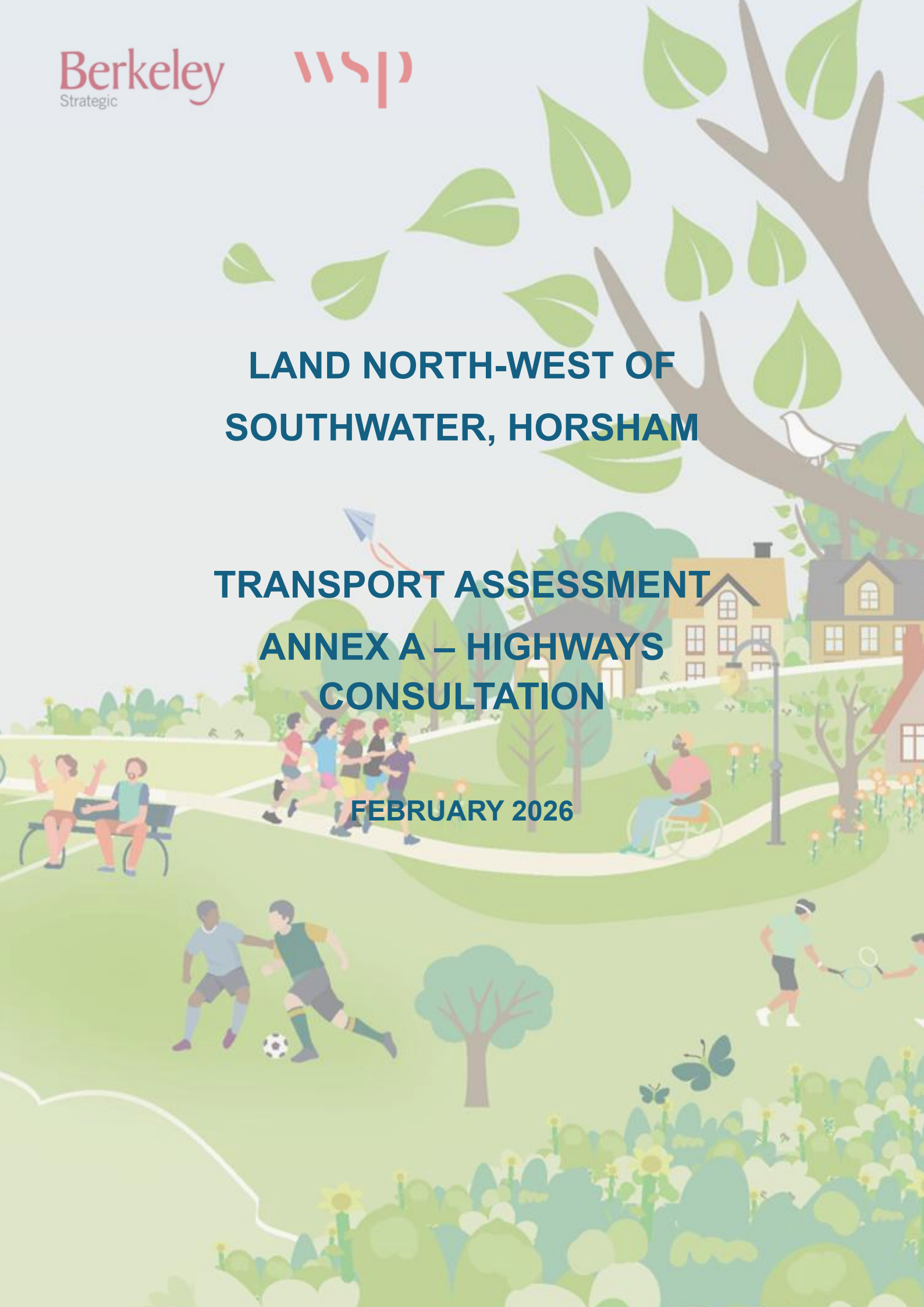


**LAND NORTH-WEST OF  
SOUTHWATER, HORSHAM**

**TRANSPORT ASSESSMENT  
ANNEX A – HIGHWAYS  
CONSULTATION**

**FEBRUARY 2026**





Berkeley Strategic Land Limited

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# LAND NORTH-WEST OF SOUTHWATER

## Transport Scoping Note

**FINAL PUBLIC**

**PROJECT NO.**

**UK0043490.961**

**DATE: AUGUST 2025**

WSP

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## ***APPENDICES***

APPENDIX A

TRICS OUTPUTS - RESIDENTIAL

APPENDIX B

TRICS OUTPUTS - EMPLOYMENT

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APPENDIX D

TRICS OUTPUTS - SECONDARY SCHOOL

APPENDIX E

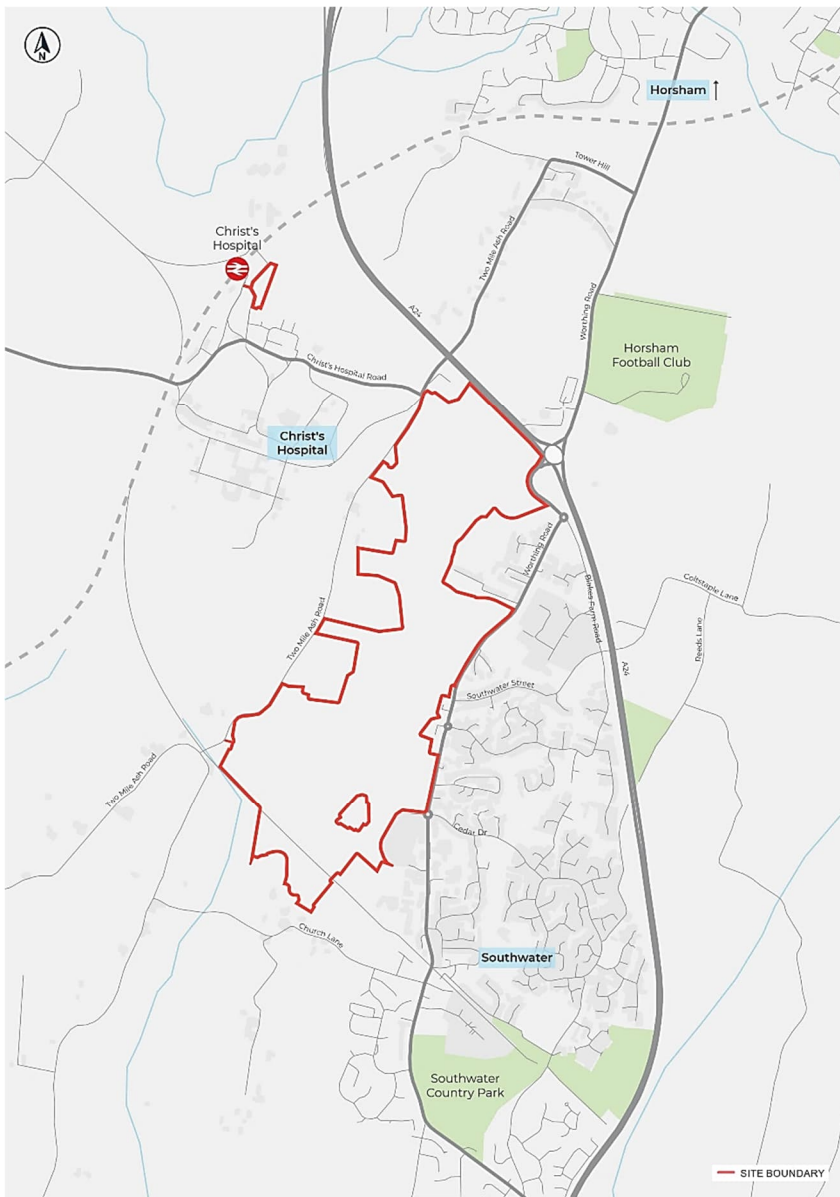
NTEM TEMPRO DATA

# 1. INTRODUCTION

## 1.1. INTRODUCTION

1.1.1. WSP has been commissioned by Berkeley Strategic Land Limited to support in the delivery of the Land North-West of Southwater site (the 'Site'). This application is to provide up to 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities. The location of the Site is shown in **Figure 1-1** below. Access to the Site will be provided via new main vehicular access to the south of the Hop Oast Roundabout, whilst a secondary vehicular access will be provided on Worthing Road to the east and Two Mile Ash to the west.

**Figure 1-1 - Site Location**



1.1.2. The Site is located to the north of the 'Broadacres' development, which has planning consent for 540 homes and 54 Retirement Living homes and is currently under construction.

- 1.1.3. The main access to the Broadacres development is via a four-arm roundabout at Worthing Road / Cedar Drive / Chessall Avenue, with a secondary access provided via a simple priority-controlled junction on Worthing Road just south of the Cedar Drive roundabout.
- 1.1.4. This development proposals associated with this Transport Scope is detailed below:
- Up to 1,000 homes (a mix of C2 and C3 use classes);
  - Up to 4 ha of employment land;
  - Community hub;
  - A 1-form entry primary school (expandable to 2 forms to incorporate Special Educational Needs and Disabilities ((SEND) and a 6-form entry secondary school (expandable to 8 forms to incorporate SEND);
  - Day care nursery (min. 60 places); and,
  - Open space.
- 1.1.5. WSP undertook a pre-application meeting with West Sussex on the 24<sup>th</sup> July to discuss the scope of this application in terms of transport and this scoping document draws together the approach and agreement from that meeting.

## 1.2. BACKGROUND

- 1.2.1. A number of assessments pertaining to the transport aspects of the proposed development have previously been undertaken by WSP. This includes work undertaken as part of WSP's previous 'Site Access Strategy' (June 2019) document, which assessed the overall highway impacts for Land North West of Southwater based on an assumption of c.1,900 homes, employment uses and a secondary school.
- 1.2.2. WSP also undertook a separate assessment of the highway impacts of 450 homes at part of the site as part of the draft Southwater Neighbourhood Plan (September 2018).
- 1.2.3. Finally, in the summer of 2022 WSP submitted a Transport Assessment to support a Planning Application on the site for the following development proposals
- Outline application with all matters reserved for a mixed-use strategic development to include up to 1,500 dwellings, up to 15,750 sqm (GIA) of flexible employment space (Use Classes E/B2/B8), up to 2,900 sqm (GIA) flexible community facilities (Use Classes E/F1/F2); education facilities; sports facilities; 5 gypsy and traveller pitches; public open space; landscaping and related infrastructure."*
- 1.2.4. The Transport Assessment included specific Walking and Cycling, Public Transport and Off-site mitigation strategies which this application will build upon. The application was withdrawn following the withdrawal of the draft Local Plan.
- 1.2.5. The site was allocated for at least 1,200 homes under Horsham District Council's (HDC) Strategic Policy HA3 from the Horsham Local Plan (Regulation 19 version) over the period to 2038 - albeit it is noted that the Local Plan has been withdrawn.
- 1.2.6. This application will utilise much of the agreed approach and methodology used within the previous transport assessment including addressing key comments focusing on the off-site Walking and Cycling Strategy, off-site mitigation and Public Transport Strategy. This will be detailed throughout this scoping document.

## 1.3. REPORT STRUCTURE

1.3.1. The structure of this report is as follows:

- Chapter 2 - Trip Generation – presenting updated TRICs assessments undertaken to account for each of the land uses ;
- Chapter 3 - Trip Distribution and Assignment – present the updated approach for the trip distribution and assignment this includes presenting the internalisation figures;
- Chapter 4 – Off-site Highway Assessment Scope – present the highway impact assessment to be undertaken within the Transport Assessment;
- Chapter 5 – Walking and Cycling Strategy – details the Walking and Cycling Strategy from the previous application and how this application will build upon it;
- Chapter 6 – Public Transport Strategy – details the Public Transport Strategy from the previous application and how this application will build upon i;
- Chapter 7 – Framework Travel Plans – detail what will be included within the framework travel plan; and,
- Chapter 8 - Summary and Conclusions.

## 2. TRIP GENERATION

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### 2.1. INTRODUCTION

- 2.1.1. This Chapter provides detail on the vehicular trip generation forecasts for the proposed development and how they have been derived. This note primarily deals with vehicular modes, not least because a key purpose of the note is to seek to agree the scope of vehicular traffic impact assessments.
- 2.1.2. Notwithstanding this, details of the projected multi-modal trip generation and impacts associated with the proposed development will be included within the Transport Assessment.
- 2.1.3. This section supersedes the agreed trip rates section from the previously submitted Transport Assessment in the Summer of 2022. The trip rates have been updated to take into account any recent surveys undertaken.

### 2.2. RESIDENTIAL

- 2.2.1. Trip rates for the residential element have been derived by way of an interrogation of the TRICS Database (Version 8.25.6). The 'Houses, Privately Owned' section of the database was reviewed, with the following site characteristics selected:
  - All England sites (excluding Greater London);
  - Dwelling range of between 200 and 1,500 dwellings located in Suburban and Edge of Town locations; and,
  - Sites that included, or were in close proximity to, notable retail, employment and / or leisure facilities were manually filtered out - given that the effect of the presence of these facilities on the subject site has been accounted for separately, as set out later in this note.
- 2.2.2. The rates that were derived from the search are provided in the following table, along with the volume of trips that would be generated by 1000 homes. The TRICS outputs (vehicular) are included at **Appendix A**. A total of seven TRICS sites were used in deriving these trip rates.

**Table 2-1 - Residential Vehicular Trip Rates & Generation**

Period	Trip Rates (per home)			Trip Generation (1,000 homes)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.143	0.375	0.518	143	375	518
PM (1700-1800)	0.345	0.150	0.495	345	150	495

- 2.2.3. Based on the above, it is envisaged that 1,000 dwellings could generate in the order of 518 two-way vehicle movements during the AM peak and 495 two-way vehicle movements during the PM peak.
- 2.2.4. The above trip rates and subsequent trip generation figures are considered robust in that:
  - The 'Private Housing' sub-land use - rather than the 'Mixed Private and Affordable Housing' category for example - has been used and applied to all 1,000 dwellings. There would be a percentage of affordable dwellings at the subject site, which typically generate fewer peak hour trips than equivalent private market dwellings. This element is not fully reflected in the selected

TRICS sites and subject to the finalised mix of the proposed properties, may be subject to further refinement;

- The majority of sites included within the TRICS analysis do not have a Travel Plan in place, unlike the subject site at Land North West of Southwater; and,
- The vehicular trip rates are comparable to those that were agreed with WSCC as part of the previous Transport Assessment study (Summer 2022) of 1,500 dwellings (0.521 AM Peak two-way / 0.523 PM Peak two-way).

## 2.3. EMPLOYMENT

- 2.3.1. The use of the employment space is unknown at this stage and the outline planning application will seek permission for flexible employment uses.
- 2.3.2. In total, it is anticipated that the employment area would cover a total combined area of up to approximately 4 ha, with the developable floor area comprising a total combined value of up to approximately 15,750 sqm GFA. This may change and is subject to further discussion and design development.
- 2.3.3. It is envisaged that this employment land area will comprise approximately one third office / research & development (Class E), one third industrial (Class B2) and one third storage and distribution (Class B8).
- 2.3.4. For the purposes of this assessment it has been assumed that a total 15,750 sqm GFA of employment floor space will comprise the following mix:
- 50% Industrial or Logistics Units (7,875 sqm); and,
  - 50% Business Park (7,875 sqm).
  - **Total - 15,750 sqm GFA.**
- 2.3.5. The TRICS Database has been interrogated to derive rates for the employment element, as set out below.

### INDUSTRIAL / LOGISTICS UNITS

- 2.3.6. In respect to the industrial / logistics units, a review of trip rates based on the 'Employment – Industrial Estate' and the 'Employment – Warehousing (Commercial)' TRICS categories have been undertaken as these are considered to most closely represent the likely future operational profile of these units. The TRICS interrogations have been undertaken based on comparable location parameters to the residential interrogation, albeit amended where appropriate in order to achieve a suitable sample size. The 'Employment – Industrial Estate' assessment is based on four TRICS sites while the 'Employment – Warehousing (Commercial)' assessment is based on five TRICS sites.
- 2.3.7. The TRICS outputs from these assessments are included at **Appendix B** and are summarised below in terms of the traditional highway network peak hours.

**Table 2-2 – Vehicular Employment Use Trip Rate Comparison (Industrial Estate v. Warehouse)**

Period	Industrial Estate Trip Rates (per 100sqm)			Warehouse (Commercial) Trip Rates (per 100sqm)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.365	0.158	0.523	0.161	0.135	0.296
PM (1700-1800)	0.127	0.309	0.436	0.134	0.173	0.307

- 2.3.8. It is apparent that the Industrial Estate TRICS outputs (Included in **Appendix B**) exhibit higher trip rates than the Warehouse (Commercial) TRICS outputs (also at **Appendix B**) and as such for the purposes of robustness these Industrial Estate trip rates have been taken forward and applied to the 7,875 sqm of this element of the employment floor area. The subsequent trip generation is presented in **Table 2-3**.

**Table 2-3 - Vehicular Employment Trip Rates and Generation (Industrial) 7,875sqm**

Period	Trip Rates (per 100sqm)			Trip Generation – 7,875sqm GFA		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.365	0.158	0.523	29	12	41
PM (1700-1800)	0.127	0.309	0.436	10	24	34

- 2.3.9. Based on the above, it is envisaged that the assumed industrial element of the proposed employment use could generate a forecast of 41 two-way movements in the AM peak and 34 two-way movements in the PM peak.

## BUSINESS PARK

- 2.3.10. A search of the ‘Business Park’ category of TRICS was completed, with all sites within the UK (excluding Greater London and Northern Ireland) selected. The TRICS interrogations have been undertaken based on comparable location parameters to the residential interrogation, albeit amended where appropriate in order to achieve a suitable sample size.
- 2.3.11. The TRICS outputs are included at **Appendix C** whilst the peak hour vehicle trip rates that were derived from the search are provided in the following table, along with the volume of vehicle trips that would be generated based on the projected 7,875sqm floor area.

**Table 2-4 – Vehicular Employment Trip Rates and Generation (Business Park) 7,875sqm**

Period	Trip Rates (per 100sqm)			Trip Generation – 7,875sqm GFA		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	1.330	0.226	1.556	105	18	123
PM (1700-1800)	0.273	0.935	1.208	21	74	95

- 2.3.12. Based on the above, it is envisaged that the assumed Business Park element of the proposed employment use could generate a forecast of 123 two-way movements in the AM peak and 95 two-way movements in the PM peak.

## TOTAL EMPLOYMENT USE

2.3.13. The figures at **Table 2-3** and **Table 2-4** have been combined to establish the total trip generation associated with the employment element (15,750 sqm). This is presented below in **Table 2-5**.

**Table 2-5 – Vehicular Trip Generation – Total Employment Use (15,750 sqm)**

Period	Trip Generation – 15,750sqm		
	Arrival	Departure	Total
AM (0800-0900)	134	30	164
PM (1700-1800)	32	97	129

2.3.14. Based on the above, it is envisaged that the proposed employment element could generate a forecast of 164 two-way movements in the AM peak and 129 two-way movements in the PM peak. This is prior to any allowance for the effects of internalisation / modal shift which is detailed in Chapter 3. The trip generation presented in Table 2-5 is a reduction on the previous employment trip generation from the 2022 Transport Assessment

## 2.4. SECONDARY SCHOOL

2.4.1. The secondary school would likely comprise a 6-form entry school (expandable to 8 forms to incorporate SEND) with a total of in the order of 900 pupils and associated teaching / administrative staff (based on 6-form entry). It is understood from initial discussions with the WSCC education department that all (or the vast majority) of these 900 pupils will reside in Southwater - either within the proposed development site or within existing areas of Southwater. For those that may come from outside of Southwater, it has been assumed that these would come from the recently approved “Horsham Golf & Fitness Village” located to the north-east approximately 1km from the site.

2.4.2. Trip rates for the secondary school element were derived by way of an interrogation of the TRICS Database (Version 8.25.6). The ‘Education - Secondary’ section of the database was interrogated, with the following parameters selected:

- All England sites (excluding Greater London were selected) with a size of between 200 and 2,000 pupils located in Suburban and Edge of Town locations.

2.4.3. The TRICS outputs are included at **Appendix D** while the peak hour trip rates that were derived from the search are provided in the following table, along with the volume of vehicular trips that would be generated based on the projected school size of 900 pupils. Whilst the trip rate is ‘per pupil’ these figures include all trips associated with the school (i.e. including staff, visitors and servicing trips etc.).

**Table 2-6 – Vehicular Secondary School Trip Rates and Generation (900 pupils)**

Period	Trip Rates (per pupil)			Trip Generation – 900 pupils		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.164	0.133	0.297	148	120	267
PM (1700-1800)	0.026	0.028	0.054	23	25	49

Based on the above, it is envisaged that the proposed secondary school could generate 270 two-way vehicle movements during the AM peak and 49 vehicle movements during the PM peak. This is prior to any allowance for the effects of internalisation / modal shift.

## 2.5. TOTAL TRAFFIC GENERATION

2.5.1. The figures presented at **Tables 2-1, 2-5, and 2-6** have been combined in order to establish the total peak hour traffic generation at the site. This is presented below at **Table 2-8**.

**Table 2-8 – Total Vehicular Trip Generation (Prior to Internalisation / Modal Shift)**

Period	Total Traffic Generation		
	Arrival	Departure	Total
AM (0800-0900)	424	525	949
PM (1700-1800)	400	273	673

2.5.2. Based on the above, it is envisaged that the site is forecast to generate a total of in the order of 949 two-way vehicle movements during the traditional AM peak hour and 673 two-way vehicle movements during the traditional PM peak hour. The previous application from 2022 had a total trip generation of 1,191 two-way trips in the AM peak and 997 two-way trips in the PM peak, this was prior to internalisation and modal shift. There is a significant reduction in trip generation this due to providing only 1,000 units compared to 1,500 units.

2.5.3. This is prior to any allowances for the effects of site internalisation or modal shift, which is discussed in the following Chapter of this note.

