

Highways Site Appraisal  
December 2021

The logo consists of a dark blue square with the letters 'EAS' in white, bold, sans-serif font centered within it.

EAS

# Land to the east of Stirling Way (Site C)

Papworth Everard, Cambridgeshire

Varrier-Jones Foundation

## Document History

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## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>	<b>4</b>	<b>The Proposed Development</b>	<b>15</b>
<b>2</b>	<b>Policy background</b>	<b>2</b>		Introduction	15
	Introduction	2		Pedestrian and Cycle Access	15
	National Planning Policy Framework (NPPF) (2019)	2		Vehicle Access	15
	The Cambridgeshire Local Transport Plan (LTP3) 2011-2031	4	<b>5</b>	<b>Transport Impact</b>	<b>16</b>
	The South Cambridgeshire Local Plan (2018)	5		Introduction	16
	The Papworth Everard Village Design Guide (January 2020)	7		Trip Generation Forecasting	16
	Draft HELAA	8		Assigning the Development Traffic Impact on the Junctions	16
<b>3</b>	<b>Existing Site Assessment</b>	<b>9</b>	<b>6</b>	<b>Summary and Conclusions</b>	<b>17</b>
	Introduction	9		Summary	17
	Site Location	9		Conclusion	17
	Walking and Cycle Routes	9	<b>7</b>	<b>Appendices</b>	<b>18</b>
	Local Bus Services	10		Appendix: A – Location Plan	
	Road Connections and Existing Traffic Conditions	10		Appendix: B – Village Design Guide connections plan	
	A14 Improvements and Traffic Diversions through Papworth Everard	11		Appendix: C – Site Access	
	Other Strategic Transport Improvements	12		Appendix: D – TRICS Data	
	Census Data	13			

## 1 Introduction

- 1.1 EAS has been commissioned by the Varrier-Jones Foundation to prepare a Site Appraisal for land to the east of Stirling Way, Site C, Papworth Everard, Cambridgeshire. This document has been prepared to inform site representations to the Greater Cambridge Local Plan Regulation 18 Issues and Options consultation. The contents of this report form a preliminary assessment of the site in terms of highways and transport.
- 1.2 Site C is located to the east of the existing Papworth Business Park and is surrounded by arable land on the south and east with the former Papworth hospital to the north.
- 1.3 The 13ha. site is currently mostly greenfield with a hospital car park in the north west of the site, a location plan is contained within **Appendix A**. For the purposes of this report it is proposed that the site will comprise of a commercial development as an extension to the existing Papworth Business Park.
- 1.4 This report is set out as follows:
- Section 2 – sets out the relevant policy background;
  - Section 3 – reviews the existing Papworth Everard settlement facilities, transport network and travel characteristics;
  - Section 4 - discusses the site proposals including accessibility to Papworth Everard and the wider network;
  - Section 5 - sets out the likely transport implications; and
  - Section 6 – summarises the findings of the report.

## 2 Policy background

### Introduction

- 2.1 This section sets out the policy context for the proposed development at national and local level. Sustainable development is to be achieved by encouraging walking, cycling and public transport use.

### National Planning Policy Framework (NPPF) (2021)

- 2.2 The revised National Planning Policy Framework was published in February 2019 and updated in July 2021, and sets out the government's planning policies for England and how these are expected to be applied. The revised Framework replaces the previous National Planning Policy Frameworks published in March 2012 and July 2018.
- 2.3 The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.
- 2.4 In respect of that, Paragraph 10 of the NPPF states:

*So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development.*

- 2.5 Section 9 of the NPPF relates to promoting sustainable transport and paragraphs 104 to 106 say:

*"104. 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.*

*105. The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.*

106. Planning policies should:

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

e) provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements; and

f) recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government's General Aviation Strategy.”

2.6 Paragraphs 107 and 108 discuss parking standards:

“107. If setting local parking standards for residential and non-residential development, policies should take into account:

a) the accessibility of the development;

b) the type, mix and use of development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles

108. Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.”

2.7 Paragraphs 110 to 113 state that, when considering development proposals in relation to transport:

*“110. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

*a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*

*b) safe and suitable access to the site can be achieved for all users; and*

*c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*

*109. 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.”*

*110. 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.”*

*113. 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.”*

## **The Cambridgeshire Local Transport Plan (LTP3) 2011-2031**

2.8 **The** Cambridgeshire Local Transport Plan (LTP3) **seeks** to address existing transport challenges as well the needs generated by new development, and plan for the delivery of new transport infrastructure, such as road improvements. This third LTP comprises 3 documents:

- Policies and Strategies (2018);
- The Long-Term Transport Strategy (July 2015) (previously the Implementation Plan); and
- The Transport Delivery Programme (updated annually).

2.9 LTP3 addresses the County Council's latest priorities, as well as strategic objectives carried forward from LTP2. These are:

- Supporting and protecting people when they need it most;
- Helping people to live independent and healthy lives in their communities;
- Developing our local economy for the benefit of all;
- Enabling people to thrive, achieve their potential and improve quality of life;
- Supporting and protecting vulnerable people;
- Managing and delivering the growth and development of sustainable communities;
- Promoting improved skills levels and economic prosperity across the county, helping people into jobs and encouraging enterprise; and
- Meeting the challenges of climate change and enhancing the natural environment.

2.10 The Cambridgeshire Long Term Transport Strategy 2011-2031 identifies the major infrastructure requirements that are needed to address existing problems and capacity constraints on Cambridgeshire's transport network, and the further infrastructure that is required to cater for the transport demand associated with planned growth. It includes the following schemes will improve the connectivity of Papworth Everard:

- Strategic and local cycle network improvement between Huntingdon-Papworth Everard-Cambourne;
- Area action plans for the A14 Trunk Road in Huntingdonshire and South Cambridgeshire delivering:
  - New A14 trunk road, local road capacity, cycle and pedestrian routes;
  - Area action plan for the A428 Trunk Road in Huntingdonshire and South Cambridgeshire. This includes:
    - A428 Caxton Gibbet to Black Cat dualling by 2021, including a grade separated junction at the A1 Black Cat roundabout;
    - Bus priority measures Caxton Gibbet – West Cambourne, A428 to Bourne airfield;
    - A428 park and ride; and
    - A428 and A1198 junction improvements.

### **The South Cambridgeshire Local Plan (2018)**

2.11 **Policy HQ/1 on Design Principles** states that all new development must be of high quality design, with a clear vision as to its positive contribution to its local and wider context. As regards transport, proposals must:

- Achieve a permeable development with ease of movement and access for all users and abilities, with user friendly and conveniently accessible streets and other routes both within the development and linking with its surroundings and existing and proposed



facilities and services, focusing on delivering attractive and safe opportunities for walking, cycling, public transport and, where appropriate, horse riding;

- Provide safe and convenient access for all users and abilities to public buildings and spaces, including those with limited mobility or those with other impairment such as of sight or hearing;
- Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues; and
- Provide safe, secure, convenient and accessible provision for cycle parking and storage, facilities for waste management, recycling and collection in a manner that is appropriately integrated within the overall development.

2.12 **Policy TI/2 on Planning for Sustainable Travel** states that development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location. Planning permission will only be granted for development likely to give rise to increased travel demands where the site has (or will attain) sufficient integration and accessibility by walking, cycling or public and community transport, including:

- Provision of safe, direct routes within permeable layouts that facilitate and encourage short distance trips by walking and cycling between home and nearby centres of attraction, and to bus stops or railway stations, to provide real travel choice for some or all of the journey, in accordance with Policy HQ/1 above;
- Provision of new cycle and walking routes that connect to existing networks, including the wider Rights of Way network, to strengthen connections between villages, Northstowe, Cambridge, market towns, and the wider countryside;
- Protection and improvement of existing cycle and walking routes, including the Rights of Way network, to ensure the effectiveness and amenity of these routes is maintained, including through maintenance, crossings, signposting and waymarking, and, where appropriate, widening and lighting;
- Provision of secure, accessible and convenient cycle parking in accordance with Policy TI/3 below; and
- Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the aims of the Cambridgeshire Local Transport Plan and South Cambridgeshire Community Transport Strategy.

2.13 The Policy also requires developers to demonstrate they will make adequate provision to mitigate the likely impacts (including cumulative impacts) of their proposal including environmental impacts (such as noise and pollution) and impact on amenity and health. This will be achieved through direct improvements and Section 106 contributions and/or the Community Infrastructure Levy (CIL), to address transport infrastructure in the wider area including across the district boundary.

2.14 Developers of larger developments (i.e. with over 20 dwellings), or where a proposal is likely to have significant transport implications, will be required to demonstrate they have maximised opportunities for sustainable travel and will make adequate provision to mitigate the likely impacts through provision of a Transport Assessment and Travel Plan. All other

developments will be required to submit a Transport Statement. Where a Transport Assessment or Statement or a Travel Plan is required, a Low Emissions Strategy Statement should be integrated.

- 2.15 Travel Plans must have measurable outputs, be related to the aims and objectives in the Local Transport Plan and provide monitoring and enforcement arrangements. Planning obligations may be an appropriate means of securing the provision of some or all of a Travel Plan, including the requirement for an annual monitoring and progress report. Submission of area-wide Travel Plans will be considered in appropriate situations. Outline planning applications are required to submit a framework for the preparation of a Travel Plan.
- 2.16 **Policy TI/3 on Parking Provision** states that parking should be provided through a designed approach in accordance with the standards reproduced in Table 2.1.

