the 2020 Base Year demonstrate that network will operate within theoretical capacity for both the AM and PM peak hours. Signalisation of the bridge would result in a maximum observed queue of nine (9) vehicles in the AM peak for the southbound movement over the bridge and a maximum degree of saturation of 69.1%.
- 7.3.9. The results of junction capacity assessments for the 2025 Forecast Years, with and without the proposed development, are summarised in **Table 7-4**. Further details can be found in Appendix G.

		AM	Peak		PM Peak				
Lane	2025 F Ye	orecast ear	25 Fored with Dev	cast Year elopment	2025 F Ye	2025 Forecast Year		25 Forecast Year with Development	
Description	Degree of Sat	Mean Max Queue	Degree of Sat	Mean Max Queue	Degree of Sat	Mean Max Queue	Degree of Sat	Mean Max Queue	
College Road (North of Bridge) Entry Ahead	71.5%	9.2	72.2%	9.4	51.6%	4.4	54.3%	4.7	
College Road North (JCT Entry) Left Ahead Right	25.8%	0.2	26.1%	0.2	15.0%	0.2	15.6%	0.1	
College Road (North of Bridge) Exit Lane 1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	
College Road North (JCT exit) Lane 1	68.0%	4.6	72.4%	5.0	51.7%	3.1	54.0%	3.3	
Dev Access Road (Exit) Ahead	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	
Dev Access Road (Entry) Right Left Ahead	0.9%	0.0	20.0%	0.5	11.1%	0.2	18.8%	0.4	
College Road South (JCT Exit)	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	
College Road South (JCT Entry) Ahead Right Left	16.2%	1.3	18.3%	1.5	12.4%	0.6	16.2%	0.8	
Former Pub (JCT Exit)	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	
Former Pub (JCT Entry) Left Ahead Right	3.0%	0.1	3.7%	0.1	0.2%	0.0	0.2%	0.0	

# Table 7-4 – Junction Capacity Forecast Years Summary

- 7.3.10. The Degree of Saturation presents a measurement of capacity for each link of the proposed junction. LinSig recommends a target threshold of 90%, with any Degree of Saturation over 100% is considered as being overcapacity.
- 7.3.11. **Table 7-4** shows that the model predicts that every link within the proposed junction will be operating below the maximum acceptable threshold of 90%.
- 7.3.12. The maximum observed theoretical mean max queue was measured as approximately nine (9) vehicles in the AM peak hour for the College Road (N) arm for vehicles travelling southbound over the rail bridge. Vehicles are queued at the signals over the bridge.

# 7.4 SUMMARY

7.4.1. Following these assessments, it can be concluded that the predicted traffic impact of the proposed development is minimal. Therefore, no intervention will be required to mitigate the traffic impact.

# 8 SUSTAINABLE TRANSPORT IMPACT

# 8.1 INTRODUCTION

8.1.1. This chapter provides a summary of the impact of the estimated site trip generation on the sustainable transport network. The impact on sustainable transport services and infrastructure in the area has been based on the multimodal trip generation analysis for the proposed development discussed within Section 6.5.

# 8.2 PUBLIC TRANSPORT

# BUS

- 8.2.1. The proposals are anticipated to generate approximately four (4) two-way trips on public transport in the weekday AM peak and four (4) two-way trips in the PM peak. These numbers are considered to have a negligible impact on local public transport and could be easily accommodated on the existing network.
- 8.2.2. As outlined within Section 4.2, the existing public transport network is considered more than capable of accommodating this additional demand. There are frequent bus services stopping in the vicinity of the site which provide links to key areas in the surrounding area, including Hereford Railway Station.

# RAIL

8.2.3. Hereford Railway Station is well placed and reasonably accessible. It provides links to several destinations such as Holyhead, Milford Haven, Birmingham New Street, Manchester Piccadilly, Cardiff Central, Carmarthen and London Paddington.

# 8.3 ACTIVE TRAVEL

# WALKING

- 8.3.1. The proposals are anticipated to generate approximately 17 two-way trips by walking in the weekday AM peak and 17 two-way trips by walking in the PM peak. It is considered that this increase in pedestrian trips can be easily accommodated on the existing network.
- 8.3.2. As discussed within Section 4.3, there is an existing pedestrian footway located south of the existing access along the eastern side of College Road. The footway provides a key connection to public transport infrastructure. Furthermore, the site is within walking distance of several other facilities which are outlined within Table 4-3. The proposed development also includes for provision of signals over the railway bridge to accommodate a footway on one side of the bridge. The footway would improve the safe accessibility of amenities to the north of the bridge.

# CYCLING

- 8.3.3. The proposals are anticipated to generate approximately three (3) two-way trips by cycling in the weekday AM peak and three (3) two-way trips in the PM peak. The anticipated increase in cycling trips on the network are not considered to be significant and can be easily accommodated on the existing network.
- 8.3.4. Section 4.3.6 provides evidence that the cycling infrastructure surrounding the site, and across the wider area within Hereford, is robust and accessible.



# 8.4 SUMMARY

- 8.4.1. It is the view of this TA that the anticipated trip generation for sustainable modes of travel would be minimal and that the existing sustainable transport network in the vicinity of the site has enough capacity to accommodate additional trips from the proposed development at Holmer Industrial Estate.
- 8.4.2. Additionally, improvements provided on College Road as part of access proposals for the development would enhance pedestrian links to public transport hubs and other facilities within the local area.

# 9 OUTLINE TRAVEL PLAN

# 9.1 INTRODUCTION

- 9.1.1. This chapter provides details of potential travel plan measures that could be implemented as part of the development scheme at Holmer Industrial Estate. Targeted travel plan measures can significantly reduce car journeys from a site. These measures can be especially effective when a site has made provision for sustainable transport modes in its masterplans.
- 9.1.2. An assessment of the forecasted switch from single occupancy car journeys to sustainable choices of travel, due to the travel plan measures set out below, is provided as part of this chapter.

# 9.2 POTENTIAL TRAVEL PLAN OBJECTIVES

9.2.1. Following a review of national, regional and local policies relevant to the proposed development, the following potential objectives have been identified:

**Objective 1**: To minimise the number of private single occupancy vehicle trips to / from the development.

**Objective 2:** To promote and facilitate travel by foot, cycle and bus as an attractive choice for travel to / from the development.

**Objective 3**: To ensure safe movement to / from the development and within the site by all travel modes, accounting for needs of people of various disabilities.

**Objective 4:** To promote and raise awareness of the benefits of healthier and more environmentally friendly travel to / from the development.

9.2.2. Further objectives may be developed as part of a full travel plan.

# 9.3 TRAVEL MODE TARGETS

9.3.1. TPs should include SMART (Specific, Measurable, Achievable, Realistic, Timebound) targets related to the objectives of the travel plan.

# 9.4 POTENTIAL TRAVEL PLAN MEASURES

9.4.1. Guidance on residential travel plans is provided within DfT's 'Guidance on Travel Plans'. Potential travel plan measures have been recommended in consideration of this document.

# **DEVELOPMENT MASTERPLAN**

- 9.4.2. The design of the masterplan is an important aspect in encouraging trips to be made by sustainable transport modes.
- 9.4.3. The development at Holmer Industrial Estate will link in with existing sustainable transport infrastructure, providing connections to nearby amenities. Furthermore, the proposed internal layout will consist of permeable walking and cycling routes within the development.
- 9.4.4. The level of parking provided within the development will be set in accordance with Herefordshire Council parking standards. This will ensure that parking standards will not be set at a level that will encourage high levels of car ownership.

# TRAVEL PLAN COORDINATOR

- 9.4.5. It is recommended that a Travel Plan Coordinator (TPC) is appointed for the proposed development. This coordinator would be based in the sales and marketing office for the site. Responsibilities of the TPC include providing 'welcome packs' with information on sustainable travel options within the area and providing further advice on making decisions on transport within the area.
- 9.4.6. The TPC will also be responsible for updating the development masterplan, whilst liaising with local residents and Herefordshire Council.

### **INFORMATION PACK**

- 9.4.7. As stated above, an information pack could be provided for all new residents. The information pack may include the following information:
  - Bus route maps and timetables;
  - Walking and cycling route maps to key facilities;
  - Information on car-sharing, including details of car-sharing websites;
  - Information on home shopping delivery;
  - Information on local taxi companies; and,
  - Contact details of the Travel Plan Coordinator.
- 9.4.8. Details of the travel plan should also be displayed within the development's sales and marketing office. This should be updated on a regular basis.

#### MONITORING

- 9.4.9. In order to monitor the effectiveness of the travel plan and its initiatives, it is recommended that a comprehensive monitoring and review programme is considered. The programme will ensure that the measures are delivered in a structured manner and achieve the travel plan objectives.
- 9.4.10. Monitoring of travel habits of residents will be undertaken through an annual survey which will be carried out throughout the lifespan of the travel plan. This will be coordinated by the Travel Plan Coordinator.
- 9.4.11. Monitoring results and analysis should be reported to local residents and Herefordshire Council.

#### TIMEFRAME

9.4.12. It is recommended that travel plan measures and monitoring be maintained through the construction of the development until the last house is sold. Due to the large scale of the site, this should allow time for a significant modal shift to be achieved.

# 10 SUMMARY AND CONCLUSIONS

# 10.1 SUMMARY

- 10.1.1. WSP has been commissioned by Ilke Homes Ltd. to prepare a Transport Assessment (TA) in support of an outline planning application to redevelop land at Holmer Industrial Estate, Hereford.
- 10.1.2. This application is made in outline for the redevelopment of the site at Holmer Industrial Estate to provide up to 120 residential units and associated parking and landscaping. All matters are to be reserved, except for access.
- 10.1.3. It is proposed that a new vehicle access to the site will take the form of a priority T-junction directly from College Road to the west. This junction will also be the primary access point for pedestrians, cyclists, refuse/servicing vehicles, and will also provide emergency access.
- 10.1.4. The site will be designed so that it is fully permeable, with pedestrian access provided through the site. Street lighting and dropped kerbs and tactile paving will be provided throughout the site.
- 10.1.5. The TA demonstrates:
  - The proposals fully comply with national, regional and local policy objectives, in that they will
    provide adequate car and cycle parking provision, and are sustainable from a transport and
    highways perspective;
  - The site has good accessibility by sustainable non-car modes of travelling, such as foot, bicycle and public transport;
  - The site is well connected to key local facilities and amenities;
  - The proposed access arrangements have demonstrated that the planned junction is appropriate for the scale of the development;
  - There are no common trends or patterns in collisions on the local highway network over the most recent five-year period, and the proposals will not negatively impact on highway safety; and,
  - The proposals would not result in a significant uplift in vehicle trips, and as such would not negatively impact on the operation of the local highway network.
- 10.1.6. The proposals meet requirements set out within NPPF, in that they provide safe and enhanced access for all users and do not negatively impact on the operation of the local highway network surrounding the application site.
- 10.1.7. An outline travel plan for the proposed development has been prepared as part of this TA. The objective of the outline TP is to commit to the promotion of the use of sustainable modes of travel with the aim of reducing single occupancy vehicle trips.

# **10.2 CONCLUSIONS**

- 10.2.1. It is the view of the TA that the development proposals are in accordance with national, regional and local policy. The proposals will not likely generate a significant number of trips and modelling demonstrates that the trips would not have a significant impact on the operation and safety of the local highway network.
- 10.2.2. It can therefore be concluded that the proposed development at Holmer Industrial Park is acceptable in terms of highway and transportation.

# **Appendix A**

PERSONAL INJURY COLLISION DATA

CONFIDENTIAL





Crash Date:	Sunday, June 22, 2014	Time of Crash:	10:50:00 AM	Crash Reference:	201422E402319
Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	2
Local Authority:	Herefordshire, County of			<b>OS Grid Reference:</b>	351760 241550
Weather Description:	Fine without high winds		11	Legion Way 20 Roman Road	inan Road Mass
Road Surface Description:	Dry		Old school !	17/22	Longer B
Speed Limit:	30			Holmer Trading Estate	
Light Conditions:	Daylight: regardless of presence	of streetlights		Westington Drive	
Carriageway Hazards:	None			an series	Hau
Junction Detail:	T or staggered junction			The Te beau	ylest
Junction Pedestrian Crossing:	No physical crossing facility withi	n 50 metres	and the second s	spe Road	A
Road Type:	Single carriageway			A man	Loder Drive
Junction Control:	Give way or uncontrolled		PRICES Arenue	The state	June Log March

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/home/Faq</a>

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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Pedal cycle	-1	Male	6 - 10	Vehicle is in the act of turning left	Front	Other	None	None
1	Car (excluding private hire)	13	Female	26 - 35	Vehicle is moving off	Offside	Other	None	None

# Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	6 - 10	Unknown or other	Unknown or other

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/home/Faq</a>



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Crash Date:	Monday, July 07, 2014	Time of Crash:	3:30:00 PM	Crash Reference:	201422E402534
Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	1
Local Authority:	Herefordshire, County of			<b>OS Grid Reference:</b>	351200 241880
Weather Description:	Fine without high winds			Athene a	
Road Surface Description:	Dry		park Close		$\square$
Speed Limit:	30			*	Asto
Light Conditions:	Daylight: regardless of presence	of streetlights	1		Roman Road
Carriageway Hazards:	None				Legion Way g
Junction Detail:	Other junction		Road	The second	7/27
Junction Pedestrian Crossing:	No physical crossing facility withi	n 50 metres	Imer		Pointer i laure suite
Road Type:	Single carriageway		H	Aydon industrial state	Wennight
Junction Control:	Give way or uncontrolled				Cartonorland Figs

For more information about the data please visit: *www.crashmap.co.uk/home/Faq* To subscribe to unlimited reports using CrashMap Pro visit *www.crashmap.co.uk/Home/Premium\_Services* 

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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	12	Male	66 - 75	Vehicle is moving off	Front	Other	None	None

### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Pedestrian	Female	36 - 45	In carriageway, crossing elsewhere	Crossing from driver's nearside

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/home/Faq</a>



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Slight

Dry

30

None

Herefordshire

**Crash Date:** 

**Highest Injury Severity:** 

**Highway Authority:** 

Weather Description:

**Road Surface Description:** 

Local Authority:

**Speed Limit:** 

**Light Conditions:** 

Junction Detail:

**Junction Control:** 

Road Type:

**Carriageway Hazards:** 

**Junction Pedestrian Crossing:** 

Tuesday, September 16, 2014

Herefordshire, County of

Fine without high winds

Single carriageway

Not Applicable

Daylight: regardless of presence of streetlights

No physical crossing facility within 50 metres

Not at or within 20 metres of junction

Time of Crash: 3:16:00 PM

Road Number: A4103

Crash Reference: 201422E403460

Number of Casualties: 1

Number of Vehicles: 2

**OS Grid Reference:** 351860 241960



For more information about the data please visit: www.crashmap.co.uk/home/Faq To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium\_Services







Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	5	Male	36 - 45	Vehicle is slowing down or stopping	Front	Other	None	None
1	Car (excluding private hire)	6	Female	36 - 45	Vehicle is slowing down or stopping	Back	Taking pupil to/from school	None	None

### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/Home/Premium\_Services</a>



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Crash Date:	Monday, January 26, 2015	Time of Crash:	7:00:00 AM	Crash Reference:	201522E500379
Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	1
Local Authority:	Herefordshire, County of			<b>OS Grid Reference:</b>	351620 241370
Weather Description:	Other			1 / Y	
Road Surface Description:	Wet or Damp			West	ngton prive
Speed Limit:	20			Griffian, File	
Light Conditions:	Darkness: street lights present	and lit	20	in the second se	
Carriageway Hazards:	None		1	Read and a second second	
Junction Detail:	Not at or within 20 metres of j	unction	6	The second	use Loder Drive
Junction Pedestrian Crossing:	Pelican, puffin, toucan or simila pedestrian light crossing	ar non-junction	kings Creacent	and a stand of the second stand of the second stand of the second stand of the second stand st	to the second se
Road Type:	Single carriageway		× 14	1	te Overbury Road
Junction Control:	Not Applicable		Anne.		Russell Cone

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/home/Faq</a>

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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	12	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Journey as part of work	None	Lamp post

#### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: <a href="http://www.crashmap.co.uk/home/Faq">www.crashmap.co.uk/home/Faq</a> To subscribe to unlimited reports using CrashMap Pro visit <a href="http://www.crashmap.co.uk/Home/Premium\_Services">www.crashmap.co.uk/Home/Premium\_Services</a>



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Crash Date:	Friday, August 21, 2015	Time of Crash:	8:45:00 PM	Crash Reference:	201522E503307
Highest Injury Severity:	Slight	Road Number:	UO	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	1
Local Authority:	Herefordshire, County of			<b>OS Grid Reference:</b>	351660 241330
Weather Description:	Fine without high winds		_	Westington	nine
Road Surface Description:	Dry				
Speed Limit:	20		$\rightarrow 4$	a Stool lane Give here	
Light Conditions:	Darkness: street lights present	t and lit		Terming Au	
Carriageway Hazards:	None		in the	Cute Contraction of the Contract	5
Junction Detail:	Not at or within 20 metres of j	junction	scent	74.	United Book Loder Drive
Junction Pedestrian Crossing:	No physical crossing facility wi	ithin 50 metres	kings Cre	And the second s	and and and and
Road Type:	Single carriageway		14	Andre .	Overbury Road
Junction Control:	Not Applicable		Research Coard		Russel Core

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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	Kerb	Other permanent object

### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

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Crash Date:

Thursday, November 05, 2015

**Time of Crash:** 6:10:00 PM

Crash Reference: 201522E504130

Highest Injury Severity:	Slight	Road Number:	U0
Highway Authority:	Herefordshire		
Local Authority:	Herefordshire, County of		
Weather Description:	Raining without high winds		
Road Surface Description:	Wet or Damp		
Speed Limit:	30		
Light Conditions:	Darkness: street lights present a	and lit	
Carriageway Hazards:	None		
Junction Detail:	T or staggered junction		
Junction Pedestrian Crossing:	No physical crossing facility with	in 50 metres	
Road Type:	Single carriageway		
Junction Control:	Give way or uncontrolled		

Number of Casualties: 1

Number of Vehicles: 2

**OS Grid Reference:** 351170 242040



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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	13	Unknow n	Unknown	Vehicle is slowing down or stopping	Front	Other	None	None
1	Car (excluding private hire)	15	Female	56 - 65	Vehicle is waiting to turn left	Back	Other	None	None

# Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	56 - 65	Unknown or other	Unknown or other

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Crash Date:	Thursday, April 21, 2016	Time of Crash:	5:30:00 PM	Crash Reference:	2016220078939
Highest Injury Severity:	Slight	Road Number:	A4103	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	2
Local Authority:	Herefordshire			<b>OS Grid Reference:</b>	351883 241957
Weather Description:	Fine without high winds			NOVA ROA	1
Road Surface Description:	Wet or Damp			а-	1
Speed Limit:	30		-		1
Light Conditions:	Daylight: regardless of presence	e of streetlights			Ted B
Carriageway Hazards:	None		Restant.	Roman Road	
Junction Detail:	Not at or within 20 metres of ju	nction		Legion Way 20 Roman Road	Koman Road
Junction Pedestrian Crossing:	No physical crossing facility with	in 50 metres	2		Sterie
Road Type:	Single carriageway			Hotmer Trading Estate	
Junction Control:	Not Applicable			Weington U	ii.