## **3. TRIP DISTRIBUTION AND ASSIGNMENT**

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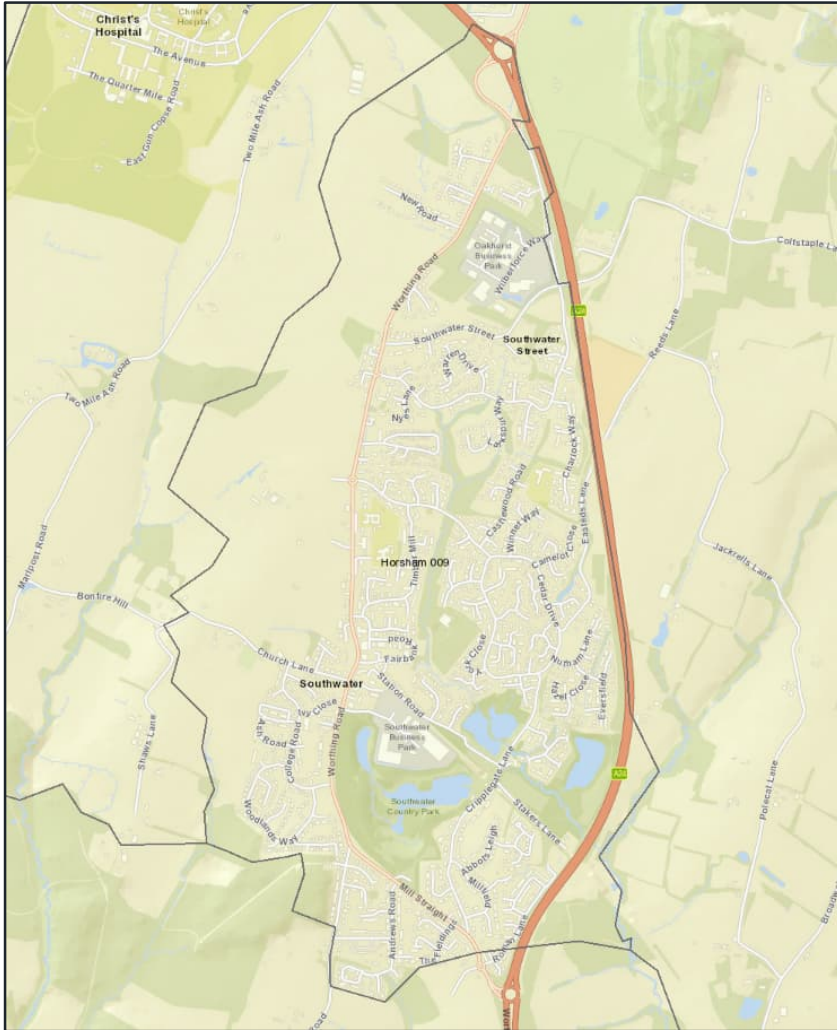
- 3.1.1. This Chapter sets out the projected distribution of the trips set out at Chapter 2 and the potential for internalisation. This includes the projected assignment on the local highway network and the projected levels of site internalisation - i.e. trips undertaken entirely within the site without involving any routeing off-site.
- 3.1.2. This application will undertake the assignment of trips differently compared to the previous Transport Assessment from July 2022, details in the following chapter will outline how the vehicular trips will be distributed in this application.

### **3.2. RESIDENTIAL TRIPS**

#### **TRIP PURPOSE**

- 3.2.1. The trips generated by the residential element of the proposals have been broken down by journey purpose in order to project the likely distribution of these trips more accurately. To this end, the National Trip End Model (NTEM) has been reviewed by way of the TEMPro database 8.2 in terms of journey purposes by mode amongst existing residents in the Horsham 009 Middle Super Output Area (MSOA), as projected in the future assessment year of 2038. This MSOA, which is shown below, includes the majority of the existing residential areas of Southwater.

**Figure 3-1 - Horsham 009 Middle Super Output Area (MSOA)**



3.2.2. The TEMPro outputs are included at **Appendix E** whilst the subsequent residential journey purpose (all modes) for the AM and PM peak periods is shown in **Table 3-1** below. This is based on a total sample size of 6,565 and 7,101 existing residential trips during the AM and PM peak periods respectively.

**Table 3-1 – Journey Purpose (All Modes) – Home Based Trips in Horsham 009 Middle Super Output Area (MSOA)**

<b>Journey Purpose (All Modes)</b>	<b>AM Peak Period (0700-1000 hours)</b>	<b>PM Peak Period (1600-1900 hours)</b>
Work	43.6%	34.6%
Education	26.4%	6.8%
Shopping	16.4%	24.5%
Leisure / Other	13.5%	34.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>

3.2.3. It is apparent that the most common journey purpose during each of the peak periods is for work. The breakdown of journey purpose amongst car drivers only is presented in **Table 3-2**. This is based on a total sample size of 3,229 and 3,736 residential car driver trips during the AM and PM peak periods respectively.

**Table 3-2 – Journey Purpose (Car Drivers Only) – Home Based Trips in Horsham 009 Middle Super Output Area (MSOA)**

<b>Journey Purpose (Car Drivers Only)</b>	<b>AM Peak Period (0700-1000 hours)</b>	<b>PM Peak Period (1600-1900 hours)</b>
Work	61.7%	45.0%
Education	9.6%	3.4%
Shopping	16.5%	23.1%
Leisure / Other	12.2%	28.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>

3.2.4. On the basis of the above it is apparent that the majority (61.7%) of AM peak period car driver trips are for work purposes with the majority (45%) of PM peak period trips also for this purpose.

3.2.5. The breakdown in journey purpose amongst car drivers (**Table 3-2**), has been applied to the projected peak hour vehicular trips amongst the 1,000 proposed dwellings at the site (**Table 2-1**). The subsequent projected number of vehicular trips by purpose is shown in **Table 3-3** below.

3.2.6. For example, the total residential AM peak hour vehicular departures at **Table 2-1** (375) have been disaggregated based on the ‘AM peak period’ percentages at **Table 3-2** - e.g. 61.7% of the 375 AM peak hour departures (231 vehicle departures) would be for ‘work’ purposes - this is reflected at the respective row / column in **Table 3-3**.

**Table 3-3 – Residential Vehicular Trips by Journey Purpose – 1,000 Dwellings**

Journey Purpose (Car Drivers Only)	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Work	88	231	320	155	68	223
Education	14	36	50	12	5	17
Shopping	24	62	86	80	34	114
Leisure / Other	17	46	63	98	43	141
<b>Total</b>	<b>143</b>	<b>375</b>	<b>518</b>	<b>345</b>	<b>150</b>	<b>495</b>

- 3.2.7. It is apparent that of the 518 two-way AM peak hour residential vehicular trips, 319 would be for work purposes, 50 would be for education purposes, 86 would be for shopping purposes and 63 would be for leisure / other purposes.
- 3.2.8. Of the 495 two-way PM peak hour residential vehicular trips, 223 would be for work purposes, 17 would be for education purposes, 114 would be for shopping purposes and 141 would be for leisure / other purposes. The distribution of the above residential trips by each respective journey purpose is set out below.

### RESIDENTIAL TRIPS - WORK PURPOSE

- 3.2.9. Given the employment facilities (approximately 15,750 sqm GFA) that would be provided on the site, it is reasonable to expect that some of the residents' work purpose trips will be to / from these on-site employment facilities and will therefore be an internal trip within the site.
- 3.2.10. In-practice these internal trips may be experienced as a modal shift to walk / cycle – given the comprehensive network of walk / cycle facilities that would be provided throughout the site. In any event, the trips would be internal and would have no impact at off-site junctions.
- 3.2.11. In order to establish the likely number of work purpose residential trips that may be internal to the on-site employment uses, reference has been made to 2011 Census data in respect to the existing residence of employees working within Horsham 009 MSOA. The 2021 Census data was deemed unrepresentative due to the fact it was undertaken during Covid conditions and as it proposed to utilise the 2011 data. It is notable that this MSOA includes Southwater Business Park and Oakhurst Business Park and therefore the assessment is based on a reasonable sample size. The assessment shows that of all the vehicle trips to these existing employment facilities, 23% are from existing residents of Southwater and it could be justifiable to apply this percentage to the subject site (i.e. 23% of the trips to the proposed employment facilities on the site will come from within the site). For the purposes of a robustness assessment however, it has been assumed that this would only be reflected as 10% internalisation, with the remainder of the trips to the employment facilities being external as assessed within the 2022 planning application. Further details relating to this assessment - in respect to the employment element of the proposals - are provided later in this note (**Table 3-9**) and demonstrate that 16 AM peak hour trips and 13 PM peak hour trips to the proposed employment uses are anticipated to be made from residents living at the site (based on the robust 10% figure). As such it is

reasonable to categorise this quantum of trips amongst the work purpose residential trips as being internal and is reflected as such at **Table 3-4**.

3.2.12. The remainder of the residential off-site work purpose trips will be distributed onto the network utilising the Horsham Transport Model for journey to work, this differs from 2022 Transport Assessment.

3.2.13. Table 3-4 presents the external and internal trip distribution for the residential work purpose vehicular trips.

**Table 3-4 – Distribution of Residential Work Purpose Vehicular Trips – 1,000 Dwellings**

	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External	85	218	304	95.0%	145	65	209	94.1%
Internal (Walking and Cycling)	3	13	16	5.0%	10	3	13	5.9%
Total	<b>88</b>	<b>231</b>	<b>320</b>	<b>100%</b>	<b>155</b>	<b>68</b>	<b>222</b>	<b>100%</b>

3.2.14. On the basis of the above it is apparent that there would be in the order 304 and 209 external two-way vehicular movements during the AM and PM peak hours respectively for the purposes of residents’ work trips. The remaining trips (16 AM peak / 13 PM peak) would be internal to the site, given the employment floor space that would be included on-site. In practice, these remaining trips may be experienced as a modal shift to walk / cycle, given the network of walk / cycle routes that would be provided throughout the site.

### RESIDENTIAL TRIPS - EDUCATION PURPOSE

3.2.15. In respect to resident trips undertaken for the purposes of education, **Table 3-2** suggests that this would comprise 9.6% (50 two-way) and 3.4% (17 two-way) of the AM and PM peak hour residential vehicular trips respectively.

3.2.16. There would be a primary and secondary school located on the site and would accommodate all - or the vast majority - of the educational requirements amongst residents at the site. The schools would likely be located close to the centre of the site and would be within a reasonable walk / cycle distance of the majority of the residential areas of the site.

3.2.17. It is therefore considered that these vehicular trips would actually be subject to a modal shift to walking / cycling – particularly given the good quality walk and cycle network that would be incorporated throughout the site and given the various measures that would be incorporated as part of the future School Travel Plan(s). These trips have therefore been excluded from any further allowance in this note.

3.2.18. In the event that there are some vehicular trips to / from the schools amongst residents living at the site, these would likely be undertaken as pass-by trips – e.g. a parent dropping-off a child on their way to work – and are therefore already accounted for in the assessments herein.

## RESIDENTIAL TRIPS – SHOPPING PURPOSE

- 3.2.19. In respect to the residential vehicular trips for the purposes of shopping, given the various retail facilities that would be provided on the site, for the purposes of this assessment it is assumed that 25% of these trips would be internal while the remaining 75% would be equally distributed between Lintot Square (25%) the centre Horsham (25%) and Broadbridge Heath (25%).
- 3.2.20. The application of 25% of the shopping trips as internal is considered appropriate given that there will be a retail centre provided on the site. It is noteworthy that peak hour trips to / from shopping facilities are often undertaken as a pass-by trip that is occurring in any event (i.e. as part of wider trip to / from work for example). It is unlikely that an individual would undertake a primary trip to a shop during the highway network peak hours.
- 3.2.21. For the purposes of this assessment, it is assumed that only the trips to Horsham and Broadbridge Heath may be discernible on the highway network, with the trips to Lintot Square (and the internal trips) being undertaken as a pass-by trip or being undertaken on foot / cycle in-practice.
- 3.2.22. The subsequent distribution of these trips is shown in **Table 3-5**.

**Table 3-5 – Location of Residential Shopping Purpose Vehicular Trips – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Town Centre	6	15	21	25%	20	9	29	25%
Broadbridge Heath	6	15	21	25%	20	9	29	25%
Internal / Lintot Square (Walking and Cycling)	12	31	43	50%	40	17	57	50%
Total	24	62	86	100%	80	35	115	100%

- 3.2.23. In terms of residential shopping trips, it is apparent that there would be in the order 42 and 58 external two-way vehicular movements during the AM and PM peak hours respectively.

## RESIDENTIAL TRIPS – LEISURE / OTHER

- 3.2.24. In respect to the residential vehicular trips for the purposes of leisure / other, again given the various leisure facilities that would be provided on the site, for the purposes of this assessment it is assumed that 25% of these trips would be internal while the remaining 75% would be to / from external areas, including 'The Bridge' leisure centre at Broadbridge Heath (25%), the 'Pavilions in the Park' leisure centre in Horsham (25%) and 'Bluecoats Sports, Health and Fitness Club' in Christ's Hospital (25% - assumed for the purposes of this assessment to also be internal, or subject to a modal shift to walk / cycle).
- 3.2.25. The subsequent distribution of these trips is shown in **Table 3-6**.

**Table 3-6 – Distribution of Residential Leisure / Other Purpose Vehicular Trips – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Town Centre	4	12	16	25%	24	11	35	25%
Broadbridge Heath	4	12	16	25%	24	11	35	25%
Internal/ Christ Hospital (Walking and Cycling)	9	22	31	50%	50	21	71	50%
Total	17	46	63	100%	98	43	141	100%

3.2.26. In terms of residential leisure / other trips, it is apparent that there would be in the order 32 and 72 external two-way vehicular movements during the AM and PM peak hours respectively.

### RESIDENTIAL TRIPS – ALL PURPOSES

3.2.27. The figures presented in **Tables 3-4, 3-5 and 3-6** have been combined to show the total vehicular trip distribution associated with the residential element of the proposals (1,000 dwellings). This is shown below at **Table 3-7**.

**Table 3-7 – Distribution of Residential Vehicular Trips (All Purposes) – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Only) – to be distributed by the traffic model	75	228	304	58.7	152	58	209	43.7
Horsham Town Centre (Non Work Trips)	10	27	37	7.1	44	20	64	13.4
Broadbridge Heath (Non Work Trips)	10	27	37	7.1	44	20	64	13.4
Internal / Lintot Square / Christ's Hospital (Walking and Cycling)	48	92	140	27.0	98	65	141	29.5
Total	143	374	518	100	338	163	478	100

3.2.28. It is forecast that the residential element of the proposals would generate a total of 378 and 337 two-way external vehicular trips during the AM and PM peak hours respectively. The remaining trips (140 AM peak / 141 PM peak) would be internal or to Lintot Square / Christ's Hospital.

### 3.3. EMPLOYMENT TRIPS

- 3.3.1. In respect to the trips associated with the approximate 15,750 sqm of employment floor space at the site (**Table 2-5**), these trips have been distributed based on the Horsham Transport Model. This is deemed an acceptable approach and will take account of the possible redistribution of traffic on the network.
- 3.3.2. The raw Census outputs indicate that 23% of existing trips to the existing employment areas within Southwater are from existing residents within Southwater as outlined in Chapter 2. However, given that this may not be reflected entirely at the subject site, for the purposes of robustness this figure has been manually reduced to 10% and subsequently assigned as ‘internal’ in respect to the subject site. The remaining trips have been manually applied pro-rata to the remaining routes.

**Table 3-9 – Distribution of Employment Vehicular Trips – 15,750 sqm GFA**

External/ Internal	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External	120	27	147	90	28	88	116	90
Internal*	13	3	16	10	3	10	13	10
<b>Total</b>	<b>133</b>	<b>30</b>	<b>163</b>	<b>100</b>	<b>32</b>	<b>98</b>	<b>129</b>	<b>100</b>

\*Internal trips are excluded from the total at Table 3-11 as trips already accounted for at Table 3-4

- 3.3.3. In terms of the employment trips, it is apparent that there would be in the order 147 and 116 external two-way vehicular movements during the AM and PM peak hours respectively, with the remaining trips (16 AM peak / 13 PM peak) being internal trips. These internal trips are already accounted for (**Table 3-4**). In practice, these internal trips may be experienced as a modal shift to walk / cycle, given the network of walk / cycle routes that would be provided throughout the site.

### 3.4. SECONDARY SCHOOL TRIPS

- 3.4.1. In terms of trips associated with the 6-form entry secondary school on the site (assumed 900 pupil capacity), it is understood from discussions with the WSCC education department that there is existing demand in Southwater for in the order of 3-4 form entry secondary school space, while the remaining 2-3 form capacity would likely be utilised by way of new demand from Broadacres (once fully built out) and the subject site at Land North West of Southwater.
- 3.4.2. To this end, it is assumed that the secondary school pupils would comprise solely those residing within the site / Broadacres / other areas of Southwater and would walk / cycle to school - or any vehicular trips to / from the school that do take place amongst residents living on the site would be undertaken by way of a pass-by trip in any event (e.g. a parent dropping their child off at school on their way to work).

- 3.4.3. It should also be noted that WSCC education department have advised that in the order of 525 children currently travel from Southwater into existing Horsham Schools but in future would likely attend the proposed secondary school on site. As such it could also be appropriate to consider a reduction in some existing baseline vehicle trips on some parts of the highway network, given that some of these trips relate to existing secondary school age pupils who currently are required to travel further afield to go to school. The provision of the new secondary school at the site will therefore reduce vehicular mileage on the roads into Horsham amongst these existing pupils – albeit it is understood that the majority of these pupils currently travel by bus. Again however, for robustness no allowance for potential reductions in existing school related trips on the transport network has been made in the assessments herein.
- 3.4.4. Based on the information above, 93.6% in the AM peak hours and 87.8% in the PM peak hours of the trips generated by the new secondary school have been allocated as internal (existing village or new development), as shown at **Table 3-10**.
- 3.4.5. Further, following the recent planning approval of the “Horsham Golf & Fitness Village”, approximately 1km to the north-east from the site, it was agreed that the new school would likely cater for new students residing in this location.
- 3.4.6. Based on School Characteristics data in West Sussex for 2024/25 131,860 pupils, including primary school, secondary and higher education (16-17 years old), 63,883 in primary school, 51,334 are going in secondary and 16,643 in higher education (16-17 years old). it is has been calculated that 39% of pupils would go to the secondary school. Combining the values shown in **Table 3-1**, **Table 5.3** “Proposed Residential Multi-Modal Trip Generation” from “Horsham Golf & Fitness Village” Transport Assessment part 1 (page 56) and 39% of secondary school pupils, the proposed development would distribute 6.4% in AM and 12.2% in the PM peak hours of trips from the Horsham Golf Course site as shown in **Table 3-10**.

**Table 3-10 – Distribution of Secondary School Vehicular Trips – 900 Pupils**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Golf Course	12	5	17	6.4	2	4	6	12.2
Internal (existing village and Proposed Development)	136	115	250	93.6	21	21	43	87.8
<b>Total</b>	<b>148</b>	<b>120</b>	<b>267</b>	<b>100</b>	<b>23</b>	<b>25</b>	<b>49</b>	<b>100%</b>

- 3.4.7. It is anticipated that the proposed secondary school would generate 267 AM Peak two-way vehicle movements and 49 PM Peak two-way vehicle movements. In practice, the majority trips may be subject to a modal shift to walking / cycling and if not they would likely be pass-by trips and associated with another form of trip purpose.

3.4.8. The secondary school trips associated with Horsham Golf Course would currently go to Tanbridge House School, as the walking time is approximately 45-60 minutes it is unlikely that this journey will be undertaken on foot. As such majority of students would be driven to and from the school as these trips would now be to the proposed new secondary school it is proposed to remove those trips from the network in the Do Something scenarios to take account of the trip distribution and remove the possibility of double counting. This would equate to 17 two-way trips in the AM peak and six trips in the PM peak being removed on the A24 north of Hop Oast Roundabout.

### 3.5. TOTAL TRIP DISTRIBUTION – ALL SITE USES COMBINED

3.5.1. Based on the values shown at **Tables 3-7, 3-9 and 3-10** the total combined vehicular trip distribution associated with all proposed uses on the site are shown in **Table 3-11** below.

**Table 3-11 – Total Distribution of Vehicular Trips – All Site Uses Combined**

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	75	228	304	56.1	152	58	209	45.5
External (Work Trips Arrivals)	120	27	147	27.1	28	88	116	25.3
Horsham Town Centre (Non Work Trips)	10	27	37	6.8	44	20	64	13.9
Broadbridge Heath (Non Work Trips)	10	27	37	6.8	44	20	64	13.9
Horsham Golf Course	12	5	17	3.1	2	4	6	1.3
<b>Total</b>	<b>227</b>	<b>314</b>	<b>542</b>		<b>270</b>	<b>190</b>	<b>459</b>	

3.5.2. It is forecast that the total development traffic would be in the order of 542 and 459 external two-way vehicular movements during the AM and PM peak hours respectively.

### 3.6. VISION LED VEHICULAR TRIP GENERATION

3.6.1. A vision led trip generation is required given the scale of the site and to align with the National Planning Policy Framework from December 2024.

3.6.2. A guide has been taken from another development Berkeley development on the edge of Horsham, which is the Highwood development, located on the western side of Horsham. The monitoring reports produced for the site from 2014 and 2018 (pre-covid) indicated that there has been a 5% reduction in single occupancy vehicle journeys. It is understood that the implementation of the bus service from the Highwood site to Horsham has yet to be implemented and as such hasn't an impact the reduction in vehicular trips.

3.6.3. This Site will benefit from an enhanced Public Transport and Walking and Cycling Strategies and based on the Highfield site in Horsham, the Vision Led Vehicular trip generation it is proposed that a 10% reduction is applied to the vehicular trips from Table 3-11 to create Vision Led Trip Generation. The Vision led Vehicular Trip generation is presented in Table 3-12.

**Table 3-12 – Vision Led Total Distribution of Vehicular Trips**

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	68	205	274	55.1	137	52	188	44.1
External (Work Trips Arrivals)	108	24	132	26.6	25	79	104	24.5
Horsham Town Centre (Non Work Trips)	10	27	37	7.4	44	20	64	15.0
Broadbridge Heath (Non Work Trips)	10	27	37	7.4	44	20	64	15.0
Horsham Golf Course	12	5	17	3.4	2	4	6	1.4
<b>Total</b>	<b>208</b>	<b>289</b>	<b>497</b>		<b>252</b>	<b>175</b>	<b>427</b>	

3.6.4. The forecast Vision Led trip generation is 497 and 427 external two-way vehicular movements during the AM and PM peak hours respectively. We would welcome WSCC view on the use of the above trip generation as the basis for the core traffic modelling assessment suggested below in Section 4. The previous planning application from the Summer of 2022 had a two way trip generation of 762 in the AM peak and 690 in the PM peak.

## 4. OFF-SITE HIGHWAY ASSESSMENT SCOPE

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- 4.1.1. Based on the projected generation and distribution of the proposed development traffic set out at Chapter 2 and Chapter 3 it is suggested that the same off-site junctions scope which was undertaken in the Transport Assessment from July 2022 (in addition to the site access junctions) would be subject to junction capacity analysis as part of the forthcoming Transport Assessment, as set out below.
- A24 / Worthing Road (Hop Oast Roundabout);
  - Worthing Road / Southwater Street Priority T-Junction;
  - Worthing Road / Church Lane;
  - Worthing Road / Cedar Drive Roundabout;
  - Worthing Road / Fairbank Road Signalised Junction;
  - A24 / Mill Straight (Pollards Hill Roundabout);
  - A272 / A24 / Cowfold Road Signalised Junction (Buck Barn Junction);
  - A24 / A264 (Great Daux Roundabout);
  - A24 / B2237 / Robin Hood Lane (Robin Hood Roundabout);
  - A264 / Rusper Road Roundabout;
  - A264 / Langhurst Wood Road; and,
  - B2237 / Worthing Road / Mill Bay Lane Roundabout.
- 4.1.2. The above junctions would be assessed based on their existing configuration and based on any committed arrangements that may be in-place at the time of the future assessment year. This includes the signalisation of the Hop Oast roundabout to be with and without bus priority.
- 4.1.3. It is suggested that the following scenarios would be assessed in the Transport Assessment and associated documentation, including the traffic and transport chapter of the Environmental Statement. The suggested 2038 assessment year relates to the end of the Horsham District Council draft Local Plan period.
- **2025 Baseline** (2019 baseline updated to take account of new traffic surveys in 2023/25)
  - **2038 Do Minimum:** baseline traffic flows, including background traffic growth and relevant committed developments only
  - **2038 Do Something:** 2038 Do Minimum plus Proposed Development (vision led).
  - **2038 Sensitivity:** 2038 Do Minimum + withdrawn Local Plan assumptions + Proposed Development (vision led)
- 4.1.4. The above scenarios would be assessed in respect to the traditional AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00) on the highway network.
- 4.1.5. The previous off-site mitigation strategy produced as part of the July 2022 application will be assessed with the future scenarios if the junctions are forecast to be operating over their theoretical capacity. The off-site mitigation strategy had schemes that have already been identified by others (towards which a contribution could be provided), or comprise new, 'application specific' improvements that would be delivered solely as part of the proposed development, or again through a financial contribution which WSCC can collate alongside contributions from other developments coming forward.