Use	Indicative car parking provision	Minimum cycle parking provision	Notes
B1: business	1 space per 25sqm under 2500sqm, 1 space per 30sqm over 2500sqm	1 space per 30sqm	
B2: General Industrial	1 space per 50sqm	1 space per 40sqm	
B8: Storage and Distribution	1 space per 100sqm	On merit	Provision should take account of duration of storage

**Table 2.1: Employment parking standards (South Cambridgeshire Local Plan 2018, Figure 11)**

- 2.17 Car parking provision will take into consideration the site location, type and mix of uses, car ownership levels, availability of local services, facilities and public transport, and highway and user safety issues, as well as ensuring appropriate parking for people with impaired mobility as set out in national standards and guidance.

### The Papworth Everard Village Design Guide (January 2020)

- 2.18 This document has been prepared by South Cambs District Council with the local community of Papworth Everard. Community design priorities for the Village Design Guide includes:

- Protect and add to existing off-road paths and connections across the village, also to protect and add to the village's trees and hedgerows in a way that is right for the village.

- 2.19 Section 6 deals with Connections with key existing and proposed connections shown in Figure 12, reproduced in **Appendix B**. Paragraphs 6.1 to 6.3 state objectives for paths:

*“6.1 The pedestrian, cycle and equestrian network within the village should be enhanced or added to wherever possible, including upgrading footpaths to bridleways and adding further safe crossings.*

*6.2 Paths should be as accessible as possible. Within developments and on routes intended for heavy pedestrian use (e.g. which might be used to reach school) this means wide (2m) tarmac or paved paths.*

*6.3 Proposals for new or enhanced off-road routes should show how they integrate with the wider village network and how they enhance it.”*

## Draft HELAA

- 2.20 The site under consideration was reviewed as part of the Greater Cambridge HELAA submission, which commented as follows:

*"Site Access - Red*

*The proposed site does not to have a direct link to the adopted public highway.*

*No possibility of creating a safe access.*

*Roads - Amber*

*The A428 corridor requires multi-modal strategic solutions, including the Black Cat to Caxton Gibbet scheme, and the C2C (or equivalent). Development could not be supported unless it can clearly demonstrate that a high sustainable mode share could be achieved.*

*This development is likely to increase the level of traffic on the B1046 which has existing capacity issues due to the level of rat running caused by the A428.*

*A cumulative impact assessment will be required.*

*Any potential impact on the functioning of trunk roads and/or local roads could be reasonably mitigated."*

- 2.21 Firstly, the client has confirmed that Stirling Way is owned by them, the Varrier-Jones Foundation, as per LR Title CB210984.
- 2.22 It is therefore not agreed that the site does not include a link to the Highway, as the clients also own Stirling Way, upon which the site has a c. 180m wide frontage, providing access to the adopted highway via Papworth Business Park, i.e. via Stirling Way. This is a similar arrangement as with all commercial units along this Business Park.
- 2.23 Whilst walking and cycle infrastructure can be provided on the site, it is accepted that public transport amenities within the village are somewhat limited to what is described below.
- 2.24 It is however noted that the proposed employment land could technically include Warehousing developments, which typically generate a significant percentage of trips which cannot be made by sustainable means (since they require the carrying of large volumes). It is therefore not essential that high sustainable mode share should be required for such an employment site, apart from providing facilities for active travel (such as shower and lockers).
- 2.25 It is noted that the site is located on the western edge of Papworth Everard, and would offer additional employment space near the village. Whilst it is understood that an element of trip generation would be generated via Ermine Street South, construction, commercial and industrial trips can safely be diverted to use the A1198 to bypass the residential part of the village, as well as the B1040 through the use of Construction Traffic Management Plans and Delivery & Servicing Plans.

## 3 Existing Site Assessment

### Introduction

- 3.1 Papworth Everard is a village of approximately 4,000 people in South Cambridgeshire, close to the border with Huntingdonshire. The village is set along Ermine Street which bisects the village and runs roughly 2km south to north. There is a roundabout at either end that provides access to the A1198 western bypass of the village.

### Site Location

- 3.2 The site is located to the east of the existing Papworth Business Park and is surrounded by arable land on the south and east with the former Papworth Hospital to the north.
- 3.3 The 13ha site (Site C) is currently mostly greenfield with a hospital car park in the north west of the site, a location plan is contained within **Appendix A**. For the purposes of this report it is proposed that the site will comprise of a commercial development with an extension to the existing Papworth Business Park.
- 3.4 The existing Papworth Business Park lies at the southern end of Papworth Everard and is served by an Industrial estate type road, Stirling Way that joins Ermine Street at a signal junction opposite Summers Hill Drive.

### Walking and Cycle Routes

- 3.5 There is an extensive walking network with Papworth Everard that connects the village centre to the surrounding residential areas and provides access into the surrounding countryside. The Papworth Everard Village Design Guide connections plan in **Appendix B** shows local rights of way.
- 3.6 At the centre of Papworth Everard is Pendrill Court on the eastern side of Ermine Street. There are footways on both sides of Ermine Street providing access northwards alongside Ermine Street North and southwards along Ermine Street South.
- 3.7 There are good quality wide footways on either side of Stirling Way throughout its length within the Papworth Business Park. These footways connect to the wider Papworth Everard footway network at the junction of Stirling Way with Ermine Street. There are pedestrian crossings at the signal junction to the south side of Ermine Street providing access directly into the Summers Hill housing estate.
- 3.8 There is a public bridleway from Ermine Street just to the south of its signal junction with Stirling Way, the Business Park access. The bridleway follows the south-western A1198 bypass that crosses the north-south footpath and then provides access west of Papworth Everard, crossing the A1198 bypass at the roundabout with the B1040.
- 3.9 All streets within Papworth Everard are suitable for cycling. There are cycle lanes along sections of Ermine Street and sections of the Ermine Street footways are designated for shared cycle use.
- 3.10 A shared equestrian, foot and cycle facility, at least 2.5m in width, is currently under development to the south of the village, linking Papworth to Cambourne and the other local areas to the south. This route starts at the southern end of the village on Ermine Street

South, near the roundabout junction of this road with the A1198, and will link the existing footway through the roundabout towards the cycleway just north of the Caxton Gibbet roundabout with the A428.

### Local Bus Services

- 3.11 There are bus stops along the length of Ermine Street serving Papworth Everard with the closest stops to the business park being 120m north of Stirling Way on Ermine Street.
- 3.12 The X3 and 8 bus services serve Papworth Everard, stopping along Ermine Street and providing services to Cambridge, Camborne and Huntingdon.
- 3.13 There are eight X3 bus services and two 8 bus services per day on weekdays and a total of seven Saturday services.

### Road Connections and Existing Traffic Conditions

- 3.14 Ermine Street through Papworth Everard is a single carriageway 30mph speed limit street with a width of circa 7m. There is a central 350m section centred on Pendrill Court with a speed limit of 20mph with traffic calming including road humps and speed activated warning signs. Ermine Street terminates north and south of Papworth Everard at roundabouts with the A1198 which provides a western bypass to the village.
- 3.15 Sterling Way joins Ermine Street just north of the southern by-pass roundabout at a signalised intersection that also provides an access to the Summers Hill housing estate. Stirling Way is 10.5m in width at the junction, with separate left and right turning lanes, narrowing to 7.3m within the estate.
- 3.16 The A1198 joins the A428 at the Caxton Gibbet roundabout 1.5km south of the village. The A4218 provides access to Cambourne and Cambridge eastwards and to St Neots, Bedford and Milton Keynes westwards. To the north, the A1198 joins the A14 at Huntingdon.
- 3.17 A site visit was made between 7am and 10am on Tuesday 28 January 2020 to observe typical morning peak traffic conditions. Observations were:
- There was little traffic within the village on Ermine Street within the morning peak hour with the exception of around 8:30am when there was some activity on Ermine Street and Varrier-Jones Drive during the morning drop off at Pendragon Primary School;
  - There were few queues observed at any junctions around Papworth Everard including:
    - The roundabout junction of A1198/B1040 and Ermine Street north of Papworth Everard;
    - The roundabout junction of A1198 bypass and B1040 west of Papworth Everard;
    - The roundabout junction of A1198 bypass and Ermine Street south of Papworth Everard; and
    - The signal junction between Ermine Street, Summers Hill Road and Stirling Way (Papworth Business Park).
  - There was queueing at the Caxton Gibbet A1198/A428 roundabout south of Papworth Everard from 7am until 9am including:

- A queue of 1.5km extending back on the A1198 to the A1198/Ermine Street roundabout between 7:15 and 7:30;
- A queue on the A1198 from the Caxton Gibbet roundabout back towards Papworth Everard of approximately 750m at 7:45am to 8:00am, falling gradually to around 250m at 9am;
- Smaller queues on the eastbound approach of the A428 and northbound A1198 Caxton Gibbet roundabout approach over this time period of up to 100m; and
- No queueing on the westbound A428 approach.

3.18 Travel time surveys undertaken on the site visit gave an estimated 6 minutes to travel in the queue from the southern A1198 bypass roundabout to the A1198/A428 Caxton Gibbet roundabout at 7:30am when the queue was at its peak, and then approximately 3 minutes delay between 8 and 9am when the queue was roughly 50% of the peak distance.

3.19 In summary, the observations confirm that:

- the A1198 bypass has removed any traffic congestion from Papworth and this includes the Business Park signal junction between Ermine Street, Stirling Way and Summers Hill Drive which has significant spare capacity;
- the three bypass roundabouts have significant spare capacity; and
- the A428/A1198 Caxton Gibbet roundabout is operating at or over capacity in the morning peak with estimated delays on the A1198 southern arm of between 3 and 6minutes.

3.20 The signal junction provides access for all traffic to the Papworth Business Park. This had no queueing at any time during the site visit. The Stirling Road and Ermine Street approaches have been designed to accommodate large vehicles suitable for an industrial estate. This junction would have been in place prior to the Papworth Everard bypass and is designed to accommodate significantly greater levels of traffic than currently uses it.