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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Pedal cycle	-1	Male	Over 75	Vehicle proceeding normally along the carriageway, on a left hand bend	Offside	Other	None	None
1	Motorcycle over 500cc	16	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a right hand bend	Offside	Other	None	None

# Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	Over 75	Unknown or other	Unknown or other

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Crash Date:

Saturday, November 19, 2016

Time of Crash: 3:11:00 PM

Crash Reference: 2016220132579

Highest Injury Severity:	Slight Road Numl
Highway Authority:	Herefordshire
Local Authority:	Herefordshire
Weather Description:	Fine without high winds
Road Surface Description:	Dry
Speed Limit:	30
Light Conditions:	Daylight: regardless of presence of streetlights
Carriageway Hazards:	None
Junction Detail:	T or staggered junction
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres
Road Type:	Single carriageway
Junction Control:	Give way or uncontrolled

umber: U0 Number of Casualties: 1 Number of Vehicles: 2 OS Grid Reference: 351175 242048



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Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	11	Female	46 - 55	Vehicle is waiting to turn left	Back	Other	None	None
1	Car (excluding private hire)	7	Female	36 - 45	Vehicle is moving off	Front	Other	None	None

# Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion	Female	11 - 15	Unknown or other	Unknown or other
			passenger				

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Crash Date:	Saturday, March 11, 2017	Time of Crash:	9:40:00 PM	Crash Reference:	2017220	166794
Highest Injury Severity:	Slight	Road Number:	UO	Number of Casualties:	1	
Highway Authority:	Herefordshire			Number of Vehicles:	2	
Local Authority:	Herefordshire			<b>OS Grid Reference:</b>	351163	241395
Weather Description:	Fine without high winds		er			
Road Surface Description:	Dry		Holm	Aydon Industrial Estate	1	· F
Speed Limit:	30		<b>R19</b>		ave	Fier
Light Conditions:	Darkness: street lights present	and lit	-		- Care	he Go
Carriageway Hazards:	None			1 1 4	Frederict Aleg	oliege Road
Junction Detail:	T or staggered junction					
Junction Pedestrian Crossing:	No physical crossing facility wit	hin 50 metres		frau Concort	AND A	Se Cra
Road Type:	Single carriageway				Ander	X
Junction Control:	Give way or uncontrolled		Priori Mare	Transla Regental Stateses Conce	/	

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#### **Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact		Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	11	Unknow n	26 - 35	Vehicle is parked in the carriageway	Offside	Other	None	None
1	Car (excluding private hire)	excluding private 2 Male 26 - 35 Vehicle proceeding normally along carriageway, on a left hand bend		Vehicle proceeding normally along the carriageway, on a left hand bend	Offside	Commuting to/from work	Parked vehicle	None	

#### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

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Crash Date:	Tuesday, May 23, 2017	Time of Crash:	8:36:00 PM	Crash Reference:	2017220185559
Highest Injury Severity:	Serious	Road Number:	A4103	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	2
Local Authority:	Herefordshire			<b>OS Grid Reference:</b>	351549 242009
Weather Description:	Fine without high winds			y Austra	
Road Surface Description:	Dry		Drive	pe Road	
Speed Limit:	30		Attended Pare		1
Light Conditions:	Daylight: regardless of presence	of streetlights	~	Eggleton Une	1
Carriageway Hazards:	None			Allon Roman	Post
Junction Detail:	T or staggered junction			College	Roman R
Junction Pedestrian Crossing:	No physical crossing facility withi	n 50 metres		Legion Way 20	Ioman Road
Road Type:	Single carriageway		-	- And	Holmer Trading Estate
Junction Control:	Give way or uncontrolled		/ Estate		Westington Drive

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#### **Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway	
2	Car (excluding private hire)	excluding private 6 Female 36 - 45		Vehicle is in the act of turning right	Nearside	Other	None	None		
1	Motorcycle over 50cc21Male16 - 20Vand up to 125cc21Male16 - 20V		Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None			

#### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

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Crash Date:	Friday, June 02, 2017	Time of Crash:	4:30:00 PM	Crash Reference:	2017220190149
Highest Injury Severity:	Slight	Road Number:	UO	Number of Casualties:	1
Highway Authority:	Herefordshire			Number of Vehicles:	2
Local Authority:	Herefordshire			<b>OS Grid Reference:</b>	351339 241614
Weather Description:	Fine without high winds				8 Road
Road Surface Description:	Dry		- 1		Legion Way Road
Speed Limit:	30			OA sanda La	7/37
Light Conditions:	Daylight: regardless of presence	of streetlights			- Down Drive
Carriageway Hazards:	None		Aydon mousthair Essain		Westing
Junction Detail:	T or staggered junction			Charles Contraction	Plan Page -
Junction Pedestrian Crossing:	No physical crossing facility withi	n 50 metres		11/1	Clie
Road Type:	Single carriageway		$\sim$	1 han	e Road
Junction Control:	Give way or uncontrolled		The second secon		Series Commission Loom

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#### **Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Journey Impact Purpose		Hit Object - On Carriageway	Hit Object - Off Carriageway
1	1 Van or goods vehicle 3.5 tonnes mgw and under10 Female46 - 55		Vehicle is waiting to turn left	Back	Other	None	None		
2	Car (excluding private hire)	9	Male	21 - 25	Vehicle is in the act of turning left	Front	Other	None	None

#### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion	Male	6 - 10	Unknown or other	Unknown or other
			passenger				

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Crash Date:	Friday, April 20, 2018	Time of Crash:	12:41:00 PM	Crash Reference:	2018220287676
Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	2
Highway Authority:	Herefordshire			Number of Vehicles:	2
Local Authority:	Herefordshire			OS Grid Reference:	351542 241537
Weather Description:	Fine without high winds			Legion Way of	toman Road
Road Surface Description:	Dry			On strength	
Speed Limit:	30				Holmer Trading Istate
Light Conditions:	Daylight: regardless of presence	of streetlights	al Estate		Wesungton
Carriageway Hazards:	None		$\sim$	Quantum and a second	
Junction Detail:	T or staggered junction		2.		* time
Junction Pedestrian Crossing:	No physical crossing facility within	n 50 metres	1	ge food	
Road Type:	Single carriageway		< 1)		a north Loder Drive
Junction Control:	Give way or uncontrolled		in Kingi Crescent	and a second sec	the series and the series of t

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#### **Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	3	Female	36 - 45	Vehicle is waiting to turn right	Back	Other	None	None
1	Car (excluding private hire)	2	Female	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	Other permanent object

#### Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

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## **Appendix B**

### BUS SERVICE TIMETABLES

CONFIDENTIAL

### Mondays to Fridays

Hereford, City Bus Station (NK)	dep	09:33	10:33	11:33	12:33	13:33	14:33	16:00	17:20	18:35
Hereford, adj Old Market		09:33	10:33	11:33	12:33	13:33	14:33	16:00	17:21	18:35
Hereford, adj Franklin Barnes		09:34	10:34	11:34	12:34	13:34	14:34	16:01	17:22	18:36
Hereford, adj Merton Hotel		09:35	10:35	11:35	12:35	13:35	14:35	16:02	17:23	18:37
Hereford, opp Bryngwyn Close		09:37	10:37	11:37	12:37	13:37	14:37	16:04	17:25	18:38
Hereford, opp Bulmer Avenue		09:38	10:38	11:38	12:38	13:38	14:39	16:06	17:26	18:39
Hereford, College Road Co-op (NE-bound)		09:39	10:39	11:39	12:39	13:39	14:39	16:06	17:27	18:40
Hereford, opp Penn Grove Road		09:40	10:40	11:40	12:40	13:40	14:40	16:07	17:28	18:40
College Green, adj Post Office		09:42	10:42	11:42	12:42	13:42	14:43	16:10	17:30	18:42
College Green, o/s 152 Kingsway		09:42	10:42	11:42	12:42	13:42	14:43	16:10	17:30	18:42
Hereford, opp Pegasus Football Ground		09:43	10:43	11:43	12:43	13:43	14:44	16:11	17:31	18:43
Hereford, opp Cleeve Orchard		09:44	10:44	11:44	12:44	13:44	14:45	16:13	17:33	18:44
Holmer, adj Starting Gate		09:46	10:46	11:46	12:46	13:46	14:47	16:15	17:35	18:45
Holmer, adj Glenthorne Road		09:46	10:46	11:46	12:46	13:46	14:47	16:15	17:35	18:45
Holmer, adj Hugh Thomas Avenue		09:46	10:46	11:46	12:46	13:46	14:47	16:15	17:35	18:45
Holmer, opp Hedgerow Way		09:46	10:46	11:46	12:46	13:46	14:47	16:15	17:35	18:45
Bobblestock, opp Thirsk Avenue		09:47	10:47	11:47	12:47	13:47	14:48	16:16	17:36	18:46
Bobblestock, adj Taunton Way		09:48	10:48	11:48	12:48	13:48	14:49	16:17	17:37	18:47
Bobblestock, opp Co-op Store		09:49	10:49	11:49	12:49	13:49	14:50	16:18	17:38	18:48
Bobblestock, opp Shops		09:49	10:49	11:49	12:49	13:49	14:50	16:18	17:38	
Hereford, adj Haydock Avenue		09:50	10:50	11:50	12:50	13:50	14:51	16:19	17:39	
Westfields, adj Shops		09:51	10:51	11:51	12:51	13:51	14:52	16:20	17:40	
Hereford, adj Sports Ground		09:52	10:52	11:52	12:52	13:52	14:53	16:22	17:42	
Hereford, adj Golden Lion Inn		09:53	10:53	11:53	12:53	13:53	14:54	16:23	17:43	
Widemarsh, opp Priory Place		09:54	10:54	11:54	12:54	13:54	14:55	16:24	17:44	
Widemarsh, opp Widemarsh Common		09:54	10:54	11:54	12:54	13:54	14:55	16:24	17:44	
Hereford, opp Heart of Oak Inn		09:57	10:57	11:57	12:57	13:57	14:58	16:27	17:47	
Hereford, opp Courtyard Theatre		09:59	10:59	11:59	12:59	13:59	15:00	16:29	17:49	
Hereford, City Bus Station (NK)	arr	10:02	11:02	12:02	13:02	14:02	15:03	16:32	17:52	

#### Saturdays

Hereford, City Bus Station (NK)	dep	09:33	10:33	11:33	12:33	13:33	14:33	15:03	16:00	17:20	18:35
Hereford, adj Old Market		09:33	10:33	11:33	12:33	13:33	14:33	15:03	16:00	17:21	18:35
Hereford, adj Franklin Barnes		09:34	10:34	11:34	12:34	13:34	14:34	15:04	16:01	17:22	18:36
Hereford, adj Merton Hotel		09:35	10:35	11:35	12:35	13:35	14:35	15:05	16:02	17:23	18:37
Hereford, opp Bryngwyn Close		09:37	10:37	11:37	12:37	13:37	14:37	15:07	16:04	17:25	18:38
Hereford, opp Bulmer Avenue		09:38	10:38	11:38	12:38	13:38	14:39	15:09	16:06	17:26	18:39
Hereford, College Road Co-op (NE-bound)		09:39	10:39	11:39	12:39	13:39	14:39	15:09	16:06	17:27	18:40
Hereford, opp Penn Grove Road		09:40	10:40	11:40	12:40	13:40	14:40	15:10	16:07	17:28	18:40
College Green, adj Post Office		09:42	10:42	11:42	12:42	13:42	14:43	15:13	16:10	17:30	18:42
College Green, o/s 152 Kingsway		09:42	10:42	11:42	12:42	13:42	14:43	15:13	16:10	17:30	18:42
Hereford, opp Pegasus Football Ground		09:43	10:43	11:43	12:43	13:43	14:44	15:14	16:11	17:31	18:43
Hereford, opp Cleeve Orchard		09:44	10:44	11:44	12:44	13:44	14:45	15:15	16:12	17:33	18:44
Holmer, adj Starting Gate		09:46	10:46	11:46	12:46	13:46	14:47	15:17	16:14	17:35	18:45
Holmer, adj Glenthorne Road		09:46	10:46	11:46	12:46	13:46	14:47	15:17	16:14		18:45
Holmer, adj Hugh Thomas Avenue		09:46	10:46	11:46	12:46	13:46	14:47	15:17	16:14		18:45
Holmer, opp Hedgerow Way		09:46	10:46	11:46	12:46	13:46	14:47	15:17	16:14		18:45
Bobblestock, opp Thirsk Avenue		09:47	10:47	11:47	12:47	13:47	14:48	15:18	16:15		18:46
Bobblestock, adj Taunton Way		09:48	10:48	11:48	12:48	13:48	14:49	15:19	16:16		18:47
Bobblestock, opp Co-op Store		09:49	10:49	11:49	12:49	13:49	14:50	15:20	16:17		18:48
Bobblestock, opp Shops		09:49	10:49	11:49	12:49	13:49	14:50	15:20	16:17		
Hereford, adj Haydock Avenue		09:50	10:50	11:50	12:50	13:50	14:51	15:21	16:18		
Westfields, adj Shops		09:51	10:51	11:51	12:51	13:51	14:52	15:22	16:19		
Hereford, adj Sports Ground		09:52	10:52	11:52	12:52	13:52	14:53	15:23	16:20		
Hereford, adj Golden Lion Inn		09:53	10:53	11:53	12:53	13:53	14:54	15:24	16:21		
Widemarsh, opp Priory Place		09:54	10:54	11:54	12:54	13:54	14:55	15:25	16:22		
Widemarsh, opp Widemarsh Common		09:54	10:54	11:54	12:54	13:54	14:55	15:25	16:22		
Hereford, opp Heart of Oak Inn		09:57	10:57	11:57	12:57	13:57	14:58	15:28	16:25		
Hereford, opp Courtyard Theatre		09:59	10:59	11:59	12:59	13:59	15:00	15:30	16:27		
Hereford, City Bus Station (NK)	arr	10:02	11:02	12:02	13:02	14:02	15:03	15:33	16:30		

#### 77B Hereford - Hereford

#### Mondays to Fridays

Hereford, City Bus Station (NK)	dep	15:17
Hereford, adj Courtyard Theatre		15:19
Hereford, adj Heart of Oak Inn		15:19
Hereford, adj Holmer Chapel		15:22
Hereford, adj Holmer Primary School		15:22
Hereford, adj Leisure Centre		15:23
Holmer, adj Starting Gate		15:2
Holmer, adj Glenthorne Road		15:2
Holmer, adj Hugh Thomas Avenue		15:20
Holmer, opp Hedgerow Way		15:2
Bobblestock, opp Thirsk Avenue		15:28
Bobblestock, adj Taunton Way		15:3
Bobblestock, opp Co-op Store		15:32
Bobblestock, adj Doncaster Avenue		15:3
Bobblestock, adj Cheltenham Avenue		15:3
Bobblestock, adj Thirsk Avenue		15:34
Holmer, adj Hedgerow Way		15:3
Holmer, opp Hugh Thomas Avenue		15:3
Holmer, opp Glenthorne Road		15:3
Holmer, opp Starting Gate		15:36
Holmer, adj Cleeve Orchard		15:3
Hereford, adj Centurion Way		15:3
Hereford, adj Victoria Park		15:37
Hereford, adj thePoint4		15:39
Hereford, adj Overbury Road		15:40
Aylestone Hill, opp Churchill Gardens		15:42
Hereford, opp Moreland Avenue		15:4
Hereford, opp Station Approach Bridge		15:4
Hereford, adj The Hop Pole		15:50
Hereford, Maylord Shopping Centre (Stand 2)		15:51
Hereford, City Bus Station (NK)	arr	15:5
Notes		[Sch

#### Mondays to Fridays

Hereford, City Bus Station (NK)	dep	08:23
Hereford, adj Old Market		08:23
Hereford, adj Franklin Barnes		08:24
Hereford, adj Merton Hotel		08:25
Hereford, adj Moreland Avenue		08:27
Hereford, adj Churchill Gardens		08:29
Hereford, opp Overbury Road		08:30
Hereford, opp thePoint4		08:32
Hereford, opp St Francis Xavier School		08:32
Hereford, o/s 53 Old School Lane		08:32
Hereford, opp Pegasus Football Ground		08:33
Hereford, opp Cleeve Orchard		08:34
Holmer, adj Starting Gate		08:36
Holmer, adj Glenthorne Road		08:36
Holmer, adj Hugh Thomas Avenue		08:36
Holmer, opp Hedgerow Way		08:36
Bobblestock, opp Thirsk Avenue		08:37
Bobblestock, adj Taunton Way		08:38
Bobblestock, opp Co-op Store		08:39
Bobblestock, opp Shops		08:39
Hereford, adj Haydock Avenue		08:40
Westfields, adj Shops		08:41
Hereford, adj Sports Ground		08:42
Hereford, adj Golden Lion Inn		08:43
Widemarsh, opp Priory Place		08:44
Widemarsh, opp Widemarsh Common		08:45
Hereford, opp Heart of Oak Inn		08:50
Hereford, opp Courtyard Theatre		08:53
Hereford, City Bus Station (NK)	arr	08:58
Notes		[Sch

#### Saturdays

Hereford, City Bus Station (NK)	dep	08:25
Hereford, adj Old Market		08:25
Hereford, adj Franklin Barnes		08:26
Hereford, adj Merton Hotel		08:27
Hereford, adj Moreland Avenue		08:28
Hereford, adj Churchill Gardens		08:29
Hereford, opp Overbury Road		08:30
Hereford, opp thePoint4		08:31
Hereford, opp St Francis Xavier School		08:32
Hereford, o/s 53 Old School Lane		08:32
Hereford, opp Pegasus Football Ground		08:33
Hereford, opp Cleeve Orchard		08:34
Holmer, adj Starting Gate		08:36
Holmer, adj Glenthorne Road		08:36
Holmer, adj Hugh Thomas Avenue		08:30
Holmer, opp Hedgerow Way		08:30
Bobblestock, opp Thirsk Avenue		08:37
Bobblestock, adj Taunton Way		08:38
Bobblestock, opp Co-op Store		08:39
Bobblestock, opp Shops		08:39
Hereford, adj Haydock Avenue		08:40
Westfields, adj Shops		08:42
Hereford, adj Sports Ground		08:42
Hereford, adj Golden Lion Inn		08:43
Widemarsh, opp Priory Place		08:44
Widemarsh, opp Widemarsh Common		08:44
Hereford, opp Heart of Oak Inn		08:47
Hereford, opp Courtyard Theatre		08:49
Hereford, City Bus Station (NK)	arr	08:52

Compiled from data for the period Mon 24-Feb-2020 to Sun 01-Mar-2020. Times not in bold are estimated by using the distance between the stops.