## 5. WALKING AND CYCLING STRATEGY

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- 5.1.1. This Chapter presents the on and off-site walking and cycling strategy for the Site. It details how the provision on-site will be provided and outlines the off-site strategy on key routes and to key destinations, and will be described in detail in Transport Assessment.
- 5.1.2. Active travel is at the heart of the Site with the internal layout focused around encouraging occupiers of the Site to walk or cycle wherever reasonably possible. Reviewing the baseline conditions in the area, the Census data from 2011 from the Horsham district indicates that 40% of travel to work journeys for distances of less than 2km are made by car or van. It is encouraging that the most popular travel to work choice is walking, which accounted for 48% of the total trips under 2km but only 6% are by cyclists for journeys less than 2km.

### ON-SITE WALKING AND CYCLING INFRASTRUCTURE

- 5.1.3. The overall Site masterplan will be designed to encourage the use of active travel modes across the Site, notably in a north/south direction. The routes focus on key on-site destinations, including the employment / school land at the north of the Site, the village centre and the proposed internal road network. As this is an outline application and details around the on-site walking and cycling infrastructure will be shared during the masterplan development. When the on-site walking and cycling infrastructure is developed this will align with the latest guidance.

### OFF-SITE WALKING AND CYCLING STRATEGY

- 5.1.4. This section outlines the off-site walking and cycling strategy for the Proposed Development. The previous application from July 2022 presented a detailed off-site walking and cycling strategy which was refined through the post application process with West Sussex.
- 5.1.5. The strategy focuses on key destinations within a two-kilometre radius for walking trips and a five-kilometre radius for cycling trips of the site - as these are the journeys that can generally be undertaken via active travel modes if suitable infrastructure is provided (albeit many cyclists comfortably cycle 8km).
- 5.1.6. The previous off-site walking and cycling strategy focused on the following routes, and this application will build upon those:
- Christ's Hospital Rail Station (West of the Site)
  - Horsham Park & Ride (North of the Site);
  - Southwater Village Centre (South East of the Site) - including Lintot Square, Southwater Junior Academy, Hen and Chicken Public House, etc.; and
  - Horsham Town Centre (North of the Site).
- 5.1.7. Since the 2022 planning application, the Golf Course application has come forward with a wide range of proposals which deliver a number of the previous strategies associated with the Southwater planning application. As such, WSP will consider how the Proposed Development can connect into these proposals, and where appropriate complement the strategy.
- 5.1.8. There will need to be ongoing consultation with WSCC to discuss the delivery of such schemes subject to which development may come forward first.



- 5.1.9. It was agreed during the scoping meeting that an on-site meeting will occur in September between WSP, West Sussex Highways and if available Active Travel England to agree approach based on the strategy outlined above, notable access to Christ Hospital Station.

## 6. PUBLIC TRANSPORT STRATEGY

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- 6.1.1. The Public Transport Strategy produced as part of the previous planning application outlined how funding would be provided to enhance the 98-bus service by improving the bus service frequency to every 12-15 minutes. As the Golf Course application is providing the funding to provide this increase service frequency as part of their Public Transport Strategy, this application will investigate different options to enhance bus services for the site by a range of different measures including bus stop provision or additional funding for other services.
- 6.1.2. WSP will look to arrange a discussion with MetroBus the operator within Southwater to discuss potential opportunities for additional improvements within proximity to the site that the Proposed Development can support.

## 7. FRAMEWORK TRAVEL PLANS

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- 7.1.1. As per the previous application the application will include a framework travel plan. The document will build upon the initiatives and targets outlined in that document as well as developing new measures to improve the sustainability of the site.
- 7.1.2. The over-arching aim of the site is:
- ‘Ensure that residents and visitors of Land North West of Southwater travel to, from and within the Site in the most sustainable manner appropriate for their journey’.*
- 7.1.3. To achieve the overarching aim, the following objectives have been identified:
- Understand baseline travel patterns for different users of the site, as well as the projected future travel patterns following implementation of the Travel Plan measures; Establish ‘inherent’ sustainable travel principles for the Proposed Development as a whole;
  - Minimise single occupancy vehicle trips;
  - Facilitate tailored travel information;
  - Encourage healthy and active travel by way of design but also by way of marketing strategies;
  - Reduce local congestion and associated externalities;
  - Support car-free lifestyles;
  - Raise awareness of sustainable modes of transport available for residents and visitors travelling to, from and within the Site;
  - Promote community integration and the use of local services and facilities;
  - Contribute towards protecting and enhancing the environment in and around the site.
- 7.1.4. These objectives and targets are key to providing a successful framework travel to build upon when the detailed elements of the site are brought forward.

## 8. SUMMARY AND CONCLUSIONS

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- 8.1.1. WSP has been commissioned by Berkeley Homes (Southern) Limited to support the delivery of the Land North West of Southwater site (the 'site') and to assess the transport impacts of the proposed development comprising up to 1,000 homes, approximately 4ha of employment land, primary and secondary school and associated facilities.
- 8.1.2. This scoping document draws, and expands, upon work previously undertaken by WSP in relation to the site – including refinements to reflect the latest development quantum. This report seeks to confirm the approach for the vehicular trip generation and distribution assumptions with WSCC as Highway Authority (HA) for the purposes of incorporation into a forthcoming Transport Assessment and associated documentation including reduction of trip generation. The document seeks to agree the same scope of junction impact assessments that would be undertaken as part of the Transport Assessment. Finally, the document details how the updated walking and cycling strategy, public transport strategy and framework travel plans will be produced based on the previous application and utilising the agreed measures from the Golf Course application.

# Appendix A

TRICS OUTPUTS - RESIDENTIAL





Audit Code: 90eeffea-fa7d-47cb-b41c-59e56f3ead63

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Total Vehicles

Selected regions and areas:

02	<b>SOUTH EAST</b>		
	ES	EAST SUSSEX	1 day
	HC	HAMPSHIRE	3 days
	KC	KENT	3 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 day
	WS	WEST SUSSEX	2 days
04	<b>EAST ANGLIA</b>		
	NF	NORFOLK	7 days
05	<b>EAST MIDLANDS</b>		
	DY	DERBY	1 day
06	<b>WEST MIDLANDS</b>		
	ST	STAFFORDSHIRE	1 day

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

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**Primary Filtering Selection:**

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

Parameter:	DWELLS
Actual Range:	7.01 to 50 (units:DWELLS)
Range Selected by User:	200 to 1500 (units:DWELLS)
Parking Spaces Range:	6 - 2696

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 17/09/24

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

**Selected survey days:**

Monday	2 days
Thursday	4 days
Tuesday	8 days
Wednesday	7 days

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

**Selected survey types:**

Manual count	21
Direction ATC Count	0

*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	20 days
Suburban Area (PPS6 Out of Centre)	1 days

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

**Selected Location Sub Categories:**

No Sub Category	1 days
Out of Town	3 days
Residential Zone	16 days
Village	1 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	16 days
Servicing vehicles Included	5 days

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Secondary Filtering Selection:

Use Class:

C3	21 surveys
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*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Population within 500m Range:

400 - 4126

Population within 1 mile:

1,001 to 5,000	2 surveys
10,001 to 15,000	6 surveys
15,001 to 20,000	4 surveys
20,001 to 25,000	2 surveys
25,001 to 50,000	1 surveys
5,001 to 10,000	6 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	7 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	3 surveys
5,001 to 25,000	3 surveys
50,001 to 75,000	2 surveys
75,001 to 100,000	4 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	5 surveys
1.1 to 1.5	15 surveys
1.6 to 2.0	1 surveys

*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.*



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**Petrol filling station:**

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

**Travel Plan:**

No	5 surveys
Yes	16 surveys

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

**COVID-19 Restrictions:**

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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



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

Total Vehicles

Calculation factor: 1 DWELLS

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	21	437	0.072	0.293	0.365
08:00-09:00	21	437	0.143	0.375	0.518
09:00-10:00	21	437	0.117	0.145	0.262
10:00-11:00	21	437	0.102	0.122	0.224
11:00-12:00	21	437	0.113	0.126	0.239
12:00-13:00	21	437	0.131	0.133	0.264
13:00-14:00	21	437	0.137	0.129	0.266
14:00-15:00	21	437	0.141	0.156	0.297
15:00-16:00	21	437	0.239	0.159	0.398
16:00-17:00	21	437	0.263	0.150	0.413
17:00-18:00	21	437	0.345	0.150	0.495
18:00-19:00	21	437	0.278	0.142	0.420
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: 90eeffa-fa7d-47cb-b41c-59e56f3ead63

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Parameter Summary:

Trip rate parameter range selected:	200 - 1500 (units: DWELLS)
Survey date date range:	11/07/2016 - 12/06/2024
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

# Appendix B

TRICS OUTPUTS - EMPLOYMENT





Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: D - INDUSTRIAL ESTATE

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	SD	SWINDON	1 day
04	<b>EAST ANGLIA</b>		
	NF	NORFOLK	1 day
	SF	SUFFOLK	1 day
05	<b>EAST MIDLANDS</b>		
	DY	DERBY	1 day
	LN	LINCOLNSHIRE	2 days
	NM	WEST NORTHAMPTONSHIRE	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day

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

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

---

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	0.27 to 3 (units:sqm)
Range Selected by User:	1000 to 15000 (units:sqm)
Parking Spaces Range:	0 - 2130

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 06/06/24

*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:**

Thursday	2 days
Tuesday	3 days
Wednesday	3 days

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

**Selected survey types:**

Manual count	8
Direction ATC Count	0

*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	4 days
Suburban Area (PPS6 Out of Centre)	4 days

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

**Selected Location Sub Categories:**

Industrial Zone	3 days
No Sub Category	3 days
Residential Zone	2 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	4 days
Servicing vehicles Included	4 days

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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Secondary Filtering Selection:

Use Class:

Not Known 8 surveys

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

Population within 500m Range:

0 - 5534

Population within 1 mile:

10,001 to 15,000	1 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	2 surveys
5,001 to 10,000	3 surveys
50,001 to 100,000	1 surveys

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

Population within 5 miles:

125,001 to 250,000	5 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	2 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	5 surveys
1.1 to 1.5	3 surveys

*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.*



Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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Petrol filling station:

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

Travel Plan:

No 8 surveys

*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 8 surveys

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

COVID-19 Restrictions:

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

<b>1</b> SHAFTESBURY STREET DERBY ROSE HILL Suburban Area (PPS6 Out of Centre) No Sub Category Site area: 0.82 hect Survey date: Wednesday 25/09/2019	<b>DY-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>DERBY</b>	Survey Type: Manual
<b>2</b> BELVOIR WAY LOUTH Edge of Town Industrial Zone Site area: 0.55 hect Survey date: Thursday 18/04/2024	<b>LN-02-D-05</b>	<b>INDUSTRIAL ESTATE</b>	<b>LINCOLNSHIRE</b>	Survey Type: Manual
<b>3</b> RICHMOND ROAD LOUTH Edge of Town Industrial Zone Site area: 0.28 hect Survey date: Tuesday 30/04/2024	<b>LN-02-D-06</b>	<b>INDUSTRIAL ESTATE</b>	<b>LINCOLNSHIRE</b>	Survey Type: Manual
<b>4</b> DRAYTON HIGH ROAD NORWICH Edge of Town No Sub Category Site area: 2.41 hect Survey date: Wednesday 14/09/2022	<b>NF-02-D-04</b>	<b>INDUSTRIAL ESTATE</b>	<b>NORFOLK</b>	Survey Type: Manual
<b>5</b> CORNHILL CLOSE NORTHAMPTON LODGE FARM IND. ESTATE Edge of Town Industrial Zone Site area: 3 hect Survey date: Wednesday 21/10/2020	<b>NM-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST NORTHAMPTONSHIRE</b>	Survey Type: Manual
<b>6</b> HEADLANDS GROVE SWINDON Suburban Area (PPS6 Out of Centre) Residential Zone Site area: 2.55 hect Survey date: Tuesday 20/09/2016	<b>SD-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>SWINDON</b>	Survey Type: Manual
<b>7</b> LANDSEER ROAD IPSWICH Suburban Area (PPS6 Out of Centre) No Sub Category Site area: 1.0942 hect Survey date: Thursday 17/09/2020	<b>SF-02-D-03</b>	<b>INDUSTRIAL ESTATE</b>	<b>SUFFOLK</b>	Survey Type: Manual
<b>8</b> JUNCTION ROAD STOURBRIDGE AUDNAM Suburban Area (PPS6 Out of Centre)	<b>WM-02-D-03</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST MIDLANDS</b>	

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

Residential Zone  
Site area: 0.27 hect  
Survey date: Tuesday 28/11/2017

Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
AK-02-D-02	23-05-2017	Removed in Site Selection
AL-02-D-01	17-10-2018	Removed in Site Selection
BE-02-D-01	19-09-2018	Removed in Site Selection
BK-02-D-01	08-09-2020	Removed in Site Selection
BT-02-D-01	14-11-2018	Removed in Site Selection
CS-02-D-03	06-09-2023	Removed in Site Selection
DL-02-D-05	25-05-2023	Removed in Site Selection
DR-02-D-03	21-09-2021	Removed in Site Selection
LC-02-D-06	29-09-2016	Removed in Site Selection
LC-02-D-08	06-11-2018	Removed in Site Selection
SW-02-D-01	09-10-2019	Removed in Site Selection
SW-02-D-02	10-10-2019	Removed in Site Selection
TI-02-D-02	23-09-2020	Removed in Site Selection
TW-02-D-08	04-04-2017	Removed in Site Selection
TW-02-D-09	18-05-2022	Removed in Site Selection
WA-02-D-01	07-03-2023	Removed in Site Selection



Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	5	7418	0.075	0.005	0.080
06:00-07:00	5	7418	0.111	0.057	0.168
07:00-08:00	8	6472	0.305	0.122	0.427
08:00-09:00	8	6472	0.365	0.158	0.523
09:00-10:00	8	6472	0.321	0.280	0.601
10:00-11:00	8	6472	0.315	0.299	0.614
11:00-12:00	8	6472	0.268	0.263	0.531
12:00-13:00	8	6472	0.245	0.270	0.515
13:00-14:00	8	6472	0.309	0.270	0.579
14:00-15:00	8	6472	0.297	0.330	0.627
15:00-16:00	8	6472	0.245	0.307	0.552
16:00-17:00	8	6472	0.172	0.332	0.504
17:00-18:00	8	6472	0.127	0.309	0.436
18:00-19:00	8	6472	0.048	0.129	0.177
19:00-20:00	5	7418	0.024	0.067	0.091
20:00-21:00	5	7418	0.003	0.022	0.025
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			3.230	3.220	6.450

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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Parameter Summary:

Trip rate parameter range selected:	1000 - 15000 (units: sqm)
Survey date date range:	20/09/2016 - 30/04/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	16
Surveys manually removed from selection:	0

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



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: F - WAREHOUSING (COMMERCIAL)

Total Vehicles

Selected regions and areas:

02	<b>SOUTH EAST</b>		
	BO	BEDFORD	1 day
	HC	HAMPSHIRE	1 day
05	<b>EAST MIDLANDS</b>		
	DS	DERBYSHIRE	1 day
	NN	NORTH NORTHAMPTONSHIRE	1 day
07	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>		
	BD	BRADFORD	1 day
09	<b>NORTH</b>		
	CU	CUMBERLAND	1 day

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

Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

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**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	3500 to 18790 (units:sqm)
Range Selected by User:	500 to 20000 (units:sqm)
Parking Spaces Range:	4 - 1192

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 18/06/24

*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:**

Thursday	4 days
Wednesday	2 days

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

**Selected survey types:**

Manual count	6
Direction ATC Count	0

*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	5 days
Suburban Area (PPS6 Out of Centre)	1 days

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

**Selected Location Sub Categories:**

Commercial Zone	1 days
Industrial Zone	5 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	5 days
Servicing vehicles Included	1 days



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

---

Secondary Filtering Selection:

Use Class:

B8 6 surveys

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

Population within 500m Range:

50 - 6282

Population within 1 mile:

1,001 to 5,000	2 surveys
10,001 to 15,000	1 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	1 surveys
5,001 to 10,000	1 surveys

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

Population within 5 miles:

125,001 to 250,000	2 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	2 surveys
50,001 to 75,000	1 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	1 surveys
1.1 to 1.5	5 surveys

*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.*



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

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Petrol filling station:

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

Travel Plan:

No 6 surveys

*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 6 surveys

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

COVID-19 Restrictions:

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

1	BD-02-F-01	DISTRIBUTION COMPANY	BRADFORD
STAITHGATE LANE BRADFORD NEWHALL Edge of Town Industrial Zone Gross floor area: 10446 sqm Survey date: Thursday 14/03/2019			
			Survey Type: Manual
2	BO-02-F-01	DRINKS WHOLESALER	BEDFORD
CAMBRIDGE ROAD BEDFORD Edge of Town Industrial Zone Gross floor area: 3500 sqm Survey date: Thursday 15/10/2020			
			Survey Type: Manual
3	CU-02-F-01	WAREHOUSING & DISTRIBUTION	CUMBERLAND
CARLISLE ROAD BRAMPTON Edge of Town Industrial Zone Gross floor area: 4007 sqm Survey date: Wednesday 19/06/2024			
			Survey Type: Manual
4	DS-02-F-01	LOGISTICS DEPOT	DERBYSHIRE
PARK ROAD HOLMEWOOD Edge of Town Industrial Zone Gross floor area: 7000 sqm Survey date: Wednesday 04/10/2023			
			Survey Type: Manual
5	HC-02-F-02	LOGISTICS	HAMPSHIRE
RUTHERFORD ROAD BASINGSTOKE Suburban Area (PPS6 Out of Centre) Commercial Zone Gross floor area: 13200 sqm Survey date: Thursday 16/06/2016			
			Survey Type: Manual
6	NN-02-F-01	WAREHOUSING & DISTRIBUTION CENTRE	NORTH NORTHAMPTONSHIRE
HALLEY ROAD CORBY Edge of Town Industrial Zone Gross floor area: 18790 sqm Survey date: Thursday 19/10/2023			
			Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
AN-02-F-03	11-10-2016	Removed in Site Selection
AN-02-F-04	14-03-2019	Removed in Site Selection
AN-02-F-05	26-11-2020	Removed in Site Selection
CC-02-F-01	25-05-2016	Removed in Site Selection
CR-02-F-03	15-10-2019	Removed in Site Selection
DL-02-F-03	26-09-2019	Removed in Site Selection



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

Site Ref	Survey Date	Reason for Deselection
DL-02-F-04	19-05-2021	Removed in Site Selection
DL-02-F-05	30-05-2023	Removed in Site Selection
HD-02-F-01	27-09-2018	Removed in Site Selection
HO-02-F-01	23-11-2016	Removed in Site Selection
LO-02-F-01	08-06-2021	Removed in Site Selection
LO-02-F-02	11-11-2021	Removed in Site Selection
WX-02-F-01	20-04-2023	Removed in Site Selection



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	5	8749	0.158	0.066	0.224
06:00-07:00	5	8749	0.233	0.137	0.370
07:00-08:00	6	9490	0.239	0.181	0.420
08:00-09:00	6	9490	0.172	0.160	0.332
09:00-10:00	6	9490	0.149	0.109	0.258
10:00-11:00	6	9490	0.105	0.104	0.209
11:00-12:00	6	9490	0.100	0.119	0.219
12:00-13:00	6	9490	0.098	0.086	0.184
13:00-14:00	6	9490	0.114	0.142	0.256
14:00-15:00	6	9490	0.112	0.153	0.265
15:00-16:00	6	9490	0.128	0.160	0.288
16:00-17:00	6	9490	0.148	0.223	0.371
17:00-18:00	6	9490	0.177	0.204	0.381
18:00-19:00	5	9989	0.090	0.126	0.216
19:00-20:00	4	9186	0.079	0.103	0.182
20:00-21:00	4	9186	0.057	0.057	0.114
21:00-22:00	1	18790	0.016	0.059	0.075
22:00-23:00	1	18790	0.005	0.043	0.048
23:00-00:00	1	18790	0.005	0.005	0.010
<b>Total Rates:</b>			2.185	2.237	4.422

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

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

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Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

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Parameter Summary:

Trip rate parameter range selected:	500 - 20000 (units: sqm)
Survey date date range:	16/06/2016 - 19/06/2024
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	13
Surveys manually removed from selection:	0

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

# Appendix C

TRICS OUTPUTS - BUSINESS PARK





Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: B - BUSINESS PARK

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	DV	DEVON	1 day
	GS	GLOUCESTERSHIRE	1 day
04	<b>EAST ANGLIA</b>		
	CA	CAMBRIDGESHIRE	1 day
	NF	NORFOLK	1 day
	PB	PETERBOROUGH	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day
07	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>		
	NY	NORTH YORKSHIRE	1 day
09	<b>NORTH</b>		
	TW	TYNE & WEAR	1 day
13	<b>MUNSTER</b>		
	TI	TIPPERARY	1 day

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

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

---

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	1500 to 13000 (units:sqm)
Range Selected by User:	1000 to 15000 (units:sqm)
Parking Spaces Range:	7 - 4167

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 19/06/24

*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:**

Thursday	3 days
Tuesday	1 days
Wednesday	5 days

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

**Selected survey types:**

Manual count	9
Direction ATC Count	0

*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	7 days
Suburban Area (PPS6 Out of Centre)	2 days

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

**Selected Location Sub Categories:**

Commercial Zone	2 days
Development Zone	1 days
Industrial Zone	3 days
No Sub Category	1 days
Residential Zone	2 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	7 days
Servicing vehicles Included	2 days

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

---

Secondary Filtering Selection:

Use Class:

Not Known 9 surveys

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

Population within 500m Range:

110 - 7500

Population within 1 mile:

10,001 to 15,000	2 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	2 surveys
5,001 to 10,000	3 surveys

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

Population within 5 miles:

125,001 to 250,000	5 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	2 surveys
5,001 to 25,000	1 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	3 surveys
1.1 to 1.5	5 surveys
1.6 to 2.0	1 surveys