### **A14 Improvements and Traffic Diversions through Papworth Everard**

3.21 The major works to improve the A14 between the Huntingdon and Cambridge north of Papworth Everard have now been substantially completed, with finishing works currently ongoing.

3.22 The works along the A14 necessitated the creation of a variety of local traffic diversions for the duration of the works. These diversions have significantly affected traffic in the Papworth Everard area and along the A428 corridor. One key diversion takes traffic from the A14 north of Cambridge via the A428 and the A1198 Papworth Everard bypass. It is expected that sometime after the works are fully completed, traffic will settle into an amended equilibrium with less queues and delays local to Papworth Everard.

3.23 For these reasons, no baseline traffic counts were undertaken for this assessment. An analysis has been carried out to estimate expected generated traffic, including an assignment based on Census travel to work data. Some conclusions are drawn regarding likely impacts based upon the site visit during the morning peak period described above, but these have been made based on the existing traffic conditions which are not typical of future, longer term traffic.



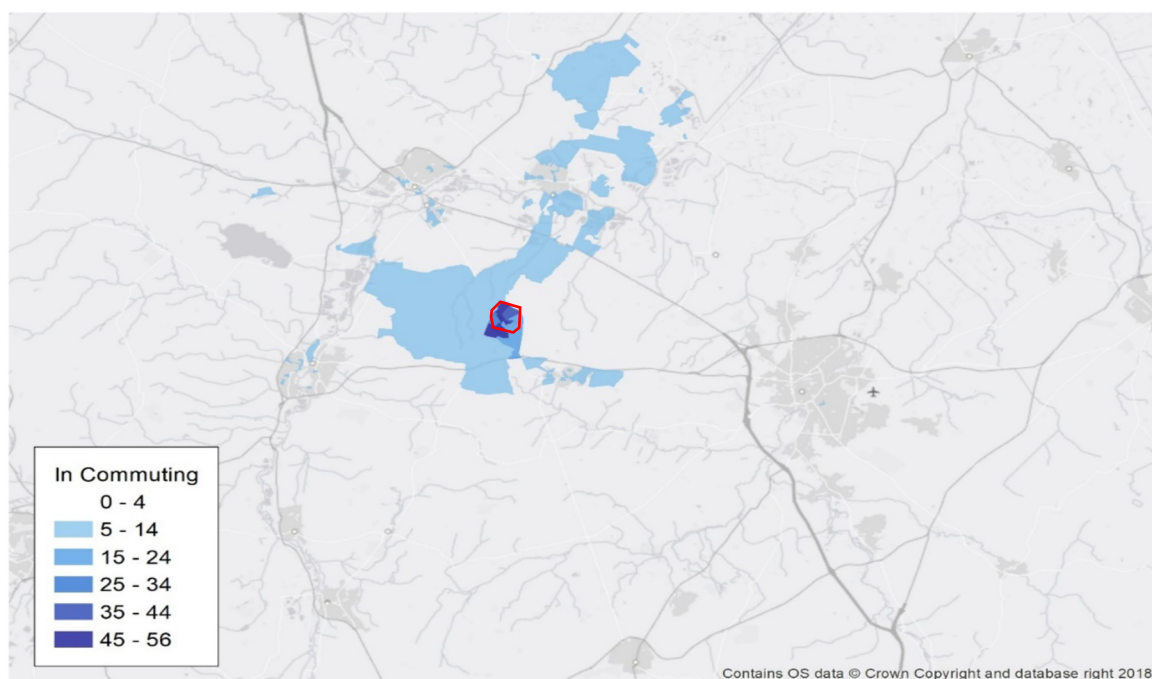
## Other Strategic Transport Improvements

- 3.24 **East West Rail:** The east west rail proposal will provide a new rail service to connect Oxford, Milton Keynes, Bedford and Cambridge. The Western section of the route is already underway with a section open between Oxford and enabling works taking place for the route to Bedford. The Eastern section between Bedford and Cambridge will be routed via Cambourne, passing around 3km to the south of the site. Public consultation began last year for this section and the next stage will be route options and it is considered that construction could begin in 2025.
- 3.25 The East West Rail would interchange with several main lines giving passengers access to local and long-distance destinations across the UK, such as Reading, Norwich, Kettering, Leeds, Corby and Nottingham, as well as several stations in London.
- 3.26 The impact on Papworth Everard and the surrounding villages will be a reliable rail link which would be expected to be accessible via a short bus ride from the village. The East West rail would therefore be expected to have a positive impact on the sustainability of new development in Papworth Everard providing sustainable means of travel for new commuters into the village.
- 3.27 **A428 Black Cat to Caxton Gibbet improvements:** The Caxton Gibbet roundabout is located 1.5km to the south of Papworth Everard and provides access to the wider road network via the A428. The A428 is currently the only stretch of single carriageway between Cambridge and Milton Keynes, providing an important strategic link and also access for local communities between Bedford, St Neots, Cambourne and Cambridge.
- 3.28 The route can experience large volumes of traffic leading to delays, due to the limited East West options available. As such Highways England are proposing to upgrade the route between the Black Cat roundabout and Caxton Gibbet with a new 10-mile dual carriageway. This is expected to cut the average commute between Black Cat and Caxton Gibbet junctions by more than a third, saving up to 10 minutes on every trip.
- 3.29 The Development Consent Order application is currently undergoing its hearings and examinations process, with the end of examination period for this application expected to be in mid-February 2022. The new road link would significantly improve access to the village from the wider road network.
- 3.30 **Cambourne to Cambridge Public Transport Route and New Park and Ride Site:** A number of options are being considered by the Greater Cambridge Partnership (GCP) to improve journeys from the west of Cambridge into the city. This follows a successful public consultation with options soon to be presented for approval to the GCP Board for approval.
- 3.31 Phase 1 includes:
- Public transport route between Cambourne and Cambridge, providing reliable and sustainable services bypassing general traffic congestion;
  - A new Park & Ride site off the A428/A1303; and
  - New cycling and walking facilities.
- 3.32 Phase 2 includes: the link west of Madingley Mulch roundabout to Bourn Airfield and on to Cambourne, and a new Park & Ride facility. The park and ride options include two sites to the west of Cambridge off the A428 (Scotland Farm & Madingley Mulch roundabout / Water works site).

- 3.33 Should the scheme be improved it is expected that the bus services to and from Papworth which already pass through Cambourne and Cambridge would make use of the potential busway/public transport route, greatly improving the journey time for public transport journeys in and out of the city.
- 3.34 It is clear from the above that major investment is being made in the A428 corridor which would support additional development in Papworth.

### Census Data

- 3.35 The census data has been used to provide an overview of commuter travel to and from Papworth. The data is from 2011, which is prior to Papworth hospital relocation to the Cambridge Biomedical Campus near Addenbrookes in Cambridge in 2019. It is also prior to a substantial increase in population due to new housing at Summers Hill. In 2015, Papworth hospital employed about 1500 staff.
- 3.36 **Figure 3.1** shows in commuting to businesses within Papworth Everard and it shows that some 13% of workplaces are filled by Papworth Everard residents. There are approximately 1.7 workplaces in the study area for every resident in employment. Of those commuting into the study area, clearly most come from the northeast. St Ives appears to be a particularly preferred location, possibly because of the B1040 providing good direct access across the A14 and lower house prices.



*Figure 3.1: In commuting to Papworth Everard, 2011 Census*

- 3.37 **Figure 3.2** shows the modes of travel to work in 2011.



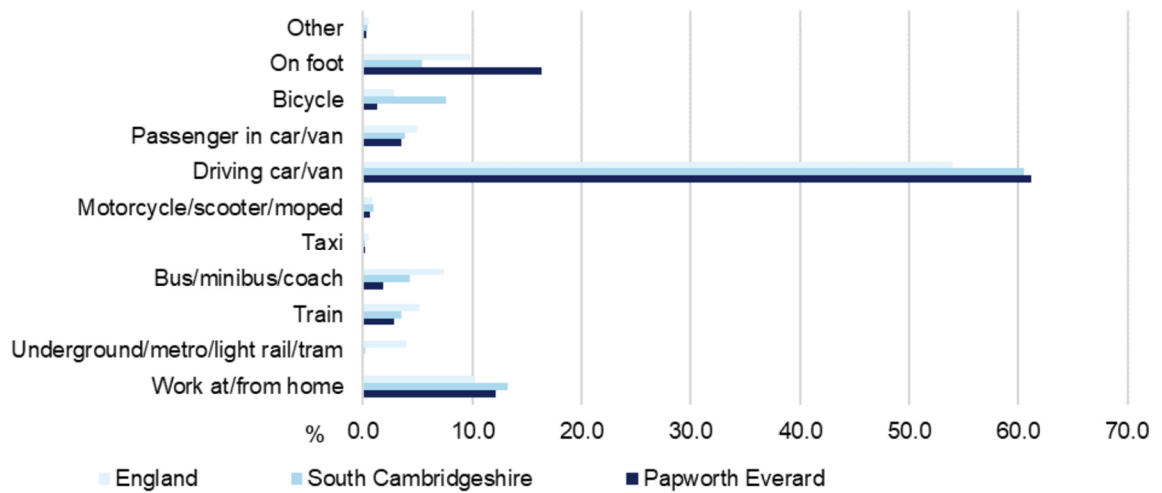


Figure 3.2: Mode of travel to work, 2011 Census

3.38 Figure 3.2 shows that just over 60% of residents travel to work by car with a further 5% as a passenger. A significant proportion of around 16% walk to work which is around three times the average in the district. Relatively few commute by bus or train.

## 4 The Proposed Development

### Introduction

- 4.1 It is proposed to develop Site C for commercial development as an extension of the existing Papworth Business Park.
- 4.2 No masterplan has yet been produced. This assessment is based upon an assumed one third developed floorspace, one third hardstanding including roads and car parks, and one third landscaping.