Yeomans Travel

Mondays to Fridays

Hereford, City Bus Station (NK)	dep			15:20	16:35	18:00
Hereford, adj Old Market				15:20	16:37	18:01
Hereford, adj Franklin Barnes				15:21	16:39	18:02
Hereford, adj Merton Hotel				15:22	16:40	18:03
Hereford, opp Bryngwyn Close				15:24	16:41	18:04
Hereford, opp Bulmer Avenue				15:26	16:42	18:06
Hereford, College Road Co-op (NE-bound)				15:26	16:43	18:06
Hereford, opp Penn Grove Road				15:27	16:43	18:07
College Green, adj Post Office	07	:20	07:50	15:30	16:45	18:09
College Green, o/s 152 Kingsway	0	7:20	07:50	15:30	16:45	18:09
Hereford, opp Pegasus Football Ground	07	:21	07:51	15:31	16:46	18:10
Hereford, adj Centurion Way	07	22	07:52	15:33	16:48	18:12
Hereford, adj Victoria Park	07	:25	07:55	15:36	16:51	18:15
Hereford, adj St Francis Xavier School	0	7:26	07:56	15:37	16:52	
Hereford, adj thePoint4	07	:28	07:58	15:39	16:54	
Hereford, adj Overbury Road	0	7:28	07:59	15:40	16:55	
Aylestone Hill, opp Churchill Gardens	07	7:28	08:02	15:42	16:57	
Hereford, opp Moreland Avenue	0	7:29	08:06	15:45	17:00	
Hereford, opp Station Approach Bridge	0	7:30	08:08	15:47	17:02	
Hereford, adj The Hop Pole	07	:31	08:11	15:50	17:05	
Hereford, Maylord Shopping Centre (Stand 2)	07	':33	08:13	15:51	17:06	
Hereford, City Bus Station (NK)	arr 07	:35	08:17	15:55	17:10	
Notes						[x0007]

#### Yeomans Travel

Saturday	/S
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Hereford, City Bus Station (NK)	dep			15:20	16:35	17:45
Hereford, adj Old Market				15:20	16:37	17:46
Hereford, adj Franklin Barnes				15:21	16:39	17:47
Hereford, adj Merton Hotel				15:22	16:40	17:48
Hereford, opp Bryngwyn Close				15:24	16:41	17:49
Hereford, opp Bulmer Avenue				15:26	16:42	17:50
Hereford, College Road Co-op (NE-bound)				15:26	16:43	17:51
Hereford, opp Penn Grove Road				15:27	16:43	17:51
College Green, adj Post Office	07:25	08:05	08:30	15:30	16:45	17:53
College Green, o/s 152 Kingsway	07:25	08:05	08:30	15:30	16:45	17:53
Hereford, opp Pegasus Football Ground	07:26	08:06	08:31	15:31	16:46	17:54
Hereford, adj Centurion Way	07:27	08:07	08:32	15:32	16:47	17:55
Hereford, adj Victoria Park	07:30	08:10	08:35	15:34	16:49	17:58
Hereford, adj St Francis Xavier School	07:31	08:11	08:36	15:34	16:49	
Hereford, adj thePoint4	07:33	08:13	08:38	15:36	16:51	
Hereford, adj Overbury Road	07:33	08:13	08:38	15:36	16:51	
Aylestone Hill, opp Churchill Gardens	07:33	08:13	08:38	15:38	16:53	
Hereford, opp Moreland Avenue	07:34	08:14	08:39	15:40	16:55	
Hereford, opp Station Approach Bridge	07:35	08:15	08:40	15:41	16:56	
Hereford, adj The Hop Pole	07:36	08:16	08:41	15:43	16:58	
Hereford, Maylord Shopping Centre (Stand 2)	07:38	08:18	08:43	15:45	17:00	
Hereford, City Bus Station (NK)	arr 07:40	08:20	08:45	15:49	17:04	
Notes						[x0007]

Mondays to Fridays

Leominster, Bus Station (Stand 3)	dep	07:00				
Leominster, adj Railway Station		07:02				
Stoke Prior, adj Old Village Pump	dep		09:08			
Drum Crossroads, Drum Crossroads (E-bound)		07:07	09:13			
Steen's Bridge, adj Humber Close		07:09	09:15			
Drum Crossroads, Drum Crossroads (W-bound)		07:10				
Drum Crossroads, Drum Crossroads (S-bound)		07:11	09:18			
Risbury, opp Bus Shelter		07:19	09:26			
Saffron's Cross, adj Broadfield Vineyard		07:23	09:29			
Saffron's Cross, adj Saffron's Cross		07:26	09:32			
Bodenham, adj Memorial		07:30	09:36	11:10	12:40	15:40
Saffron's Cross, opp Saffron's Cross						15:42
Bodenham Moor, opp England's Gate		07:33	09:39	11:13	12:43	15:44
Bodenham Moor, opp Ashgrove Close		07:34	09:40	11:14	12:44	15:45
Bodenham Moor, opp Orchard Close		07:36	09:41	11:15	12:45	15:46
Bodenham Moor, opp Vauld Turn		07:38	09:43	11:17	12:47	15:48
Litmarsh, The Vauld (W-bound)		07:41	09:46	11:20	12:50	15:51
Litmarsh, adj Vauld Turn		07:44	09:49	11:23	12:53	15:54
Marden, adj Brook Farm		07:47	09:52	11:26	12:56	15:57
Marden, adj The Volunteer Inn		07:48	09:53	11:27	12:57	15:58
Marden, adj Walkers Green Shops		07:49	09:54	11:28	12:58	15:59
Marden, adj Rudge Grove		07:50	09:55	11:29	12:59	16:00
Franklands Gate, opp Amberley Arms PH		07:55	10:00	11:34	13:04	16:05
Franklands Gate, adj Bus Shelter		07:58	10:02	11:36	13:06	16:07
Sutton St Nicholas, adj Golden Cross Inn		08:00	10:04	11:38	13:08	16:09
Sutton St Nicholas, Wergins Bridge (S-bound)		08:01	10:05	11:39	13:09	16:10
Shelwick Green, opp Munstone Turn		08:04	10:08	11:42	13:12	16:13
Munstone, Crossroads (W-bound)			10:11			L
Hereford, adj Centurion Way			10:12			
Hereford, adj thePoint4		İ	10:14	Í	Í	Ī
Hereford, adj Overbury Road			10:15			
Aylestone Hill, opp Churchill Gardens			10:16			
Aylestone Hill, opp The Swan		08:08		11:46	13:16	16:17
Aylestone Hill, o/s The Shires		08:09		11:47	13:17	16:18
Aylestone Hill, opp Venn's Lane		08:11		11:49	13:19	16:20

Yeomans Travel

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Notoo		[b]	[v0060]			[Sch]
Hereford, Shire Hall (Stand 1)	arr	08:20	10:20	11:53	13:23	16:24
Hereford, adj The Hop Pole		08:18	10:18	11:51	13:21	16:22
Hereford, opp Station Approach Bridge		08:15	10:17	11:50	13:20	16:21
Hereford, opp Moreland Avenue		08:13	10:16	11:49	13:19	16:20

[Sch] Operates only on school days [h] 5 minutes earlier during school holidays [x0069] English Concession Passes are valid throughout this journey. Compiled from data for the period Mon 24-Feb-2020 to Sun 01-Mar-2020. Times not in bold are estimated by using the distance between the stops.

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### Saturdays

Stoke Prior, adj Old Village Pump	dep		09:08			
Drum Crossroads, Drum Crossroads (E-bound)			09:13			
Steen's Bridge, adj Humber Close			09:15			
Drum Crossroads, Drum Crossroads (S-bound)			09:18			
Risbury, opp Bus Shelter			09:26			
Saffron's Cross, adj Broadfield Vineyard			09:29			
Saffron's Cross, adj Saffron's Cross			09:32			
Bodenham, adj Memorial	G	)7:40	09:36	11:10	12:40	
Bodenham Moor, opp England's Gate	G	7:43	09:39	11:13	12:43	
Bodenham Moor, opp Ashgrove Close	C	)7:44	09:40	11:14	12:44	
Bodenham Moor, opp Orchard Close	G	7:46	09:41	11:15	12:45	
Bodenham Moor, opp Vauld Turn	G	)7:48	09:43	11:17	12:47	
Litmarsh, The Vauld (W-bound)	C	)7:51	09:46	11:20	12:50	
Litmarsh, adj Vauld Turn	G	7:54	09:49	11:23	12:53	
Marden, adj Brook Farm	G	7:57	09:52	11:26	12:56	15:07
Marden, adj The Volunteer Inn	G	)7:58	09:53	11:27	12:57	15:08
Marden, adj Walkers Green Shops	C	)7:59	09:54	11:28	12:58	15:09
Marden, adj Rudge Grove	G	8:00	09:55	11:29	12:59	15:10
Franklands Gate, opp Amberley Arms PH	G	8:05	10:00	11:34	13:04	15:15
Franklands Gate, adj Bus Shelter	G	8:08	10:02	11:36	13:06	15:17
Sutton St Nicholas, adj Golden Cross Inn	G	8:10	10:04	11:38	13:08	15:19
Sutton St Nicholas, Wergins Bridge (S-bound)	G	8:11	10:05	11:39	13:09	15:20
Shelwick Green, opp Munstone Turn	G	8:14	10:08	11:42	13:12	15:23
Munstone, Crossroads (W-bound)			10:11			
Hereford, adj Centurion Way			10:12			
Hereford, adj thePoint4			10:14			
Hereford, adj Overbury Road			10:15			
Aylestone Hill, opp Churchill Gardens			10:16			
Aylestone Hill, opp The Swan	C	8:18		11:46	13:16	15:27
Aylestone Hill, o/s The Shires	G	8:19		11:47	13:17	15:28
Aylestone Hill, opp Venn's Lane	G	8:21		11:49	13:19	15:30
Hereford, opp Moreland Avenue	C	8:21	10:16	11:49	13:19	15:30
Hereford, opp Station Approach Bridge	C	8:22	10:17	11:50	13:20	15:31
Hereford, adj The Hop Pole	6	8:23	10:18	11:51	13:21	15:32
Hereford, Shire Hall (Stand 1)	arr 0	8:25	10:20	11:53	13:23	15:34

	Notes	[x0069]
[x0060] English Concession Passes are valid throughout this journey		

[x0069] English Concession Passes are valid throughout this journey. Compiled from data for the period Mon 24-Feb-2020 to Sun 01-Mar-2020. Times not in bold are estimated by using the distance between the stops.

### Mondays to Fridays

Hereford, Shire Hall (Stand 1)	<i>dep</i> 10:30	12:00	13:30	14:40	16:30	18:00
Hereford, adj Merton Hotel	10:33	12:03	13:33	14:43	16:36	18:03
Hereford, adj Moreland Avenue	10:34	12:04	13:34	14:43	16:38	18:04
Hereford, adj Churchill Gardens				14:45		
Hereford, opp Overbury Road				14:45		
Hereford, opp thePoint4				14:46		
Hereford, opp St Francis Xavier School				14:46		
Munstone, Crossroads (E-bound)				14:50		
Aylestone Hill, adj Venn's Lane	10:35	12:05	13:35		16:40	18:05
Aylestone Hill, opp The Shires	10:35	12:05	13:35		16:40	18:05
Aylestone Hill, adj The Swan	10:36	12:06	13:36		16:41	18:06
Shelwick Green, adj Munstone Turn	10:39	12:09	13:39	14:52	16:44	18:09
Sutton St Nicholas, Wergins Bridge (N-bound)	10:41	12:11	13:41	14:54	16:46	18:11
Sutton St Nicholas, opp Golden Cross Inn	10:43	12:13	13:43	14:56	16:48	18:13
Franklands Gate, opp Bus Shelter	10:45	12:15	13:45	14:58	16:50	18:15
Franklands Gate, adj Amberley Arms PH	10:47	12:17	13:47	15:00	16:52	18:17
Marden, opp Rudge Grove	10:50	12:20	13:50	15:03	16:55	18:20
Marden, opp Walkers Green Shops	10:50	12:20	13:50	15:03	16:55	18:20
Marden, opp The Volunteer Inn	10:52	12:22	13:52	15:05	16:57	18:22
Marden, opp Brook Farm	10:53	12:23	13:53	15:06	16:58	18:22
Litmarsh, opp Vauld Turn	10:56	12:26	13:56	15:09	17:01	18:26
Litmarsh, The Vauld (E-bound)	10:58	12:28	13:58	15:11	17:03	18:28
Bodenham Moor, adj Vauld Turn	11:02	12:32	14:02	15:15	17:07	18:32
Bodenham Moor, adj Orchard Close	11:04	12:34	14:04	15:17	17:09	18:34
Bodenham Moor, adj Ashgrove Close	11:05	12:35	14:05	15:18	17:10	18:35
Bodenham Moor, adj England's Gate	11:07	12:37	14:07	15:20	17:12	18:37
Bodenham, adj Memorial	11:10	12:40	14:10	15:23	17:15	18:40
Saffron's Cross, opp Saffron's Cross			14:12		17:17	18:42
Saffron's Cross, opp Broadfield Vineyard			14:14		17:19	18:44
Risbury, adj Bus Shelter			14:18		17:23	18:48
Drum Crossroads, Drum Crossroads (N-bound)			14:24		17:28	18:53
Steen's Bridge, adj Humber Close			14:26		17:30	18:55
Drum Crossroads, Drum Crossroads (S-bound)			14:28		17:32	18:57
Stoke Prior, opp Old Village Pump			14:31		17:35	19:00
Leominster, opp Railway Station						19:08

Leominster, Bus Station (Stand 3)	arr				19:10
Notes		[x0007]	[Sch]	[Sch][x0007]	[x0007]

### Saturdays

Hereford, Shire Hall (Stand 1)	dep 1	.0:30	12:00	13:30	14:40	16:30	18:00
Hereford, adj Merton Hotel	1	.0:33	12:03	13:33	14:43	16:33	18:03
Hereford, adj Moreland Avenue	1	.0:34	12:04	13:34	14:43	16:34	18:04
Aylestone Hill, adj Venn's Lane	1	.0:35	12:05	13:35		16:35	18:05
Aylestone Hill, opp The Shires	1	.0:35	12:05	13:35		16:35	18:05
Aylestone Hill, adj The Swan	1	0:36	12:06	13:36		16:36	18:06
Hereford, adj Churchill Gardens					14:45		
Hereford, opp Overbury Road					14:45		
Hereford, opp thePoint4					14:46		
Hereford, opp St Francis Xavier School					14:46		
Munstone, Crossroads (E-bound)					14:50		
Shelwick Green, adj Munstone Turn	1	.0:39	12:09	13:39	14:52	16:39	18:09
Sutton St Nicholas, Wergins Bridge (N-bound)	1	.0:41	12:11	13:41	14:54	16:41	18:11
Sutton St Nicholas, opp Golden Cross Inn	1	.0:43	12:13	13:43	14:56	16:43	18:13
Franklands Gate, opp Bus Shelter	1	.0:45	12:15	13:45	14:58	16:45	18:15
Franklands Gate, adj Amberley Arms PH	1	.0:47	12:17	13:47	15:00	16:47	18:17
Marden, opp Rudge Grove	1	.0:50	12:20	13:50	15:03	16:50	18:20
Marden, opp Walkers Green Shops	1	0:50	12:20	13:50	15:03	16:50	18:20
Marden, opp The Volunteer Inn	1	.0:52	12:22	13:52	15:05	16:52	18:22
Marden, opp Brook Farm	1	.0:53	12:23	13:53	15:06	16:53	18:23
Litmarsh, opp Vauld Turn	1	.0:56	12:26	13:56		16:56	18:26
Litmarsh, The Vauld (E-bound)	1	0:58	12:28	13:58		16:58	18:28
Bodenham Moor, adj Vauld Turn	1	1:02	12:32	14:02		17:02	18:32
Bodenham Moor, adj Orchard Close	1	1:04	12:34	14:04		17:04	18:34
Bodenham Moor, adj Ashgrove Close	1	1:05	12:35	14:05		17:05	18:35
Bodenham Moor, adj England's Gate	1	1:07	12:37	14:07		17:07	18:37
Bodenham, adj Memorial	1	1:10	12:40	14:10		17:10	18:40
Saffron's Cross, opp Saffron's Cross				14:12		17:12	
Saffron's Cross, opp Broadfield Vineyard				14:14		17:14	
Risbury, adj Bus Shelter				14:18		17:18	
Drum Crossroads, Drum Crossroads (N-bound)				14:24		17:23	
Steen's Bridge, adj Humber Close				14:26		17:25	
Drum Crossroads, Drum Crossroads (S-bound)				14:28		17:27	
Stoke Prior, opp Old Village Pump	arr			14:31		17:30	
Notes				[×0007]		[×0007]	[×0007]

Mondays to Fridays

Hereford, City Bus Station (NK)	dep	16:45	17:50
Hereford, adj Old Market		16:47	17:52
Hereford, adj Franklin Barnes		16:49	17:54
Hereford, adj Merton Hotel		16:50	17:55
Hereford, adj Moreland Avenue		16:51	17:56
Hereford, adj Churchill Gardens		16:53	17:58
Hereford, opp Overbury Road		16:54	17:59
Hereford, opp thePoint4		16:55	18:00
Hereford, opp St Francis Xavier School		16:55	18:00
Hereford, o/s 53 Old School Lane		16:56	18:01
Hereford, opp Pegasus Football Ground		16:58	18:03
Hereford, opp Cleeve Orchard		16:59	18:04
Holmer, adj Starting Gate		17:00	18:05
Holmer, adj Glenthorne Road		17:00	18:05
Holmer, adj Hugh Thomas Avenue		17:00	18:05
Holmer, opp Hedgerow Way		17:01	18:06
Bobblestock, opp Thirsk Avenue		17:01	18:06
Bobblestock, adj Taunton Way		17:02	18:07
Bobblestock, opp Co-op Store		17:04	18:09
Bobblestock, adj Three Elms Inn		17:05	18:10
Burghill, opp St. Mary's Park		17:07	18:12
Burghill, opp Leasown		17:10	18:15
Burghill, adj Redstone		17:11	18:16
Tillington, opp Tillington Business Park		17:14	18:19
Tillington Common, adj Post Box		17:18	18:23
Portway, opp Gospel Hall			18:30
Portway, adj Royal Oak			18:30
Canon Pyon, adj Meadow Drive			18:34
Canon Pyon, adj Post Office	arr		18:35
Notes		[x0007]	[x0007]

#### Saturdays

Hereford, City Bus Station (NK)	dep	16:45	17:50
Hereford, adj Old Market		16:47	17:52
Hereford, adj Franklin Barnes		16:49	17:54
Hereford, adj Merton Hotel		16:50	17:55
Hereford, adj Moreland Avenue		16:51	17:56
Hereford, adj Churchill Gardens		16:53	17:58
Hereford, opp Overbury Road		16:54	17:59
Hereford, opp thePoint4		16:55	18:00
Hereford, opp St Francis Xavier School		16:55	18:00
Hereford, o/s 53 Old School Lane		16:56	18:01
Hereford, opp Pegasus Football Ground		16:58	18:03
Hereford, opp Cleeve Orchard		16:59	18:04
Holmer, adj Starting Gate		17:00	18:05
Holmer, adj Glenthorne Road		17:00	18:05
Holmer, adj Hugh Thomas Avenue		17:00	18:05
Holmer, opp Hedgerow Way		17:01	18:06
Bobblestock, opp Thirsk Avenue		17:01	18:06
Bobblestock, adj Taunton Way		17:02	18:07
Bobblestock, opp Co-op Store		17:04	18:09
Bobblestock, adj Three Elms Inn		17:05	18:10
Burghill, opp St. Mary's Park		17:07	18:12
Burghill, opp Leasown		17:10	18:15
Burghill, adj Redstone		17:11	18:16
Tillington, opp Tillington Business Park		17:14	18:19
Tillington Common, adj Post Box		17:18	18:23
Portway, opp Gospel Hall			18:30
Portway, adj Royal Oak			18:30
Canon Pyon, adj Meadow Drive			18:34
Canon Pyon, adj Post Office	arr		18:35
Notes	[	[x0007]	[x0007]

#### Mondays to Fridays

Hereford, Country Bus Station (Stand 11)	dep	16:50
Hereford, Maylord Shopping Centre (Stand 2)		16:52
Hereford, City Bus Station (NK)		16:55
Hereford, adj Courtyard Theatre		16:57
Hereford, adj Heart of Oak Inn		16:57
Widemarsh, adj Priory Place		17:00
Hereford, opp Golden Lion Inn		17:00
Hereford, opp The Old Grandstand		17:01
Hereford, adj The Grandstand PH		17:02
Westfields, opp Shops		17:02
Hereford, opp Haydock Avenue		17:03
Bobblestock, Shops (NW-bound)		17:04
Bobblestock, adj Three Elms Inn		17:05
Eltons Marsh, Elton's Marsh (N-bound)		17:07
Portway, opp Lion Farm		17:09
Portway, opp Gospel Hall		17:10
Portway, adj Royal Oak		17:10
Canon Pyon, adj Meadow Drive		17:15
Canon Pyon, adj Post Office		17:16
Canon Pyon, opp Brookside		17:16
Bush Bank, adj Bush Inn		17:21
Knapton Green, opp Birley Turn		17:23
Dilwyn, opp Crown Inn		17:30
Monkland, adj Bus Shelter		17:37
Barons Cross Estate, opp Cornhill Road		17:41
Barons Cross, opp Baron's Cross Inn		17:41
Leominster, adj Pierrepont Road		17:43
Leominster, Bus Station (Stand 3)	arr	17:45