*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.*



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

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**Petrol filling station:**

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

**Travel Plan:**

No 9 surveys

*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 9 surveys

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

**COVID-19 Restrictions:**

No

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

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

<b>1</b> SWANNS ROAD CAMBRIDGE Suburban Area (PPS6 Out of Centre) Industrial Zone Gross floor area: 5070 sqm Survey date: Thursday 22/06/2023	<b>CA-02-B-04</b>	<b>BUSINESS PARK</b>	<b>CAMBRIDGESHIRE</b>	Survey Type: Manual
<b>2</b> MANATON CLOSE EXETER MATFORD BUSINESS PARK Edge of Town Commercial Zone Gross floor area: 1500 sqm Survey date: Wednesday 05/07/2017	<b>DV-02-B-01</b>	<b>BUSINESS PARK</b>	<b>DEVON</b>	Survey Type: Manual
<b>3</b> BARNETT WAY GLOUCESTER BARNWOOD Edge of Town Industrial Zone Gross floor area: 3485 sqm Survey date: Wednesday 03/05/2023	<b>GS-02-B-01</b>	<b>BUSINESS PARK</b>	<b>GLOUCESTERSHIRE</b>	Survey Type: Manual
<b>4</b> BARTON WAY NORWICH Edge of Town Residential Zone Gross floor area: 2634 sqm Survey date: Thursday 15/09/2022	<b>NF-02-B-03</b>	<b>BUSINESS PARK</b>	<b>NORFOLK</b>	Survey Type: Manual
<b>5</b> OAKNEY WOOD ROAD SELBY Edge of Town Industrial Zone Gross floor area: 3150 sqm Survey date: Tuesday 06/06/2023	<b>NY-02-B-02</b>	<b>BUSINESS PARK</b>	<b>NORTH YORKSHIRE</b>	Survey Type: Manual
<b>6</b> LYNCH WOOD PETERBOROUGH Edge of Town Commercial Zone Gross floor area: 12800 sqm Survey date: Wednesday 19/10/2016	<b>PB-02-B-01</b>	<b>BUSINESS PARK</b>	<b>PETERBOROUGH</b>	Survey Type: Manual
<b>7</b> R498 THURLES Edge of Town No Sub Category Gross floor area: 4180 sqm Survey date: Wednesday 12/10/2022	<b>TI-02-B-01</b>	<b>BUSINESS PARK</b>	<b>TIPPERARY</b>	Survey Type: Manual
<b>8</b> JOICEY ROAD GATESHEAD Suburban Area (PPS6 Out of Centre)	<b>TW-02-B-06</b>	<b>BUSINESS PARK</b>	<b>TYNE &amp; WEAR</b>	

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

Residential Zone

Gross floor area: 3712 sqm

Survey date: Thursday 18/10/2018

Survey Type: Manual

9 WM-02-B-03 BUSINESS PARK WEST MIDLANDS

PARADISE WAY

COVENTRY

Edge of Town

Development Zone

Gross floor area: 13000 sqm

Survey date: Wednesday 25/09/2019

Survey Type: Manual

#### DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
AD-02-B-02	21-11-2019	Removed in Site Selection
AN-02-B-02	12-10-2016	Removed in Site Selection
AN-02-B-03	19-10-2017	Removed in Site Selection
AN-02-B-04	19-10-2017	Removed in Site Selection
CF-02-B-05	05-10-2016	Removed in Site Selection
DL-02-B-08	05-09-2017	Removed in Site Selection
HM-02-B-01	30-06-2016	Removed in Site Selection
IS-02-B-01	13-09-2022	Removed in Site Selection



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

Total Vehicles

Calculation factor: 100 sqm

*\*BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	9	5503	0.925	0.119	1.044
08:00-09:00	9	5503	1.330	0.226	1.556
09:00-10:00	9	5503	0.559	0.188	0.747
10:00-11:00	9	5503	0.228	0.210	0.438
11:00-12:00	9	5503	0.194	0.190	0.384
12:00-13:00	9	5503	0.277	0.331	0.608
13:00-14:00	9	5503	0.295	0.266	0.561
14:00-15:00	9	5503	0.184	0.291	0.475
15:00-16:00	9	5503	0.188	0.448	0.636
16:00-17:00	9	5503	0.240	1.217	1.457
17:00-18:00	9	5503	0.273	0.935	1.208
18:00-19:00	9	5503	0.109	0.428	0.537
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			4.802	4.849	9.651

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

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

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Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

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Parameter Summary:

Trip rate parameter range selected:	1000 - 15000 (units: sqm)
Survey date date range:	19/10/2016 - 22/06/2023
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	0

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

# Appendix D

TRICS OUTPUTS - SECONDARY  
SCHOOL





Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 04 - EDUCATION

Category: B - SECONDARY

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	DV	DEVON	1 day
	NS	NORTH SOMERSET	1 day
04	<b>EAST ANGLIA</b>		
	CA	CAMBRIDGESHIRE	1 day
	PB	PETERBOROUGH	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day
08	<b>NORTH WEST</b>		
	LC	LANCASHIRE	2 days
	MS	MERSEYSIDE	1 day
09	<b>NORTH</b>		
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	1 day
14	<b>LEINSTER</b>		
	KK	KILKENNY	1 day

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

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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**Primary Filtering Selection:**

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

Parameter:	PUPILS
Actual Range:	4732 to 22669 (units:PUPILS)
Range Selected by User:	100 to 1500 (units:PUPILS)
Parking Spaces Range:	0 - 207

<b>Public Transport Provision:</b>	
Selection by:	All Surveys Included
Date Range:	01/01/16 to 20/06/24

*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.*

<b>Selected survey days:</b>	
Thursday	4 days
Tuesday	4 days
Wednesday	4 days

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

<b>Selected survey types:</b>	
Manual count	12
Direction ATC Count	0

*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*

<b>Selected Locations:</b>	
Edge of Town	4 days
Edge of Town Centre	4 days
Suburban Area (PPS6 Out of Centre)	4 days

*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.*

<b>Selected Location Sub Categories:</b>	
No Sub Category	1 days
Residential Zone	11 days

*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.*

<b>Inclusion of Servicing Vehicle Counts:</b>	
Servicing vehicles Excluded	8 days
Servicing vehicles Included	4 days

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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Secondary Filtering Selection:

Use Class:

F1(a)	12 surveys
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*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Population within 500m Range:

675 - 4623

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	1 surveys
15,001 to 20,000	3 surveys
20,001 to 25,000	3 surveys
25,001 to 50,000	3 surveys
5,001 to 10,000	1 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	4 surveys
250,001 to 500,000	4 surveys
5,000 or Less	1 surveys
75,001 to 100,000	2 surveys

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

Car ownership within 5 miles:

0.5 or Less	1 surveys
0.6 to 1.0	5 surveys
1.1 to 1.5	6 surveys

*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.*

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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**Petrol filling station:**

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

**Travel Plan:**

No 12 surveys

*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 12 surveys

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

**COVID-19 Restrictions:**

No

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

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

<b>1</b> PARKSIDE CAMBRIDGE Edge of Town Centre Residential Zone Gross floor area: 4732 sqm Survey date: Thursday 21/09/2017	<b>CA-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>CAMBRIDGESHIRE</b>	Survey Type: Manual
<b>2</b> EARL RICHARD'S RD SOUTH EXETER Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 12650 sqm Survey date: Tuesday 02/04/2019	<b>DV-04-B-04</b>	<b>SECONDARY ACADEMY</b>	<b>DEVON</b>	Survey Type: Manual
<b>3</b> LADY'S WELL STREET THOMASTOWN Edge of Town Centre No Sub Category Gross floor area: 7952 sqm Survey date: Thursday 26/10/2017	<b>KK-04-B-02</b>	<b>SECONDARY SCHOOL</b>	<b>KILKENNY</b>	Survey Type: Manual
<b>4</b> TODD LANE NORTH LOSTOCK HALL Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 8300 sqm Survey date: Tuesday 06/11/2018	<b>LC-04-B-02</b>	<b>SECONDARY ACADEMY</b>	<b>LANCASHIRE</b>	Survey Type: Manual
<b>5</b> VENABLES AVENUE COLNE Edge of Town Residential Zone Gross floor area: 6240 sqm Survey date: Thursday 23/05/2024	<b>LC-04-B-03</b>	<b>SECONDARY SCHOOL</b>	<b>LANCASHIRE</b>	Survey Type: Manual
<b>6</b> DEYES LANE NEAR LIVERPOOL MAGHULL Edge of Town Centre Residential Zone Gross floor area: 19900 sqm Survey date: Wednesday 13/09/2023	<b>MS-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>MERSEYSIDE</b>	Survey Type: Manual
<b>7</b> MIZZYMEAD ROAD NAILSEA Edge of Town Centre Residential Zone Gross floor area: 12000 sqm Survey date: Wednesday 03/10/2018	<b>NS-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>NORTH SOMERSET</b>	Survey Type: Manual
<b>8</b> REEVES WAY PETERBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 18000 sqm	<b>PB-04-B-01</b>	<b>SECONDARY ACADEMY</b>	<b>PETERBOROUGH</b>	



Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

Survey date: Wednesday 28/09/2022				Survey Type: Manual
<b>9</b>	<b>TV-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>TEES VALLEY</b>	
COAST ROAD MARSKE-BY-THE-SEA Edge of Town Residential Zone Gross floor area: 7546 sqm Survey date: Wednesday 24/10/2018				Survey Type: Manual
<b>10</b>	<b>TV-04-B-02</b>	<b>SECONDARY SCHOOL</b>	<b>TEES VALLEY</b>	
THAMES ROAD BILLINGHAM Edge of Town Residential Zone Gross floor area: 14700 sqm Survey date: Tuesday 24/05/2022				Survey Type: Manual
<b>11</b>	<b>TW-04-B-03</b>	<b>CATHOLIC HIGH SCHOOL</b>	<b>TYNE &amp; WEAR</b>	
GRETNA ROAD NEWCASTLE UPON TYNE Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 22669 sqm Survey date: Thursday 18/10/2018				Survey Type: Manual
<b>12</b>	<b>WM-04-B-06</b>	<b>SECONDARY SCHOOL</b>	<b>WEST MIDLANDS</b>	
PARK ROAD WEST STOURBRIDGE WOLLASTON Edge of Town Residential Zone Gross floor area: 9420 sqm Survey date: Tuesday 21/11/2017				Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
CF-04-B-02	15-03-2018	Removed in Site Selection
DN-04-B-02	10-10-2018	Removed in Site Selection
MA-04-B-01	10-04-2024	Removed in Site Selection
NW-04-B-01	12-10-2022	Removed in Site Selection
ON-04-B-01	09-11-2023	Removed in Site Selection
PE-04-B-01	22-11-2023	Removed in Site Selection
TI-04-B-01	21-11-2017	Removed in Site Selection
WA-04-B-02	08-03-2023	Removed in Site Selection
WR-04-B-01	06-06-2024	Removed in Site Selection



Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY

Total Vehicles

Calculation factor: 1 PUPILS

*\*BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. PUPILS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	12	898	0.047	0.007	0.054
08:00-09:00	12	898	0.164	0.133	0.297
09:00-10:00	12	898	0.018	0.016	0.034
10:00-11:00	12	898	0.011	0.009	0.020
11:00-12:00	12	898	0.011	0.010	0.021
12:00-13:00	12	898	0.010	0.012	0.022
13:00-14:00	12	898	0.012	0.011	0.023
14:00-15:00	12	898	0.025	0.020	0.045
15:00-16:00	12	898	0.081	0.104	0.185
16:00-17:00	12	898	0.018	0.059	0.077
17:00-18:00	12	898	0.026	0.028	0.054
18:00-19:00	12	898	0.024	0.020	0.044
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			0.447	0.429	0.876

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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Parameter Summary:

Trip rate parameter range selected:	100 - 1500 (units: PUPILS)
Survey date date range:	21/09/2017 - 23/05/2024
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	9
Surveys manually removed from selection:	0

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

# Appendix E

NTEM TEMPRO DATA



**Dataset Version:** 80  
**Result Type:** Trip ends by time period  
**Base Year:** 2025  
**Future Year:** 2036  
**Trip Purpose Group:** All purposes - individually  
**Time Period:** Weekday AM peak period (0700 - 0959)  
**Trip End Type:** Origin/Destination  
**Alternative Assumptions Applied:** No

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8255	0.8255	1.0342	1.0342	0.7890	0.7890	0.9148	0.9148	0.8280	0.8280	0.9691

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-163,664	1,752	1,752	-791,405	-791,405	-70,692	-70,692	-67,150	-67,150	-3,549

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	938,114	938,114	51,183	51,183	3,751,389	3,751,389	830,136	830,136	390,427	390,427	114,720

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	774,451	774,451	52,935	52,935	2,959,984	2,959,984	759,444	759,444	323,276	323,276	111,172

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9691	0.7179	0.7179	0.8937	0.8937	0.8633	0.8633	0.9351	0.9351	0.8606	0.8606	0.9103	0.9103

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-3,549	#####	-17,437	-383	-383	-7,825	-7,825	-3,041	-3,041	#####	-13,183	-6,901	-6,901

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
114,720	61,815	61,815	3,598	3,598	57,225	57,225	46,827	46,827	94,545	94,545	76,966	76,966

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
111,172	44,378	44,378	3,215	3,215	49,400	49,400	43,786	43,786	81,362	81,362	70,065	70,065

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8878	0.8878	0.9370	0.9370	1.2088	1.2088

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-6,144	-6,144	-2,389	-2,389	3,506	3,506

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
54,748	54,748	37,944	37,944	16,791	16,791

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
48,604	48,604	35,555	35,555	20,297	20,297

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8317	0.8317	1.0402	1.0402	0.7931	0.7931	0.9314	0.9314	0.8366	0.8366	0.9846

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-52,405	-52,405	555	555	-27,755	-27,755	-2,410	-2,410	-2,627	-2,627	-204

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	311,404	311,404	13,801	13,801	134,133	134,133	35,116	35,116	16,076	16,076	13,279

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	258,999	258,999	14,356	14,356	106,377	106,377	32,706	32,706	13,449	13,449	13,075

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9846	0.7371	0.7371	1.2172	1.2172	0.8913	0.8913	0.9478	0.9478	0.8767	0.8767	0.9026	0.9026	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-204	-1,314	-1,314	5,125	5,125	-834	-834	-230	-230	-338	-338	-190	-190	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,279	4,997	4,997	23,599	23,599	7,670	7,670	4,408	4,408	2,738	2,738	1,948	1,948	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,075	3,684	3,684	28,724	28,724	6,836	6,836	4,178	4,178	2,400	2,400	1,759	1,759	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9040	0.9040	0.9385	0.9385	1.1911	1.1911

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-143	-143	-40	-40	127	127

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,494	1,494	654	654	666	666

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,351	1,351	614	614	794	794

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8754	0.8754	1.0946	1.0946	0.8631	0.8631	0.9657	0.9657	0.8856	0.8856	1.0350

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-767,072	-767,072	78,074	78,074	-175,505	-175,505	-48,228	-48,228	-73,554	-73,554	12,297

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	6,156,043	6,156,043	825,140	825,140	1,282,084	1,282,084	1,405,364	1,405,364	642,813	642,813	351,802

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	5,388,971	5,388,971	903,214	903,214	1,106,579	1,106,579	1,357,136	1,357,136	569,259	569,259	364,099

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
1.0350	0.7739	0.7739	1.2766	1.2766	0.9050	0.9050	0.9669	0.9669	0.8999	0.8999	0.9487	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
12,297	-34,426	-34,426	69,543	69,543	-58,925	-58,925	-10,120	-10,120	-9,872	-9,872	-9,524	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
351,802	152,275	152,275	251,422	251,422	620,108	620,108	305,874	305,874	98,633	98,633	185,766	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
364,099	117,849	117,849	320,965	320,965	561,183	561,183	295,755	295,755	88,761	88,761	176,242	

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9487	0.9313	0.9313	0.9608	0.9608	1.1692	1.1692

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
-9,524	-5,357	-5,357	-2,875	-2,875	4,230	4,230

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
185,766	78,000	78,000	73,259	73,259	24,999	24,999

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
176,242	72,643	72,643	70,383	70,383	29,230	29,230

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8350	0.8350	1.0440	1.0440	0.8117	0.8117	0.9141	0.9141	0.8401	0.8401	0.9838

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-161,563	3,984	3,984	-563,130	-563,130	-47,734	-47,734	#####	-108,440	-3,097

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	979,200	979,200	90,536	90,536	2,990,460	2,990,460	555,990	555,990	678,115	678,115	191,257

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	817,636	817,636	94,520	94,520	2,427,330	2,427,330	508,256	508,256	569,675	569,675	188,161

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9838	0.7223	0.7223	1.2316	1.2316	0.8815	0.8815	0.9240	0.9240	0.8420	0.8420	0.9379	0.9379

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-3,097	#####	-36,478	26,604	26,604	-5,328	-5,328	-3,381	-3,381	-25,786	-25,786	-3,328	-3,328

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
191,257	#####	131,363	114,892	114,892	44,943	44,943	44,506	44,506	163,187	163,187	53,620	53,620

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
188,161	94,885	94,885	141,496	141,496	39,615	39,615	41,125	41,125	137,401	137,401	50,292	50,292

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8989	0.8989	0.9492	0.9492	1.1631	1.1631

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,911	-5,911	-2,004	-2,004	2,868	2,868

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
58,447	58,447	39,469	39,469	17,583	17,583

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
52,536	52,536	37,465	37,465	20,451	20,451

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8185	0.8185	1.0123	1.0123	0.7942	0.7942	0.8877	0.8877	0.8096	0.8096	0.9536

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-155,422	482	482	#####	-233,040	-28,590	-28,590	-23,848	-23,848	-2,363

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	856,222	856,222	39,308	39,308	#####	1,132,192	254,597	254,597	125,236	125,236	50,950

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	700,799	700,799	39,790	39,790	899,153	899,153	226,007	226,007	101,388	101,388	48,587

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9536	0.7128	0.7128	1.1570	1.1570	0.8551	0.8551	0.9196	0.9196	0.8510	0.8510	0.8823	0.8823	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-2,363	-5,746	-5,746	2,026	2,026	-3,057	-3,057	-613	-613	-1,666	-1,666	-1,529	-1,529	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
50,950	20,007	20,007	12,910	12,910	21,100	21,100	7,626	7,626	11,185	11,185	12,988	12,988	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
48,587	14,261	14,261	14,937	14,937	18,044	18,044	7,013	7,013	9,519	9,519	11,459	11,459	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8642	0.8642	0.9007	0.9007	1.1514	1.1514

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-673	-673	-404	-404	345	345

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
4,952	4,952	4,070	4,070	2,277	2,277

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
4,279	4,279	3,666	3,666	2,622	2,622

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8516	0.8516	1.0522	1.0522	0.8195	0.8195	0.9005	0.9005	0.8421	0.8421	0.9771

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-161,656	5,515	5,515	-27,518	-27,518	-2,195	-2,195	-3,009	-3,009	-307

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	1,089,252	105,574	105,574	152,451	152,451	22,053	22,053	19,056	19,056	13,412

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	927,596	927,596	111,090	111,090	124,932	124,932	19,858	19,858	16,047	16,047	13,105

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9771	0.7650	0.7650	1.2210	1.2210	0.9015	0.9015	0.9502	0.9502	0.8903	0.8903	0.9395	0.9395	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-307	-900	-900	2,505	2,505	-2,394	-2,394	-842	-842	-371	-371	-93	-93	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,412	3,830	3,830	11,337	11,337	24,297	24,297	16,918	16,918	3,385	3,385	1,532	1,532	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,105	2,930	2,930	13,842	13,842	21,903	21,903	16,076	16,076	3,014	3,014	1,439	1,439	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9047	0.9047	0.9509	0.9509	1.1383	1.1383

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-119	-119	-103	-103	175	175

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,245	1,245	2,099	2,099	1,268	1,268

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,126	1,126	1,996	1,996	1,443	1,443

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	0.8585	0.8585	1.0803	1.0803	0.8074	0.8074	0.9356	0.9356	0.8511	0.8511

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	-1,461,782	90,363	90,363	#####	-1,818,353	-199,849	-199,849	-278,628	-278,628

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	10,330,234	1,125,542	1,125,542	9,442,709	9,442,709	3,103,256	3,103,256	1,871,722	1,871,722

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	8,868,452	8,868,452	1,215,905	1,215,905	7,624,356	7,624,356	2,903,406	2,903,406	1,593,095	1,593,095

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
1.0038	1.0038	0.7427	0.7427	1.2524	1.2524	0.8989	0.8989	0.9572	0.9572	0.8629	0.8629	0.9352

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
2,778	2,778	-96,301	-96,301	105,421	105,421	-78,362	-78,362	-18,226	-18,226	-51,216	-51,216	-21,565

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
735,421	735,421	374,287	374,287	417,758	417,758	775,343	775,343	426,159	426,159	373,673	373,673	332,821

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
738,199	738,199	277,986	277,986	523,179	523,179	696,981	696,981	407,933	407,933	322,457	322,457	311,255

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9352	0.9078	0.9078	0.9504	0.9504	1.1770	1.1770

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
-21,565	-18,347	-18,347	-7,816	-7,816	11,252	11,252

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
332,821	198,886	198,886	157,495	157,495	63,584	63,584

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
311,255	180,539	180,539	149,679	149,679	74,837	74,837

**Dataset Version:** 80  
**Result Type:** Trip ends by time period  
**Base Year:** 2025  
**Future Year:** 2036  
**Trip Purpose Group:** All purposes - individually  
**Time Period:** Weekday PM peak period (1600 - 1859)  
**Trip End Type:** Origin/Destination  
**Alternative Assumptions Applied:** No

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8265	0.8265	0.9575	0.9575	0.7964	0.7964	0.8861	0.8861	0.8393	0.8393	0.9486

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-157,967	-3,321	-3,321	#####	-180,122	-134,779	-134,779	-85,957	-85,957	-26,269

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	910,539	910,539	78,197	78,197	884,867	884,867	1,183,121	1,183,121	534,948	534,948	511,356

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	752,573	752,573	74,877	74,877	704,745	704,745	1,048,342	1,048,342	448,991	448,991	485,086

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9486	0.7394	0.7394	0.8652	0.8652	0.8641	0.8641	0.9367	0.9367	0.8577	0.8577	0.9118	0.9118

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-26,269	#####	-158,563	-3,149	-3,149	-3,035	-3,035	-2,788	-2,788	-1,082	-1,082	-13,099	-13,099

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
511,356	608,358	608,358	23,359	23,359	22,341	22,341	44,043	44,043	7,602	7,602	148,428	148,428

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
485,086	449,795	449,795	20,210	20,210	19,305	19,305	41,255	41,255	6,520	6,520	135,329	135,329

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8888	0.8888	0.9447	0.9447	1.2108	1.2108

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,277	-5,277	-10,275	-10,275	15,351	15,351

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
47,448	47,448	185,968	185,968	72,822	72,822

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
42,172	42,172	175,693	175,693	88,173	88,173

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8325	0.8325	0.9826	0.9826	0.8127	0.8127	0.9022	0.9022	0.8495	0.8495	0.9622

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-42,168	-42,168	-317	-317	-6,022	-6,022	-5,720	-5,720	-3,731	-3,731	-1,816

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	251,716	251,716	18,231	18,231	32,148	32,148	58,492	58,492	24,792	24,792	48,026

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	209,548	209,548	17,914	17,914	26,126	26,126	52,772	52,772	21,061	21,061	46,210

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9622	0.7503	0.7503	1.2271	1.2271	0.8913	0.8913	0.9478	0.9478	0.8767	0.8767	0.9026	0.9026	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-1,816	#####	-13,164	23,005	23,005	-129	-129	-192	-192	-77	-77	-678	-678	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
48,026	52,719	52,719	101,305	101,305	1,191	1,191	3,668	3,668	625	625	6,960	6,960	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
46,210	39,555	39,555	124,311	124,311	1,062	1,062	3,477	3,477	548	548	6,282	6,282	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9040	0.9040	0.9355	0.9355	1.1911	1.1911

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-375	-375	-547	-547	1,306	1,306

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
3,907	3,907	8,493	8,493	6,833	6,833

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
3,532	3,532	7,946	7,946	8,139	8,139

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8774	0.8774	1.0622	1.0622	0.8713	0.8713	0.9461	0.9461	0.8855	0.8855	1.0180

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-608,806	-608,806	46,114	46,114	-73,168	-73,168	-117,888	-117,888	#####	-105,616	19,198