### Pedestrian and Cycle Access

- 4.3 Pedestrian and cycle links would join the existing Papworth Business Park links.

### Vehicle Access

- 4.4 Vehicle access will be provided via a continuation of Stirling Way into the site as shown in **Appendix C**. The proposed access link would be designed to the same standards as Stirling Way.
- 4.5 No improvements are proposed to the Stirling Way signal junction which is designed to accommodate significantly greater traffic levels than currently observed. The junction has pedestrian phases to allow pedestrian movements across both Ermine Street and Stirling Way.
- 4.6 It is noted that the clients retain ownership over Stirling Way, linking the site to the adopted Highway through the extending of the Papworth Business Park.

### Parking

- 4.7 Car and cycle parking will be provided in accordance with the standards in the South Cambridgeshire Local Plan (2018) unless agreed otherwise with the Planning Authority at a Reserved Matters stage.

## 5 Transport Impact

### Introduction

- 5.1 This section provides an overview of expected traffic generated by the proposed development and the likely distribution on the local road network.
- 5.2 The assessment assumes a 30% developable area.

### Trip Generation Forecasting

- 5.3 The TRICS database was used to estimate person trip rates for an Industrial Estate. The site area is 13Ha and at a development rate of 30% of the area, this would equate to 39,000m<sup>2</sup> of site coverage. Table 5.1 shows the vehicle trip rates obtained and the estimated trip numbers for this site area. **Appendix D** shows the full TRICS output.

	08:00 – 09:00			17:00 – 18:00			07:00 – 19:00		
	In	Out	Total	In	Out	Total	In	Out	Total
Trip rates	0.156	0.065	0.221	0.045	0.119	0.164	2.004	1.604	3.608
Trips	61	25	86	18	46	64	782	626	1407

**Table 5.1: Vehicle trip rates and trips for 39,000m<sup>2</sup> of Industrial Estate (TRICS 7.5.4)**

- 5.4 Table 5.1 shows that expected vehicle trips would be of the order of 86 in the morning peak, 64 in the evening peak and 1407 daily.

### Assigning the Development Traffic

- 5.5 No assignment of traffic has been undertaken at this stage. However, the majority of the traffic would be assigned to the bypass with traffic travelling against the main existing local traffic peak directions.
- 5.6 A proportion of the traffic would be internal to Papworth Everard with an element of traffic likely to come from Site A, the proposed new housing site.

### Impact on the Junctions

- 5.7 No impact assessments have been undertaken as no baseline or existing traffic counts were possible due to the A14 diversions in place resulting in abnormal local traffic conditions. However, all trips will use the existing signal junction of Ermine Street with Stirling Way and the majority of trips will use the bypass junctions. Most traffic will be coming into site in the morning and leaving in the evening, against the general flow of commuter traffic and so is not expected to significantly impact upon existing local junction congestion.
- 5.8 The existing Stirling Way/Ermine Street/Summershill Drive has significant spare capacity, sufficient to accommodate the expected additional traffic generated by the development.

## 6 Summary and Conclusions

### Summary

- 6.1 This document has been prepared to inform site representations to the Greater Cambridge Local Plan Regulation 18 Issues and Options consultation. The contents of this report form a preliminary assessment of Papworth Everard site C in terms of highways and transport.
- 6.2 The site is located to the east of Stirling Way. The 13ha site is currently greenfield. For the purposes of this report it is proposed that the site will comprise commercial development with a footprint of 30% of the area which equates to approximately 39,000m<sup>2</sup> of industrial estate use.
- 6.3 Papworth Everard has good existing pedestrian and cycle provision and the site can link to existing footways and cycleways via Stirling Way.
- 6.4 Vehicle access will be via a continuation of Stirling Way into the site and via Stirling Way onto Ermine Street using the existing signal junction.
- 6.5 All new vehicle trips generated by the development will use the Stirling Way/Ermine Street signal junction. This has significant existing capacity and is expected to be able to operate within capacity with the new development. The majority of new vehicle trips will access Papworth Everard bypass and these will be travelling against typical peak traffic and so will not significantly impact on existing peak hour local congestion.
- 6.6 It is noted that the clients retain ownership over Stirling Way, linking the site to the adopted Highway through the extending of the Papworth Business Park.
- 6.7 A number of improvements are proposed to the A428 corridor as discussed in this report, which are expected to be built out over the next decade and would further support development in Papworth Everard.

### Conclusion

- 6.8 Site C has good connections to the village and its facilities. The proposed business park extension will help further enhance local commuting with Papworth Everard. The additional trips associated with the extension are expected to be able to be accommodated on the Sterling Way signal junction. Site C is therefore a sustainable location suitable for the proposed business park extension.

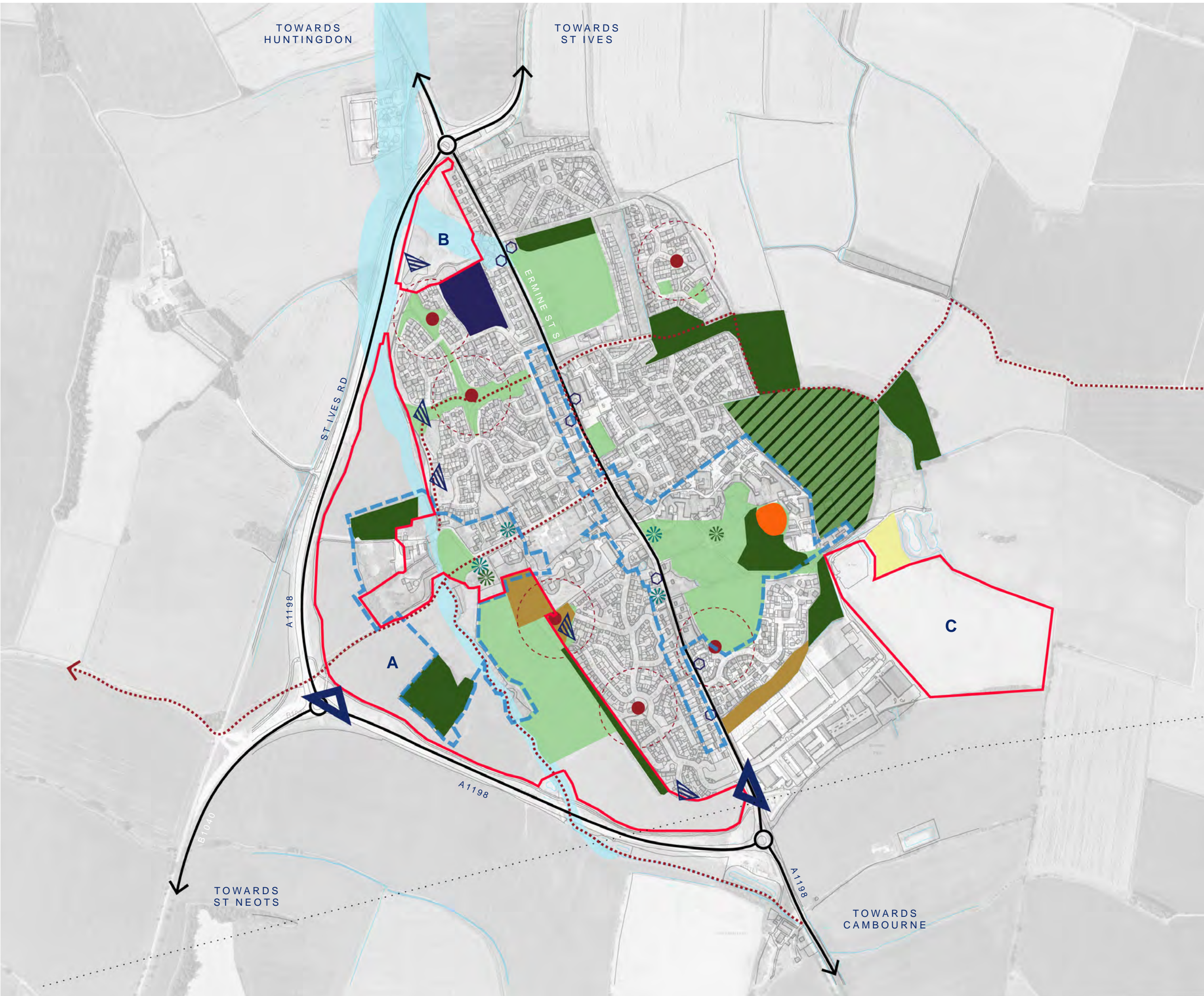
## 7 Appendices

Appendix: A – Location Plan  
Appendix: B – Village Design Guide connections plan  
Appendix: C – Site Access  
Appendix: D – TRICS Data



## Appendix: A – Location Plan

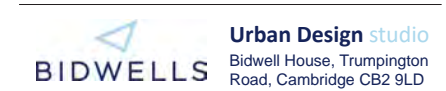




- LEGEND**
- Red line boundaries (A,B and C)
  - Existing roads
  - Drainage channel
  - Existing Public Rights of Way
  - Conservation Area
  - Existing woodland
  - Existing significant woodland / SSSI
  - Existing informal open space
  - Scheduled ancient monument
  - Overhead electricity line
  - Existing allotments
  - Protected amenity
  - Pendragon Community Primary School
  - Existing LAP and 100m isochrone
  - ✱ Grade II Listed Building
  - ✱ Grade II\* Listed Building
  - Existing bus stop
  - ▶ Potential vehicular access
  - ▶ Potential pedestrian / cycle access

Rev.	Date.	Details.