#### Mondays to Fridays

Leominster, Bus Station (Stand 3)	dep	07:20
Leominster, opp Pierrepont Road		07:21
Barons Cross, adj Morrisons Store		07:23
Barons Cross, adj Baron's Cross Inn		07:23
Barons Cross Estate, opp 8 Cornhill Road		07:25
Monkland, opp Bus Shelter		07:28
Dilwyn, adj Crown Inn		07:35
Knapton Green, adj Birley Turn		07:42
Bush Bank, opp Bush Inn		07:44
Canon Pyon, adj Brookside		07:48
Canon Pyon, opp Post Office		07:49
Canon Pyon, opp Meadow Drive		07:49
Portway, opp Royal Oak		07:54
Portway, adj Gospel Hall		07:55
Portway, adj Lion Farm		07:55
Eltons Marsh, Elton's Marsh (S-bound)		07:57
Bobblestock, adj Crossroads		08:00
Holmer, adj Hedgerow Way		08:03
Holmer, opp Hugh Thomas Avenue		08:03
Holmer, opp Glenthorne Road		08:04
Holmer, opp Starting Gate		08:05
Holmer, adj Cleeve Orchard		08:05
Hereford, adj Centurion Way		08:07
Hereford, adj Victoria Park		08:08
Hereford, adj thePoint4		08:10
Hereford, adj Overbury Road		08:11
Aylestone Hill, opp Churchill Gardens		08:12
Hereford, opp Moreland Avenue		08:14
Hereford, opp Station Approach Bridge		08:16
Hereford, adj The Hop Pole		08:18
Hereford, Shire Hall (Stand 3)	arr	08:20

#### Mondays to Fridays

Hereford, Country Bus Station (Stand 11)	dep	17:15
Hereford, adj Moreland Avenue		17:16
Hereford, adj Churchill Gardens		17:17
Hereford, opp Overbury Road		17:18
Hereford, opp thePoint4		17:19
Hereford, opp St Francis Xavier School		17:19
Hereford, o/s 53 Old School Lane		17:20
Hereford, opp Pegasus Football Ground		17:22
Hereford, opp Cleeve Orchard		17:23
Holmer, adj Starting Gate		17:25
Holmer, adj Glenthorne Road		17:25
Holmer, adj Hugh Thomas Avenue		17:25
Holmer, opp Hedgerow Way		17:25
Bobblestock, Crossroads (W-bound)		17:27
Eltons Marsh, Elton's Marsh (N-bound)		17:29
Portway, opp Lion Farm		17:31
Portway, opp Gospel Hall		17:32
Portway, adj Royal Oak		17:33
Canon Pyon, adj Meadow Drive		17:39
Canon Pyon, adj Post Office		17:40
Canon Pyon, opp Brookside		17:40
Bush Bank, adj Bush Inn		17:43
Knapton Green, opp Birley Turn		17:45
Shirl Heath, opp Car Auctions		17:49
Kingsland, Corners Inn (NW-bound)		17:55
Mortimer's Cross, Mortimer's Cross Inn (N-bound)		18:00
Aymestrey, adj Riverside Inn		18:03
Wigmore, adj Castle Garage		18:06
Adforton, adj Church		18:09
Walford, Adforton Turn (NE-bound)		18:10
Leintwardine, opp Lion Hotel	arr	18:12

#### Mondays to Fridays

Leintwardine, opp Lion Hotel	dep	07:30
Walford, Adforton Turn (SW-bound)		07:32
Adforton, opp Church		07:36
Wigmore, opp Castle Garage		07:40
Aymestrey, opp Riverside Inn		07:44
Mortimer's Cross, opp Mortimer's Cross Inn		07:46
Kingsland, adj Corners Inn		07:51
Kingsland, adj Coronation Hall		07:51
Shirl Heath, adj Car Auctions		07:58
Knapton Green, adj Birley Turn		08:05
Bush Bank, opp Bush Inn		08:09
Canon Pyon, adj Brookside		08:11
Canon Pyon, opp Post Office		08:12
Canon Pyon, opp Meadow Drive		08:12
Portway, opp Royal Oak		08:18
Portway, adj Gospel Hall		08:20
Portway, adj Lion Farm		08:20
Eltons Marsh, Elton's Marsh (S-bound)		08:21
Bobblestock, adj Crossroads		08:24
Holmer, adj Hedgerow Way		08:25
Holmer, opp Hugh Thomas Avenue		08:26
Holmer, opp Glenthorne Road		08:26
Holmer, opp Starting Gate		08:27
Holmer, adj Cleeve Orchard		08:28
Hereford, adj Pegasus Football Ground		08:29
Hereford, opp 53 Old School Lane		08:32
Hereford, adj St Francis Xavier School		08:33
Hereford, adj thePoint4		08:35
Hereford, adj Overbury Road		08:36
Aylestone Hill, opp Churchill Gardens		08:38
Hereford, opp Moreland Avenue		08:41
Hereford, opp Station Approach Bridge		08:43
Hereford, Country Bus Station (Stand 11)	arr	08:45

### Mondays to Fridays

Hereford, City Bus Station (NK)	dep	09:00	10:00	11:00	12:00	13:00	14:00
Hereford, adj Courtyard Theatre		09:02	10:02	11:02	12:02	13:02	14:02
Hereford, adj Heart of Oak Inn		09:02	10:02	11:02	12:02	13:02	14:02
Widemarsh, adj Priory Place		09:05	10:05	11:05	12:05	13:05	14:05
Hereford, opp Golden Lion Inn		09:05	10:05	11:05	12:05	13:05	14:05
Hereford, opp The Old Grandstand		09:06	10:06	11:06	12:06	13:06	14:06
Hereford, adj The Grandstand PH		09:07	10:07	11:07	12:07	13:07	14:07
Westfields, opp Shops		09:08	10:08	11:08	12:08	13:08	14:08
Hereford, opp Haydock Avenue		09:09	10:09	11:09	12:09	13:09	14:09
Bobblestock, Shops (NW-bound)		09:10	10:10	11:10	12:10	13:10	14:10
Bobblestock, adj Doncaster Avenue		09:11	10:11	11:11	12:11	13:11	14:11
Bobblestock, adj Cheltenham Avenue		09:11	10:11	11:11	12:11	13:11	14:11
Bobblestock, adj Thirsk Avenue		09:12	10:12	11:12	12:12	13:12	14:12
Holmer, adj Hedgerow Way		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Hugh Thomas Avenue		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Glenthorne Road		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Starting Gate		09:14	10:14	11:14	12:14	13:14	14:14
Holmer, adj Cleeve Orchard		09:14	10:14	11:14	12:14	13:14	14:14
Hereford, adj Centurion Way		09:14	10:14	11:14	12:14	13:14	14:14
Hereford, adj Victoria Park		09:15	10:15	11:15	12:15	13:15	14:15
Hereford, adj thePoint4		09:17	10:17	11:17	12:17	13:17	14:17
Hereford, adj Overbury Road		09:17	10:17	11:17	12:17	13:17	14:17
Aylestone Hill, opp Churchill Gardens		09:19	10:19	11:19	12:19	13:19	14:19
Hereford, opp Moreland Avenue		09:21	10:21	11:21	12:21	13:21	14:21
Hereford, opp Station Approach Bridge		09:22	10:22	11:22	12:22	13:22	14:22
Hereford, adj The Hop Pole		09:24	10:24	11:24	12:24	13:24	14:24
Hereford, Maylord Shopping Centre (Stand 2)		09:25	10:25	11:25	12:25	13:25	14:25
Hereford, City Bus Station (NK)	arr	09:27	10:27	11:27	12:27	13:27	14:27

Hereford, City Bus Station (NK)	dep	09:00	10:00	11:00	12:00	13:00	14:00
Hereford, adj Courtyard Theatre		09:02	10:02	11:02	12:02	13:02	14:02
Hereford, adj Heart of Oak Inn		09:02	10:02	11:02	12:02	13:02	14:02
Widemarsh, adj Priory Place		09:05	10:05	11:05	12:05	13:05	14:05
Hereford, opp Golden Lion Inn		09:05	10:05	11:05	12:05	13:05	14:05
Hereford, opp The Old Grandstand		09:06	10:06	11:06	12:06	13:06	14:06
Hereford, adj The Grandstand PH		09:07	10:07	11:07	12:07	13:07	14:07
Westfields, opp Shops		09:08	10:08	11:08	12:08	13:08	14:08
Hereford, opp Haydock Avenue		09:09	10:09	11:09	12:09	13:09	14:09
Bobblestock, Shops (NW-bound)		09:10	10:10	11:10	12:10	13:10	14:10
Bobblestock, adj Doncaster Avenue		09:11	10:11	11:11	12:11	13:11	14:11
Bobblestock, adj Cheltenham Avenue		09:11	10:11	11:11	12:11	13:11	14:11
Bobblestock, adj Thirsk Avenue		09:12	10:12	11:12	12:12	13:12	14:12
Holmer, adj Hedgerow Way		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Hugh Thomas Avenue		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Glenthorne Road		09:13	10:13	11:13	12:13	13:13	14:13
Holmer, opp Starting Gate		09:14	10:14	11:14	12:14	13:14	14:14
Holmer, adj Cleeve Orchard		09:14	10:14	11:14	12:14	13:14	14:14
Hereford, adj Centurion Way		09:14	10:14	11:14	12:14	13:14	14:14
Hereford, adj Victoria Park		09:15	10:15	11:15	12:15	13:15	14:15
Hereford, adj thePoint4		09:17	10:17	11:17	12:17	13:17	14:17
Hereford, adj Overbury Road		09:17	10:17	11:17	12:17	13:17	14:17
Aylestone Hill, opp Churchill Gardens		09:19	10:19	11:19	12:19	13:19	14:19
Hereford, opp Moreland Avenue		09:21	10:21	11:21	12:21	13:21	14:21
Hereford, opp Station Approach Bridge		09:22	10:22	11:22	12:22	13:22	14:22
Hereford, adj The Hop Pole		09:24	10:24	11:24	12:24	13:24	14:24
Hereford, Maylord Shopping Centre (Stand 2)		09:25	10:25	11:25	12:25	13:25	14:25
Hereford, City Bus Station (NK)	arr	09:27	10:27	11:27	12:27	13:27	14:27

# **Appendix C**

CYCLING INFRASTRUCTURE WITHIN HEREFORD

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If you walk or cycle across Hereford you can now take advantage of over twenty miles of dedicated traffic-free paths. There are great direct routes into the City centre, many with fabulous views and green around so you can get away from the noise of the main roads, see a different side of the City and enjoy your journey.

Walking and cycling are often the quickest and easiest way to get around the City. One-way streets, pedestrianised areas, short cuts and traffic-free paths all help walkers and cyclists to beat the traffic.

We are adding more routes and linking paths wherever possible. New paths along the west of Roman Road will connect recent housing developments to the traffic-free network, while in Rotherwas new paths along the Straight Mile support people to walk and cycle to work.



In addition, there are new shared-use paths and toucan crossings along Ross Road.

	Кеу
-	Traffic free and a mixture of special cycle tracks, river paths and other routes through parks
-	Suggested routes on quiet suburban roads or the safest way through the city centre. Intended to be the best available route at all times but some will be busier than others
	Indicates linking routes where cyclists are legally required to dismount and behave like pedestrians
•••	Traffic calming
20	20 mph zone
Δ	Beware hazardous junction/crossing
P	Cycle parking
<b>® (</b>	Pedestrian crossing/Pedestrian & Cycle crossing
50	Junction with advanced stop line for cyclists
	Safety camera sites
$\odot$	Bicycle shop
0	Museum
	Bus Station
•	Park and Choose site: Park and Share. Cycle or take the bus

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## **Appendix D**

### VEHICULAR ACCESS DESIGN

CONFIDENTIAL



NUK.WSPGROUP.COMICENTRAL DATAIPROJECTS/70062561 - HOLMER ILKE HOMES/03 WIP/CV CIVIL ENGINEERING/02 CAD-BIM MODELS/HIH-WSP-XX-XX-C-SK-0107.DWG, printed on 05 May 2020 14:53:29, by Davey, Cai

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	I	DU NUT SCALE
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	BE UNDE PRELIMINAF CONTRACTOR	ERSTOOD THAT ALL DRAWINGS ARE ISSUED AS RY AND NOT FOR CONSTRUCTION. SHOULD THE AND / OR EMPLOYER COMMENCE WORK PRIOR TO
	P03 05/05/2020	CD UPDATE SITE PLAN PG AV
	P02         22/04/2020           P01         21/04/2020	CD     UPDATED SITE PLAN/BATTER AMENDED TO 1 IN 2     PG     AM       CD     FIRST ISSUE     MT     M
	REV         DATE           DRAWING STATUS:	BY DESCRIPTION CHK AP
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	The Mailbo	ox, Level 2, 100 Wharfside Street, Birmingham, B1 1RT, UK T+ 44 (0) 121 352 4700, F+ 44 (0) 121 352 4701
	CLIENT:	wsp.com
	ARCHITECT:	HOLMER ILKE HOMES
	_	-
	SITE/PROJECT:	COLLEGE ROAD
		HEREFORD
	TITLE:	JUNCTION DESIGN
		OPTION 3
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## **Appendix E**

### SWEPT PATH ASSESSMENT

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# **Appendix F**

# TRICS OUTPUT DATA

CONFIDENTIAL

**\\S**D

Calculation Reference: AUDIT-100312-200214-0208

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Categ MUL	Use gory _TI -M	: 02 - EMPLOYMENT : D - INDUSTRIAL ESTATE ODAL VEHICLES	
Seled	cted red	gions and areas:	
02	SOUT	TH EAST	
	ES	EAST SUSSEX	2 days
	ΕX	ESSEX	1 days
	KC	KENT	1 days
03	SOUT	TH WEST	5
	BR	BRISTOL CITY	2 days
	WL	WILTSHIRE	1 days
06	WEST	T MIDLANDS	-
	HE	HEREFORDSHIRE	1 days
07	)7 YORKSHIRE & NORTH LINCOLNSHIRE		5
	WY	WEST YORKSHIRE	1 days
10	WAL	ES	
	SW	SWANSEA	2 days
	VG	VALE OF GLAMORGAN	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:	5214 to 18128 (units: sqm)	
Range Selected by User:	5000 to 20000 (units: sqm)	
Parking Spaces Range:	All Surveys Included	
Public Transport Provision:		
Selection by:		Include all surveys

Date Range: 01/01/11 to 10/10/19

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

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	3 days
Thursday	2 days
Friday	3 days

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

<u>Selected survey types:</u>	
Manual count	12 days
Directional ATC Count	0 days

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

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7 3 2

Selected Locations:	
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Suburban Area (PPS6 Out	of Centre)
Edge of Town	

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	
Residential Zone	
No Sub Category	

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.

Licence No: 100312

Secondary Filtering selection:

<u>Use Class:</u>	
Not Known	1 days
B1	4 days
B2	4 days
B8	3 days

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

Population within 1 mile:	
5,001 to 10,000	1 days
10,001 to 15,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	6 days
50,001 to 100,000	1 days

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

Population within 5 miles:	
25,001 to 50,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	6 days
250,001 to 500,000	2 days
500,001 or More	1 days

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

Car ownership within 5 miles:	
0.6 to 1.0	5 days
1.1 to 1.5	7 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

12 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.

<u>PTAL Rating:</u> No PTAL Present

12 days

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

LIST OF SITES relevant to selection parameters

1	BR-02-D-04 CROFTS END ROAD BRISTOL	INDUSTRIAL ESTATE	E	BRISTOL CITY
2	SPEEDWELL Suburban Area (PPS6 Industrial Zone Total Gross floor area <i>Survey date:</i> BR-02-D-05 NOVERS HILL BRISTOL BEDMINSTER Suburban Area (PPS6 Industrial Zone Total Gross floor area <i>Survey date:</i>	o Out of Centre) :: <i>FRIDAY</i> INDUSTRIAL ESTATE OUt of Centre) :: <i>FRIDAY</i>	18018 sqm <i>29/11/13</i> - - - 18128 sqm <i>29/11/13</i>	<i>Survey Type: MANUAL</i> BRISTOL CITY <i>Survey Type: MANUAL</i>
3	ES-02-D-06 COURTLANDS ROAD EASTBOURNE	INDUSTRIAL ESTATE		EAST SUŚSÉX
4	Edge of Town Residential Zone Total Gross floor area <i>Survey date:</i> ES-02-D-07 HUGHES ROAD BRIGHTON	I: <i>MONDAY</i> INDUSTRIAL ESTATE	7525 sqm <i>21/10/13</i>	<i>Survey Type: MANUAL</i> EAST SUSSEX
5	Suburban Area (PPS6 Industrial Zone Total Gross floor area <i>Survey date:</i> EX-02-D-05 HECKWORTH CLOSE COLCHESTER SEVERALLS INDUSTR	Out of Centre) I: <i>THURSDAY</i> INDUSTRIAL ESTATE	6625 sqm <i>16/10/14</i>	<i>Survey Type: MANUAL</i> ESSEX
6	Industrial Zone Total Gross floor area <i>Survey date:</i> HE-02-D-02 BURCOTT ROAD HEREFORD	I: <i>FRIDAY</i> BUSI NESS PARK	7280 sqm <i>18/05/18</i>	<i>Survey Type: MANUAL</i> HEREFORDSHIRE
7	Suburban Area (PPS6 Industrial Zone Total Gross floor area <i>Survey date:</i> KC-02-D-02 SOUTHWELL ROAD DEAL	Out of Centre) I: <i>TUESDAY</i> INDUSTRIAL ESTATE	5214 sqm <i>22/10/13</i>	<i>Survey Type: MANUAL</i> KENT
8	Edge of Town Residential Zone Total Gross floor area <i>Survey date:</i> SW-02-D-01 UPPER FOREST WAY SWANSEA SWANSEA ENTERPRIS	i: <i>WEDNESDAY</i> INDUSTRIAL ESTATE SE PK	10715 sqm <i>28/11/12</i>	<i>Survey Type: MANUAL</i> SWANSEA
	Luge of Town Industrial Zone Total Gross floor area Survey date:	i: WEDNESDAY	6822 sqm <i>09/10/19</i>	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SW-02-D-02 CLARION COURT SWANSEA		E	SWANSEA
10	Edge of Town Industrial Zone Total Gross floor area <i>Survey date:</i> VG-02-D-01 ARTHUR STREET BARRY	a: <i>THURSDAY</i> INDUSTRIAL ESTATI	5280 sqm <i>10/10/19</i> E	<i>Survey Type: MANUAL</i> VALE OF GLAMORGAN
11	Edge of Town No Sub Category Total Gross floor area <i>Survey date:</i> WL-02-D-02 HEADLANDS GROVE SWINDON	a: <i>MONDAY</i> INDUSTRIAL ESTATI	13091 sqm <i>08/05/17</i> E	<i>Survey Type: MANUAL</i> WILTSHIRE
12	Suburban Area (PPSe Residential Zone Total Gross floor area <i>Survey date:</i> WY-02-D-08 MILL LANE HALIFAX	5 Out of Centre) a: <i>TUESDAY</i> INDUSTRIAL ESTAT	10000 sqm <i>20/09/16</i> E	<i>Survey Type: MANUAL</i> WEST YORKSHIRE
	Edge of Town No Sub Category Total Gross floor area <i>Survey date:</i>	a: WEDNESDAY	11305 sqm <i>17/10/18</i>	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 MULTI - MODAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.025	2	6051	0.000	2	6051	0.025
05:30 - 06:00	2	6051	0.050	2	6051	0.008	2	6051	0.058
06:00 - 06:30	2	6051	0.058	2	6051	0.017	2	6051	0.075
06:30 - 07:00	2	6051	0.140	2	6051	0.008	2	6051	0.148
07:00 - 07:30	12	10000	0.102	12	10000	0.024	12	10000	0.126
07:30 - 08:00	12	10000	0.177	12	10000	0.055	12	10000	0.232
08:00 - 08:30	12	10000	0.226	12	10000	0.083	12	10000	0.309
08:30 - 09:00	12	10000	0.206	12	10000	0.096	12	10000	0.302
09:00 - 09:30	12	10000	0.164	12	10000	0.118	12	10000	0.282
09:30 - 10:00	12	10000	0.152	12	10000	0.118	12	10000	0.270
10:00 - 10:30	12	10000	0.147	12	10000	0.132	12	10000	0.279
10:30 - 11:00	12	10000	0.127	12	10000	0.111	12	10000	0.238
11:00 - 11:30	12	10000	0.121	12	10000	0.114	12	10000	0.235
11:30 - 12:00	12	10000	0.122	12	10000	0.120	12	10000	0.242
12:00 - 12:30	12	10000	0.142	12	10000	0.137	12	10000	0.279
12:30 - 13:00	12	10000	0.109	12	10000	0.138	12	10000	0.247
13:00 - 13:30	12	10000	0.150	12	10000	0.135	12	10000	0.285
13:30 - 14:00	12	10000	0.137	12	10000	0.136	12	10000	0.273
14:00 - 14:30	12	10000	0.122	12	10000	0.136	12	10000	0.258
14:30 - 15:00	12	10000	0.138	12	10000	0.138	12	10000	0.276
15:00 - 15:30	12	10000	0.101	12	10000	0.176	12	10000	0.277
15:30 - 16:00	12	10000	0.127	12	10000	0.149	12	10000	0.276
16:00 - 16:30	12	10000	0.157	12	10000	0.166	12	10000	0.323
16:30 - 17:00	12	10000	0.139	12	10000	0.213	12	10000	0.352
17:00 - 17:30	12	10000	0.100	12	10000	0.222	12	10000	0.322
17:30 - 18:00	12	10000	0.092	12	10000	0.191	12	10000	0.283
18:00 - 18:30	12	10000	0.040	12	10000	0.118	12	10000	0.158
18:30 - 19:00	12	10000	0.035	12	10000	0.075	12	10000	0.110
19:00 - 19:30	2	6051	0.008	2	6051	0.165	2	6051	0.173
19:30 - 20:00	2	6051	0.008	2	6051	0.140	2	6051	0.148
20:00 - 20:30	2	6051	0.000	2	6051	0.066	2	6051	0.066
20:30 - 21:00	2	6051	0.000	2	6051	0.025	2	6051	0.025
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.422			3.530			6.952