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	4,967,794	4,967,794	741,146	741,146	568,452	568,452	2,187,041	2,187,041	922,191	922,191	1,064,685

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	4,358,988	4,358,988	787,260	787,260	495,284	495,284	2,069,153	2,069,153	816,575	816,575	1,083,883

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1.0180	0.8004	0.8004	1.2454	1.2454	0.9058	0.9058	0.9671	0.9671	0.9004	0.9004	0.9481	0.9481

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
19,198	#####	-236,609	110,463	110,463	-2,976	-2,976	-10,827	-10,827	-7,182	-7,182	-22,488	-22,488

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,064,685	#####	1,185,224	450,144	450,144	31,596	31,596	328,945	328,945	72,137	72,137	433,245	433,245

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,083,883	948,615	948,615	560,607	560,607	28,620	28,620	318,117	318,117	64,955	64,955	410,757	410,757

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9320	0.9320	0.9606	0.9606	1.1588	1.1588

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-9,143	-9,143	-14,365	-14,365	15,034	15,034

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
134,366	134,366	364,837	364,837	94,690	94,690

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
125,224	125,224	350,473	350,473	109,724	109,724

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8415	0.8415	0.9898	0.9898	0.8185	0.8185	0.9055	0.9055	0.8480	0.8480	0.9726

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-147,753	-1,037	-1,037	#####	-122,371	-110,753	-110,753	-84,905	-84,905	-31,830

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	932,083	932,083	102,036	102,036	674,214	674,214	1,172,304	1,172,304	558,582	558,582	1,161,328

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	784,330	784,330	100,999	100,999	551,843	551,843	1,061,552	1,061,552	473,676	473,676	1,129,498

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9726	0.7508	0.7508	1.2146	1.2146	0.8819	0.8819	0.9234	0.9234	0.8410	0.8410	0.9396	0.9396

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-31,830	#####	-216,163	85,967	85,967	-696	-696	-4,584	-4,584	-4,454	-4,454	-10,817	-10,817

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,161,328	867,493	867,493	400,539	400,539	5,894	5,894	59,815	59,815	28,006	28,006	179,190	179,190

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,129,498	651,330	651,330	486,506	486,506	5,198	5,198	55,231	55,231	23,552	23,552	168,373	168,373

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8993	0.8993	0.9515	0.9515	1.1600	1.1600

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,427	-5,427	-12,375	-12,375	20,642	20,642

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
53,896	53,896	255,322	255,322	128,996	128,996

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
48,468	48,468	242,946	242,946	149,638	149,638

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8183	0.8183	0.9458	0.9458	0.7988	0.7988	0.8751	0.8751	0.8214	0.8214	0.9392

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-124,790	-2,772	-2,772	-48,635	-48,635	-40,912	-40,912	-24,397	-24,397	-11,220

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	686,886	686,886	51,139	51,139	241,668	241,668	327,527	327,527	136,616	136,616	184,493

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	562,097	562,097	48,366	48,366	193,033	193,033	286,615	286,615	112,219	112,219	173,273

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9392	0.7444	0.7444	1.1334	1.1334	0.8552	0.8552	0.9165	0.9165	0.8512	0.8512	0.8849	0.8849	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-11,220	-50,220	-50,220	7,073	7,073	-787	-787	-764	-764	-560	-560	-3,836	-3,836	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
184,493	196,481	196,481	53,030	53,030	5,433	5,433	9,151	9,151	3,762	3,762	33,336	33,336	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
173,273	146,261	146,261	60,104	60,104	4,646	4,646	8,387	8,387	3,202	3,202	29,500	29,500	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8648	0.8648	0.9020	0.9020	1.1528	1.1528

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-1,771	-1,771	-6,225	-6,225	3,403	3,403

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
13,101	13,101	63,499	63,499	22,267	22,267

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
11,330	11,330	57,274	57,274	25,670	25,670

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8537	0.8537	1.0183	1.0183	0.8333	0.8333	0.8955	0.8955	0.8573	0.8573	0.9751

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-102,677	1,672	1,672	-6,917	-6,917	-7,671	-7,671	-4,844	-4,844	-1,806

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	701,623	701,623	91,293	91,293	41,481	41,481	73,393	73,393	33,956	33,956	72,592

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	598,946	598,946	92,965	92,965	34,564	34,564	65,722	65,722	29,111	29,111	70,786

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9751	0.7905	0.7905	1.1954	1.1954	0.8995	0.8995	0.9492	0.9492	0.8903	0.8903	0.9350	0.9350

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-1,806	#####	-10,858	8,025	8,025	-334	-334	-1,139	-1,139	-367	-367	-1,296	-1,296

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
72,592	51,835	51,835	41,062	41,062	3,322	3,322	22,426	22,426	3,346	3,346	19,935	19,935

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
70,786	40,977	40,977	49,087	49,087	2,988	2,988	21,287	21,287	2,979	2,979	18,640	18,640

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9047	0.9047	0.9282	0.9282	1.1355	1.1355

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-913	-913	-3,904	-3,904	2,069	2,069

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
9,578	9,578	54,360	54,360	15,269	15,269

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
8,665	8,665	50,456	50,456	17,338	17,338

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	0.8599	0.8599	1.0373	1.0373	0.8210	0.8210	0.9165	0.9165	0.8600	0.8600

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	-1,184,160	40,339	40,339	-437,235	-437,235	-417,722	-417,721	-309,451	-309,451

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	8,450,642	8,450,642	1,082,041	1,082,041	2,442,830	2,442,830	5,001,878	5,001,878	2,211,084	2,211,084

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	7,266,482	7,266,482	1,122,380	1,122,380	2,005,595	2,005,595	4,584,156	4,584,156	1,901,633	1,901,633

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9823	0.9823	0.7686	0.7686	1.2164	1.2164	0.8860	0.8860	0.9566	0.9566	0.8812	0.8812

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-53,742	-53,742	-685,578	-685,578	231,384	231,384	-7,957	-7,957	-20,294	-20,294	-13,722	-13,722

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
3,042,480	3,042,480	2,962,110	2,962,110	1,069,440	1,069,440	69,777	69,777	468,048	468,048	115,477	115,477

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
2,988,737	2,988,737	2,276,533	2,276,533	1,300,825	1,300,825	61,821	61,821	447,754	447,754	101,755	101,755

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9364	0.9364	0.9127	0.9127	0.9489	0.9489	1.1696	1.1696

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-52,213	-52,213	-22,905	-22,905	-47,692	-47,692	57,805	57,805

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
821,094	821,094	262,295	262,295	932,480	932,480	340,876	340,876

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
768,880	768,880	239,390	239,390	884,788	884,788	398,682	398,682



Matrix House  
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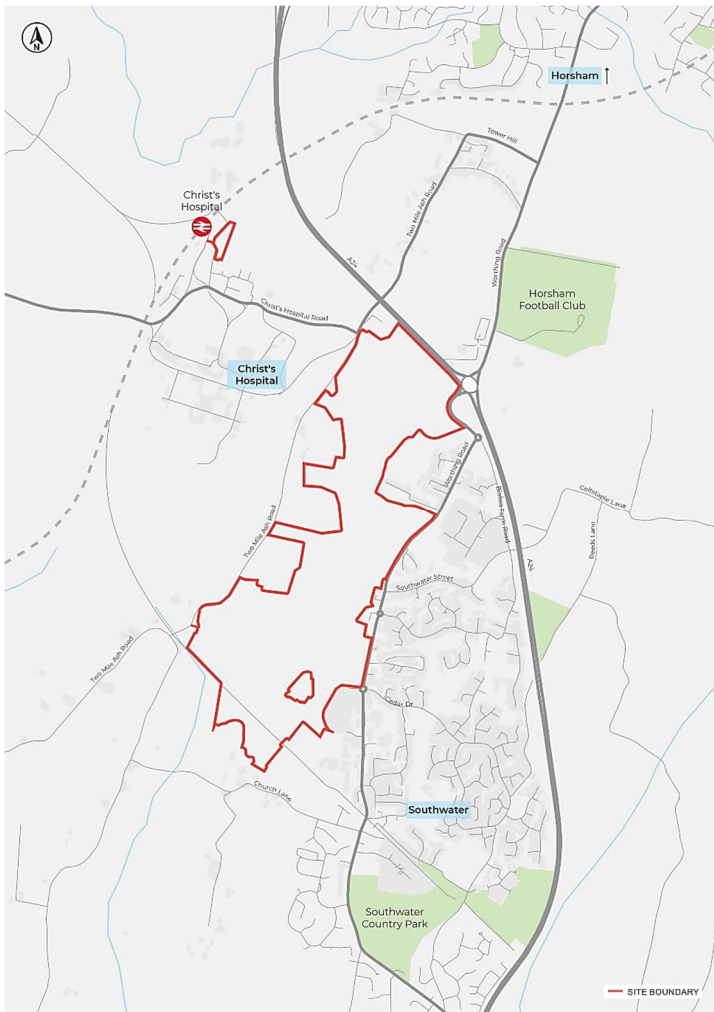
# National Highways Scoping Note

<b>DATE:</b>	12 September 2025	<b>CONFIDENTIALITY:</b>	Public
<b>SUBJECT:</b>	National Highways Scoping Note		
<b>PROJECT:</b>	Land North West of Southwater	<b>AUTHOR:</b>	Philip Moss
<b>CHECKED:</b>	David Dixon	<b>APPROVED:</b>	Allan Norcutt

## SCOPING DOCUMENT

WSP has been commissioned by Berkeley Strategic to support in the delivery of the Land North West of Southwater site (the 'site'). This application is to provide up to 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities. The location of the site is shown in Figure 1 below. Access to the site will be provided via new main vehicular access to the south of the Hop Oast Roundabout, whilst a secondary vehicular access will be provided on Worthing Road to the east and Two Mile Ash to the west.

Figure 1 - Site Location



This scoping document is specifically focused on the Strategic Road network. A planning application was submitted in 2022 for a scheme which was withdrawn due to delays in the local plan. An updated Scoping Note has been produced and shared with West Sussex Highways in their position as the highway authority.



# National Highways Scoping Note

<b>DATE:</b>	12 September 2025	<b>CONFIDENTIALITY:</b>	Public
<b>SUBJECT:</b>	National Highways Scoping Note		
<b>PROJECT:</b>	Land North West of Southwater	<b>AUTHOR:</b>	Philip Moss
<b>CHECKED:</b>	David Dixon	<b>APPROVED:</b>	Allan Norcutt

This is included in **Appendix A** of this document. The document focused on the impact on the local highway network, the public transport network and the walking and cycling strategy and provides context for National Highways.

The previous planning application from 2022 had a similar quantum of development to that proposed by this application except this 2025 application has a reduction in residential units from 1,500 to 1,000. Table 1 presents the difference in Development Proposals between the 2022 application to 2025 application.

*Table 1 – Comparison between 2022 and 2025 Development Proposals for the Land North West of Southwater*

Land Use	2022 Development Proposals	2025 Development Proposals
Residential	1,500 Units	1,000 Units
Employment	15,750sqm	15,750sqm
Flexible Community Facilities	2,900sqm	2,900sqm
Education Facilities	Nursery, Primary and Secondary Schools	Nursery, Primary and Secondary Schools
Traveller Pitches	Five Traveller Pitches	Five Traveller Pitches

The development site is located at a significant distance from the Strategic Road network; to the north the M23/ A23 is approximately 10km as the crow flies from the site and to the south the A23 at the A272 junction is approximately 12km from the site. As such, the majority of development trips on a day-to-day basis will not have an interaction with the Strategic Road network.

Within the Transport Assessment for the 2022 application, WSP reviewed the impact of development traffic on the strategic road network, which is presented in Appendix J of the Transport Assessment, and this has been include within **Appendix B** of this document. The forthcoming application will utilise the Horsham Strategic Model to distribute journey to work trips this is from the residential and commercial elements of the site, this approach has been agreed with Horsham and West Sussex County Council this is as per the previous application. Whilst for trips associated educational, shopping and leisure/ other these trip destinations have been assigned to local facilities.

Table 2 presents the forecast development traffic impact on the M23 and A23 based on the information presented in Appendix J from the 2022 planning application, taken from the Saturn model which was utilised to distribute the development traffic across the network.



# National Highways Scoping Note

<b>DATE:</b>	12 September 2025	<b>CONFIDENTIALITY:</b>	Public
<b>SUBJECT:</b>	National Highways Scoping Note		
<b>PROJECT:</b>	Land North West of Southwater	<b>AUTHOR:</b>	Philip Moss
<b>CHECKED:</b>	David Dixon	<b>APPROVED:</b>	Allan Norcutt

Table 2 – Information taken from Appendix J of the Transport Assessment from Summer 2022.

National Highways Link	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
M23 Pease Pottage Junction (Northbound)	4	2	6	3	2	5
A23 A272 Junction (Southbound)	0	5	5	1	0	1

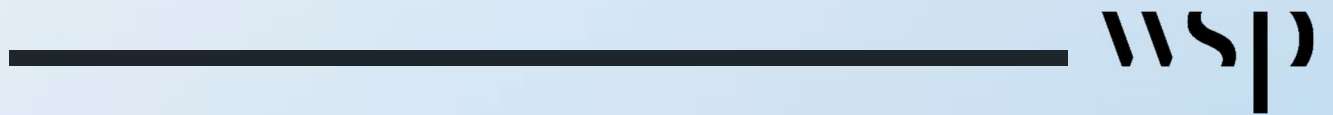
During the AM peak, the M23 north of Pease Pottage sees six two-way trips, reducing to five in the PM. On the A23 south, five two-way trips are forecast for the AM peak, dropping to one in the PM. The new application reduces residential units by 500, so impacts will likely be lower than those shown in Table 2 for both peak times. The Transport Assessment will summarise development traffic flows on the Strategic Road Network, and no further assessment is expected.

## Summary

In Summary, the location of the development at Southwater is anticipated to have minimal impact on the Strategic Road Network. Initial review of the traffic generation and distribution as undertaken in 2022 indicate that minimal trips route to the M23 or A23 and it is not anticipated that the revised application with a reduced quantum of development will change this conclusion. We welcome National Highways views that subject to the traffic flows being no more than specified above, no additional assessment will be required.

# Appendix A

Transport Scoping Document





Berkeley Strategic Limited

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# LAND NORTH WEST OF SOUTHWATER

Transport Scoping Note





Berkeley Strategic Limited

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# LAND NORTH WEST OF SOUTHWATER

## Transport Scoping Note

**FINAL PUBLIC**

**PROJECT NO.**

**UK0043490.961**

**DATE: AUGUST 2025**

WSP

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# QUALITY CONTROL

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Issue/revision	Revision 1	Revision 2	Revision 3	Revision 4
Remarks	First Issue			
Date	Aug 2025			
Prepared by	DJ			
Signature				
Checked by	PM			
Signature				
Authorised by	DD			
Signature				
Project number	UK0043490.961			
Report number				
File reference	\\uk.wspgroup.com\central data\Projects\70091xxx\UK0043490.961 - North Southwater, Phase 2\03 WIP\TP Transport Planning\05 Reports\Trip Generation and Distribution Note			



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## ***APPENDICES***

APPENDIX A

TRICS OUTPUTS - RESIDENTIAL

APPENDIX B

TRICS OUTPUTS - EMPLOYMENT

APPENDIX C

TRICS OUTPUTS - BUSINESS PARK

APPENDIX D

TRICS OUTPUTS - SECONDARY SCHOOL

APPENDIX E

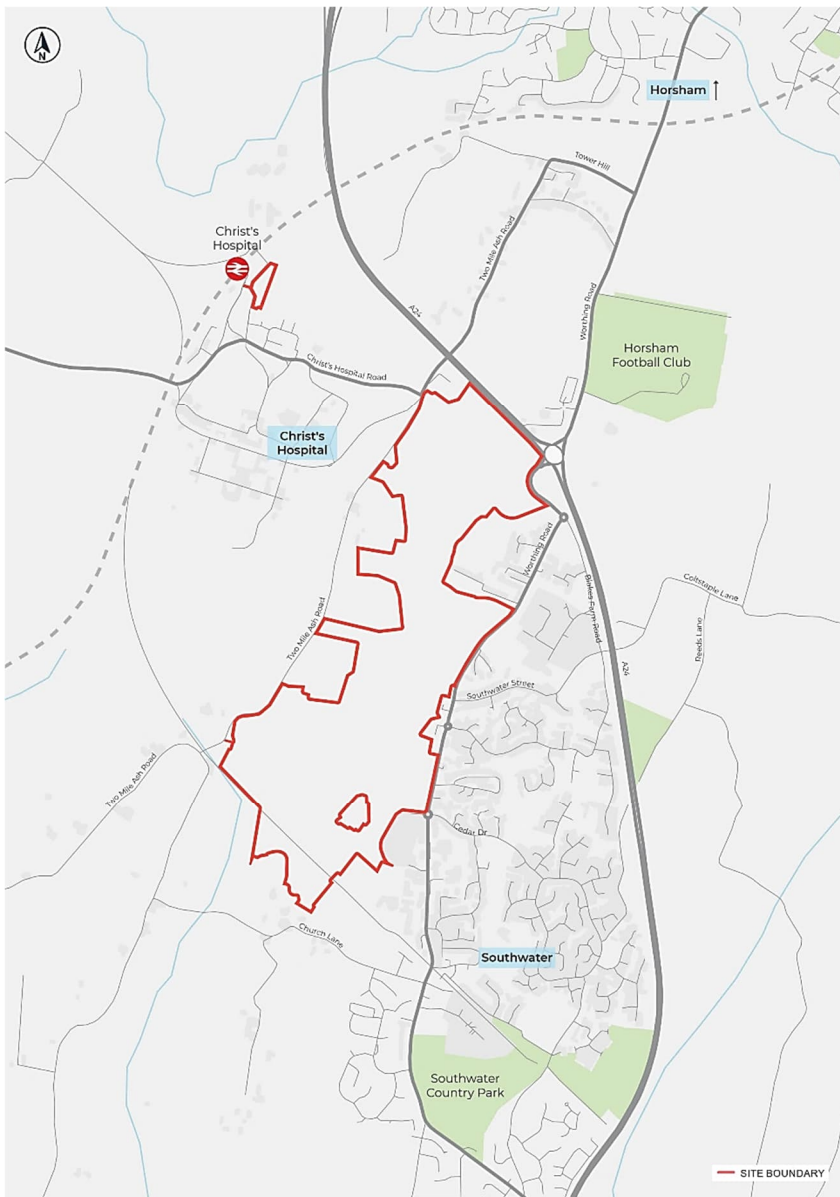
NTEM TEMPRO DATA

# 1. INTRODUCTION

## 1.1. INTRODUCTION

1.1.1. WSP has been commissioned by Berkeley Strategic to support in the delivery of the Land North West of Southwater site (the 'site'). This application is to provide up to 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities. The location of the site is shown in **Figure 1-1** below. Access to the site will be provided via new main vehicular access to the south of the Hop Oast Roundabout, whilst a secondary vehicular access will be provided on Worthing Road to the east and Two Mile Ash to the west.

**Figure 1-1 - Site Location**



1.1.2. The site is located to the north of the 'Broadacres' development, which has planning consent for 540 homes and 54 Retirement Living homes and is currently under construction.

- 1.1.3. The main access to the Broadacres development is via a four-arm roundabout at Worthing Road / Cedar Drive / Chessall Avenue, with a secondary access provided via a simple priority-controlled junction on Worthing Road just south of the Cedar Drive roundabout.
- 1.1.4. This development proposals associated with this Transport Scope is detailed below:
- Up to 1,000 homes (a mix of C2 and C3 use classes);
  - Up to 4 ha of employment land;
  - Community hub;
  - A 1-form entry primary school (expandable to 2 forms to incorporate Special Educational Needs and Disabilities ((SEND) and a 6-form entry secondary school (expandable to 8 forms to incorporate SEND);
  - Day care nursery (min. 60 places); and,
  - Open space.
- 1.1.5. WSP undertook a pre-application meeting with West Sussex on the 24<sup>th</sup> July to discuss the scope of this application in terms of transport and this scoping document draws together the approach and agreement from that meeting.

## 1.2. BACKGROUND

- 1.2.1. A number of assessments pertaining to the transport aspects of the proposed development have previously been undertaken by WSP. This includes work undertaken as part of WSP's previous 'Site Access Strategy' (June 2019) document, which assessed the overall highway impacts for Land North West of Southwater based on an assumption of c.1,900 homes, employment uses and a secondary school.
- 1.2.2. WSP also undertook a separate assessment of the highway impacts of 450 homes at part of the site as part of the draft Southwater Neighbourhood Plan (September 2018).
- 1.2.3. Finally, in the summer of 2022 WSP submitted a Transport Assessment to support a Planning Application on the site for the following development proposals
- Outline application with all matters reserved for a mixed-use strategic development to include up to 1,500 dwellings, up to 15,750 sqm (GIA) of flexible employment space (Use Classes E/B2/B8), up to 2,900 sqm (GIA) flexible community facilities (Use Classes E/F1/F2); education facilities; sports facilities; 5 gypsy and traveller pitches; public open space; landscaping and related infrastructure."*
- 1.2.4. The Transport Assessment included specific Walking and Cycling, Public Transport and Off-site mitigation strategies which this application will build upon. The application was withdrawn following the withdrawal of the draft Local Plan.
- 1.2.5. The site was allocated for at least 1,200 homes under Horsham District Council's (HDC) Strategic Policy HA3 from the Horsham Local Plan (Regulation 19 version) over the period to 2038 - albeit it is noted that the Local Plan has been withdrawn.
- 1.2.6. This application will utilise much of the agreed approach and methodology used within the previous transport assessment including addressing key comments focusing on the off-site Walking and Cycling Strategy, off-site mitigation and Public Transport Strategy. This will be detailed throughout this scoping document.

## 1.3. REPORT STRUCTURE

1.3.1. The structure of this report is as follows:

- Chapter 2 - Trip Generation – presenting updated TRICs assessments undertaken to account for each of the land uses ;
- Chapter 3 - Trip Distribution and Assignment – present the updated approach for the trip distribution and assignment this includes presenting the internalisation figures;
- Chapter 4 – Off-site Highway Assessment Scope – present the highway impact assessment to be undertaken within the Transport Assessment;
- Chapter 5 – Walking and Cycling Strategy – details the Walking and Cycling Strategy from the previous application and how this application will build upon it;
- Chapter 6 – Public Transport Strategy – details the Public Transport Strategy from the previous application and how this application will build upon i;
- Chapter 7 – Framework Travel Plans – detail what will be included within the framework travel plan; and,
- Chapter 8 - Summary and Conclusions.

## 2. TRIP GENERATION

---

### 2.1. INTRODUCTION

- 2.1.1. This Chapter provides detail on the vehicular trip generation forecasts for the proposed development and how they have been derived. This note primarily deals with vehicular modes, not least because a key purpose of the note is to seek to agree the scope of vehicular traffic impact assessments.
- 2.1.2. Notwithstanding this, details of the projected multi-modal trip generation and impacts associated with the proposed development will be included within the Transport Assessment.
- 2.1.3. This section supersedes the agreed trip rates section from the previously submitted Transport Assessment in the Summer of 2022. The trip rates have been updated to take into account any recent surveys undertaken.