Do not scale from this drawing.  
 All dimensions to be checked on site.  
 This plan is to be read with all accompanying documentation.  
 © Bidwells 2019



**PAPWORTH ESTATE  
 VARRIER JONES FOUNDATION  
 PAPWORTH EVERARD CONTEXT**

Job Code: 45598	OS License Number: 100017734	
Drawing Scale: NTS	Date: 11.03.19	Drawn By: HD
Drawing Number: UDS45598-A3-0101	Checked By: DP	Revision: -



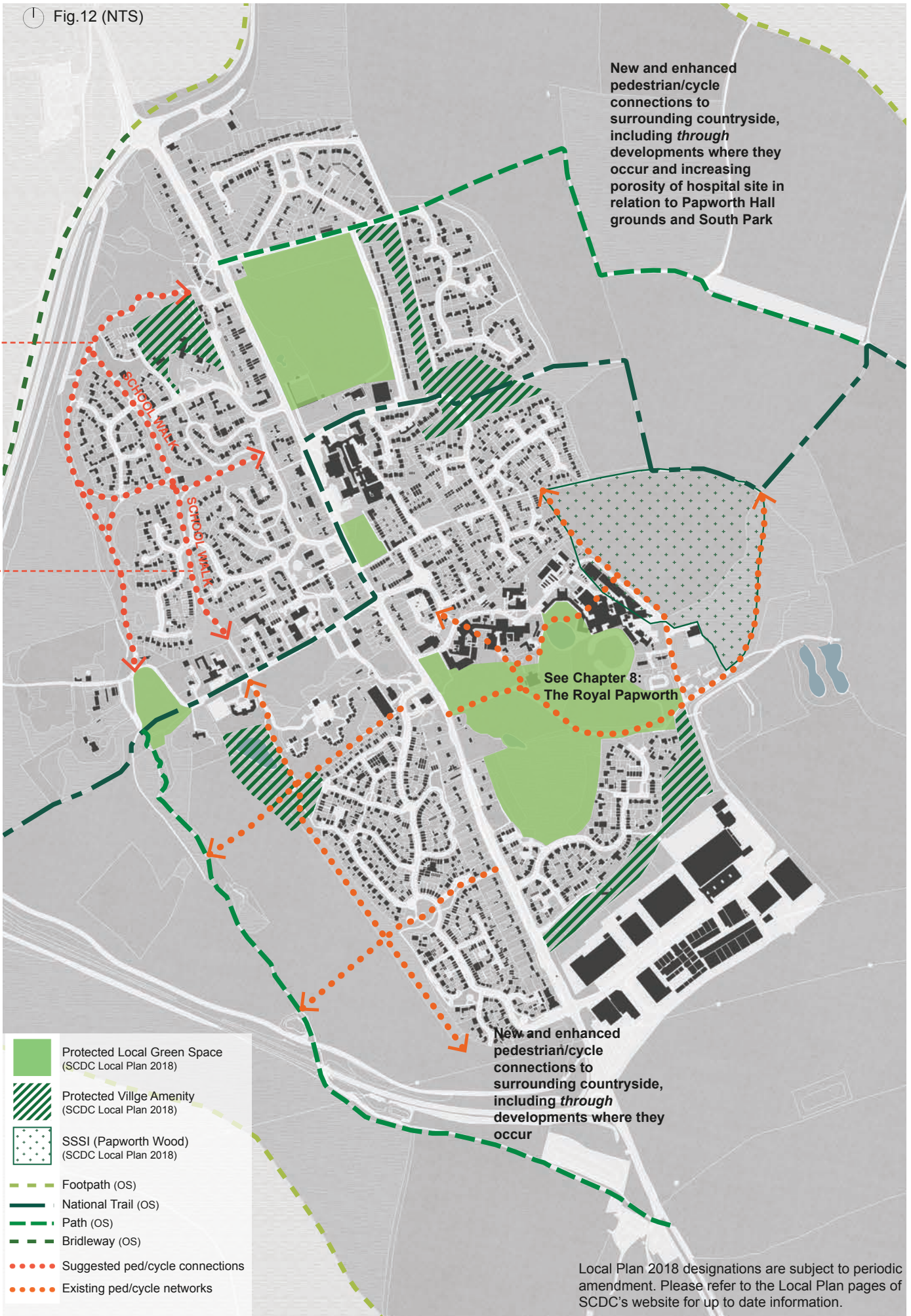


Appendix: B – Village Design Guide connections plan



Fig.12 (NTS)

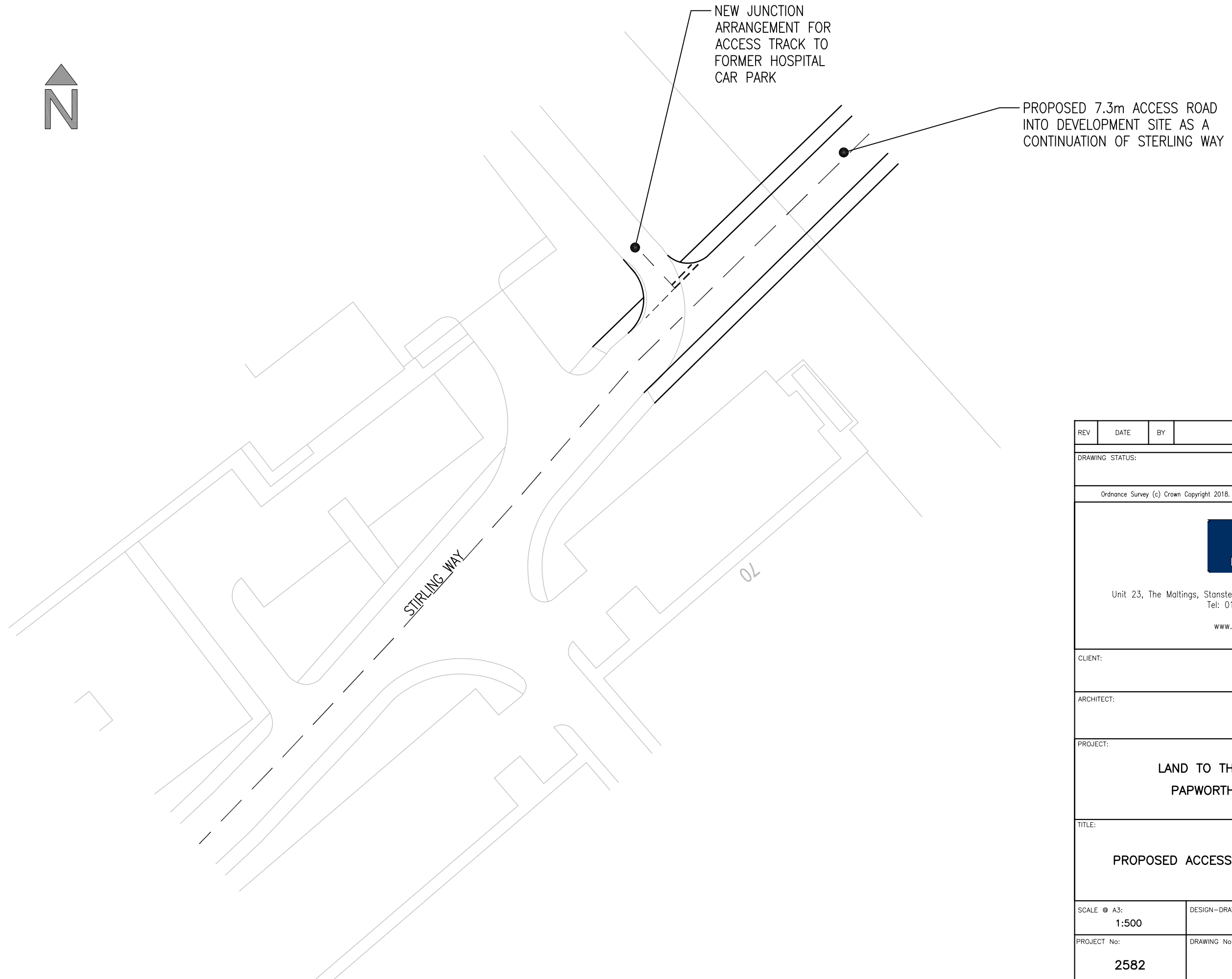
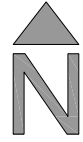
New and enhanced pedestrian/cycle connections to surrounding countryside, including *through* developments where they occur and increasing porosity of hospital site in relation to Papworth Hall grounds and South Park




Local Plan 2018 designations are subject to periodic amendment. Please refer to the Local Plan pages of SCDC's website for up to date information.