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

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

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#### Parameter summary

Trip rate parameter range selected:5214 - 18128 (units: sqm)Survey date date range:01/01/11 - 10/10/19Number of weekdays (Monday-Friday):12Number of Saturdays:0Number of Sundays:0Surveys automatically removed from selection:0Surveys manually removed from selection:0

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

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

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
07:00 - 07:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
07:30 - 08:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
08:00 - 08:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
08:30 - 09:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
09:00 - 09:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
09:30 - 10:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
10:00 - 10:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
10:30 - 11:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
11:00 - 11:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
11:30 - 12:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:00 - 12:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
12:30 - 13:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:00 - 13:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:30 - 14:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:00 - 14:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
14:30 - 15:00	12	10000	0.001	12	10000	0.001	12	10000	0.002
15:00 - 15:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
15:30 - 16:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:00 - 16:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
16:30 - 17:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:00 - 17:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
17:30 - 18:00	12	10000	0.001	12	10000	0.001	12	10000	0.002
18:00 - 18:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
18:30 - 19:00	12	10000	0.001	12	10000	0.001	12	10000	0.002
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.016			0.016			0.032

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

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

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

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.008	2	6051	0.000	2	6051	0.008
07:00 - 07:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
07:30 - 08:00	12	10000	0.008	12	10000	0.007	12	10000	0.015
08:00 - 08:30	12	10000	0.009	12	10000	0.006	12	10000	0.015
08:30 - 09:00	12	10000	0.010	12	10000	0.006	12	10000	0.016
09:00 - 09:30	12	10000	0.011	12	10000	0.010	12	10000	0.021
09:30 - 10:00	12	10000	0.014	12	10000	0.015	12	10000	0.029
10:00 - 10:30	12	10000	0.012	12	10000	0.012	12	10000	0.024
10:30 - 11:00	12	10000	0.016	12	10000	0.015	12	10000	0.031
11:00 - 11:30	12	10000	0.012	12	10000	0.014	12	10000	0.026
11:30 - 12:00	12	10000	0.009	12	10000	0.009	12	10000	0.018
12:00 - 12:30	12	10000	0.012	12	10000	0.012	12	10000	0.024
12:30 - 13:00	12	10000	0.013	12	10000	0.016	12	10000	0.029
13:00 - 13:30	12	10000	0.008	12	10000	0.008	12	10000	0.016
13:30 - 14:00	12	10000	0.012	12	10000	0.012	12	10000	0.024
14:00 - 14:30	12	10000	0.006	12	10000	0.009	12	10000	0.015
14:30 - 15:00	12	10000	0.011	12	10000	0.006	12	10000	0.017
15:00 - 15:30	12	10000	0.008	12	10000	0.011	12	10000	0.019
15:30 - 16:00	12	10000	0.014	12	10000	0.013	12	10000	0.027
16:00 - 16:30	12	10000	0.006	12	10000	0.008	12	10000	0.014
16:30 - 17:00	12	10000	0.007	12	10000	0.005	12	10000	0.012
17:00 - 17:30	12	10000	0.002	12	10000	0.009	12	10000	0.011
17:30 - 18:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
18:00 - 18:30	12	10000	0.001	12	10000	0.002	12	10000	0.003
18:30 - 19:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00			0.015			0.011			0.404
Total Rates:			0.215			0.211			0.426

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

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

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
07:00 - 07:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
07:30 - 08:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
08:00 - 08:30	12	10000	0.002	12	10000	0.001	12	10000	0.003
08:30 - 09:00	12	10000	0.002	12	10000	0.003	12	10000	0.005
09:00 - 09:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
09:30 - 10:00	12	10000	0.001	12	10000	0.002	12	10000	0.003
10:00 - 10:30	12	10000	0.002	12	10000	0.001	12	10000	0.003
10:30 - 11:00	12	10000	0.002	12	10000	0.000	12	10000	0.002
11:00 - 11:30	12	10000	0.000	12	10000	0.002	12	10000	0.002
11:30 - 12:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:00 - 12:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:30 - 13:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
13:00 - 13:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:30 - 14:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:00 - 14:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:30 - 15:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
15:00 - 15:30	12	10000	0.001	12	10000	0.001	12	10000	0.002
15:30 - 16:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:00 - 16:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:30 - 17:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:00 - 17:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:30 - 18:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
18:00 - 18:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
18:30 - 19:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.014			0.014			0.028

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

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

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
07:00 - 07:30	12	10000	0.002	12	10000	0.000	12	10000	0.002
07:30 - 08:00	12	10000	0.005	12	10000	0.000	12	10000	0.005
08:00 - 08:30	12	10000	0.004	12	10000	0.001	12	10000	0.005
08:30 - 09:00	12	10000	0.009	12	10000	0.001	12	10000	0.010
09:00 - 09:30	12	10000	0.002	12	10000	0.000	12	10000	0.002
09:30 - 10:00	12	10000	0.002	12	10000	0.000	12	10000	0.002
10:00 - 10:30	12	10000	0.002	12	10000	0.000	12	10000	0.002
10:30 - 11:00	12	10000	0.002	12	10000	0.001	12	10000	0.003
11:00 - 11:30	12	10000	0.000	12	10000	0.001	12	10000	0.001
11:30 - 12:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
12:00 - 12:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:30 - 13:00	12	10000	0.000	12	10000	0.002	12	10000	0.002
13:00 - 13:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
13:30 - 14:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
14:00 - 14:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
14:30 - 15:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
15:00 - 15:30	12	10000	0.000	12	10000	0.001	12	10000	0.001
15:30 - 16:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
16:00 - 16:30	12	10000	0.000	12	10000	0.005	12	10000	0.005
16:30 - 17:00	12	10000	0.000	12	10000	0.004	12	10000	0.004
17:00 - 17:30	12	10000	0.001	12	10000	0.006	12	10000	0.007
17:30 - 18:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
18:00 - 18:30	12	10000	0.000	12	10000	0.002	12	10000	0.002
18:30 - 19:00	12	10000	0.000	12	10000	0.002	12	10000	0.002
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.037			0.037			0.074

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

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

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

	ARRIVALS		C	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.041	2	6051	0.000	2	6051	0.041
05:30 - 06:00	2	6051	0.058	2	6051	0.008	2	6051	0.066
06:00 - 06:30	2	6051	0.066	2	6051	0.017	2	6051	0.083
06:30 - 07:00	2	6051	0.157	2	6051	0.008	2	6051	0.165
07:00 - 07:30	12	10000	0.123	12	10000	0.027	12	10000	0.150
07:30 - 08:00	12	10000	0.217	12	10000	0.068	12	10000	0.285
08:00 - 08:30	12	10000	0.292	12	10000	0.106	12	10000	0.398
08:30 - 09:00	12	10000	0.267	12	10000	0.108	12	10000	0.375
09:00 - 09:30	12	10000	0.220	12	10000	0.139	12	10000	0.359
09:30 - 10:00	12	10000	0.198	12	10000	0.153	12	10000	0.351
10:00 - 10:30	12	10000	0.192	12	10000	0.171	12	10000	0.363
10:30 - 11:00	12	10000	0.163	12	10000	0.128	12	10000	0.291
11:00 - 11:30	12	10000	0.156	12	10000	0.147	12	10000	0.303
11:30 - 12:00	12	10000	0.156	12	10000	0.155	12	10000	0.311
12:00 - 12:30	12	10000	0.184	12	10000	0.173	12	10000	0.357
12:30 - 13:00	12	10000	0.129	12	10000	0.182	12	10000	0.311
13:00 - 13:30	12	10000	0.184	12	10000	0.179	12	10000	0.303
13.30 - 14.00	12	10000	0.101	12	10000	0.176	12	10000	0.337
14.00 - 14.30	12	10000	0.140	12	10000	0.175	12	10000	0.321
15:00 15:30	12	10000	0.193	12	10000	0.173	12	10000	0.308
15:20 16:00	12	10000	0.122	12	10000	0.240	12	10000	0.302
16:00 16:30	12	10000	0.170	12	10000	0.183	12	10000	0.339
16:30 - 17:00	12	10000	0.231	12	10000	0.220	12	10000	0.477
17:00 - 17:30	12	10000	0.210	12	10000	0.273	12	10000	0.400
17:30 - 18:00	12	10000	0.147	12	10000	0.280	12	10000	0 4 2 4
18:00 - 18:30	12	10000	0.057	12	10000	0.167	12	10000	0.224
18:30 - 19:00	12	10000	0.042	12	10000	0.122	12	10000	0.164
19:00 - 19:30	2	6051	0.008	2	6051	0.198	2	6051	0.206
19:30 - 20:00	2	6051	0.008	2	6051	0.198	2	6051	0.206
20:00 - 20:30	2	6051	0.000	2	6051	0.074	2	6051	0.074
20:30 - 21:00	2	6051	0.000	2	6051	0.025	2	6051	0.025
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			4.490			4.578			9.068

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

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

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

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.025	2	6051	0.000	2	6051	0.025
06:30 - 07:00	2	6051	0.025	2	6051	0.000	2	6051	0.025
07:00 - 07:30	12	10000	0.008	12	10000	0.000	12	10000	0.008
07:30 - 08:00	12	10000	0.015	12	10000	0.007	12	10000	0.022
08:00 - 08:30	12	10000	0.022	12	10000	0.004	12	10000	0.026
08:30 - 09:00	12	10000	0.018	12	10000	0.010	12	10000	0.028
09:00 - 09:30	12	10000	0.014	12	10000	0.007	12	10000	0.021
09:30 - 10:00	12	10000	0.006	12	10000	0.004	12	10000	0.010
10:00 - 10:30	12	10000	0.007	12	10000	0.004	12	10000	0.011
10:30 - 11:00	12	10000	0.005	12	10000	0.005	12	10000	0.010
11:00 - 11:30	12	10000	0.011	12	10000	0.010	12	10000	0.021
11:30 - 12:00	12	10000	0.010	12	10000	0.014	12	10000	0.024
12:00 - 12:30	12	10000	0.016	12	10000	0.020	12	10000	0.036
12:30 - 13:00	12	10000	0.012	12	10000	0.020	12	10000	0.032
13:00 - 13:30	12	10000	0.017	12	10000	0.013	12	10000	0.030
13:30 - 14:00	12	10000	0.017	12	10000	0.016	12	10000	0.033
14:00 - 14:30	12	10000	0.012	12	10000	0.016	12	10000	0.028
14:30 - 15:00	12	10000	0.012	12	10000	0.006	12	10000	0.018
15:00 - 15:30	12	10000	0.010	12	10000	0.008	12	10000	0.018
15:30 - 16:00	12	10000	0.013	12	10000	0.007	12	10000	0.020
16:00 - 16:30	12	10000	0.006	12	10000	0.024	12	10000	0.030
16:30 - 17:00	12	10000	0.008	12	10000	0.010	12	10000	0.018
17:00 - 17:30	12	10000	0.008	12	10000	0.022	12	10000	0.030
17:30 - 18:00	12	10000	0.006	12	10000	0.014	12	10000	0.020
18:00 - 18:30	12	10000	0.004	12	10000	0.014	12	10000	0.018
18:30 - 19:00	12	10000	0.002	12	10000	0.010	12	10000	0.012
19:00 - 19:30	2	6051	0.008	2	6051	0.050	2	6051	0.058
19:30 - 20:00	2	6051	0.017	2	6051	0.017	2	6051	0.034
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.334		1	0.332			0.666

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

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

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

		ARRIVALS			DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.008	2	6051	0.000	2	6051	0.008
06:30 - 07:00	2	6051	0.017	2	6051	0.000	2	6051	0.017
07:00 - 07:30	12	10000	0.002	12	10000	0.000	12	10000	0.002
07:30 - 08:00	12	10000	0.002	12	10000	0.000	12	10000	0.002
08:00 - 08:30	12	10000	0.007	12	10000	0.000	12	10000	0.007
08:30 - 09:00	12	10000	0.007	12	10000	0.000	12	10000	0.007
09:00 - 09:30	12	10000	0.007	12	10000	0.000	12	10000	0.007
09:30 - 10:00	12	10000	0.002	12	10000	0.001	12	10000	0.003
10:00 - 10:30	12	10000	0.003	12	10000	0.002	12	10000	0.005
10:30 - 11:00	12	10000	0.002	12	10000	0.001	12	10000	0.003
11:00 - 11:30	12	10000	0.001	12	10000	0.002	12	10000	0.003
11:30 - 12:00	12	10000	0.002	12	10000	0.000	12	10000	0.002
12:00 - 12:30	12	10000	0.004	12	10000	0.004	12	10000	0.008
12:30 - 13:00	12	10000	0.004	12	10000	0.003	12	10000	0.007
13:00 - 13:30	12	10000	0.003	12	10000	0.004	12	10000	0.007
13:30 - 14:00	12	10000	0.007	12	10000	0.006	12	10000	0.013
14:00 - 14:30	12	10000	0.001	12	10000	0.006	12	10000	0.007
14:30 - 15:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
15:00 - 15:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
15:30 - 16:00	12	10000	0.000	12	10000	0.005	12	10000	0.005
16:00 - 16:30	12	10000	0.002	12	10000	0.002	12	10000	0.004
16:30 - 17:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
17:00 - 17:30	12	10000	0.003	12	10000	0.006	12	10000	0.009
17:30 - 18:00	12	10000	0.001	12	10000	0.004	12	10000	0.005
18:00 - 18:30	12	10000	0.000	12	10000	0.006	12	10000	0.006
18:30 - 19:00	12	10000	0.000	12	10000	0.004	12	10000	0.004
19:00 - 19:30	2	6051	0.000	2	6051	0.008	2	6051	0.008
19:30 - 20:00	2	6051	0.000	2	6051	0.008	2	6051	0.008
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00			0.001			0.070			0.1/0
TOTAL RATES:			0.091			0.078			0.169

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

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

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

		ARRIVALS		C	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
07:00 - 07:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
07:30 - 08:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
08:00 - 08:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
08:30 - 09:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
09:00 - 09:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
09:30 - 10:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
10:00 - 10:30	12	10000	0.001	12	10000	0.000	12	10000	0.001
10:30 - 11:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
11:00 - 11:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
11:30 - 12:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
12:00 - 12:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:30 - 13:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:00 - 13:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:30 - 14:00	12	10000	0.001	12	10000	0.000	12	10000	0.001
14:00 - 14:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:30 - 15:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
15:00 - 15:30	12	10000	0.000	12	10000	0.001	12	10000	0.001
15:30 - 16:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:00 - 16:30	12	10000	0.000	12	10000	0.001	12	10000	0.001
16:30 - 17:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:00 - 17:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:30 - 18:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
18:00 - 18:30	12	10000	0.000	12	10000	0.001	12	10000	0.001
18:30 - 19:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00			0.001			0.001			0.010
Total Rates:			0.006			0.006			0.012

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

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

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

	ARRIVALS		[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
07:00 - 07:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
07:30 - 08:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
08:00 - 08:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
08:30 - 09:00	12	10000	0.000	12	10000	0.001	12	10000	0.001
09:00 - 09:30	12	10000	0.006	12	10000	0.000	12	10000	0.006
09:30 - 10:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
10:00 - 10:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
10:30 - 11:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
11:00 - 11:30	12	10000	0.000	12	10000	0.002	12	10000	0.002
11:30 - 12:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:00 - 12:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
12:30 - 13:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:00 - 13:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
13:30 - 14:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:00 - 14:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
14:30 - 15:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
15:00 - 15:30	12	10000	0.000	12	10000	0.004	12	10000	0.004
15:30 - 16:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:00 - 16:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
16:30 - 17:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:00 - 17:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
17:30 - 18:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
18:00 - 18:30	12	10000	0.000	12	10000	0.000	12	10000	0.000
18:30 - 19:00	12	10000	0.000	12	10000	0.000	12	10000	0.000
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.006			0.007			0.013