### 2.2. RESIDENTIAL

- 2.2.1. Trip rates for the residential element have been derived by way of an interrogation of the TRICS Database (Version 8.25.6). The 'Houses, Privately Owned' section of the database was reviewed, with the following site characteristics selected:
  - All England sites (excluding Greater London);
  - Dwelling range of between 200 and 1,500 dwellings located in Suburban and Edge of Town locations; and,
  - Sites that included, or were in close proximity to, notable retail, employment and / or leisure facilities were manually filtered out - given that the effect of the presence of these facilities on the subject site has been accounted for separately, as set out later in this note.
- 2.2.2. The rates that were derived from the search are provided in the following table, along with the volume of trips that would be generated by 1000 homes. The TRICS outputs (vehicular) are included at **Appendix A**. A total of seven TRICS sites were used in deriving these trip rates.

**Table 2-1 - Residential Vehicular Trip Rates & Generation**

Period	Trip Rates (per home)			Trip Generation (1,000 homes)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.143	0.375	0.518	143	375	518
PM (1700-1800)	0.345	0.150	0.495	345	150	495

- 2.2.3. Based on the above, it is envisaged that 1,000 dwellings could generate in the order of 518 two-way vehicle movements during the AM peak and 495 two-way vehicle movements during the PM peak.
- 2.2.4. The above trip rates and subsequent trip generation figures are considered robust in that:
  - The 'Private Housing' sub-land use - rather than the 'Mixed Private and Affordable Housing' category for example - has been used and applied to all 1,000 dwellings. There would be a percentage of affordable dwellings at the subject site, which typically generate fewer peak hour trips than equivalent private market dwellings. This element is not fully reflected in the selected

TRICS sites and subject to the finalised mix of the proposed properties, may be subject to further refinement;

- The majority of sites included within the TRICS analysis do not have a Travel Plan in place, unlike the subject site at Land North West of Southwater; and,
- The vehicular trip rates are comparable to those that were agreed with WSCC as part of the previous Transport Assessment study (Summer 2022) of 1,500 dwellings (0.521 AM Peak two-way / 0.523 PM Peak two-way).

## 2.3. EMPLOYMENT

- 2.3.1. The use of the employment space is unknown at this stage and the outline planning application will seek permission for flexible employment uses.
- 2.3.2. In total, it is anticipated that the employment area would cover a total combined area of up to approximately 4 ha, with the developable floor area comprising a total combined value of up to approximately 15,750 sqm GFA. This may change and is subject to further discussion and design development.
- 2.3.3. It is envisaged that this employment land area will comprise approximately one third office / research & development (Class E), one third industrial (Class B2) and one third storage and distribution (Class B8).
- 2.3.4. For the purposes of this assessment it has been assumed that a total 15,750 sqm GFA of employment floor space will comprise the following mix:
- 50% Industrial or Logistics Units (7,875 sqm); and,
  - 50% Business Park (7,875 sqm).
  - **Total - 15,750 sqm GFA.**
- 2.3.5. The TRICS Database has been interrogated to derive rates for the employment element, as set out below.

### INDUSTRIAL / LOGISTICS UNITS

- 2.3.6. In respect to the industrial / logistics units, a review of trip rates based on the 'Employment – Industrial Estate' and the 'Employment – Warehousing (Commercial)' TRICS categories have been undertaken as these are considered to most closely represent the likely future operational profile of these units. The TRICS interrogations have been undertaken based on comparable location parameters to the residential interrogation, albeit amended where appropriate in order to achieve a suitable sample size. The 'Employment – Industrial Estate' assessment is based on four TRICS sites while the 'Employment – Warehousing (Commercial)' assessment is based on five TRICS sites.
- 2.3.7. The TRICS outputs from these assessments are included at **Appendix B** and are summarised below in terms of the traditional highway network peak hours.

**Table 2-2 – Vehicular Employment Use Trip Rate Comparison (Industrial Estate v. Warehouse)**

Period	Industrial Estate Trip Rates (per 100sqm)			Warehouse (Commercial) Trip Rates (per 100sqm)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.365	0.158	0.523	0.161	0.135	0.296
PM (1700-1800)	0.127	0.309	0.436	0.134	0.173	0.307

- 2.3.8. It is apparent that the Industrial Estate TRICS outputs (Included in **Appendix B**) exhibit higher trip rates than the Warehouse (Commercial) TRICS outputs (also at **Appendix B**) and as such for the purposes of robustness these Industrial Estate trip rates have been taken forward and applied to the 7,875 sqm of this element of the employment floor area. The subsequent trip generation is presented in **Table 2-3**.

**Table 2-3 - Vehicular Employment Trip Rates and Generation (Industrial) 7,875sqm**

Period	Trip Rates (per 100sqm)			Trip Generation – 7,875sqm GFA		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.365	0.158	0.523	29	12	41
PM (1700-1800)	0.127	0.309	0.436	10	24	34

- 2.3.9. Based on the above, it is envisaged that the assumed industrial element of the proposed employment use could generate a forecast of 41 two-way movements in the AM peak and 34 two-way movements in the PM peak.

## BUSINESS PARK

- 2.3.10. A search of the ‘Business Park’ category of TRICS was completed, with all sites within the UK (excluding Greater London and Northern Ireland) selected. The TRICS interrogations have been undertaken based on comparable location parameters to the residential interrogation, albeit amended where appropriate in order to achieve a suitable sample size.
- 2.3.11. The TRICS outputs are included at **Appendix C** whilst the peak hour vehicle trip rates that were derived from the search are provided in the following table, along with the volume of vehicle trips that would be generated based on the projected 7,875sqm floor area.

**Table 2-4 – Vehicular Employment Trip Rates and Generation (Business Park) 7,875sqm**

Period	Trip Rates (per 100sqm)			Trip Generation – 7,875sqm GFA		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	1.330	0.226	1.556	105	18	123
PM (1700-1800)	0.273	0.935	1.208	21	74	95

- 2.3.12. Based on the above, it is envisaged that the assumed Business Park element of the proposed employment use could generate a forecast of 123 two-way movements in the AM peak and 95 two-way movements in the PM peak.

## TOTAL EMPLOYMENT USE

2.3.13. The figures at **Table 2-3** and **Table 2-4** have been combined to establish the total trip generation associated with the employment element (15,750 sqm). This is presented below in **Table 2-5**.

**Table 2-5 – Vehicular Trip Generation – Total Employment Use (15,750 sqm)**

Period	Trip Generation – 15,750sqm		
	Arrival	Departure	Total
AM (0800-0900)	134	30	164
PM (1700-1800)	32	97	129

2.3.14. Based on the above, it is envisaged that the proposed employment element could generate a forecast of 164 two-way movements in the AM peak and 129 two-way movements in the PM peak. This is prior to any allowance for the effects of internalisation / modal shift which is detailed in Chapter 3. The trip generation presented in Table 2-5 is a reduction on the previous employment trip generation from the 2022 Transport Assessment

## 2.4. SECONDARY SCHOOL

2.4.1. The secondary school would likely comprise a 6-form entry school (expandable to 8 forms to incorporate SEND) with a total of in the order of 900 pupils and associated teaching / administrative staff (based on 6-form entry). It is understood from initial discussions with the WSCC education department that all (or the vast majority) of these 900 pupils will reside in Southwater - either within the proposed development site or within existing areas of Southwater. For those that may come from outside of Southwater, it has been assumed that these would come from the recently approved “Horsham Golf & Fitness Village” located to the north-east approximately 1km from the site.

2.4.2. Trip rates for the secondary school element were derived by way of an interrogation of the TRICS Database (Version 8.25.6). The ‘Education - Secondary’ section of the database was interrogated, with the following parameters selected:

- All England sites (excluding Greater London were selected) with a size of between 200 and 2,000 pupils located in Suburban and Edge of Town locations.

2.4.3. The TRICS outputs are included at **Appendix D** while the peak hour trip rates that were derived from the search are provided in the following table, along with the volume of vehicular trips that would be generated based on the projected school size of 900 pupils. Whilst the trip rate is ‘per pupil’ these figures include all trips associated with the school (i.e. including staff, visitors and servicing trips etc.).

**Table 2-6 – Vehicular Secondary School Trip Rates and Generation (900 pupils)**

Period	Trip Rates (per pupil)			Trip Generation – 900 pupils		
	Arrival	Departure	Total	Arrival	Departure	Total
AM (0800-0900)	0.164	0.133	0.297	148	120	267
PM (1700-1800)	0.026	0.028	0.054	23	25	49

Based on the above, it is envisaged that the proposed secondary school could generate 270 two-way vehicle movements during the AM peak and 49 vehicle movements during the PM peak. This is prior to any allowance for the effects of internalisation / modal shift.

## 2.5. TOTAL TRAFFIC GENERATION

2.5.1. The figures presented at **Tables 2-1, 2-5, and 2-6** have been combined in order to establish the total peak hour traffic generation at the site. This is presented below at **Table 2-8**.

**Table 2-8 – Total Vehicular Trip Generation (Prior to Internalisation / Modal Shift)**

Period	Total Traffic Generation		
	Arrival	Departure	Total
AM (0800-0900)	424	525	949
PM (1700-1800)	400	273	673

2.5.2. Based on the above, it is envisaged that the site is forecast to generate a total of in the order of 949 two-way vehicle movements during the traditional AM peak hour and 673 two-way vehicle movements during the traditional PM peak hour. The previous application from 2022 had a total trip generation of 1,191 two-way trips in the AM peak and 997 two-way trips in the PM peak, this was prior to internalisation and modal shift. There is a significant reduction in trip generation this due to providing only 1,000 units compared to 1,500 units.

2.5.3. This is prior to any allowances for the effects of site internalisation or modal shift, which is discussed in the following Chapter of this note.

## **3. TRIP DISTRIBUTION AND ASSIGNMENT**

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- 3.1.1. This Chapter sets out the projected distribution of the trips set out at Chapter 2 and the potential for internalisation. This includes the projected assignment on the local highway network and the projected levels of site internalisation - i.e. trips undertaken entirely within the site without involving any routeing off-site.
- 3.1.2. This application will undertake the assignment of trips differently compared to the previous Transport Assessment from July 2022, details in the following chapter will outline how the vehicular trips will be distributed in this application.

### **3.2. RESIDENTIAL TRIPS**

#### **TRIP PURPOSE**

- 3.2.1. The trips generated by the residential element of the proposals have been broken down by journey purpose in order to project the likely distribution of these trips more accurately. To this end, the National Trip End Model (NTEM) has been reviewed by way of the TEMPro database 8.2 in terms of journey purposes by mode amongst existing residents in the Horsham 009 Middle Super Output Area (MSOA), as projected in the future assessment year of 2038. This MSOA, which is shown below, includes the majority of the existing residential areas of Southwater.



**Table 3-1 – Journey Purpose (All Modes) – Home Based Trips in Horsham 009 Middle Super Output Area (MSOA)**

<b>Journey Purpose (All Modes)</b>	<b>AM Peak Period (0700-1000 hours)</b>	<b>PM Peak Period (1600-1900 hours)</b>
Work	43.6%	34.6%
Education	26.4%	6.8%
Shopping	16.4%	24.5%
Leisure / Other	13.5%	34.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>

3.2.3. It is apparent that the most common journey purpose during each of the peak periods is for work. The breakdown of journey purpose amongst car drivers only is presented in **Table 3-2**. This is based on a total sample size of 3,229 and 3,736 residential car driver trips during the AM and PM peak periods respectively.

**Table 3-2 – Journey Purpose (Car Drivers Only) – Home Based Trips in Horsham 009 Middle Super Output Area (MSOA)**

<b>Journey Purpose (Car Drivers Only)</b>	<b>AM Peak Period (0700-1000 hours)</b>	<b>PM Peak Period (1600-1900 hours)</b>
Work	61.7%	45.0%
Education	9.6%	3.4%
Shopping	16.5%	23.1%
Leisure / Other	12.2%	28.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>

3.2.4. On the basis of the above it is apparent that the majority (61.7%) of AM peak period car driver trips are for work purposes with the majority (45%) of PM peak period trips also for this purpose.

3.2.5. The breakdown in journey purpose amongst car drivers (**Table 3-2**), has been applied to the projected peak hour vehicular trips amongst the 1,000 proposed dwellings at the site (**Table 2-1**). The subsequent projected number of vehicular trips by purpose is shown in **Table 3-3** below.

3.2.6. For example, the total residential AM peak hour vehicular departures at **Table 2-1** (375) have been disaggregated based on the ‘AM peak period’ percentages at **Table 3-2** - e.g. 61.7% of the 375 AM peak hour departures (231 vehicle departures) would be for ‘work’ purposes - this is reflected at the respective row / column in **Table 3-3**.

**Table 3-3 – Residential Vehicular Trips by Journey Purpose – 1,000 Dwellings**

Journey Purpose (Car Drivers Only)	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Work	88	231	320	155	68	223
Education	14	36	50	12	5	17
Shopping	24	62	86	80	34	114
Leisure / Other	17	46	63	98	43	141
<b>Total</b>	<b>143</b>	<b>375</b>	<b>518</b>	<b>345</b>	<b>150</b>	<b>495</b>

- 3.2.7. It is apparent that of the 518 two-way AM peak hour residential vehicular trips, 319 would be for work purposes, 50 would be for education purposes, 86 would be for shopping purposes and 63 would be for leisure / other purposes.
- 3.2.8. Of the 495 two-way PM peak hour residential vehicular trips, 223 would be for work purposes, 17 would be for education purposes, 114 would be for shopping purposes and 141 would be for leisure / other purposes. The distribution of the above residential trips by each respective journey purpose is set out below.

### RESIDENTIAL TRIPS - WORK PURPOSE

- 3.2.9. Given the employment facilities (approximately 15,750 sqm GFA) that would be provided on the site, it is reasonable to expect that some of the residents' work purpose trips will be to / from these on-site employment facilities and will therefore be an internal trip within the site.
- 3.2.10. In-practice these internal trips may be experienced as a modal shift to walk / cycle – given the comprehensive network of walk / cycle facilities that would be provided throughout the site. In any event, the trips would be internal and would have no impact at off-site junctions.
- 3.2.11. In order to establish the likely number of work purpose residential trips that may be internal to the on-site employment uses, reference has been made to 2011 Census data in respect to the existing residence of employees working within Horsham 009 MSOA. The 2021 Census data was deemed unrepresentative due to the fact it was undertaken during Covid conditions and as it proposed to utilise the 2011 data. It is notable that this MSOA includes Southwater Business Park and Oakhurst Business Park and therefore the assessment is based on a reasonable sample size. The assessment shows that of all the vehicle trips to these existing employment facilities, 23% are from existing residents of Southwater and it could be justifiable to apply this percentage to the subject site (i.e. 23% of the trips to the proposed employment facilities on the site will come from within the site). For the purposes of a robustness assessment however, it has been assumed that this would only be reflected as 10% internalisation, with the remainder of the trips to the employment facilities being external as assessed within the 2022 planning application. Further details relating to this assessment - in respect to the employment element of the proposals - are provided later in this note (**Table 3-9**) and demonstrate that 16 AM peak hour trips and 13 PM peak hour trips to the proposed employment uses are anticipated to be made from residents living at the site (based on the robust 10% figure). As such it is

reasonable to categorise this quantum of trips amongst the work purpose residential trips as being internal and is reflected as such at **Table 3-4**.

3.2.12. The remainder of the residential off-site work purpose trips will be distributed onto the network utilising the Horsham Transport Model for journey to work, this differs from 2022 Transport Assessment.

3.2.13. Table 3-4 presents the external and internal trip distribution for the residential work purpose vehicular trips.

**Table 3-4 – Distribution of Residential Work Purpose Vehicular Trips – 1,000 Dwellings**

	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External	85	218	304	95.0%	145	65	209	94.1%
Internal (Walking and Cycling)	3	13	16	5.0%	10	3	13	5.9%
Total	<b>88</b>	<b>231</b>	<b>320</b>	<b>100%</b>	<b>155</b>	<b>68</b>	<b>222</b>	<b>100%</b>

3.2.14. On the basis of the above it is apparent that there would be in the order 304 and 209 external two-way vehicular movements during the AM and PM peak hours respectively for the purposes of residents’ work trips. The remaining trips (16 AM peak / 13 PM peak) would be internal to the site, given the employment floor space that would be included on-site. In practice, these remaining trips may be experienced as a modal shift to walk / cycle, given the network of walk / cycle routes that would be provided throughout the site.

### RESIDENTIAL TRIPS - EDUCATION PURPOSE

3.2.15. In respect to resident trips undertaken for the purposes of education, **Table 3-2** suggests that this would comprise 9.6% (50 two-way) and 3.4% (17 two-way) of the AM and PM peak hour residential vehicular trips respectively.

3.2.16. There would be a primary and secondary school located on the site and would accommodate all - or the vast majority - of the educational requirements amongst residents at the site. The schools would likely be located close to the centre of the site and would be within a reasonable walk / cycle distance of the majority of the residential areas of the site.

3.2.17. It is therefore considered that these vehicular trips would actually be subject to a modal shift to walking / cycling – particularly given the good quality walk and cycle network that would be incorporated throughout the site and given the various measures that would be incorporated as part of the future School Travel Plan(s). These trips have therefore been excluded from any further allowance in this note.

3.2.18. In the event that there are some vehicular trips to / from the schools amongst residents living at the site, these would likely be undertaken as pass-by trips – e.g. a parent dropping-off a child on their way to work – and are therefore already accounted for in the assessments herein.

## RESIDENTIAL TRIPS – SHOPPING PURPOSE

- 3.2.19. In respect to the residential vehicular trips for the purposes of shopping, given the various retail facilities that would be provided on the site, for the purposes of this assessment it is assumed that 25% of these trips would be internal while the remaining 75% would be equally distributed between Lintot Square (25%) the centre Horsham (25%) and Broadbridge Heath (25%).
- 3.2.20. The application of 25% of the shopping trips as internal is considered appropriate given that there will be a retail centre provided on the site. It is noteworthy that peak hour trips to / from shopping facilities are often undertaken as a pass-by trip that is occurring in any event (i.e. as part of wider trip to / from work for example). It is unlikely that an individual would undertake a primary trip to a shop during the highway network peak hours.
- 3.2.21. For the purposes of this assessment, it is assumed that only the trips to Horsham and Broadbridge Heath may be discernible on the highway network, with the trips to Lintot Square (and the internal trips) being undertaken as a pass-by trip or being undertaken on foot / cycle in-practice.
- 3.2.22. The subsequent distribution of these trips is shown in **Table 3-5**.

**Table 3-5 – Location of Residential Shopping Purpose Vehicular Trips – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Town Centre	6	15	21	25%	20	9	29	25%
Broadbridge Heath	6	15	21	25%	20	9	29	25%
Internal / Lintot Square (Walking and Cycling)	12	31	43	50%	40	17	57	50%
Total	24	62	86	100%	80	35	115	100%

- 3.2.23. In terms of residential shopping trips, it is apparent that there would be in the order 42 and 58 external two-way vehicular movements during the AM and PM peak hours respectively.

## RESIDENTIAL TRIPS – LEISURE / OTHER

- 3.2.24. In respect to the residential vehicular trips for the purposes of leisure / other, again given the various leisure facilities that would be provided on the site, for the purposes of this assessment it is assumed that 25% of these trips would be internal while the remaining 75% would be to / from external areas, including 'The Bridge' leisure centre at Broadbridge Heath (25%), the 'Pavilions in the Park' leisure centre in Horsham (25%) and 'Bluecoats Sports, Health and Fitness Club' in Christ's Hospital (25% - assumed for the purposes of this assessment to also be internal, or subject to a modal shift to walk / cycle).
- 3.2.25. The subsequent distribution of these trips is shown in **Table 3-6**.

**Table 3-6 – Distribution of Residential Leisure / Other Purpose Vehicular Trips – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Town Centre	4	12	16	25%	24	11	35	25%
Broadbridge Heath	4	12	16	25%	24	11	35	25%
Internal/ Christ Hospital (Walking and Cycling)	9	22	31	50%	50	21	71	50%
Total	17	46	63	100%	98	43	141	100%

3.2.26. In terms of residential leisure / other trips, it is apparent that there would be in the order 32 and 72 external two-way vehicular movements during the AM and PM peak hours respectively.

### RESIDENTIAL TRIPS – ALL PURPOSES

3.2.27. The figures presented in **Tables 3-4, 3-5 and 3-6** have been combined to show the total vehicular trip distribution associated with the residential element of the proposals (1,000 dwellings). This is shown below at **Table 3-7**.

**Table 3-7 – Distribution of Residential Vehicular Trips (All Purposes) – 1,000 Dwellings**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Only) – to be distributed by the traffic model	75	228	304	58.7	152	58	209	43.7
Horsham Town Centre (Non Work Trips)	10	27	37	7.1	44	20	64	13.4
Broadbridge Heath (Non Work Trips)	10	27	37	7.1	44	20	64	13.4
Internal / Lintot Square / Christ's Hospital (Walking and Cycling)	48	92	140	27.0	98	65	141	29.5
Total	143	374	518	100	338	163	478	100

3.2.28. It is forecast that the residential element of the proposals would generate a total of 378 and 337 two-way external vehicular trips during the AM and PM peak hours respectively. The remaining trips (140 AM peak / 141 PM peak) would be internal or to Lintot Square / Christ's Hospital.

### 3.3. EMPLOYMENT TRIPS

- 3.3.1. In respect to the trips associated with the approximate 15,750 sqm of employment floor space at the site (**Table 2-5**), these trips have been distributed based on the Horsham Transport Model. This is deemed an acceptable approach and will take account of the possible redistribution of traffic on the network.
- 3.3.2. The raw Census outputs indicate that 23% of existing trips to the existing employment areas within Southwater are from existing residents within Southwater as outlined in Chapter 2. However, given that this may not be reflected entirely at the subject site, for the purposes of robustness this figure has been manually reduced to 10% and subsequently assigned as ‘internal’ in respect to the subject site. The remaining trips have been manually applied pro-rata to the remaining routes.

**Table 3-9 – Distribution of Employment Vehicular Trips – 15,750 sqm GFA**

External/ Internal	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External	120	27	147	90	28	88	116	90
Internal*	13	3	16	10	3	10	13	10
<b>Total</b>	<b>133</b>	<b>30</b>	<b>163</b>	<b>100</b>	<b>32</b>	<b>98</b>	<b>129</b>	<b>100</b>

\*Internal trips are excluded from the total at Table 3-11 as trips already accounted for at Table 3-4

- 3.3.3. In terms of the employment trips, it is apparent that there would be in the order 147 and 116 external two-way vehicular movements during the AM and PM peak hours respectively, with the remaining trips (16 AM peak / 13 PM peak) being internal trips. These internal trips are already accounted for (**Table 3-4**). In practice, these internal trips may be experienced as a modal shift to walk / cycle, given the network of walk / cycle routes that would be provided throughout the site.

### 3.4. SECONDARY SCHOOL TRIPS

- 3.4.1. In terms of trips associated with the 6-form entry secondary school on the site (assumed 900 pupil capacity), it is understood from discussions with the WSCC education department that there is existing demand in Southwater for in the order of 3-4 form entry secondary school space, while the remaining 2-3 form capacity would likely be utilised by way of new demand from Broadacres (once fully built out) and the subject site at Land North West of Southwater.
- 3.4.2. To this end, it is assumed that the secondary school pupils would comprise solely those residing within the site / Broadacres / other areas of Southwater and would walk / cycle to school - or any vehicular trips to / from the school that do take place amongst residents living on the site would be undertaken by way of a pass-by trip in any event (e.g. a parent dropping their child off at school on their way to work).