## Appendix: C – Site Access



REV	DATE	BY	DESCRIPTION	CHK	APD
DRAWING STATUS:					
Ordnance Survey (c) Crown Copyright 2018. All rights reserved. Licence number 100022432					
 Unit 23, The Maltings, Stanstead Abbots, Hertfordshire, SG12 8HG Tel: 01920 871777 www.eastp.co.uk					
CLIENT:					
ARCHITECT:					
PROJECT: <b>LAND TO THE EAST OF PAPWORTH EVERARD</b>					
TITLE: <b>PROPOSED ACCESS OFF STIRLING WAY</b>					
SCALE © A3: <b>1:500</b>		DESIGN-DRAWN: <b>SA</b>		DATE: <b>12/02/2020</b>	
PROJECT No: <b>2582</b>		DRAWING No: <b>SK02</b>			



Appendix: D – TRICS Data

Calculation Reference: AUDIT-743101-190701-0727

## TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
	HD HILLINGDON	1 days
	HO HOUNSLOW	1 days
02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	EX ESSEX	3 days
	KC KENT	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	2 days
	CW CORNWALL	1 days
	DV DEVON	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS	
	HE HEREFORDSHIRE	1 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	2 days
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	4 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

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

## Secondary Filtering selection:

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

Parameter: Gross floor area  
 Actual Range: 1138 to 974258 (units: sqm)  
 Range Selected by User: 1138 to 974258 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

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

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

Selected survey days:

Monday	5 days
Tuesday	8 days
Wednesday	5 days
Thursday	4 days
Friday	4 days

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

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	9
Edge of Town	15
Neighbourhood Centre (PPS6 Local Centre)	1

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

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

Secondary Filtering selection:

Use Class:

Not Known	3 days
B1	10 days
B2	9 days
B8	4 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	5 days
10,001 to 15,000	6 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	9 days
50,001 to 100,000	2 days

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

Population within 5 miles:

25,001 to 50,000	4 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	13 days
250,001 to 500,000	3 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	10 days
1.1 to 1.5	15 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	1 days
No	25 days

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

PTAL Rating:

No PTAL Present	24 days
1b Very poor	1 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	BR-02-D-04	INDUSTRIAL ESTATE	BRISTOL CITY
	CROFTS END ROAD		
	BRISTOL		
	SPEEDWELL		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	18018 sqm	
	Survey date: FRIDAY	29/11/13	Survey Type: MANUAL
2	BR-02-D-05	INDUSTRIAL ESTATE	BRISTOL CITY
	NOVERS HILL		
	BRISTOL		
	BEDMINSTER		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	18128 sqm	
	Survey date: FRIDAY	29/11/13	Survey Type: MANUAL
3	CA-02-D-04	INDUSTRIAL ESTATE	CAMBRI D GESH I RE
	LINCOLN ROAD		
	PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	4133 sqm	
	Survey date: TUESDAY	02/12/14	Survey Type: MANUAL
4	CW-02-D-03	IND. ESTATE	CORNWALL
	LONG ROCK ROAD		
	NEAR PENZANCE		
	LONG ROCK		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	36500 sqm	
	Survey date: MONDAY	03/10/11	Survey Type: MANUAL
5	DV-02-D-07	INDUSTRIAL ESTATE	DEVON
	BITTERN ROAD		
	EXETER		
	SOWTON IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3600 sqm	
	Survey date: MONDAY	03/07/17	Survey Type: MANUAL
6	ES-02-D-06	INDUSTRIAL ESTATE	EAST SUSSEX
	COURTLANDS ROAD		
	EASTBOURNE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7525 sqm	
	Survey date: MONDAY	21/10/13	Survey Type: MANUAL
7	ES-02-D-07	INDUSTRIAL ESTATE	EAST SUSSEX
	HUGHES ROAD		
	BRIGHTON		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	6625 sqm	
	Survey date: THURSDAY	16/10/14	Survey Type: MANUAL
8	EX-02-D-03	INDUSTRIAL ESTATE	ESSEX
	WYNCOLLS ROAD		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4876 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	EX-02-D-04 PASTURE ROAD WITHAM	INDUSTRIAL ESTATE	ESSEX
	Edge of Town Industrial Zone Total Gross floor area: 37130 sqm <i>Survey date: THURSDAY 10/05/18</i>		<i>Survey Type: MANUAL</i>
10	EX-02-D-05 HECKWORTH CLOSE COLCHESTER SEVERALLS INDUSTRIAL PK	INDUSTRIAL ESTATE	ESSEX
	Edge of Town Industrial Zone Total Gross floor area: 7280 sqm <i>Survey date: FRIDAY 18/05/18</i>		<i>Survey Type: MANUAL</i>
11	HD-02-D-02 BRADFIELD ROAD RUISLIP SOUTH RUISLIP	INDUSTRIAL ESTATE	HILLINGDON
	Edge of Town Industrial Zone Total Gross floor area: 13850 sqm <i>Survey date: THURSDAY 25/06/15</i>		<i>Survey Type: MANUAL</i>
12	HE-02-D-02 BURCOTT ROAD HEREFORD	BUSINESS PARK	HEREFORDSHIRE
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 5214 sqm <i>Survey date: TUESDAY 22/10/13</i>		<i>Survey Type: MANUAL</i>
13	HO-02-D-01 HAMPTON ROAD WEST FELTHAM HANWORTH	INDUSTRIAL ESTATE	HOUNSLOW
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 7400 sqm <i>Survey date: THURSDAY 25/06/15</i>		<i>Survey Type: MANUAL</i>
14	KC-02-D-02 SOUTHWELL ROAD DEAL	INDUSTRIAL ESTATE	KENT
	Edge of Town Residential Zone Total Gross floor area: 10715 sqm <i>Survey date: WEDNESDAY 28/11/12</i>		<i>Survey Type: MANUAL</i>
15	LC-02-D-05 APPLEBY STREET BLACKBURN	INDUSTRIAL ESTATE	LANCASHIRE
	Edge of Town Centre Industrial Zone Total Gross floor area: 7020 sqm <i>Survey date: TUESDAY 04/06/13</i>		<i>Survey Type: MANUAL</i>
16	TW-02-D-08 NORTH HYLTON ROAD SUNDERLAND SOUTHWICK	INDUSTRIAL ESTATE	TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Development Zone Total Gross floor area: 8310 sqm <i>Survey date: TUESDAY 04/04/17</i>		<i>Survey Type: MANUAL</i>



LIST OF SITES relevant to selection parameters (Cont.)

17	WK-02-D-01 CASTLE MOUND WAY RUGBY	INDUSTRIAL ESTATE	WARWICKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 150564 sqm <i>Survey date: WEDNESDAY 27/06/18</i>		<i>Survey Type: MANUAL</i>
18	WK-02-D-02 OVERVIEW WAY RUGBY	INDUSTRIAL ESTATE	WARWICKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 974258 sqm <i>Survey date: WEDNESDAY 27/06/18</i>		<i>Survey Type: MANUAL</i>
19	WL-02-D-02 HEADLANDS GROVE SWINDON	INDUSTRIAL ESTATE	WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 10000 sqm <i>Survey date: TUESDAY 20/09/16</i>		<i>Survey Type: MANUAL</i>
20	WM-02-D-02 DUNLOP WAY BIRMINGHAM	INDUSTRIAL ESTATE	WEST MIDLANDS
	Edge of Town Residential Zone Total Gross floor area: 23480 sqm <i>Survey date: WEDNESDAY 07/11/12</i>		<i>Survey Type: MANUAL</i>
21	WM-02-D-03 JUNCTION ROAD STOURBRIDGE AUDNAM	INDUSTRIAL ESTATE	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 1138 sqm <i>Survey date: TUESDAY 28/11/17</i>		<i>Survey Type: MANUAL</i>
22	WO-02-D-03 MILLENNIUM WAY EVESHAM	INDUSTRIAL ESTATE	WORCESTERSHIRE
	Edge of Town Out of Town Total Gross floor area: 84575 sqm <i>Survey date: TUESDAY 26/06/18</i>		<i>Survey Type: MANUAL</i>
23	WY-02-D-05 CARR WOOD ROAD CASTLEFORD	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town Development Zone Total Gross floor area: 1776 sqm <i>Survey date: MONDAY 22/05/17</i>		<i>Survey Type: MANUAL</i>
24	WY-02-D-06 PIONEER WAY CASTLEFORD	INDUSTRIAL ESTATE (PART)	WEST YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 4328 sqm <i>Survey date: TUESDAY 23/05/17</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

25	WY-02-D-07	INDUSTRIAL ESTATE	WEST YORKSHIRE
	THUNDERHEAD RIDGE RD		
	CASTLEFORD		
	GLASSHOUGHTON		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	3191 sqm	
	Survey date: MONDAY	15/05/17	Survey Type: MANUAL
26	WY-02-D-08	INDUSTRIAL ESTATE	WEST YORKSHIRE
	MILL LANE		
	HALIFAX		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	11305 sqm	
	Survey date: WEDNESDAY	17/10/18	Survey Type: MANUAL

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

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

Calculation factor: 100 sqm

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.047	2.131	1	6370	0.000	0.000	1	6370	0.047	2.131
06:00 - 07:00	1	6370	0.644	29.125	1	6370	0.251	11.366	1	6370	0.895	40.491
07:00 - 08:00	26	54789	0.120	5.451	26	54789	0.041	1.861	26	54789	0.161	7.312
08:00 - 09:00	26	54789	0.156	7.039	26	54789	0.065	2.964	26	54789	0.221	10.003
09:00 - 10:00	26	54789	0.118	5.359	26	54789	0.079	3.558	26	54789	0.197	8.917
10:00 - 11:00	26	54789	0.100	4.520	26	54789	0.084	3.805	26	54789	0.184	8.325
11:00 - 12:00	26	54789	0.097	4.399	26	54789	0.094	4.241	26	54789	0.191	8.640
12:00 - 13:00	26	54789	0.096	4.358	26	54789	0.107	4.844	26	54789	0.203	9.202
13:00 - 14:00	26	54789	0.113	5.130	26	54789	0.098	4.457	26	54789	0.211	9.587
14:00 - 15:00	26	54789	0.085	3.837	26	54789	0.109	4.927	26	54789	0.194	8.764
15:00 - 16:00	26	54789	0.075	3.405	26	54789	0.108	4.879	26	54789	0.183	8.284
16:00 - 17:00	26	54789	0.071	3.205	26	54789	0.119	5.371	26	54789	0.190	8.576
17:00 - 18:00	26	54789	0.045	2.049	26	54789	0.139	6.293	26	54789	0.184	8.342
18:00 - 19:00	26	54789	0.033	1.477	26	54789	0.059	2.659	26	54789	0.092	4.136
19:00 - 20:00	1	6370	0.204	9.235	1	6370	0.251	11.366	1	6370	0.455	20.601
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			2.004	90.720			1.604	72.591			3.608	163.311