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

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

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

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
06:00 - 06:30	2	6051	0.008	2	6051	0.000	2	6051	0.008
06:30 - 07:00	2	6051	0.017	2	6051	0.000	2	6051	0.017
07:00 - 07:30	12	10000	0.002	12	10000	0.000	12	10000	0.002
07:30 - 08:00	12	10000	0.002	12	10000	0.000	12	10000	0.002
08:00 - 08:30	12	10000	0.007	12	10000	0.000	12	10000	0.007
08:30 - 09:00	12	10000	0.007	12	10000	0.001	12	10000	0.008
09:00 - 09:30	12	10000	0.013	12	10000	0.000	12	10000	0.013
09:30 - 10:00	12	10000	0.003	12	10000	0.001	12	10000	0.004
10:00 - 10:30	12	10000	0.004	12	10000	0.002	12	10000	0.006
10:30 - 11:00	12	10000	0.002	12	10000	0.001	12	10000	0.003
11:00 - 11:30	12	10000	0.001	12	10000	0.004	12	10000	0.005
11:30 - 12:00	12	10000	0.003	12	10000	0.002	12	10000	0.005
12:00 - 12:30	12	10000	0.004	12	10000	0.004	12	10000	0.008
12:30 - 13:00	12	10000	0.004	12	10000	0.003	12	10000	0.007
13:00 - 13:30	12	10000	0.003	12	10000	0.004	12	10000	0.007
13:30 - 14:00	12	10000	0.007	12	10000	0.006	12	10000	0.013
14:00 - 14:30	12	10000	0.001	12	10000	0.006	12	10000	0.007
14:30 - 15:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
15:00 - 15:30	12	10000	0.002	12	10000	0.007	12	10000	0.009
15:30 - 16:00	12	10000	0.000	12	10000	0.005	12	10000	0.005
16:00 - 16:30	12	10000	0.002	12	10000	0.003	12	10000	0.005
16:30 - 17:00	12	10000	0.002	12	10000	0.002	12	10000	0.004
17:00 - 17:30	12	10000	0.003	12	10000	0.006	12	10000	0.009
17:30 - 18:00	12	10000	0.001	12	10000	0.005	12	10000	0.006
18:00 - 18:30	12	10000	0.000	12	10000	0.007	12	10000	0.007
18:30 - 19:00	12	10000	0.000	12	10000	0.004	12	10000	0.004
19:00 - 19:30	2	6051	0.000	2	6051	0.008	2	6051	0.008
19:30 - 20:00	2	6051	0.000	2	6051	0.008	2	6051	0.008
20:00 - 20:30	2	6051	0.000	2	6051	0.000	2	6051	0.000
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00						C			
Total Rates:			0.100			0.091			0.191

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

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

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

	ARRIVALS				DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 00:30										
00:30 - 01:00										
01:00 - 01:30										
01:30 - 02:00										
02:00 - 02:30										
02:30 - 03:00										
03:00 - 03:30										
03:30 - 04:00										
04:00 - 04:30										
04:30 - 05:00										
05:00 - 05:30	2	6051	0.041	2	6051	0.000	2	6051	0.041	
05:30 - 06:00	2	6051	0.058	2	6051	0.008	2	6051	0.066	
06:00 - 06:30	2	6051	0.099	2	6051	0.017	2	6051	0.116	
06:30 - 07:00	2	6051	0.198	2	6051	0.008	2	6051	0.206	
07:00 - 07:30	12	10000	0.135	12	10000	0.027	12	10000	0.162	
07:30 - 08:00	12	10000	0.239	12	10000	0.075	12	10000	0.314	
08:00 - 08:30	12	10000	0.324	12	10000	0.111	12	10000	0.435	
08:30 - 09:00	12	10000	0.302	12	10000	0.120	12	10000	0.422	
09:00 - 09:30	12	10000	0.249	12	10000	0.147	12	10000	0.396	
09:30 - 10:00	12	10000	0.209	12	10000	0.158	12	10000	0.367	
10:00 - 10:30	12	10000	0.205	12	10000	0.177	12	10000	0.382	
10:30 - 11:00	12	10000	0.172	12	10000	0.135	12	10000	0.307	
11:00 - 11:30	12	10000	0.167	12	10000	0.162	12	10000	0.329	
11:30 - 12:00	12	10000	0.169	12	10000	0.172	12	10000	0.341	
12:00 - 12:30	12	10000	0.204	12	10000	0.197	12	10000	0.401	
12:30 - 13:00	12	10000	0.145	12	10000	0.207	12	10000	0.352	
13:00 - 13:30	12	10000	0.207	12	10000	0.198	12	10000	0.405	
13:30 - 14:00	12	10000	0.206	12	10000	0.198	12	10000	0.404	
14:00 - 14:30	12	10000	0.161	12	10000	0.198	12	10000	0.359	
14:30 - 15:00	12	10000	0.209	12	10000	0.182	12	10000	0.391	
15:00 - 15:30	12	10000	0.134	12	10000	0.256	12	10000	0.390	
15:30 - 16:00	12	10000	0.191	12	10000	0.197	12	10000	0.388	
16:00 - 16:30	12	10000	0.259	12	10000	0.258	12	10000	0.517	
16:30 - 17:00	12	10000	0.221	12	10000	0.292	12	10000	0.513	
17:00 - 17:30	12	10000	0.159	12	10000	0.331	12	10000	0.490	
17:30 - 18:00	12	10000	0.153	12	10000	0.302	12	10000	0.455	
18:00 - 18:30	12	10000	0.061	12	10000	0.191	12	10000	0.252	
18:30 - 19:00	12	10000	0.044	12	10000	0.139	12	10000	0.183	
19:00 - 19:30	2	6051	0.017	2	6051	0.256	2	6051	0.273	
19:30 - 20:00	2	6051	0.025	2	6051	0.223	2	6051	0.248	
20:00 - 20:30	2	6051	0.000	2	6051	0.074	2	6051	0.074	
20:30 - 21:00	2	6051	0.000	2	6051	0.025	2	6051	0.025	
21:00 - 21:30										
21:30 - 22:00										
22:00 - 22:30										
22:30 - 23:00										
23:00 - 23:30										
23:30 - 24:00										
Total Rates:			4.963			5.041			10.004	
						5.0.1				

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

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

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

	ARRIVALS			[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 00:30										
00:30 - 01:00										
01:00 - 01:30										
01:30 - 02:00										
02:00 - 02:30										
02:30 - 03:00										
03:00 - 03:30										
03:30 - 04:00										
04:00 - 04:30										
04:30 - 05:00										
05:00 - 05:30	2	6051	0.025	2	6051	0.000	2	6051	0.025	
05:30 - 06:00	2	6051	0.033	2	6051	0.008	2	6051	0.041	
06:00 - 06:30	2	6051	0.041	2	6051	0.008	2	6051	0.049	
06:30 - 07:00	2	6051	0.083	2	6051	0.008	2	6051	0.091	
07:00 - 07:30	12	10000	0.028	12	10000	0.004	12	10000	0.032	
07:30 - 08:00	12	10000	0.057	12	10000	0.008	12	10000	0.065	
08:00 - 08:30	12	10000	0.096	12	10000	0.027	12	10000	0.123	
08:30 - 09:00	12	10000	0.088	12	10000	0.029	12	10000	0.117	
09:00 - 09:30	12	10000	0.067	12	10000	0.050	12	10000	0.117	
09:30 - 10:00	12	10000	0.053	12	10000	0.036	12	10000	0.089	
10:00 - 10:30	12	10000	0.055	12	10000	0.056	12	10000	0.111	
10:30 - 11:00	12	10000	0.037	12	10000	0.043	12	10000	0.080	
11:00 - 11:30	12	10000	0.045	12	10000	0.041	12	10000	0.086	
11:30 - 12:00	12	10000	0.047	12	10000	0.046	12	10000	0.093	
12:00 - 12:30	12	10000	0.051	12	10000	0.042	12	10000	0.093	
12:30 - 13:00	12	10000	0.039	12	10000	0.055	12	10000	0.094	
13:00 - 13:30	12	10000	0.064	12	10000	0.057	12	10000	0 121	
13:30 - 14:00	12	10000	0.052	12	10000	0.055	12	10000	0.107	
14:00 - 14:30	12	10000	0.042	12	10000	0.047	12	10000	0.089	
14:30 - 15:00	12	10000	0.050	12	10000	0.055	12	10000	0 105	
15:00 - 15:30	12	10000	0.037	12	10000	0.084	12	10000	0.121	
15:30 - 16:00	12	10000	0.044	12	10000	0.061	12	10000	0.105	
16:00 - 16:30	12	10000	0.088	12	10000	0.064	12	10000	0 152	
16:30 - 17:00	12	10000	0.077	12	10000	0.090	12	10000	0.162	
17:00 - 17:30	12	10000	0.064	12	10000	0.070	12	10000	0.166	
17:30 - 18:00	12	10000	0.067	12	10000	0.102	12	10000	0.160	
18:00 - 18:30	12	10000	0.007	12	10000	0.102	12	10000	0.098	
18:30 - 19:00	12	10000	0.022	12	10000	0.052	12	10000	0.074	
19:00 - 19:30	2	6051	0.022	2	6051	0.002	2	6051	0.074	
19:30 - 20:00	2	6051	0.008	2	6051	0.132	2	6051	0.140	
20:00 20:30	2	6051	0.000	2	6051	0.124	2	6051	0.132	
20:30 - 21:00	2	6051	0.000	2	6051	0.041	2	6051	0.041	
21.00 - 21.00	Z	0001	0.000	2	0031	0.017	2	0031	0.017	
21.00-21.00										
22.00 - 22.00										
22.00 - 22.30										
22.30 - 23.00										
23.00 - 23.30										
Total Patos:			1 400			1 6 1 1			2 110	
I Utal Rates.			1.499			1.011			3.110	

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

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

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

	ARRIVALS			[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 00:30										
00:30 - 01:00										
01:00 - 01:30										
01:30 - 02:00										
02:00 - 02:30										
02:30 - 03:00										
03:00 - 03:30										
03:30 - 04:00										
04:00 - 04:30										
04:30 - 05:00										
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000	
05:30 - 06:00	2	6051	0.017	2	6051	0.000	2	6051	0.017	
06:00 - 06:30	2	6051	0.017	2	6051	0.008	2	6051	0.025	
06:30 - 07:00	2	6051	0.050	2	6051	0.000	2	6051	0.050	
07:00 - 07:30	12	10000	0.044	12	10000	0.013	12	10000	0.057	
07:30 - 08:00	12	10000	0.065	12	10000	0.032	12	10000	0.097	
08:00 - 08:30	12	10000	0.044	12	10000	0.038	12	10000	0.082	
08:30 - 09:00	12	10000	0.046	12	10000	0.042	12	10000	0.088	
09:00 - 09:30	12	10000	0.042	12	10000	0.044	12	10000	0.086	
09:30 - 10:00	12	10000	0.049	12	10000	0.046	12	10000	0.095	
10:00 - 10:30	12	10000	0.045	12	10000	0.042	12	10000	0.087	
10:30 - 11:00	12	10000	0.051	12	10000	0.035	12	10000	0.086	
11:00 - 11:30	12	10000	0.043	12	10000	0.042	12	10000	0.085	
11:30 - 12:00	12	10000	0.042	12	10000	0.042	12	10000	0.084	
12:00 - 12:30	12	10000	0.050	12	10000	0.056	12	10000	0.106	
12:30 - 13:00	12	10000	0.039	12	10000	0.041	12	10000	0.080	
13:00 - 13:30	12	10000	0.041	12	10000	0.041	12	10000	0.082	
13:30 - 14:00	12	10000	0.049	12	10000	0.041	12	10000	0.090	
14:00 - 14:30	12	10000	0.038	12	10000	0.047	12	10000	0.085	
14:30 - 15:00	12	10000	0.048	12	10000	0.048	12	10000	0.096	
15:00 - 15:30	12	10000	0.032	12	10000	0.042	12	10000	0.074	
15:30 - 16:00	12	10000	0.039	12	10000	0.041	12	10000	0.080	
16:00 - 16:30	12	10000	0.042	12	10000	0.047	12	10000	0.089	
16:30 - 17:00	12	10000	0.030	12	10000	0.047	12	10000	0.077	
17:00 - 17:30	12	10000	0.017	12	10000	0.032	12	10000	0.049	
17:30 - 18:00	12	10000	0.014	12	10000	0.027	12	10000	0.041	
18:00 - 18:30	12	10000	0.003	12	10000	0.021	12	10000	0.024	
18:30 - 19:00	12	10000	0.002	12	10000	0.007	12	10000	0.009	
19:00 - 19:30	2	6051	0.000	2	6051	0.033	2	6051	0.033	
19:30 - 20:00	2	6051	0.000	2	6051	0.017	2	6051	0.017	
20:00 - 20:30	2	6051	0.000	2	6051	0.025	2	6051	0.025	
20:30 - 21:00	2	6051	0.000	2	6051	0.008	2	6051	0.008	
21:00 - 21:30										
21:30 - 22:00										
22:00 - 22:30										
22:30 - 23:00										
23:00 - 23:30										
23:30 - 24:00										
Total Rates:			0.999			1.005			2.004	

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

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

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

	ARRIVALS			[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 00:30										
00:30 - 01:00										
01:00 - 01:30										
01:30 - 02:00										
02:00 - 02:30										
02:30 - 03:00									1	
03:00 - 03:30										
03:30 - 04:00										
04:00 - 04:30									1	
04:30 - 05:00										
05:00 - 05:30	2	6051	0.000	2	6051	0.000	2	6051	0.000	
05:30 - 06:00	2	6051	0.000	2	6051	0.000	2	6051	0.000	
06:00 - 06:30	2	6051	0.000	2	6051	0.000	2	6051	0.000	
06:30 - 07:00	2	6051	0.000	2	6051	0.000	2	6051	0.000	
07:00 - 07:30	12	10000	0.000	12	10000	0.000	12	10000	0.000	
07:30 - 08:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
08:00 - 08:30	12	10000	0.002	12	10000	0.000	12	10000	0.002	
08:30 - 09:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
09:00 - 09:30	12	10000	0.001	12	10000	0.001	12	10000	0.002	
09:30 - 10:00	12	10000	0.000	12	10000	0.001	12	10000	0.001	
10:00 - 10:30	12	10000	0.000	12	10000	0.000	12	10000	0.000	
10:30 - 11:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
11:00 - 11:30	12	10000	0.000	12	10000	0.000	12	10000	0.000	
11:30 - 12:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
12:00 - 12:30	12	10000	0.000	12	10000	0.001	12	10000	0.001	
12:30 - 13:00	12	10000	0.001	12	10000	0.001	12	10000	0.002	
13:00 - 13:30	12	10000	0.001	12	10000	0.000	12	10000	0.001	
13:30 - 14:00	12	10000	0.000	12	10000	0.002	12	10000	0.002	
14:00 - 14:30	12	10000	0.000	12	10000	0.000	12	10000	0.000	
14:30 - 15:00	12	10000	0.000	12	10000	0.001	12	10000	0.001	
15:00 - 15:30	12	10000	0.000	12	10000	0.000	12	10000	0.000	
15:30 - 16:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
16:00 - 16:30	12	10000	0.001	12	10000	0.002	12	10000	0.003	
16:30 - 17:00	12	10000	0.001	12	10000	0.001	12	10000	0.002	
17:00 - 17:30	12	10000	0.000	12	10000	0.002	12	10000	0.002	
17:30 - 18:00	12	10000	0.001	12	10000	0.000	12	10000	0.001	
18:00 - 18:30	12	10000	0.000	12	10000	0.002	12	10000	0.002	
18:30 - 19:00	12	10000	0.000	12	10000	0.000	12	10000	0.000	
19:00 - 19:30	2	6051	0.000	2	6051	0.000	2	6051	0.000	
19:30 - 20:00	2	6051	0.000	2	6051	0.000	2	6051	0.000	
20:00 - 20:30	2	6051	0,000	2	6051	0,000	2	6051	0.000	
20:30 - 21:00	2	6051	0.000	2	6051	0.000	2	6051	0.000	
21:00 - 21:30	2		3.000	2	0001	5.000	2	0001		
21:30 - 22:00									·	
22.00 - 22.00										
22:30 - 23:00										
23.00 - 23.30										
23 30 - 24 00										
Total Rates			0.008			0.014			0.022	
Total Nates.			0.000			0.014			0.022	

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

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

# TRICS 7.6.4 Trip Rate F Number of dwellings

# TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: VEHICLES

			ARRIVALS			DEPARTU	RES		TOTALS
No.		Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0.065	23	95	0.28	2	.3 95	0.345
08:00-09:0	23	95	0.11	23	95	0.343	2	.3 95	0.453
09:00-10:C	23	95	0.155	23	95	0.172	2	.3 95	0.327
10:00-11:C	23	95	0.136	23	95	0.185	2	.3 95	0.321
11:00-12:0	23	95	0.14	23	95	0.145	2	.3 95	0.285
12:00-13:0	23	95	0.161	23	95	0.144	2	.3 95	0.305
13:00-14:C	23	95	0.174	23	95	0.164	2	.3 95	0.338
14:00-15:C	23	95	0.154	23	95	0.193	2	.3 95	0.347
15:00-16:C	23	95	0.247	23	95	0.159	2	.3 95	0.406
16:00-17:C	23	95	0.252	23	95	0.147	2	.3 95	0.399
17:00-18:C	23	95	0.304	23	95	0.144	2	.3 95	0.448
18:00-19:C	23	95	0.259	23	95	0.151	2	.3 95	0.41
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.157			2.227			4.384
TRIP RATE for Lan	d Us	se 03 - RES	IDENTIAL/A	- HOUSES	PRIVATELY	OWNED			
Calculation Factor	:	1 DWELLS							
Count Type: TAXIS	5								
			ARRIVALS			DEPARTU	RES		TOTALS
No.		Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00				-					
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:C	23	95	0.003	23	95	0.003	23	95	0.006
08:00-09:C	23	95	0.002	23	95	0.002	23	95	0.004
09:00-10:C	23	95	0.004	23	95	0.003	23	95	0.007
10:00-11:C	23	95	0.002	23	95	0.002	23	95	0.004
11:00-12:C	23	95	0.003	23	95	0.002	23	95	0.005
12:00-13:C	23	95	0.002	23	95	0.002	23	95	0.004
13:00-14:C	23	95	0.002	23	95	0.003	23	95	0.005
14:00-15:C	23	95	0.003	23	95	0.003	23	95	0.006
15:00-16:C	23	95	0.006	23	95	0.005	23	95	0.011
16:00-17:C	23	95	0.002	23	95	0.003	23	95	0.005
17:00-18:C	23	95	0.002	23	95	0.002	23	95	0.004
18:00-19:C	23	95	0.002	23	95	0.002	23	95	0.004
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.033			0.032			0.065

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: OGVS

			ARRIVALS			DEPARTU	RES		TOTALS
No.		Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0.002	23	8 95	0.001	23	95	0.003
08:00-09:C	23	95	0.001	23	95	0.001	23	95	0.002
09:00-10:C	23	95	0.003	23	95	0.003	23	95	0.006
10:00-11:C	23	95	0.003	23	95	0.003	23	95	0.006
11:00-12:C	23	95	0.002	23	95	0.003	23	95	0.005
12:00-13:C	23	95	0	23	95	0.001	23	95	0.001
13:00-14:C	23	95	0.002	23	95	0.001	23	95	0.003
14:00-15:C	23	95	0.003	23	95	0.004	23	95	0.007
15:00-16:C	23	95	0.003	23	95	0.003	23	95	0.006
16:00-17:C	23	95	0.001	23	95	0.001	23	95	0.002
17:00-18:C	23	95	0.002	23	95	0.001	23	95	0.003
18:00-19:C	23	95	0.001	23	95	0.001	23	95	0.002
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									

23:00-24:00 Daily Trip Rates:

0.023

0.046

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: PSVS

ARRIVA			ARRIVALS	RIVALS DEPARTURES					TOTALS
No.		Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0	23	95	0	23	95	0
08:00-09:C	23	95	0	23	95	0	23	95	0
09:00-10:C	23	95	0	23	95	0	23	95	0
10:00-11:C	23	95	0	23	95	0	23	95	0
11:00-12:C	23	95	0.001	23	95	0.001	23	95	0.002
12:00-13:C	23	95	0	23	95	0	23	95	0
13:00-14:C	23	95	0	23	95	0	23	95	0
14:00-15:C	23	95	0	23	95	0	23	95	0
15:00-16:C	23	95	0	23	95	0	23	95	0
16:00-17:C	23	95	0	23	95	0	23	95	0
17:00-18:C	23	95	0	23	95	0	23	95	0
18:00-19:C	23	95	0	23	95	0	23	95	0
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.001			0.001			0.002
TRID PATE for Lan	dua								
Calculation Factor	u 0:			(-11003L3	FNIVAILLI	OWNED			
	וכדכו	IDVVLLLJ							
count type. erel	1313								
			ARRIVALS			DEPARTUR	RES		TOTALS
No.		Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0.006	23	95	0.012	23	95	0.018
08:00-09:C	23	95	0.01	23	95	0.022	23	95	0.032
09:00-10:C	23	95	0.001	23	95	0.007	23	95	0.008
10:00-11:C	23	95	0.005	23	95	0.007	23	95	0.012
11:00-12:C	23	95	0.005	23	95	0.005	23	95	0.01
12:00-13:C	23	95	0.006	23	95	0.006	23	95	0.012
13:00-14:C	23	95	0.004	23	95	0.001	23	95	0.005
14:00-15:C	23	95	0.005	23	95	0.004	23	95	0.009
15:00-16:C	23	95	0.013	23	95	0.007	23	95	0.02
16:00-17:C	23	95	0.011	23	95	0.009	23	95	0.02
17:00-18:C	23	95	0.02	23	95	0.009	23	95	0.029
18:00-19:C	23	95	0.014	23	95	0.01	23	95	0.024
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.1			0.099			0.199