- 3.4.3. It should also be noted that WSCC education department have advised that in the order of 525 children currently travel from Southwater into existing Horsham Schools but in future would likely attend the proposed secondary school on site. As such it could also be appropriate to consider a reduction in some existing baseline vehicle trips on some parts of the highway network, given that some of these trips relate to existing secondary school age pupils who currently are required to travel further afield to go to school. The provision of the new secondary school at the site will therefore reduce vehicular mileage on the roads into Horsham amongst these existing pupils – albeit it is understood that the majority of these pupils currently travel by bus. Again however, for robustness no allowance for potential reductions in existing school related trips on the transport network has been made in the assessments herein.
- 3.4.4. Based on the information above, 93.6% in the AM peak hours and 87.8% in the PM peak hours of the trips generated by the new secondary school have been allocated as internal (existing village or new development), as shown at **Table 3-10**.
- 3.4.5. Further, following the recent planning approval of the “Horsham Golf & Fitness Village”, approximately 1km to the north-east from the site, it was agreed that the new school would likely cater for new students residing in this location.
- 3.4.6. Based on School Characteristics data in West Sussex for 2024/25 131,860 pupils, including primary school, secondary and higher education (16-17 years old), 63,883 in primary school, 51,334 are going in secondary and 16,643 in higher education (16-17 years old). it is has been calculated that 39% of pupils would go to the secondary school. Combining the values shown in **Table 3-1**, **Table 5.3** “Proposed Residential Multi-Modal Trip Generation” from “Horsham Golf & Fitness Village” Transport Assessment part 1 (page 56) and 39% of secondary school pupils, the proposed development would distribute 6.4% in AM and 12.2% in the PM peak hours of trips from the Horsham Golf Course site as shown in **Table 3-10**.

**Table 3-10 – Distribution of Secondary School Vehicular Trips – 900 Pupils**

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Golf Course	12	5	17	6.4	2	4	6	12.2
Internal (existing village and Proposed Development)	136	115	250	93.6	21	21	43	87.8
<b>Total</b>	<b>148</b>	<b>120</b>	<b>267</b>	<b>100</b>	<b>23</b>	<b>25</b>	<b>49</b>	<b>100%</b>

- 3.4.7. It is anticipated that the proposed secondary school would generate 267 AM Peak two-way vehicle movements and 49 PM Peak two-way vehicle movements. In practice, the majority trips may be subject to a modal shift to walking / cycling and if not they would likely be pass-by trips and associated with another form of trip purpose.

3.4.8. The secondary school trips associated with Horsham Golf Course would currently go to Tanbridge House School, as the walking time is approximately 45-60 minutes it is unlikely that this journey will be undertaken on foot. As such majority of students would be driven to and from the school as these trips would now be to the proposed new secondary school it is proposed to remove those trips from the network in the Do Something scenarios to take account of the trip distribution and remove the possibility of double counting. This would equate to 17 two-way trips in the AM peak and six trips in the PM peak being removed on the A24 north of Hop Oast Roundabout.

### 3.5. TOTAL TRIP DISTRIBUTION – ALL SITE USES COMBINED

3.5.1. Based on the values shown at **Tables 3-7, 3-9 and 3-10** the total combined vehicular trip distribution associated with all proposed uses on the site are shown in **Table 3-11** below.

**Table 3-11 – Total Distribution of Vehicular Trips – All Site Uses Combined**

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	75	228	304	56.1	152	58	209	45.5
External (Work Trips Arrivals)	120	27	147	27.1	28	88	116	25.3
Horsham Town Centre (Non Work Trips)	10	27	37	6.8	44	20	64	13.9
Broadbridge Heath (Non Work Trips)	10	27	37	6.8	44	20	64	13.9
Horsham Golf Course	12	5	17	3.1	2	4	6	1.3
<b>Total</b>	<b>227</b>	<b>314</b>	<b>542</b>		<b>270</b>	<b>190</b>	<b>459</b>	

3.5.2. It is forecast that the total development traffic would be in the order of 542 and 459 external two-way vehicular movements during the AM and PM peak hours respectively.

### 3.6. VISION LED VEHICULAR TRIP GENERATION

3.6.1. A vision led trip generation is required given the scale of the site and to align with the National Planning Policy Framework from December 2024.

3.6.2. A guide has been taken from another development Berkeley development on the edge of Horsham, which is the Highwood development, located on the western side of Horsham. The monitoring reports produced for the site from 2014 and 2018 (pre-covid) indicated that there has been a 5% reduction in single occupancy vehicle journeys. It is understood that the implementation of the bus service from the Highwood site to Horsham has yet to be implemented and as such hasn't an impact the reduction in vehicular trips.

3.6.3. This Site will benefit from an enhanced Public Transport and Walking and Cycling Strategies and based on the Highfield site in Horsham, the Vision Led Vehicular trip generation it is proposed that a 10% reduction is applied to the vehicular trips from Table 3-11 to create Vision Led Trip Generation. The Vision led Vehicular Trip generation is presented in Table 3-12.

**Table 3-12 – Vision Led Total Distribution of Vehicular Trips**

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	68	205	274	55.1	137	52	188	44.1
External (Work Trips Arrivals)	108	24	132	26.6	25	79	104	24.5
Horsham Town Centre (Non Work Trips)	10	27	37	7.4	44	20	64	15.0
Broadbridge Heath (Non Work Trips)	10	27	37	7.4	44	20	64	15.0
Horsham Golf Course	12	5	17	3.4	2	4	6	1.4
<b>Total</b>	<b>208</b>	<b>289</b>	<b>497</b>		<b>252</b>	<b>175</b>	<b>427</b>	

3.6.4. The forecast Vision Led trip generation is 497 and 427 external two-way vehicular movements during the AM and PM peak hours respectively. We would welcome WSCC view on the use of the above trip generation as the basis for the core traffic modelling assessment suggested below in Section 4. The previous planning application from the Summer of 2022 had a two way trip generation of 762 in the AM peak and 690 in the PM peak.

## 4. OFF-SITE HIGHWAY ASSESSMENT SCOPE

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- 4.1.1. Based on the projected generation and distribution of the proposed development traffic set out at Chapter 2 and Chapter 3 it is suggested that the same off-site junctions scope which was undertaken in the Transport Assessment from July 2022 (in addition to the site access junctions) would be subject to junction capacity analysis as part of the forthcoming Transport Assessment, as set out below.
- A24 / Worthing Road (Hop Oast Roundabout);
  - Worthing Road / Southwater Street Priority T-Junction;
  - Worthing Road / Church Lane;
  - Worthing Road / Cedar Drive Roundabout;
  - Worthing Road / Fairbank Road Signalised Junction;
  - A24 / Mill Straight (Pollards Hill Roundabout);
  - A272 / A24 / Cowfold Road Signalised Junction (Buck Barn Junction);
  - A24 / A264 (Great Daux Roundabout);
  - A24 / B2237 / Robin Hood Lane (Robin Hood Roundabout);
  - A264 / Rusper Road Roundabout;
  - A264 / Langhurst Wood Road; and,
  - B2237 / Worthing Road / Mill Bay Lane Roundabout.
- 4.1.2. The above junctions would be assessed based on their existing configuration and based on any committed arrangements that may be in-place at the time of the future assessment year. This includes the signalisation of the Hop Oast roundabout to be with and without bus priority.
- 4.1.3. It is suggested that the following scenarios would be assessed in the Transport Assessment and associated documentation, including the traffic and transport chapter of the Environmental Statement. The suggested 2038 assessment year relates to the end of the Horsham District Council draft Local Plan period.
- **2025 Baseline** (2019 baseline updated to take account of new traffic surveys in 2023/25)
  - **2038 Do Minimum:** baseline traffic flows, including background traffic growth and relevant committed developments only
  - **2038 Do Something:** 2038 Do Minimum plus Proposed Development (vision led).
  - **2038 Sensitivity:** 2038 Do Minimum + withdrawn Local Plan assumptions + Proposed Development (vision led)
- 4.1.4. The above scenarios would be assessed in respect to the traditional AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00) on the highway network.
- 4.1.5. The previous off-site mitigation strategy produced as part of the July 2022 application will be assessed with the future scenarios if the junctions are forecast to be operating over their theoretical capacity. The off-site mitigation strategy had schemes that have already been identified by others (towards which a contribution could be provided), or comprise new, 'application specific' improvements that would be delivered solely as part of the proposed development, or again through a financial contribution which WSCC can collate alongside contributions from other developments coming forward.

## 5. WALKING AND CYCLING STRATEGY

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- 5.1.1. This Chapter presents the on and off-site walking and cycling strategy for the Site. It details how the provision on-site will be provided and outlines the off-site strategy on key routes and to key destinations, and will be described in detail in Transport Assessment.
- 5.1.2. Active travel is at the heart of the Site with the internal layout focused around encouraging occupiers of the Site to walk or cycle wherever reasonably possible. Reviewing the baseline conditions in the area, the Census data from 2011 from the Horsham district indicates that 40% of travel to work journeys for distances of less than 2km are made by car or van. It is encouraging that the most popular travel to work choice is walking, which accounted for 48% of the total trips under 2km but only 6% are by cyclists for journeys less than 2km.

### ON-SITE WALKING AND CYCLING INFRASTRUCTURE

- 5.1.3. The overall Site masterplan will be designed to encourage the use of active travel modes across the Site, notably in a north/south direction. The routes focus on key on-site destinations, including the employment / school land at the north of the Site, the village centre and the proposed internal road network. As this is an outline application and details around the on-site walking and cycling infrastructure will be shared during the masterplan development. When the on-site walking and cycling infrastructure is developed this will align with the latest guidance.

### OFF-SITE WALKING AND CYCLING STRATEGY

- 5.1.4. This section outlines the off-site walking and cycling strategy for the Proposed Development. The previous application from July 2022 presented a detailed off-site walking and cycling strategy which was refined through the post application process with West Sussex.
- 5.1.5. The strategy focuses on key destinations within a two-kilometre radius for walking trips and a five-kilometre radius for cycling trips of the site - as these are the journeys that can generally be undertaken via active travel modes if suitable infrastructure is provided (albeit many cyclists comfortably cycle 8km).
- 5.1.6. The previous off-site walking and cycling strategy focused on the following routes, and this application will build upon those:
- Christ's Hospital Rail Station (West of the Site)
  - Horsham Park & Ride (North of the Site);
  - Southwater Village Centre (South East of the Site) - including Lintot Square, Southwater Junior Academy, Hen and Chicken Public House, etc.; and
  - Horsham Town Centre (North of the Site).
- 5.1.7. Since the 2022 planning application, the Golf Course application has come forward with a wide range of proposals which deliver a number of the previous strategies associated with the Southwater planning application. As such, WSP will consider how the Proposed Development can connect into these proposals, and where appropriate complement the strategy.
- 5.1.8. There will need to be ongoing consultation with WSCC to discuss the delivery of such schemes subject to which development may come forward first.



- 5.1.9. It was agreed during the scoping meeting that an on-site meeting will occur in September between WSP, West Sussex Highways and if available Active Travel England to agree approach based on the strategy outlined above, notable access to Christ Hospital Station.

## 6. PUBLIC TRANSPORT STRATEGY

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- 6.1.1. The Public Transport Strategy produced as part of the previous planning application outlined how funding would be provided to enhance the 98-bus service by improving the bus service frequency to every 12-15 minutes. As the Golf Course application is providing the funding to provide this increase service frequency as part of their Public Transport Strategy, this application will investigate different options to enhance bus services for the site by a range of different measures including bus stop provision or additional funding for other services.
- 6.1.2. WSP will look to arrange a discussion with MetroBus the operator within Southwater to discuss potential opportunities for additional improvements within proximity to the site that the Proposed Development can support.

## 7. FRAMEWORK TRAVEL PLANS

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- 7.1.1. As per the previous application the application will include a framework travel plan. The document will build upon the initiatives and targets outlined in that document as well as developing new measures to improve the sustainability of the site.
- 7.1.2. The over-arching aim of the site is:
- ‘Ensure that residents and visitors of Land North West of Southwater travel to, from and within the Site in the most sustainable manner appropriate for their journey’.*
- 7.1.3. To achieve the overarching aim, the following objectives have been identified:
- Understand baseline travel patterns for different users of the site, as well as the projected future travel patterns following implementation of the Travel Plan measures; Establish ‘inherent’ sustainable travel principles for the Proposed Development as a whole;
  - Minimise single occupancy vehicle trips;
  - Facilitate tailored travel information;
  - Encourage healthy and active travel by way of design but also by way of marketing strategies;
  - Reduce local congestion and associated externalities;
  - Support car-free lifestyles;
  - Raise awareness of sustainable modes of transport available for residents and visitors travelling to, from and within the Site;
  - Promote community integration and the use of local services and facilities;
  - Contribute towards protecting and enhancing the environment in and around the site.
- 7.1.4. These objectives and targets are key to providing a successful framework travel to build upon when the detailed elements of the site are brought forward.

## 8. SUMMARY AND CONCLUSIONS

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- 8.1.1. WSP has been commissioned by Berkeley Homes (Southern) Limited to support the delivery of the Land North West of Southwater site (the 'site') and to assess the transport impacts of the proposed development comprising up to 1,000 homes, approximately 4ha of employment land, primary and secondary school and associated facilities.
- 8.1.2. This scoping document draws, and expands, upon work previously undertaken by WSP in relation to the site – including refinements to reflect the latest development quantum. This report seeks to confirm the approach for the vehicular trip generation and distribution assumptions with WSCC as Highway Authority (HA) for the purposes of incorporation into a forthcoming Transport Assessment and associated documentation including reduction of trip generation. The document seeks to agree the same scope of junction impact assessments that would be undertaken as part of the Transport Assessment. Finally, the document details how the updated walking and cycling strategy, public transport strategy and framework travel plans will be produced based on the previous application and utilising the agreed measures from the Golf Course application.

# Appendix A

TRICS OUTPUTS - RESIDENTIAL





Audit Code: 90eeffea-fa7d-47cb-b41c-59e56f3ead63

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Total Vehicles

Selected regions and areas:

02	<b>SOUTH EAST</b>		
	ES	EAST SUSSEX	1 day
	HC	HAMPSHIRE	3 days
	KC	KENT	3 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 day
	WS	WEST SUSSEX	2 days
04	<b>EAST ANGLIA</b>		
	NF	NORFOLK	7 days
05	<b>EAST MIDLANDS</b>		
	DY	DERBY	1 day
06	<b>WEST MIDLANDS</b>		
	ST	STAFFORDSHIRE	1 day

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

Audit Code: 90eeffea-fa7d-47cb-b41c-59e56f3ead63

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**Primary Filtering Selection:**

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

Parameter:	DWELLS
Actual Range:	7.01 to 50 (units:DWELLS)
Range Selected by User:	200 to 1500 (units:DWELLS)
Parking Spaces Range:	6 - 2696

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 17/09/24

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

**Selected survey days:**

Monday	2 days
Thursday	4 days
Tuesday	8 days
Wednesday	7 days

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

**Selected survey types:**

Manual count	21
Direction ATC Count	0

*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	20 days
Suburban Area (PPS6 Out of Centre)	1 days

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

**Selected Location Sub Categories:**

No Sub Category	1 days
Out of Town	3 days
Residential Zone	16 days
Village	1 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	16 days
Servicing vehicles Included	5 days

Audit Code: 90eeffea-fa7d-47cb-b41c-59e56f3ead63

---

Secondary Filtering Selection:

Use Class:

C3	21 surveys
----	------------

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

Population within 500m Range:

400 - 4126

Population within 1 mile:

1,001 to 5,000	2 surveys
10,001 to 15,000	6 surveys
15,001 to 20,000	4 surveys
20,001 to 25,000	2 surveys
25,001 to 50,000	1 surveys
5,001 to 10,000	6 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	7 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	3 surveys
5,001 to 25,000	3 surveys
50,001 to 75,000	2 surveys
75,001 to 100,000	4 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	5 surveys
1.1 to 1.5	15 surveys
1.6 to 2.0	1 surveys

*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.*



Audit Code: 90eeffa-fa7d-47cb-b41c-59e56f3ead63

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**Petrol filling station:**

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

**Travel Plan:**

No	5 surveys
Yes	16 surveys

*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	21 surveys
-----------------	------------

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

**COVID-19 Restrictions:**

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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



Audit Code: 90eeffea-fa7d-47cb-b41c-59e56f3ead63

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

Total Vehicles

Calculation factor: 1 DWELLS

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	21	437	0.072	0.293	0.365
08:00-09:00	21	437	0.143	0.375	0.518
09:00-10:00	21	437	0.117	0.145	0.262
10:00-11:00	21	437	0.102	0.122	0.224
11:00-12:00	21	437	0.113	0.126	0.239
12:00-13:00	21	437	0.131	0.133	0.264
13:00-14:00	21	437	0.137	0.129	0.266
14:00-15:00	21	437	0.141	0.156	0.297
15:00-16:00	21	437	0.239	0.159	0.398
16:00-17:00	21	437	0.263	0.150	0.413
17:00-18:00	21	437	0.345	0.150	0.495
18:00-19:00	21	437	0.278	0.142	0.420
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: 90eeffa-fa7d-47cb-b41c-59e56f3ead63

---

Parameter Summary:

Trip rate parameter range selected:	200 - 1500 (units: DWELLS)
Survey date date range:	11/07/2016 - 12/06/2024
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

# Appendix B

TRICS OUTPUTS - EMPLOYMENT





Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: D - INDUSTRIAL ESTATE

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	SD	SWINDON	1 day
04	<b>EAST ANGLIA</b>		
	NF	NORFOLK	1 day
	SF	SUFFOLK	1 day
05	<b>EAST MIDLANDS</b>		
	DY	DERBY	1 day
	LN	LINCOLNSHIRE	2 days
	NM	WEST NORTHAMPTONSHIRE	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day

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

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

---

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	0.27 to 3 (units:sqm)
Range Selected by User:	1000 to 15000 (units:sqm)
Parking Spaces Range:	0 - 2130

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 06/06/24

*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:**

Thursday	2 days
Tuesday	3 days
Wednesday	3 days

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

**Selected survey types:**

Manual count	8
Direction ATC Count	0

*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	4 days
Suburban Area (PPS6 Out of Centre)	4 days

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

**Selected Location Sub Categories:**

Industrial Zone	3 days
No Sub Category	3 days
Residential Zone	2 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	4 days
Servicing vehicles Included	4 days

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

---

Secondary Filtering Selection:

Use Class:

Not Known 8 surveys

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

Population within 500m Range:

0 - 5534

Population within 1 mile:

10,001 to 15,000	1 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	2 surveys
5,001 to 10,000	3 surveys
50,001 to 100,000	1 surveys

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

Population within 5 miles:

125,001 to 250,000	5 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	2 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	5 surveys
1.1 to 1.5	3 surveys

*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.*



Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

---

Petrol filling station:

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

Travel Plan:

No 8 surveys

*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 8 surveys

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

COVID-19 Restrictions:

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

<b>1</b> SHAFTESBURY STREET DERBY ROSE HILL Suburban Area (PPS6 Out of Centre) No Sub Category Site area: 0.82 hect Survey date: Wednesday 25/09/2019	<b>DY-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>DERBY</b>	Survey Type: Manual
<b>2</b> BELVOIR WAY LOUTH Edge of Town Industrial Zone Site area: 0.55 hect Survey date: Thursday 18/04/2024	<b>LN-02-D-05</b>	<b>INDUSTRIAL ESTATE</b>	<b>LINCOLNSHIRE</b>	Survey Type: Manual
<b>3</b> RICHMOND ROAD LOUTH Edge of Town Industrial Zone Site area: 0.28 hect Survey date: Tuesday 30/04/2024	<b>LN-02-D-06</b>	<b>INDUSTRIAL ESTATE</b>	<b>LINCOLNSHIRE</b>	Survey Type: Manual
<b>4</b> DRAYTON HIGH ROAD NORWICH Edge of Town No Sub Category Site area: 2.41 hect Survey date: Wednesday 14/09/2022	<b>NF-02-D-04</b>	<b>INDUSTRIAL ESTATE</b>	<b>NORFOLK</b>	Survey Type: Manual
<b>5</b> CORNHILL CLOSE NORTHAMPTON LODGE FARM IND. ESTATE Edge of Town Industrial Zone Site area: 3 hect Survey date: Wednesday 21/10/2020	<b>NM-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST NORTHAMPTONSHIRE</b>	Survey Type: Manual
<b>6</b> HEADLANDS GROVE SWINDON Suburban Area (PPS6 Out of Centre) Residential Zone Site area: 2.55 hect Survey date: Tuesday 20/09/2016	<b>SD-02-D-01</b>	<b>INDUSTRIAL ESTATE</b>	<b>SWINDON</b>	Survey Type: Manual
<b>7</b> LANDSEER ROAD IPSWICH Suburban Area (PPS6 Out of Centre) No Sub Category Site area: 1.0942 hect Survey date: Thursday 17/09/2020	<b>SF-02-D-03</b>	<b>INDUSTRIAL ESTATE</b>	<b>SUFFOLK</b>	Survey Type: Manual
<b>8</b> JUNCTION ROAD STOURBRIDGE AUDNAM Suburban Area (PPS6 Out of Centre)	<b>WM-02-D-03</b>	<b>INDUSTRIAL ESTATE</b>	<b>WEST MIDLANDS</b>	

Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

Residential Zone  
Site area: 0.27 hect  
Survey date: Tuesday 28/11/2017

Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
AK-02-D-02	23-05-2017	Removed in Site Selection
AL-02-D-01	17-10-2018	Removed in Site Selection
BE-02-D-01	19-09-2018	Removed in Site Selection
BK-02-D-01	08-09-2020	Removed in Site Selection
BT-02-D-01	14-11-2018	Removed in Site Selection
CS-02-D-03	06-09-2023	Removed in Site Selection
DL-02-D-05	25-05-2023	Removed in Site Selection
DR-02-D-03	21-09-2021	Removed in Site Selection
LC-02-D-06	29-09-2016	Removed in Site Selection
LC-02-D-08	06-11-2018	Removed in Site Selection
SW-02-D-01	09-10-2019	Removed in Site Selection
SW-02-D-02	10-10-2019	Removed in Site Selection
TI-02-D-02	23-09-2020	Removed in Site Selection
TW-02-D-08	04-04-2017	Removed in Site Selection
TW-02-D-09	18-05-2022	Removed in Site Selection
WA-02-D-01	07-03-2023	Removed in Site Selection



Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	5	7418	0.075	0.005	0.080
06:00-07:00	5	7418	0.111	0.057	0.168
07:00-08:00	8	6472	0.305	0.122	0.427
08:00-09:00	8	6472	0.365	0.158	0.523
09:00-10:00	8	6472	0.321	0.280	0.601
10:00-11:00	8	6472	0.315	0.299	0.614
11:00-12:00	8	6472	0.268	0.263	0.531
12:00-13:00	8	6472	0.245	0.270	0.515
13:00-14:00	8	6472	0.309	0.270	0.579
14:00-15:00	8	6472	0.297	0.330	0.627
15:00-16:00	8	6472	0.245	0.307	0.552
16:00-17:00	8	6472	0.172	0.332	0.504
17:00-18:00	8	6472	0.127	0.309	0.436
18:00-19:00	8	6472	0.048	0.129	0.177
19:00-20:00	5	7418	0.024	0.067	0.091
20:00-21:00	5	7418	0.003	0.022	0.025
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			3.230	3.220	6.450

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: 1c293067-5f5b-46fa-8de6-7f147b3d860a

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Parameter Summary:

Trip rate parameter range selected:	1000 - 15000 (units: sqm)
Survey date date range:	20/09/2016 - 30/04/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	16
Surveys manually removed from selection:	0