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

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	1138 - 974258 (units: sqm)
Survey date date range:	01/01/11 - 17/10/18
Number of weekdays (Monday-Friday):	26
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
07:00 - 08:00	26	54789	0.000	0.010	26	54789	0.000	0.006	26	54789	0.000	0.016
08:00 - 09:00	26	54789	0.001	0.038	26	54789	0.001	0.035	26	54789	0.002	0.073
09:00 - 10:00	26	54789	0.000	0.019	26	54789	0.000	0.022	26	54789	0.000	0.041
10:00 - 11:00	26	54789	0.000	0.010	26	54789	0.000	0.010	26	54789	0.000	0.020
11:00 - 12:00	26	54789	0.000	0.010	26	54789	0.000	0.006	26	54789	0.000	0.016
12:00 - 13:00	26	54789	0.000	0.003	26	54789	0.000	0.003	26	54789	0.000	0.006
13:00 - 14:00	26	54789	0.000	0.016	26	54789	0.000	0.013	26	54789	0.000	0.029
14:00 - 15:00	26	54789	0.000	0.019	26	54789	0.000	0.022	26	54789	0.000	0.041
15:00 - 16:00	26	54789	0.000	0.013	26	54789	0.000	0.010	26	54789	0.000	0.023
16:00 - 17:00	26	54789	0.000	0.006	26	54789	0.000	0.003	26	54789	0.000	0.009
17:00 - 18:00	26	54789	0.000	0.019	26	54789	0.000	0.016	26	54789	0.000	0.035
18:00 - 19:00	26	54789	0.000	0.016	26	54789	0.000	0.016	26	54789	0.000	0.032
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.001	0.179			0.001	0.162			0.002	0.341

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.047	2.131	1	6370	0.031	1.421	1	6370	0.078	3.552
07:00 - 08:00	26	54789	0.008	0.343	26	54789	0.006	0.292	26	54789	0.014	0.635
08:00 - 09:00	26	54789	0.010	0.451	26	54789	0.008	0.375	26	54789	0.018	0.826
09:00 - 10:00	26	54789	0.013	0.591	26	54789	0.011	0.489	26	54789	0.024	1.080
10:00 - 11:00	26	54789	0.011	0.508	26	54789	0.011	0.486	26	54789	0.022	0.994
11:00 - 12:00	26	54789	0.011	0.486	26	54789	0.011	0.502	26	54789	0.022	0.988
12:00 - 13:00	26	54789	0.012	0.527	26	54789	0.011	0.505	26	54789	0.023	1.032
13:00 - 14:00	26	54789	0.009	0.426	26	54789	0.010	0.473	26	54789	0.019	0.899
14:00 - 15:00	26	54789	0.010	0.432	26	54789	0.009	0.391	26	54789	0.019	0.823
15:00 - 16:00	26	54789	0.011	0.480	26	54789	0.011	0.508	26	54789	0.022	0.988
16:00 - 17:00	26	54789	0.007	0.311	26	54789	0.008	0.372	26	54789	0.015	0.683
17:00 - 18:00	26	54789	0.006	0.276	26	54789	0.004	0.197	26	54789	0.010	0.473
18:00 - 19:00	26	54789	0.004	0.168	26	54789	0.004	0.203	26	54789	0.008	0.371
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.159	7.130			0.135	6.214			0.294	13.344

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

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

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

Calculation factor: 100 sqm

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
07:00 - 08:00	26	54789	0.000	0.006	26	54789	0.000	0.000	26	54789	0.000	0.006
08:00 - 09:00	26	54789	0.001	0.025	26	54789	0.000	0.016	26	54789	0.001	0.041
09:00 - 10:00	26	54789	0.001	0.032	26	54789	0.000	0.019	26	54789	0.001	0.051
10:00 - 11:00	26	54789	0.001	0.025	26	54789	0.001	0.025	26	54789	0.002	0.050
11:00 - 12:00	26	54789	0.000	0.000	26	54789	0.000	0.013	26	54789	0.000	0.013
12:00 - 13:00	26	54789	0.000	0.003	26	54789	0.000	0.003	26	54789	0.000	0.006
13:00 - 14:00	26	54789	0.000	0.003	26	54789	0.000	0.000	26	54789	0.000	0.003
14:00 - 15:00	26	54789	0.000	0.003	26	54789	0.000	0.010	26	54789	0.000	0.013
15:00 - 16:00	26	54789	0.000	0.003	26	54789	0.000	0.010	26	54789	0.000	0.013
16:00 - 17:00	26	54789	0.000	0.010	26	54789	0.000	0.003	26	54789	0.000	0.013
17:00 - 18:00	26	54789	0.000	0.016	26	54789	0.000	0.006	26	54789	0.000	0.022
18:00 - 19:00	26	54789	0.000	0.022	26	54789	0.000	0.006	26	54789	0.000	0.028
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.003	0.148			0.001	0.111			0.004	0.259

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.063	2.841	1	6370	0.000	0.000	1	6370	0.063	2.841
06:00 - 07:00	1	6370	0.016	0.710	1	6370	0.000	0.000	1	6370	0.016	0.710
07:00 - 08:00	26	54789	0.003	0.140	26	54789	0.001	0.032	26	54789	0.004	0.172
08:00 - 09:00	26	54789	0.003	0.149	26	54789	0.001	0.025	26	54789	0.004	0.174
09:00 - 10:00	26	54789	0.001	0.041	26	54789	0.000	0.013	26	54789	0.001	0.054
10:00 - 11:00	26	54789	0.001	0.048	26	54789	0.001	0.051	26	54789	0.002	0.099
11:00 - 12:00	26	54789	0.000	0.016	26	54789	0.000	0.013	26	54789	0.000	0.029
12:00 - 13:00	26	54789	0.001	0.038	26	54789	0.000	0.022	26	54789	0.001	0.060
13:00 - 14:00	26	54789	0.002	0.070	26	54789	0.001	0.041	26	54789	0.003	0.111
14:00 - 15:00	26	54789	0.001	0.057	26	54789	0.002	0.073	26	54789	0.003	0.130
15:00 - 16:00	26	54789	0.001	0.032	26	54789	0.003	0.146	26	54789	0.004	0.178
16:00 - 17:00	26	54789	0.001	0.025	26	54789	0.002	0.105	26	54789	0.003	0.130
17:00 - 18:00	26	54789	0.001	0.060	26	54789	0.004	0.197	26	54789	0.005	0.257
18:00 - 19:00	26	54789	0.001	0.064	26	54789	0.001	0.038	26	54789	0.002	0.102
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.031	1.421	1	6370	0.031	1.421
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.095	4.291			0.047	2.177			0.142	6.468

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.047	2.131	1	6370	0.000	0.000	1	6370	0.047	2.131
06:00 - 07:00	1	6370	0.832	37.649	1	6370	0.251	11.366	1	6370	1.083	49.015
07:00 - 08:00	26	54789	0.164	7.436	26	54789	0.050	2.278	26	54789	0.214	9.714
08:00 - 09:00	26	54789	0.210	9.523	26	54789	0.079	3.586	26	54789	0.289	13.109
09:00 - 10:00	26	54789	0.157	7.093	26	54789	0.094	4.266	26	54789	0.251	11.359
10:00 - 11:00	26	54789	0.130	5.870	26	54789	0.103	4.673	26	54789	0.233	10.543
11:00 - 12:00	26	54789	0.123	5.559	26	54789	0.120	5.451	26	54789	0.243	11.010
12:00 - 13:00	26	54789	0.120	5.451	26	54789	0.134	6.080	26	54789	0.254	11.531
13:00 - 14:00	26	54789	0.144	6.531	26	54789	0.126	5.702	26	54789	0.270	12.233
14:00 - 15:00	26	54789	0.113	5.095	26	54789	0.151	6.820	26	54789	0.264	11.915
15:00 - 16:00	26	54789	0.099	4.479	26	54789	0.151	6.820	26	54789	0.250	11.299
16:00 - 17:00	26	54789	0.101	4.581	26	54789	0.163	7.366	26	54789	0.264	11.947
17:00 - 18:00	26	54789	0.063	2.846	26	54789	0.198	8.951	26	54789	0.261	11.797
18:00 - 19:00	26	54789	0.042	1.922	26	54789	0.088	3.974	26	54789	0.130	5.896
19:00 - 20:00	1	6370	0.220	9.945	1	6370	0.361	16.338	1	6370	0.581	26.283
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			2.565	116.111			2.069	93.671			4.634	209.782

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.047	2.131	1	6370	0.000	0.000	1	6370	0.047	2.131
06:00 - 07:00	1	6370	0.173	7.814	1	6370	0.000	0.000	1	6370	0.173	7.814
07:00 - 08:00	26	54789	0.007	0.311	26	54789	0.004	0.162	26	54789	0.011	0.473
08:00 - 09:00	26	54789	0.010	0.435	26	54789	0.004	0.181	26	54789	0.014	0.616
09:00 - 10:00	26	54789	0.006	0.270	26	54789	0.003	0.152	26	54789	0.009	0.422
10:00 - 11:00	26	54789	0.004	0.191	26	54789	0.004	0.187	26	54789	0.008	0.378
11:00 - 12:00	26	54789	0.004	0.162	26	54789	0.004	0.191	26	54789	0.008	0.353
12:00 - 13:00	26	54789	0.008	0.375	26	54789	0.010	0.451	26	54789	0.018	0.826
13:00 - 14:00	26	54789	0.010	0.442	26	54789	0.009	0.416	26	54789	0.019	0.858
14:00 - 15:00	26	54789	0.007	0.295	26	54789	0.006	0.276	26	54789	0.013	0.571
15:00 - 16:00	26	54789	0.005	0.232	26	54789	0.006	0.260	26	54789	0.011	0.492
16:00 - 17:00	26	54789	0.004	0.159	26	54789	0.007	0.330	26	54789	0.011	0.489
17:00 - 18:00	26	54789	0.004	0.181	26	54789	0.009	0.397	26	54789	0.013	0.578
18:00 - 19:00	26	54789	0.002	0.083	26	54789	0.004	0.162	26	54789	0.006	0.245
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.126	5.683	1	6370	0.126	5.683
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.291	13.081			0.196	8.848			0.487	21.929