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS

Count Type: VEHICLE OCCUPANTS

		ARRIVALS			DEPARTU	TOTALS			
No.	A	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days	C	OWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0.075	23	3 95	5 0.385	5 23	3 95	0.46
08:00-09:C	23	95	0.137	23	3 95	5 0.541	. 23	3 95	0.678
09:00-10:C	23	95	0.195	23	3 95	5 0.241	. 23	3 95	0.436
10:00-11:C	23	95	0.174	23	3 95	5 0.256	5 23	3 95	0.43
11:00-12:C	23	95	0.188	23	3 95	5 0.195	5 23	3 95	0.383
12:00-13:C	23	95	0.21	23	3 95	5 0.191	. 23	3 95	0.401
13:00-14:C	23	95	0.243	23	3 95	5 0.223	23	3 95	0.466
14:00-15:C	23	95	0.205	23	3 95	5 0.262	2 23	3 95	0.467
15:00-16:C	23	95	0.416	23	3 95	5 0.222	2 23	3 95	0.638
16:00-17:C	23	95	0.395	23	3 95	5 0.228	3 23	3 95	0.623
17:00-18:C	23	95	0.437	23	3 95	5 0.2	2 23	3 95	0.637
18:00-19:C	23	95	0.374	23	3 95	5 0.218	3 23	3 95	0.592
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									

Daily Trip Rates:

# TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: PEDESTRIANS

			ARRIVALS			DEPARTURES			TOTALS		
No.		Ave.	Trip	No.		Ave.	Trip	No.		Ave.	Trip
Time Rang Days		DWELLS	Rate	Days	I	DWELLS	Rate	Days		DWELLS	Rate
00:00-01:00											
01:00-02:00											
02:00-03:00											
03:00-04:00											
04:00-05:00											
05:00-06:00											
06:00-07:00											
07:00-08:0	23	95	0.019	Ĩ	23	95	0.052		23	95	0.071
08:00-09:0	23	95	0.051	2	23	95	0.132		23	95	0.183
09:00-10:C	23	95	0.057	2	23	95	0.06		23	95	0.117
10:00-11:0	23	95	0.054	2	23	95	0.058		23	95	0.112
11:00-12:0	23	95	0.043	2	23	95	0.042		23	95	0.085
12:00-13:C	23	95	0.055	2	23	95	0.043		23	95	0.098
13:00-14:0	23	95	0.04	2	23	95	0.045		23	95	0.085
14:00-15:C	23	95	0.04	2	23	95	0.047		23	95	0.087
15:00-16:C	23	95	0.116	-	23	95	0.074		23	95	0.19
16:00-17:C	23	95	0.085	-	23	95	0.054		23	95	0.139
17:00-18:0	23	95	0.079	2	23	95	0.035		23	95	0.114
18:00-19:0	23	95	0.048	2	23	95	0.044		23	95	0.092
19:00-20:00											
20:00-21:00											
21:00-22:00											
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			0.687				0.686				1.373
TRIP RATE for Lan Calculation Factor	d Us ::	se 03 - RES 1 DWELLS	IDENTIAL/A	- HOUSE	ES P	RIVATELY	OWNED				

Count Type: BUS/TRAM PASSENGERS

			ARRIVAL	ARRIVALS			DEPARTURES			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Rang	g Days	DWELLS	S Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00-01:0	00									
01:00-02:0	00									
02:00-03:0	00									
03:00-04:0	00									
04:00-05:0	00									
05:00-06:0	00									
06:00-07:0	00									
07:00-08:0	2	23	95	0	23 9	5 0.0	15	23 9	5 0.015	

09:00-10:C23950.00323950.009239510:00-11:C23950.00623950.006239511:00-12:C23950.00523950.007239512:00-13:C23950.00723950.008239513:00-14:C23950.00723950.003239514:00-15:C23950.00723950.005239515:00-16:C23950.01223950.004239516:00-17:C23950.01223950.004239517:00-18:C23950.01423950.001239519:00-20:0023950.01423950.001239521:00-23:0023:00-24:0023:00-24:0023:00-24:0023:00-24:0023:00-24:0023:00-24:00	23 95	08:00-09:C	0.001	23	95	0.026	23	95	0.027
10:00-11:C23950.00623950.006239511:00-12:C23950.00523950.007239512:00-13:C23950.00723950.008239513:00-14:C23950.00423950.003239514:00-15:C23950.00723950.005239515:00-16:C23950.01923950.007239516:00-17:C23950.01223950.004239517:00-18:C23950.01423950.001239518:00-19:C23950.01423950.001239519:00-20:0021:00-22:0022:00-23:0023:00-24:0023:00-24:0023:00-24:0023:00-24:00	23 95	09:00-10:C	0.003	23	95	0.009	23	95	0.012
11:00-12:C       23       95       0.005       23       95       0.007       23       95         12:00-13:C       23       95       0.007       23       95       0.008       23       95         13:00-14:C       23       95       0.004       23       95       0.003       23       95         14:00-15:C       23       95       0.007       23       95       0.005       23       95         15:00-16:C       23       95       0.019       23       95       0.007       23       95         16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.012       23       95       0.001       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       21:00-22:00       22:00-23:00       22:00-23:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-23:00	23 95	10:00-11:C	0.006	23	95	0.006	23	95	0.012
12:00-13:C       23       95       0.007       23       95       0.008       23       95         13:00-14:C       23       95       0.004       23       95       0.003       23       95         14:00-15:C       23       95       0.007       23       95       0.005       23       95         15:00-16:C       23       95       0.019       23       95       0.007       23       95         16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.012       23       95       0.003       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       23:00-21:00       23:00-21:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-23:00       23:00-24:00       23:00-24:00       23:00-24:00       23:00-23:00       23	23 95	11:00-12:C	0.005	23	95	0.007	23	95	0.012
13:00-14:C       23       95       0.003       23       95         14:00-15:C       23       95       0.007       23       95       0.005       23       95         15:00-16:C       23       95       0.019       23       95       0.007       23       95         16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.012       23       95       0.003       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       23       95       0.014       23       95       0.001       23       95         21:00-22:00       22:00-23:00       23:00-24:00       23:0	23 95	12:00-13:C	0.007	23	95	0.008	23	95	0.015
14:00-15:C       23       95       0.007       23       95       0.005       23       95         15:00-16:C       23       95       0.019       23       95       0.007       23       95         16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.012       23       95       0.003       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       23       95       0.014       23       95       0.001       23       95         20:00-21:00       23:00-22:00       23:00-23:00       23:00-24:00       23:00-23:00       23:00-24:00       23:00-24:00       23:00-2	23 95	13:00-14:C	0.004	23	95	0.003	23	95	0.007
15:00-16:C       23       95       0.019       23       95       0.007       23       95         16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.01       23       95       0.003       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       23:00-21:00       23:00-23:00       23:00-24:00	23 95	14:00-15:C	0.007	23	95	0.005	23	95	0.012
16:00-17:C       23       95       0.012       23       95       0.004       23       95         17:00-18:C       23       95       0.01       23       95       0.003       23       95         18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       23:00-21:00       23:00-23:00       23:00-24:00       4       <	23 95	15:00-16:C	0.019	23	95	0.007	23	95	0.026
17:00-18:C 23 95 0.01 23 95 0.003 23 95 18:00-19:C 23 95 0.014 23 95 0.001 23 95 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00	23 95	16:00-17:C	0.012	23	95	0.004	23	95	0.016
18:00-19:C       23       95       0.014       23       95       0.001       23       95         19:00-20:00       20:00-21:00       21:00-22:00       22:00-23:00       23:00-24:00       4<	23 95	17:00-18:C	0.01	23	95	0.003	23	95	0.013
19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00	23 95	18:00-19:C	0.014	23	95	0.001	23	95	0.015
20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00		19:00-20:00							
21:00-22:00 22:00-23:00 23:00-24:00		20:00-21:00							
22:00-23:00 23:00-24:00		21:00-22:00							
23:00-24:00		22:00-23:00							
		23:00-24:00							
Daily Trip Rates: 0.088 0.094		Daily Trip Rates:	0.088			0.094			0.182

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: TOTAL RAIL PASSENGERS

			ARRIVALS			DEPARTUR	RES		TOTALS
No.	A	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Rang Days	[	OWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00-01:00									
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:C	23	95	0.002	23	95	0.008	23	95	0.01
08:00-09:C	23	95	0	23	95	0.01	23	95	0.01
09:00-10:C	23	95	0	23	95	0.004	23	95	0.004
10:00-11:C	23	95	0	23	95	0.001	23	95	0.001
11:00-12:C	23	95	0	23	95	0	23	95	0
12:00-13:C	23	95	0	23	95	0.003	23	95	0.003
13:00-14:C	23	95	0.001	23	95	0.001	23	95	0.002
14:00-15:C	23	95	0.001	23	95	0.001	23	95	0.002
15:00-16:C	23	95	0.001	23	95	0	23	95	0.001
16:00-17:C	23	95	0.005	23	95	0	23	95	0.005
17:00-18:C	23	95	0.005	23	95	0.001	23	95	0.006
18:00-19:C	23	95	0.005	23	95	0.001	23	95	0.006
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.02			0.03			0.05

# TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: COACH PASSENGERS

			ARRIVALS	5			DEPA	RTURES			TOTALS	5
No.	Д	ve.	Trip	No.		Ave.	Trip	No.		Ave.	Trip	
Time Rang Days	D	WELLS	Rate	Days		DWELLS	Rate	Days		DWELLS	Rate	
00:00-01:00												
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:C	23	95	(	C	23	9	5	0	23	95		0
08:00-09:C	23	95	(	C	23	9	5	0	23	95		0
09:00-10:C	23	95	(	C	23	9	5	0	23	95		0
10:00-11:C	23	95	(	C	23	9	5	0	23	95		0
11:00-12:C	23	95	(	C	23	9	5	0	23	95		0
12:00-13:C	23	95	(	C	23	9	5	0	23	95		0
13:00-14:C	23	95	(	C	23	9	5	0	23	95		0
14:00-15:C	23	95	(	C	23	9	5	0	23	95		0
15:00-16:C	23	95	(	C	23	9	5	0	23	95		0
16:00-17:C	23	95	(	C	23	9	5	0	23	95		0
17:00-18:C	23	95	(	C	23	9	5	0	23	95		0
18:00-19:C	23	95	(	C	23	9	5	0	23	95		0
19:00-20:00												
20:00-21:00												
21:00-22:00												
22:00-23:00												
23:00-24:00												
Daily Trip Rates:			(	C				0				0
-												

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS Count Type: PUBLIC TRANSPORT USERS

			ARR	IVALS				DEPARTUR	RES		ТС	TALS
	No.	Ave.	Trip		No.	Ave.		Trip	No.	Ave.	Tri	p
Time Rang	Days	DWELLS	Rate	9	Days	DWELL	.S	Rate	Days	DWELL	S Ra	te
00:00-01:0	00											
01:00-02:0	00											
02:00-03:0	00											
03:00-04:0	00											
04:00-05:0	00											
05:00-06:0	00											
06:00-07:0	00											
07:00-08:0	2	23 9	95	0.002	2	3	95	0.023	Ĩ	23	95	0.025
08:00-09:0	2	23 9	95	0.001	2	3	95	0.036		23	95	0.037

09:00-10:C	23	95	0.003	23	95	0.013	23	95	0.016
10:00-11:C	23	95	0.006	23	95	0.008	23	95	0.014
11:00-12:C	23	95	0.006	23	95	0.007	23	95	0.013
12:00-13:C	23	95	0.008	23	95	0.011	23	95	0.019
13:00-14:C	23	95	0.005	23	95	0.004	23	95	0.009
14:00-15:C	23	95	0.009	23	95	0.006	23	95	0.015
15:00-16:C	23	95	0.02	23	95	0.007	23	95	0.027
16:00-17:C	23	95	0.017	23	95	0.005	23	95	0.022
17:00-18:C	23	95	0.015	23	95	0.004	23	95	0.019
18:00-19:C	23	95	0.018	23	95	0.002	23	95	0.02
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.11			0.126			0.236

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED Calculation Factor: 1 DWELLS

Count Type: TOTAL PEOPLE

			ARRIVALS				DEPARTU	RES			TOTALS
No.		Ave.	Trip	No.	Ave.		Trip	No.	Ave.		Trip
Time Rang Days		DWELLS	Rate	Days	DWELI	S	Rate	Days	DWELL	S	Rate
00:00-01:00											
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:C	23	95	0.103		23	95	0.474		23	95	0.577
08:00-09:C	23	95	0.199		23	95	0.731	:	23	95	0.93
09:00-10:C	23	95	0.256		23	95	0.321	:	23	95	0.577
10:00-11:C	23	95	0.239		23	95	0.329	:	23	95	0.568
11:00-12:C	23	95	0.242		23	95	0.249	:	23	95	0.491
12:00-13:C	23	95	0.278		23	95	0.252	:	23	95	0.53
13:00-14:C	23	95	0.293		23	95	0.274		23	95	0.567
14:00-15:C	23	95	0.259		23	95	0.318		23	95	0.577
15:00-16:C	23	95	0.565		23	95	0.31	:	23	95	0.875
16:00-17:C	23	95	0.507		23	95	0.296		23	95	0.803
17:00-18:C	23	95	0.551		23	95	0.248		23	95	0.799
18:00-19:C	23	95	0.455		23	95	0.274		23	95	0.729
19:00-20:00											
20:00-21:00											
21:00-22:00											
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			3.947				4.076				8.023

# **Appendix G**

# JUNCTION MODEL OUTPUTS

CONFIDENTIAL

# Full Input Data And Results Full Input Data And Results

## User and Project Details

Project:	Holmer Industrial Estate Transport Assessment
Title:	
Location:	Holmer Industrial Estate, Hereford
Additional detail:	
File name:	Holmer Industrial Estate Dev Access.lsg3x
Author:	
Company:	
Address:	

# Network Layout Diagram



# Phase Diagram



# Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
А	Traffic		7	7
В	Traffic		7	7
С	Pedestrian		6	6

# Phase Intergreens Matrix



# Phases in Stage

Stage No.	Phases in Stage
1	А
2	В
3	С

# Full Input Data And Results



## **Phase Delays**

Term. Stage	Start Stage	Phase	Туре	Value	Cont value
	There are no	Phase D	elays d	efined	

# Prohibited Stage Change

		To S	Stage	e
		1	2	3
From	1		14	10
Stage	2	14		7
	3	10	10	

# Full Input Data And Results Give-Way Lane Input Data

Junction: Holmer Industrial E	Estate Site Ac	cess									
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (College Road North (JCT entry))	9/1 (Right)	850	0	8/1	1.09	To 4/1 (Ahead)	-	-	-	-	-
	1/1 (Dight)	600	0	2/1	1.09	To 7/1 (Ahead) To 9/1 (Right)					
6/1 (Dev Access Road (Entry))	4/T (Right)	600	0	8/1	1.09	To 4/1 (Ahead) To 5/1 (Right)					
	7/1 (Left)	715	0	2/1	1.09	To 7/1 (Ahead)					
	9/1 (Ahead)		0	2/1	1.09	To 7/1 (Ahead) To 9/1 (Right)		-	-	-	-
		600		10/1	1.09	To 7/1 (Right)					
				8/1	1.09	To 4/1 (Ahead) To 5/1 (Right)					
8/1 (College Road South (JCT Entry))	5/1 (Right)	850	0	2/1	1.09	To 7/1 (Ahead)	-	-	-	-	-
	4/1 (Left)	715	0	8/1	1.09	To 4/1 (Ahead)					
				2/1	1.09	All	-				
	5/1	600	0	6/1	1.09	To 4/1 (Right)					
10/1 (Former Pub (JCT Entry)) <sup>—</sup>	(Ahead)			8/1	1.09	To 4/1 (Ahead) To 5/1 (Right)	_	_	_	_	_
				2/1	1.09	To 7/1 (Ahead) To 9/1 (Right)					
	7/1 (Right)	600	0	6/1	1.09	All					
				8/1	1.09	To 4/1 (Ahead) To 5/1 (Right)					

# Full Input Data And Results <u>Lane Input Data</u>

Junction: Holmer Industrial Estate Site Access												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (College Road (North of Bridge) Entry)	U	A	2	3	60.0	User	1800	-	-	-	-	-
2/1 (College Road North (JCT entry))	ο		2	3	3.7	User	1800	-	-	-	-	-
3/1 (College Road (North of Bridge) Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (College Road North (JCT exit))	U	В	2	3	3.5	User	1800	-	-	-	-	-
5/1 (Dev Access Road (Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Dev Access Road (Entry))	ο		2	3	60.0	User	1800	-	-	-	-	-
7/1 (College Road South (JCT Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (College Road South (JCT Entry))	ο		2	3	60.0	User	1800	-	-	-	-	-
9/1 (Former Pub (JCT Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Former Pub (JCT Entry))	0		2	3	60.0	User	1800	-	-	-	-	-

# Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2020 Without Dev AM'	08:00	09:00	01:00	
2: '2020 Without Dev PM'	17:00	18:00	01:00	
3: '2025 Without Dev AM'	08:00	09:00	01:00	
4: '2025 Without Dev PM'	17:00	18:00	01:00	
5: '2025 With Dev AM'	08:00	09:00	01:00	
6: '2025 With Dev PM'	17:00	18:00	01:00	

## Full Input Data And Results Plan 1') Traffic Flows, Desired Desired Flow :

	Destination					
Origin		А	В	С	D	Tot.
	А	0	3	446	0	449
	В	2	0	0	0	2
	С	175	11	0	0	186
	D	4	0	4	0	8
	Tot.	181	14	450	0	645

# Traffic Lane Flows

Lane	Scenario 1: 2020 Without Development - AM Peak Hour					
Junction: Holmer Industrial Estate Site Access						
1/1	449					
2/1	449					
3/1	181					
4/1	181					
5/1	14					
6/1	2					
7/1	450					
8/1	186					
9/1	0					
10/1	8					
#### Lane Saturation Flows

Junction: Holmer Industrial Estate Site Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	т	This lane uses a directly entered Saturation Flow					1800	1800
2/1 (College Road North (JCT entry) Lane 1)	т	This lane uses a directly entered Saturation Flow 1800 1800						1800
3/1 (College Road (North of Bridge) Exit Lane 1)		Infinite Saturation Flow				Inf	Inf	
4/1 (College Road North (JCT exit) Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1800	1800
5/1 (Dev Access Road (Exit) Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (College Road South (JCT Entry) Lane 1)	Т	This lane uses a directly entered Saturation Flow				1800	1800	
9/1 (Former Pub (JCT Exit) Lane 1)		Infinite Saturation Flow Inf Inf				Inf		
10/1 (Former Pub (JCT Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800

# Scenario 2: '2020 Without Development - PM Peak Hour' (FG2: '2020 Without Dev PM', Plan 1: 'Network Control Plan 1') Traffic Flows, Desired

Desired Flow :