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE  
 MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.016	0.710	1	6370	0.000	0.000	1	6370	0.016	0.710
06:00 - 07:00	1	6370	0.078	3.552	1	6370	0.000	0.000	1	6370	0.078	3.552
07:00 - 08:00	26	54789	0.008	0.343	26	54789	0.001	0.041	26	54789	0.009	0.384
08:00 - 09:00	26	54789	0.007	0.314	26	54789	0.000	0.013	26	54789	0.007	0.327
09:00 - 10:00	26	54789	0.005	0.219	26	54789	0.001	0.029	26	54789	0.006	0.248
10:00 - 11:00	26	54789	0.001	0.064	26	54789	0.001	0.038	26	54789	0.002	0.102
11:00 - 12:00	26	54789	0.002	0.083	26	54789	0.001	0.051	26	54789	0.003	0.134
12:00 - 13:00	26	54789	0.003	0.152	26	54789	0.004	0.200	26	54789	0.007	0.352
13:00 - 14:00	26	54789	0.008	0.372	26	54789	0.003	0.140	26	54789	0.011	0.512
14:00 - 15:00	26	54789	0.002	0.073	26	54789	0.007	0.295	26	54789	0.009	0.368
15:00 - 16:00	26	54789	0.001	0.054	26	54789	0.007	0.314	26	54789	0.008	0.368
16:00 - 17:00	26	54789	0.002	0.076	26	54789	0.004	0.197	26	54789	0.006	0.273
17:00 - 18:00	26	54789	0.001	0.048	26	54789	0.006	0.257	26	54789	0.007	0.305
18:00 - 19:00	26	54789	0.001	0.025	26	54789	0.002	0.105	26	54789	0.003	0.130
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.078	3.552	1	6370	0.078	3.552
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.135	6.085			0.115	5.232			0.250	11.317

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
07:00 - 08:00	26	54789	0.000	0.019	26	54789	0.000	0.000	26	54789	0.000	0.019
08:00 - 09:00	26	54789	0.001	0.025	26	54789	0.000	0.003	26	54789	0.001	0.028
09:00 - 10:00	26	54789	0.001	0.029	26	54789	0.000	0.003	26	54789	0.001	0.032
10:00 - 11:00	26	54789	0.000	0.010	26	54789	0.000	0.000	26	54789	0.000	0.010
11:00 - 12:00	26	54789	0.000	0.003	26	54789	0.000	0.003	26	54789	0.000	0.006
12:00 - 13:00	26	54789	0.000	0.000	26	54789	0.000	0.003	26	54789	0.000	0.003
13:00 - 14:00	26	54789	0.000	0.000	26	54789	0.000	0.013	26	54789	0.000	0.013
14:00 - 15:00	26	54789	0.000	0.000	26	54789	0.000	0.019	26	54789	0.000	0.019
15:00 - 16:00	26	54789	0.000	0.000	26	54789	0.000	0.013	26	54789	0.000	0.013
16:00 - 17:00	26	54789	0.000	0.000	26	54789	0.000	0.022	26	54789	0.000	0.022
17:00 - 18:00	26	54789	0.000	0.000	26	54789	0.000	0.022	26	54789	0.000	0.022
18:00 - 19:00	26	54789	0.000	0.000	26	54789	0.000	0.013	26	54789	0.000	0.013
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.002	0.086			0.000	0.114			0.002	0.200

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
07:00 - 08:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
08:00 - 09:00	26	54789	0.000	0.000	26	54789	0.000	0.003	26	54789	0.000	0.003
09:00 - 10:00	26	54789	0.000	0.022	26	54789	0.000	0.000	26	54789	0.000	0.022
10:00 - 11:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
11:00 - 12:00	26	54789	0.000	0.000	26	54789	0.000	0.006	26	54789	0.000	0.006
12:00 - 13:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
13:00 - 14:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
14:00 - 15:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
15:00 - 16:00	26	54789	0.000	0.000	26	54789	0.000	0.016	26	54789	0.000	0.016
16:00 - 17:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
17:00 - 18:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
18:00 - 19:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.000	0.022			0.000	0.025			0.000	0.047

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE  
 MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.016	0.710	1	6370	0.000	0.000	1	6370	0.016	0.710
06:00 - 07:00	1	6370	0.078	3.552	1	6370	0.000	0.000	1	6370	0.078	3.552
07:00 - 08:00	25	56772	0.008	0.363	25	56772	0.001	0.041	25	56772	0.009	0.404
08:00 - 09:00	25	56772	0.008	0.341	25	56772	0.000	0.019	25	56772	0.008	0.360
09:00 - 10:00	25	56772	0.006	0.271	25	56772	0.001	0.032	25	56772	0.007	0.303
10:00 - 11:00	25	56772	0.002	0.073	25	56772	0.001	0.038	25	56772	0.003	0.111
11:00 - 12:00	25	56772	0.002	0.086	25	56772	0.001	0.061	25	56772	0.003	0.147
12:00 - 13:00	25	56772	0.003	0.153	25	56772	0.005	0.204	25	56772	0.008	0.357
13:00 - 14:00	25	56772	0.008	0.373	25	56772	0.003	0.153	25	56772	0.011	0.526
14:00 - 15:00	25	56772	0.002	0.073	25	56772	0.007	0.316	25	56772	0.009	0.389
15:00 - 16:00	25	56772	0.001	0.054	25	56772	0.008	0.344	25	56772	0.009	0.398
16:00 - 17:00	25	56772	0.002	0.077	25	56772	0.005	0.220	25	56772	0.007	0.297
17:00 - 18:00	25	56772	0.001	0.048	25	56772	0.006	0.281	25	56772	0.007	0.329
18:00 - 19:00	25	56772	0.001	0.026	25	56772	0.003	0.118	25	56772	0.004	0.144
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.078	3.552	1	6370	0.078	3.552
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.138	6.200			0.119	5.379			0.257	11.579

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

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

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.173	7.814	1	6370	0.000	0.000	1	6370	0.173	7.814
06:00 - 07:00	1	6370	1.099	49.725	1	6370	0.251	11.366	1	6370	1.350	61.091
07:00 - 08:00	26	54789	0.182	8.249	26	54789	0.056	2.513	26	54789	0.238	10.762
08:00 - 09:00	26	54789	0.231	10.448	26	54789	0.084	3.812	26	54789	0.315	14.260
09:00 - 10:00	26	54789	0.170	7.674	26	54789	0.099	4.463	26	54789	0.269	12.137
10:00 - 11:00	26	54789	0.137	6.181	26	54789	0.109	4.949	26	54789	0.246	11.130
11:00 - 12:00	26	54789	0.129	5.823	26	54789	0.126	5.715	26	54789	0.255	11.538
12:00 - 13:00	26	54789	0.133	6.016	26	54789	0.149	6.756	26	54789	0.282	12.772
13:00 - 14:00	26	54789	0.164	7.414	26	54789	0.139	6.312	26	54789	0.303	13.726
14:00 - 15:00	26	54789	0.122	5.521	26	54789	0.165	7.484	26	54789	0.287	13.005
15:00 - 16:00	26	54789	0.106	4.797	26	54789	0.167	7.570	26	54789	0.273	12.367
16:00 - 17:00	26	54789	0.107	4.841	26	54789	0.177	8.021	26	54789	0.284	12.862
17:00 - 18:00	26	54789	0.069	3.135	26	54789	0.217	9.825	26	54789	0.286	12.960
18:00 - 19:00	26	54789	0.046	2.093	26	54789	0.095	4.291	26	54789	0.141	6.384
19:00 - 20:00	1	6370	0.220	9.945	1	6370	0.597	26.994	1	6370	0.817	36.939
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			3.088	139.676			2.431	110.071			5.519	249.747

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

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

Calculation factor: 100 sqm

Estimated TRIP rate value per 4525 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate	No. Days	Ave. GFA	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
06:00 - 07:00	1	6370	0.016	0.710	1	6370	0.016	0.710	1	6370	0.032	1.420
07:00 - 08:00	26	54789	0.001	0.048	26	54789	0.001	0.038	26	54789	0.002	0.086
08:00 - 09:00	26	54789	0.002	0.095	26	54789	0.002	0.102	26	54789	0.004	0.197
09:00 - 10:00	26	54789	0.002	0.083	26	54789	0.002	0.070	26	54789	0.004	0.153
10:00 - 11:00	26	54789	0.001	0.057	26	54789	0.001	0.064	26	54789	0.002	0.121
11:00 - 12:00	26	54789	0.001	0.067	26	54789	0.001	0.060	26	54789	0.002	0.127
12:00 - 13:00	26	54789	0.002	0.073	26	54789	0.002	0.086	26	54789	0.004	0.159
13:00 - 14:00	26	54789	0.001	0.025	26	54789	0.001	0.025	26	54789	0.002	0.050
14:00 - 15:00	26	54789	0.001	0.060	26	54789	0.001	0.051	26	54789	0.002	0.111
15:00 - 16:00	26	54789	0.001	0.044	26	54789	0.001	0.048	26	54789	0.002	0.092
16:00 - 17:00	26	54789	0.001	0.067	26	54789	0.001	0.064	26	54789	0.002	0.131
17:00 - 18:00	26	54789	0.001	0.032	26	54789	0.001	0.041	26	54789	0.002	0.073
18:00 - 19:00	26	54789	0.000	0.000	26	54789	0.000	0.000	26	54789	0.000	0.000
19:00 - 20:00	1	6370	0.000	0.000	1	6370	0.000	0.000	1	6370	0.000	0.000
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			0.030	1.361			0.030	1.359			0.060	2.720

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

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