	Destination						
		А	В	С	D	Tot.	
	А	0	3	246	3	252	
Origin	В	11	0	0	21	32	
Ongin	С	143	13	0	6	162	
	D	1	0	0	0	1	
	Tot.	155	16	246	30	447	

# Traffic Lane Flows

Lane	Scenario 2: 2020 Without Development - PM Peak Hour							
Junction: Holmer Industrial Estate Site Acces								
1/1	252							
2/1	252							
3/1	155							
4/1	155							
5/1	16							
6/1	32							
7/1	246							
8/1	162							
9/1	30							
10/1	1							

# Lane Saturation Flows

Junction: Holmer Industrial Estate Site Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	Т	This lane uses a directly entered Saturation Flow					1800	1800
2/1 (College Road North (JCT entry) Lane 1)	T	his lane use	es a directly	entered Sa	aturation F	low	1800	1800
3/1 (College Road (North of Bridge) Exit Lane 1)		Infinite Saturation Flow					Inf	Inf
4/1 (College Road North (JCT exit) Lane 1)	Т	This lane uses a directly entered Saturation Flow				1800	1800	
5/1 (Dev Access Road (Exit) Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	entered Sa	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf
8/1 (College Road South (JCT Entry) Lane 1)	Т	This lane uses a directly entered Saturation Flow				1800	1800	
9/1 (Former Pub (JCT Exit) Lane 1)		Infinite Saturation Flow Inf Inf				Inf		
10/1 (Former Pub (JCT Entry) Lane 1)	T	his lane use	es a directly	entered Sa	aturation F	low	1800	1800

# Scenario 3: '2025 Without Development - AM Peak Hour' (FG3: '2025 Without Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

	Destination								
		А	В	С	D	Tot.			
	А	0	3	462	0	465			
Origin	В	2	0	0	0	2			
Ongin	С	181	11	0	0	192			
	D	4	0	4	0	8			
	Tot.	187	14	466	0	667			

## Traffic Lane Flows

Lane	Scenario 3: 2025 Without Development - AM Peak Hour							
Junction: Holmer Industrial Estate Site Access								
1/1	465							
2/1	465							
3/1	187							
4/1	187							
5/1	14							
6/1	2							
7/1	466							
8/1	192							
9/1	0							
10/1	8							

#### Lane Saturation Flows

Junction: Holmer Industrial Estate Site Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	т	This lane uses a directly entered Saturation Flow					1800	1800
2/1 (College Road North (JCT entry) Lane 1)	т	This lane uses a directly entered Saturation Flow 1800 1800						1800
3/1 (College Road (North of Bridge) Exit Lane 1)		Infinite Saturation Flow				Inf	Inf	
4/1 (College Road North (JCT exit) Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1800	1800
5/1 (Dev Access Road (Exit) Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
8/1 (College Road South (JCT Entry) Lane 1)	Т	This lane uses a directly entered Saturation Flow				1800	1800	
9/1 (Former Pub (JCT Exit) Lane 1)		Infinite Saturation Flow Inf Inf				Inf		
10/1 (Former Pub (JCT Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800

# Scenario 4: '2025 Without Development - PM Peak Hour' (FG4: '2025 Without Dev PM', Plan 1: 'Network Control Plan 1') Traffic Flows, Desired

Desired Flow :

	Destination						
		А	В	С	D	Tot.	
	А	0	3	255	3	261	
Origin	В	11	0	0	22	33	
Ongin	С	148	13	0	6	167	
	D	1	0	0	0	1	
	Tot.	160	16	255	31	462	

# **Traffic Lane Flows**

Lane	Scenario 4: 2025 Without Development - PM Peak Hour							
Junction: Holmer Industrial Estate Site Acces								
1/1	261							
2/1	261							
3/1	160							
4/1	160							
5/1	16							
6/1	33							
7/1	255							
8/1	167							
9/1	31							
10/1	1							

# Lane Saturation Flows

Junction: Holmer Industrial Estate Site Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	т	This lane uses a directly entered Saturation Flow					1800	1800
2/1 (College Road North (JCT entry) Lane 1)	т	This lane uses a directly entered Saturation Flow					1800	1800
3/1 (College Road (North of Bridge) Exit Lane 1)		Infinite Saturation Flow					Inf	Inf
4/1 (College Road North (JCT exit) Lane 1)	Т	This lane uses a directly entered Saturation Flow				1800	1800	
5/1 (Dev Access Road (Exit) Lane 1)		Infinite Saturation Flow				Inf	Inf	
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	/ entered S	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)			Infinite Satu	uration Flov	w		Inf	Inf
8/1 (College Road South (JCT Entry) Lane 1)	т	This lane uses a directly entered Saturation Flow			1800	1800		
9/1 (Former Pub (JCT Exit) Lane 1)			Infinite Sati	uration Flov	w		Inf	Inf
10/1 (Former Pub (JCT Entry) Lane 1)	Т	his lane us	es a directly	/ entered S	aturation F	-low	1800	1800

Scenario 5: '2025 With Development - AM Peak Hour' (FG5: '2025 With Dev AM', Plan 1: 'Network Control Plan 1') Traffic Flows, Desired Desired Flow :

	Destination							
		А	В	С	D	Tot.		
	А	0	7	462	0	469		
Oninin	В	14	0	0	29	43		
Origin	С	181	21	0	0	202		
	D	4	0	4	0	8		
	Tot.	199	28	466	29	722		

# Traffic Lane Flows

Lane	Scenario 5: 2025 With Development - AM Peak Hour
Junction: Holi	mer Industrial Estate Site Access
1/1	469
2/1	469
3/1	199
4/1	199
5/1	28
6/1	43
7/1	466
8/1	202
9/1	29
10/1	8

#### Lane Saturation Flows

Junction: Holmer Industrial Estate Sit	e Acces	s						
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
2/1 (College Road North (JCT entry) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (College Road (North of Bridge) Exit Lane 1)	3/1 PRoad (North of Bridge) Exit Infinite Saturation Flow Lane 1)						Inf	Inf
4/1 (College Road North (JCT exit) Lane 1)	xit) Lane 1) This lane uses a directly entered Saturation Flow					1800	1800	
5/1 (Dev Access Road (Exit) Lane 1)			Infinite Satu	uration Flov	N		Inf	Inf
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)	) Lane Infinite Saturation Flow					Inf	Inf	
8/1 (College Road South (JCT Entry) Lane 1)	Т	This lane uses a directly entered Saturation Flow					1800	1800
9/1 (Former Pub (JCT Exit) Lane 1)	Exit) Lane 1) Infinite Saturation Flow						Inf	Inf
10/1 (Former Pub (JCT Entry) Lane 1)	Т	his lane use	es a directly	entered S	aturation F	low	1800	1800

# Scenario 6: '2025 With Development - PM Peak Hour' (FG6: '2025 With Dev PM', Plan 1: 'Network Control Plan 1') Traffic Flows, Desired Desired Flow :

		Destination										
		А	В	С	D	Tot.						
	А	0	17	255	3	275						
Origin	В	18	0	0	33	51						
Ongin	С	148	37	0	6	191						
	D	1	0	0	0	1						
	Tot.	167	54	255	42	518						

# Traffic Lane Flows

Lane	Scenario 6: 2025 With Development - PM Peak Hour
Junction: Holi	mer Industrial Estate Site Access
1/1	275
2/1	275
3/1	167
4/1	167
5/1	54
6/1	51
7/1	255
8/1	191
9/1	42
10/1	1

# Lane Saturation Flows

Junction: Holmer Industrial Estate Site	e Acces	s						
Lane	Lane Width (m)	Lane Width (m) Gradient Nearside Lane Allowed Turns Radius (m) Turning Prop.						Flared Sat Flow (PCU/Hr)
1/1 (College Road (North of Bridge) Entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/1 (College Road North (JCT entry) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (College Road (North of Bridge) Exit Lane 1)	3/1 Road (North of Bridge) Exit Infinite Saturation Flow Lane 1)						Inf	Inf
4/1 (College Road North (JCT exit) Lane 1)	This lane uses a directly entered Saturation Flow					1800	1800	
5/1 (Dev Access Road (Exit) Lane 1)			Infinite Satu	uration Flow	N		Inf	Inf
6/1 (Dev Access Road (Entry) Lane 1)	Т	his lane use	es a directly	ventered S	aturation F	low	1800	1800
7/1 (College Road South (JCT Exit) Lane 1)	7/1 College Road South (JCT Exit) Lane Infinite Saturation Flow 1)			Inf	Inf			
8/1 College Road South (JCT Entry) Lane 1) This lane uses a directly entered Saturation Flow					1800	1800		
9/1 (Former Pub (JCT Exit) Lane 1)	Infinite Saturation Flow Inf			Inf	Inf			
10/1 (Former Pub (JCT Entry) Lane 1)	т	his lane use	es a directly	entered S	aturation F	low	1800	1800

Scenario 1: '2020 Without Development - AM Peak Hour' (FG1: '2020 Without Dev AM', Plan 1: 'Network Control Plan 1')

# Stage Sequence Diagram



#### **Stage Timings**

Stage	1	2	3
Duration	25	10	6
Change Point	5	40	64





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	69.1%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	69.1%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	25	-	449	1800	650	69.1%
2/1	College Road North (JCT entry) Left Ahead Right	Ο	N/A	N/A	-		-	-	-	449	1800	1800	24.9%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	181	1800	275	65.8%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	Ο	N/A	N/A	-		-	-	-	2	1800	233	0.9%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	ο	N/A	N/A	-		-	-	-	186	1800	1200	15.5%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	8	1800	268	3.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	21	0	0	3.9	2.3	0.0	6.2	-	-	-	-
Holmer Industrial Estate Site Access	-	-	21	0	0	3.9	2.3	0.0	6.2	-	-	-	-
1/1	449	449	-	-	-	2.4	1.1	-	3.5	28.4	7.6	1.1	8.7
2/1	449	449	0	0	0	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	181	181	-	-	-	1.3	0.9	-	2.2	44.5	3.4	0.9	4.3
5/1	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	2	0	0	0.0	0.0	-	0.0	13.1	0.0	0.0	0.0
7/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	186	186	11	0	0	0.2	0.1	-	0.2	4.7	1.1	0.1	1.2
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	8	0	0	0.0	0.0	-	0.0	12.3	0.1	0.0	0.1
	-	C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	30.3 T 30.3	otal Delay for Si Total Delay	gnalled Lanes (p Over All Lanes(p	cuHr): 5.78 cuHr): 6.23	Cycle T	- ime (s): 72		-	•

Scenario 2: '2020 Without Development - PM Peak Hour' (FG2: '2020 Without Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

	A A A A A A A A A A A A A A A A A A A		Min: 7	3		Min: 6
10 17s	1-	<b>B</b>	Os	7	6s	►

# Stage Timings

Stage	1	2	3
Duration	17	10	6
Change Point	0	27	51





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	50.1%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	50.1%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	17	-	252	1800	506	49.8%
2/1	College Road North (JCT entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	252	1800	1739	14.5%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	155	1800	309	50.1%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	16	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	0	N/A	N/A	-		-	-	-	32	1800	303	10.6%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	о	N/A	N/A	-		-	-	-	162	1800	1358	11.9%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	30	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	1	1800	565	0.2%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	49	0	0	2.4	1.2	0.0	3.6	-	-	-	-
Holmer Industrial Estate Site Access	-	-	49	0	0	2.4	1.2	0.0	3.6	-	-	-	-
1/1	252	252	-	-	-	1.3	0.5	-	1.8	26.3	3.7	0.5	4.2
2/1	252	252	3	0	0	0.0	0.1	-	0.1	1.2	0.1	0.1	0.2
3/1	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	155	155	-	-	-	1.0	0.5	-	1.5	34.7	2.5	0.5	3.0
5/1	16	16	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	32	32	32	0	0	0.0	0.1	-	0.1	8.6	0.2	0.1	0.2
7/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	162	162	13	0	0	0.0	0.1	-	0.1	2.3	0.5	0.1	0.6
9/1	30	30	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1	1	1	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
		C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	79.6 Te 79.6	otal Delay for Si Total Delay	gnalled Lanes (p Over All Lanes(p	cuHr): 3.34 cuHr): 3.60	Cycle T		÷	-	

Scenario 3: '2025 Without Development - AM Peak Hour' (FG3: '2025 Without Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



#### **Stage Timings**

Stage	1	2	3
Duration	25	10	6
Change Point	5	40	64





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	71.5%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	71.5%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	25	-	465	1800	650	71.5%
2/1	College Road North (JCT entry) Left Ahead Right	О	N/A	N/A	-		-	-	-	465	1800	1800	25.8%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	187	1800	275	68.0%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	Ο	N/A	N/A	-		-	-	-	2	1800	228	0.9%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	ο	N/A	N/A	-		-	-	-	192	1800	1185	16.2%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	8	1800	263	3.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	21	0	0	4.1	2.6	0.0	6.6	-	-	-	-
Holmer Industrial Estate Site Access	-	-	21	0	0	4.1	2.6	0.0	6.6	-	-	-	-
1/1	465	465	-	-	-	2.6	1.2	-	3.8	29.4	8.0	1.2	9.2
2/1	465	465	0	0	0	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	187	187	-	-	-	1.3	1.0	-	2.4	45.5	3.5	1.0	4.6
5/1	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	2	2	2	0	0	0.0	0.0	-	0.0	13.2	0.0	0.0	0.0
7/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	192	192	11	0	0	0.2	0.1	-	0.3	5.0	1.2	0.1	1.3
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	8	0	0	0.0	0.0	-	0.0	12.5	0.1	0.0	0.1
	÷	C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	25.8 T 25.8	otal Delay for Si Total Delay	gnalled Lanes (p Over All Lanes(p	cuHr): 6.16 cuHr): 6.64	Cycle T	ime (s): 72			÷

Scenario 4: '2025 Without Development - PM Peak Hour' (FG4: '2025 Without Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

	A A A A A A A A A A A A A A A A A A A		Min: 7	3		Min: 6
10 17s	1-	<b>B</b>	Os	7	6s	►

# Stage Timings

Stage	1	2	3
Duration	17	10	6
Change Point	0	27	51





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	51.7%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	51.7%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	17	-	261	1800	506	51.6%
2/1	College Road North (JCT entry) Left Ahead Right	О	N/A	N/A	-		-	-	-	261	1800	1736	15.0%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	160	1800	309	51.7%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	16	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	0	N/A	N/A	-		-	-	-	33	1800	298	11.1%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	ο	N/A	N/A	-		-	-	-	167	1800	1348	12.4%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	31	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	1	1800	559	0.2%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	50	0	0	2.5	1.3	0.0	3.8	-	-	-	-
Holmer Industrial Estate Site Access	-	-	50	0	0	2.5	1.3	0.0	3.8	-	-	-	-
1/1	261	261	-	-	-	1.4	0.5	-	1.9	26.6	3.8	0.5	4.4
2/1	261	261	3	0	0	0.0	0.1	-	0.1	1.2	0.1	0.1	0.2
3/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	160	160	-	-	-	1.0	0.5	-	1.6	35.1	2.6	0.5	3.1
5/1	16	16	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	33	33	33	0	0	0.0	0.1	-	0.1	8.8	0.2	0.1	0.2
7/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	167	167	13	0	0	0.0	0.1	-	0.1	2.4	0.5	0.1	0.6
9/1	31	31	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1	1	1	0	0	0.0	0.0	-	0.0	3.3	0.0	0.0	0.0
	-	C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	74.0 Tr 74.0	otal Delay for Si Total Delay	gnalled Lanes (p Over All Lanes(p	cuHr): 3.49 cuHr): 3.78	Cycle T		÷	-	÷

#### Full Input Data And Results Scenario 5: '2025 With Development - AM Peak Hour' (FG5: '2025 With Dev AM', Plan 1: 'Network Control Plan 1') Stage Sequence Diagram



#### **Stage Timings**

Stage	1	2	3
Duration	25	10	6
Change Point	5	40	64





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	72.4%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	72.4%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	25	-	469	1800	650	72.2%
2/1	College Road North (JCT entry) Left Ahead Right	Ο	N/A	N/A	-		-	-	-	469	1800	1800	26.1%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	199	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	199	1800	275	72.4%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	Ο	N/A	N/A	-		-	-	-	43	1800	215	20.0%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	ο	N/A	N/A	-		-	-	-	202	1800	1105	18.3%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	29	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	ο	N/A	N/A	-		-	-	-	8	1800	215	3.7%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	72	0	0	4.3	3.0	0.0	7.3	-	-	-	-
Holmer Industrial Estate Site Access	-	-	72	0	0	4.3	3.0	0.0	7.3	-	-	-	-
1/1	469	469	-	-	-	2.6	1.3	-	3.9	29.7	8.1	1.3	9.4
2/1	469	469	0	0	0	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	199	199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	199	199	-	-	-	1.4	1.3	-	2.7	48.3	3.7	1.3	5.0
5/1	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	43	43	43	0	0	0.1	0.1	-	0.2	17.5	0.4	0.1	0.5
7/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	202	202	21	0	0	0.2	0.1	-	0.3	5.5	1.4	0.1	1.5
9/1	29	29	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	8	0	0	0.0	0.0	-	0.0	14.6	0.1	0.0	0.1
		C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	24.4 T 24.4	otal Delay for Si Total Delay	gnalled Lanes (po Over All Lanes(po	cuHr): 6.53 cuHr): 7.26	Cycle T	ime (s): 72		-	-

#### Full Input Data And Results Scenario 6: '2025 With Development - PM Peak Hour' (FG6: '2025 With Dev PM', Plan 1: 'Network Control Plan 1') Stage Sequence Diagram



#### **Stage Timings**

Stage	1	2	3
Duration	17	10	6
Change Point	0	27	51





Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	54.3%
Holmer Industrial Estate Site Access	-	-	N/A	-	-		-	-	-	-	-	-	54.3%
1/1	College Road (North of Bridge) Entry Ahead	U	N/A	N/A	А		1	17	-	275	1800	506	54.3%
2/1	College Road North (JCT entry) Left Ahead Right	ο	N/A	N/A	-		-	-	-	275	1800	1759	15.6%
3/1	College Road (North of Bridge) Exit	U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
4/1	College Road North (JCT exit) Ahead	U	N/A	N/A	В		1	10	-	167	1800	309	54.0%
5/1	Dev Access Road (Exit)	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
6/1	Dev Access Road (Entry) Right Left Ahead	ο	N/A	N/A	-		-	-	-	51	1800	271	18.8%
7/1	College Road South (JCT Exit)	U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
8/1	College Road South (JCT Entry) Ahead Right Left	ο	N/A	N/A	-		-	-	-	191	1800	1176	16.2%
9/1	Former Pub (JCT Exit)	U	N/A	N/A	-		-	-	-	42	Inf	Inf	0.0%
10/1	Former Pub (JCT Entry) Left Ahead Right	0	N/A	N/A	-		-	-	-	1	1800	555	0.2%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	92	0	0	2.7	1.5	0.0	4.1	-	-	-	-
Holmer Industrial Estate Site Access	-	-	92	0	0	2.7	1.5	0.0	4.1	-	-	-	-
1/1	275	275	-	-	-	1.5	0.6	-	2.1	27.3	4.1	0.6	4.7
2/1	275	275	3	0	0	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	167	167	-	-	-	1.1	0.6	-	1.6	35.5	2.7	0.6	3.3
5/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	51	51	51	0	0	0.0	0.1	-	0.2	11.4	0.3	0.1	0.4
7/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	191	191	37	0	0	0.1	0.1	-	0.2	2.8	0.7	0.1	0.8
9/1	42	42	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1	1	1	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
	-	C1	PRC for Sign PRC Over	alled Lanes (%): All Lanes (%):	65.7 T 65.7	otal Delay for Si Total Delay	gnalled Lanes (p Over All Lanes(p	cuHr): 3.73 cuHr): 4.14	Cycle T		÷	-	÷

# vsp

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