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



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

---

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: F - WAREHOUSING (COMMERCIAL)

Total Vehicles

Selected regions and areas:

02	<b>SOUTH EAST</b>		
	BO	BEDFORD	1 day
	HC	HAMPSHIRE	1 day
05	<b>EAST MIDLANDS</b>		
	DS	DERBYSHIRE	1 day
	NN	NORTH NORTHAMPTONSHIRE	1 day
07	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>		
	BD	BRADFORD	1 day
09	<b>NORTH</b>		
	CU	CUMBERLAND	1 day

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

Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

---

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	3500 to 18790 (units:sqm)
Range Selected by User:	500 to 20000 (units:sqm)
Parking Spaces Range:	4 - 1192

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 18/06/24

*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:**

Thursday	4 days
Wednesday	2 days

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

**Selected survey types:**

Manual count	6
Direction ATC Count	0

*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	5 days
Suburban Area (PPS6 Out of Centre)	1 days

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

**Selected Location Sub Categories:**

Commercial Zone	1 days
Industrial Zone	5 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	5 days
Servicing vehicles Included	1 days

Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

---

Secondary Filtering Selection:

Use Class:

B8 6 surveys

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

Population within 500m Range:

50 - 6282

Population within 1 mile:

1,001 to 5,000	2 surveys
10,001 to 15,000	1 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	1 surveys
5,001 to 10,000	1 surveys

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

Population within 5 miles:

125,001 to 250,000	2 surveys
250,001 to 500,000	1 surveys
5,001 to 25,000	2 surveys
50,001 to 75,000	1 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	1 surveys
1.1 to 1.5	5 surveys

*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.*



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

---

Petrol filling station:

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

Travel Plan:

No 6 surveys

*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 6 surveys

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

COVID-19 Restrictions:

**Yes - At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions**

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



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

1	BD-02-F-01	DISTRIBUTION COMPANY	BRADFORD
STAITHGATE LANE BRADFORD NEWHALL Edge of Town Industrial Zone Gross floor area: 10446 sqm Survey date: Thursday 14/03/2019			
			Survey Type: Manual
2	BO-02-F-01	DRINKS WHOLESALER	BEDFORD
CAMBRIDGE ROAD BEDFORD Edge of Town Industrial Zone Gross floor area: 3500 sqm Survey date: Thursday 15/10/2020			
			Survey Type: Manual
3	CU-02-F-01	WAREHOUSING & DISTRIBUTION	CUMBERLAND
CARLISLE ROAD BRAMPTON Edge of Town Industrial Zone Gross floor area: 4007 sqm Survey date: Wednesday 19/06/2024			
			Survey Type: Manual
4	DS-02-F-01	LOGISTICS DEPOT	DERBYSHIRE
PARK ROAD HOLMEWOOD Edge of Town Industrial Zone Gross floor area: 7000 sqm Survey date: Wednesday 04/10/2023			
			Survey Type: Manual
5	HC-02-F-02	LOGISTICS	HAMPSHIRE
RUTHERFORD ROAD BASINGSTOKE Suburban Area (PPS6 Out of Centre) Commercial Zone Gross floor area: 13200 sqm Survey date: Thursday 16/06/2016			
			Survey Type: Manual
6	NN-02-F-01	WAREHOUSING & DISTRIBUTION CENTRE	NORTH NORTHAMPTONSHIRE
HALLEY ROAD CORBY Edge of Town Industrial Zone Gross floor area: 18790 sqm Survey date: Thursday 19/10/2023			
			Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
AN-02-F-03	11-10-2016	Removed in Site Selection
AN-02-F-04	14-03-2019	Removed in Site Selection
AN-02-F-05	26-11-2020	Removed in Site Selection
CC-02-F-01	25-05-2016	Removed in Site Selection
CR-02-F-03	15-10-2019	Removed in Site Selection
DL-02-F-03	26-09-2019	Removed in Site Selection



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

Site Ref	Survey Date	Reason for Deselection
DL-02-F-04	19-05-2021	Removed in Site Selection
DL-02-F-05	30-05-2023	Removed in Site Selection
HD-02-F-01	27-09-2018	Removed in Site Selection
HO-02-F-01	23-11-2016	Removed in Site Selection
LO-02-F-01	08-06-2021	Removed in Site Selection
LO-02-F-02	11-11-2021	Removed in Site Selection
WX-02-F-01	20-04-2023	Removed in Site Selection



Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	5	8749	0.158	0.066	0.224
06:00-07:00	5	8749	0.233	0.137	0.370
07:00-08:00	6	9490	0.239	0.181	0.420
08:00-09:00	6	9490	0.172	0.160	0.332
09:00-10:00	6	9490	0.149	0.109	0.258
10:00-11:00	6	9490	0.105	0.104	0.209
11:00-12:00	6	9490	0.100	0.119	0.219
12:00-13:00	6	9490	0.098	0.086	0.184
13:00-14:00	6	9490	0.114	0.142	0.256
14:00-15:00	6	9490	0.112	0.153	0.265
15:00-16:00	6	9490	0.128	0.160	0.288
16:00-17:00	6	9490	0.148	0.223	0.371
17:00-18:00	6	9490	0.177	0.204	0.381
18:00-19:00	5	9989	0.090	0.126	0.216
19:00-20:00	4	9186	0.079	0.103	0.182
20:00-21:00	4	9186	0.057	0.057	0.114
21:00-22:00	1	18790	0.016	0.059	0.075
22:00-23:00	1	18790	0.005	0.043	0.048
23:00-00:00	1	18790	0.005	0.005	0.010
<b>Total Rates:</b>			2.185	2.237	4.422

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

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

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Audit Code: d75ac78b-21df-47f2-960f-1df5a5b4bdff

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Parameter Summary:

Trip rate parameter range selected:	500 - 20000 (units: sqm)
Survey date date range:	16/06/2016 - 19/06/2024
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	13
Surveys manually removed from selection:	0

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

# Appendix C

TRICS OUTPUTS - BUSINESS PARK





Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 02 - EMPLOYMENT

Category: B - BUSINESS PARK

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	DV	DEVON	1 day
	GS	GLOUCESTERSHIRE	1 day
04	<b>EAST ANGLIA</b>		
	CA	CAMBRIDGESHIRE	1 day
	NF	NORFOLK	1 day
	PB	PETERBOROUGH	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day
07	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>		
	NY	NORTH YORKSHIRE	1 day
09	<b>NORTH</b>		
	TW	TYNE & WEAR	1 day
13	<b>MUNSTER</b>		
	TI	TIPPERARY	1 day

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

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

---

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	1500 to 13000 (units:sqm)
Range Selected by User:	1000 to 15000 (units:sqm)
Parking Spaces Range:	7 - 4167

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 19/06/24

*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:**

Thursday	3 days
Tuesday	1 days
Wednesday	5 days

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

**Selected survey types:**

Manual count	9
Direction ATC Count	0

*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	7 days
Suburban Area (PPS6 Out of Centre)	2 days

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

**Selected Location Sub Categories:**

Commercial Zone	2 days
Development Zone	1 days
Industrial Zone	3 days
No Sub Category	1 days
Residential Zone	2 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	7 days
Servicing vehicles Included	2 days

Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

---

**Secondary Filtering Selection:**

**Use Class:**

Not Known 9 surveys

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

**Population within 500m Range:**

110 - 7500

**Population within 1 mile:**

10,001 to 15,000	2 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	2 surveys
5,001 to 10,000	3 surveys

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

**Population within 5 miles:**

125,001 to 250,000	5 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	2 surveys
5,001 to 25,000	1 surveys

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

**Car ownership within 5 miles:**

0.6 to 1.0	3 surveys
1.1 to 1.5	5 surveys
1.6 to 2.0	1 surveys

*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.*



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

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**Petrol filling station:**

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

**Travel Plan:**

No 9 surveys

*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 9 surveys

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

**COVID-19 Restrictions:**

No

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



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

1	CA-02-B-04	BUSINESS PARK	CAMBRIDGESHIRE
SWANNS ROAD CAMBRIDGE Suburban Area (PPS6 Out of Centre) Industrial Zone Gross floor area: 5070 sqm Survey date: Thursday 22/06/2023			
			Survey Type: Manual
2	DV-02-B-01	BUSINESS PARK	DEVON
MANATON CLOSE EXETER MATFORD BUSINESS PARK Edge of Town Commercial Zone Gross floor area: 1500 sqm Survey date: Wednesday 05/07/2017			
			Survey Type: Manual
3	GS-02-B-01	BUSINESS PARK	GLOUCESTERSHIRE
BARNETT WAY GLOUCESTER BARNWOOD Edge of Town Industrial Zone Gross floor area: 3485 sqm Survey date: Wednesday 03/05/2023			
			Survey Type: Manual
4	NF-02-B-03	BUSINESS PARK	NORFOLK
BARTON WAY NORWICH Edge of Town Residential Zone Gross floor area: 2634 sqm Survey date: Thursday 15/09/2022			
			Survey Type: Manual
5	NY-02-B-02	BUSINESS PARK	NORTH YORKSHIRE
OAKNEY WOOD ROAD SELBY Edge of Town Industrial Zone Gross floor area: 3150 sqm Survey date: Tuesday 06/06/2023			
			Survey Type: Manual
6	PB-02-B-01	BUSINESS PARK	PETERBOROUGH
LYNCH WOOD PETERBOROUGH Edge of Town Commercial Zone Gross floor area: 12800 sqm Survey date: Wednesday 19/10/2016			
			Survey Type: Manual
7	TI-02-B-01	BUSINESS PARK	TIPPERARY
R498 THURLES Edge of Town No Sub Category Gross floor area: 4180 sqm Survey date: Wednesday 12/10/2022			
			Survey Type: Manual
8	TW-02-B-06	BUSINESS PARK	TYNE & WEAR
JOICEY ROAD GATESHEAD Suburban Area (PPS6 Out of Centre)			



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

Residential Zone

Gross floor area: 3712 sqm

Survey date: Thursday 18/10/2018

Survey Type: Manual

9 WM-02-B-03 BUSINESS PARK WEST MIDLANDS

PARADISE WAY

COVENTRY

Edge of Town

Development Zone

Gross floor area: 13000 sqm

Survey date: Wednesday 25/09/2019

Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
AD-02-B-02	21-11-2019	Removed in Site Selection
AN-02-B-02	12-10-2016	Removed in Site Selection
AN-02-B-03	19-10-2017	Removed in Site Selection
AN-02-B-04	19-10-2017	Removed in Site Selection
CF-02-B-05	05-10-2016	Removed in Site Selection
DL-02-B-08	05-09-2017	Removed in Site Selection
HM-02-B-01	30-06-2016	Removed in Site Selection
IS-02-B-01	13-09-2022	Removed in Site Selection



Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	9	5503	0.925	0.119	1.044
08:00-09:00	9	5503	1.330	0.226	1.556
09:00-10:00	9	5503	0.559	0.188	0.747
10:00-11:00	9	5503	0.228	0.210	0.438
11:00-12:00	9	5503	0.194	0.190	0.384
12:00-13:00	9	5503	0.277	0.331	0.608
13:00-14:00	9	5503	0.295	0.266	0.561
14:00-15:00	9	5503	0.184	0.291	0.475
15:00-16:00	9	5503	0.188	0.448	0.636
16:00-17:00	9	5503	0.240	1.217	1.457
17:00-18:00	9	5503	0.273	0.935	1.208
18:00-19:00	9	5503	0.109	0.428	0.537
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			4.802	4.849	9.651

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

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

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Audit Code: e1151b9c-7711-4477-9ca5-4c7a416ee612

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Parameter Summary:

Trip rate parameter range selected:	1000 - 15000 (units: sqm)
Survey date date range:	19/10/2016 - 22/06/2023
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	0

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

# Appendix D

TRICS OUTPUTS - SECONDARY  
SCHOOL





Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

---

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 04 - EDUCATION

Category: B - SECONDARY

Total Vehicles

Selected regions and areas:

03	<b>SOUTH WEST</b>		
	DV	DEVON	1 day
	NS	NORTH SOMERSET	1 day
04	<b>EAST ANGLIA</b>		
	CA	CAMBRIDGESHIRE	1 day
	PB	PETERBOROUGH	1 day
06	<b>WEST MIDLANDS</b>		
	WM	WEST MIDLANDS	1 day
08	<b>NORTH WEST</b>		
	LC	LANCASHIRE	2 days
	MS	MERSEYSIDE	1 day
09	<b>NORTH</b>		
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	1 day
14	<b>LEINSTER</b>		
	KK	KILKENNY	1 day

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

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

---

**Primary Filtering Selection:**

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

Parameter:	PUPILS
Actual Range:	4732 to 22669 (units:PUPILS)
Range Selected by User:	100 to 1500 (units:PUPILS)
Parking Spaces Range:	0 - 207

<b>Public Transport Provision:</b>	
Selection by:	All Surveys Included
Date Range:	01/01/16 to 20/06/24

*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.*

<b>Selected survey days:</b>	
Thursday	4 days
Tuesday	4 days
Wednesday	4 days

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

<b>Selected survey types:</b>	
Manual count	12
Direction ATC Count	0

*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*

<b>Selected Locations:</b>	
Edge of Town	4 days
Edge of Town Centre	4 days
Suburban Area (PPS6 Out of Centre)	4 days

*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.*

<b>Selected Location Sub Categories:</b>	
No Sub Category	1 days
Residential Zone	11 days

*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.*

<b>Inclusion of Servicing Vehicle Counts:</b>	
Servicing vehicles Excluded	8 days
Servicing vehicles Included	4 days

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

---

Secondary Filtering Selection:

Use Class:

F1(a)	12 surveys
-------	------------

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

Population within 500m Range:

675 - 4623

Population within 1 mile:

1,001 to 5,000	1 surveys
10,001 to 15,000	1 surveys
15,001 to 20,000	3 surveys
20,001 to 25,000	3 surveys
25,001 to 50,000	3 surveys
5,001 to 10,000	1 surveys

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

Population within 5 miles:

100,001 to 125,000	1 surveys
125,001 to 250,000	4 surveys
250,001 to 500,000	4 surveys
5,000 or Less	1 surveys
75,001 to 100,000	2 surveys

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

Car ownership within 5 miles:

0.5 or Less	1 surveys
0.6 to 1.0	5 surveys
1.1 to 1.5	6 surveys

*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.*

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

---

**Petrol filling station:**

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

**Travel Plan:**

No 12 surveys

*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 12 surveys

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

**COVID-19 Restrictions:**

No

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

Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

<b>1</b> PARKSIDE CAMBRIDGE Edge of Town Centre Residential Zone Gross floor area: 4732 sqm Survey date: Thursday 21/09/2017	<b>CA-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>CAMBRIDGESHIRE</b>	Survey Type: Manual
<b>2</b> EARL RICHARD'S RD SOUTH EXETER Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 12650 sqm Survey date: Tuesday 02/04/2019	<b>DV-04-B-04</b>	<b>SECONDARY ACADEMY</b>	<b>DEVON</b>	Survey Type: Manual
<b>3</b> LADY'S WELL STREET THOMASTOWN Edge of Town Centre No Sub Category Gross floor area: 7952 sqm Survey date: Thursday 26/10/2017	<b>KK-04-B-02</b>	<b>SECONDARY SCHOOL</b>	<b>KILKENNY</b>	Survey Type: Manual
<b>4</b> TODD LANE NORTH LOSTOCK HALL Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 8300 sqm Survey date: Tuesday 06/11/2018	<b>LC-04-B-02</b>	<b>SECONDARY ACADEMY</b>	<b>LANCASHIRE</b>	Survey Type: Manual
<b>5</b> VENABLES AVENUE COLNE Edge of Town Residential Zone Gross floor area: 6240 sqm Survey date: Thursday 23/05/2024	<b>LC-04-B-03</b>	<b>SECONDARY SCHOOL</b>	<b>LANCASHIRE</b>	Survey Type: Manual
<b>6</b> DEYES LANE NEAR LIVERPOOL MAGHULL Edge of Town Centre Residential Zone Gross floor area: 19900 sqm Survey date: Wednesday 13/09/2023	<b>MS-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>MERSEYSIDE</b>	Survey Type: Manual
<b>7</b> MIZZYMEAD ROAD NAILSEA Edge of Town Centre Residential Zone Gross floor area: 12000 sqm Survey date: Wednesday 03/10/2018	<b>NS-04-B-01</b>	<b>SECONDARY SCHOOL</b>	<b>NORTH SOMERSET</b>	Survey Type: Manual
<b>8</b> REEVES WAY PETERBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 18000 sqm	<b>PB-04-B-01</b>	<b>SECONDARY ACADEMY</b>	<b>PETERBOROUGH</b>	



Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

Survey date: Wednesday 28/09/2022 Survey Type: Manual

**9** **TV-04-B-01** **SECONDARY SCHOOL** **TEES VALLEY**  
 COAST ROAD  
 MARSKE-BY-THE-SEA  
 Edge of Town  
 Residential Zone  
 Gross floor area: 7546 sqm  
 Survey date: Wednesday 24/10/2018 Survey Type: Manual

**10** **TV-04-B-02** **SECONDARY SCHOOL** **TEES VALLEY**  
 THAMES ROAD  
 BILLINGHAM  
 Edge of Town  
 Residential Zone  
 Gross floor area: 14700 sqm  
 Survey date: Tuesday 24/05/2022 Survey Type: Manual

**11** **TW-04-B-03** **CATHOLIC HIGH SCHOOL** **TYNE & WEAR**  
 GRETNA ROAD  
 NEWCASTLE UPON TYNE  
 Suburban Area (PPS6 Out of Centre)  
 Residential Zone  
 Gross floor area: 22669 sqm  
 Survey date: Thursday 18/10/2018 Survey Type: Manual

**12** **WM-04-B-06** **SECONDARY SCHOOL** **WEST MIDLANDS**  
 PARK ROAD WEST  
 STOURBRIDGE  
 WOLLASTON  
 Edge of Town  
 Residential Zone  
 Gross floor area: 9420 sqm  
 Survey date: Tuesday 21/11/2017 Survey Type: Manual

**DESELECTED SURVEYS**

Site Ref	Survey Date	Reason for Deselection
CF-04-B-02	15-03-2018	Removed in Site Selection
DN-04-B-02	10-10-2018	Removed in Site Selection
MA-04-B-01	10-04-2024	Removed in Site Selection
NW-04-B-01	12-10-2022	Removed in Site Selection
ON-04-B-01	09-11-2023	Removed in Site Selection
PE-04-B-01	22-11-2023	Removed in Site Selection
TI-04-B-01	21-11-2017	Removed in Site Selection
WA-04-B-02	08-03-2023	Removed in Site Selection
WR-04-B-01	06-06-2024	Removed in Site Selection



Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY

Total Vehicles

Calculation factor: 1 PUPILS

*\*BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. PUPILS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	12	898	0.047	0.007	0.054
08:00-09:00	12	898	0.164	0.133	0.297
09:00-10:00	12	898	0.018	0.016	0.034
10:00-11:00	12	898	0.011	0.009	0.020
11:00-12:00	12	898	0.011	0.010	0.021
12:00-13:00	12	898	0.010	0.012	0.022
13:00-14:00	12	898	0.012	0.011	0.023
14:00-15:00	12	898	0.025	0.020	0.045
15:00-16:00	12	898	0.081	0.104	0.185
16:00-17:00	12	898	0.018	0.059	0.077
17:00-18:00	12	898	0.026	0.028	0.054
18:00-19:00	12	898	0.024	0.020	0.044
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			0.447	0.429	0.876

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

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just 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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Audit Code: baf451a3-e853-4bc3-8c68-3f4ce672eab2

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Parameter Summary:

Trip rate parameter range selected:	100 - 1500 (units: PUPILS)
Survey date date range:	21/09/2017 - 23/05/2024
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	9
Surveys manually removed from selection:	0

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

# Appendix E

NTEM TEMPRO DATA



**Dataset Version:** 80  
**Result Type:** Trip ends by time period  
**Base Year:** 2025  
**Future Year:** 2036  
**Trip Purpose Group:** All purposes - individually  
**Time Period:** Weekday AM peak period (0700 - 0959)  
**Trip End Type:** Origin/Destination  
**Alternative Assumptions Applied:** No

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8255	0.8255	1.0342	1.0342	0.7890	0.7890	0.9148	0.9148	0.8280	0.8280	0.9691

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-163,664	1,752	1,752	-791,405	-791,405	-70,692	-70,692	-67,150	-67,150	-3,549

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	938,114	938,114	51,183	51,183	3,751,389	3,751,389	830,136	830,136	390,427	390,427	114,720

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	774,451	774,451	52,935	52,935	2,959,984	2,959,984	759,444	759,444	323,276	323,276	111,172

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9691	0.7179	0.7179	0.8937	0.8937	0.8633	0.8633	0.9351	0.9351	0.8606	0.8606	0.9103	0.9103

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-3,549	#####	-17,437	-383	-383	-7,825	-7,825	-3,041	-3,041	#####	-13,183	-6,901	-6,901

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
114,720	61,815	61,815	3,598	3,598	57,225	57,225	46,827	46,827	94,545	94,545	76,966	76,966

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
111,172	44,378	44,378	3,215	3,215	49,400	49,400	43,786	43,786	81,362	81,362	70,065	70,065

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8878	0.8878	0.9370	0.9370	1.2088	1.2088

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-6,144	-6,144	-2,389	-2,389	3,506	3,506

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
54,748	54,748	37,944	37,944	16,791	16,791

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
48,604	48,604	35,555	35,555	20,297	20,297

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8317	0.8317	1.0402	1.0402	0.7931	0.7931	0.9314	0.9314	0.8366	0.8366	0.9846

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-52,405	-52,405	555	555	-27,755	-27,755	-2,410	-2,410	-2,627	-2,627	-204

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	311,404	311,404	13,801	13,801	134,133	134,133	35,116	35,116	16,076	16,076	13,279

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	258,999	258,999	14,356	14,356	106,377	106,377	32,706	32,706	13,449	13,449	13,075

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9846	0.7371	0.7371	1.2172	1.2172	0.8913	0.8913	0.9478	0.9478	0.8767	0.8767	0.9026	0.9026	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-204	-1,314	-1,314	5,125	5,125	-834	-834	-230	-230	-338	-338	-190	-190	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,279	4,997	4,997	23,599	23,599	7,670	7,670	4,408	4,408	2,738	2,738	1,948	1,948	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,075	3,684	3,684	28,724	28,724	6,836	6,836	4,178	4,178	2,400	2,400	1,759	1,759	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9040	0.9040	0.9385	0.9385	1.1911	1.1911

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-143	-143	-40	-40	127	127

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,494	1,494	654	654	666	666

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,351	1,351	614	614	794	794

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8754	0.8754	1.0946	1.0946	0.8631	0.8631	0.9657	0.9657	0.8856	0.8856	1.0350

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-767,072	-767,072	78,074	78,074	-175,505	-175,505	-48,228	-48,228	-73,554	-73,554	12,297

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	6,156,043	6,156,043	825,140	825,140	1,282,084	1,282,084	1,405,364	1,405,364	642,813	642,813	351,802

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	5,388,971	5,388,971	903,214	903,214	1,106,579	1,106,579	1,357,136	1,357,136	569,259	569,259	364,099

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
1.0350	0.7739	0.7739	1.2766	1.2766	0.9050	0.9050	0.9669	0.9669	0.8999	0.8999	0.9487	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
12,297	-34,426	-34,426	69,543	69,543	-58,925	-58,925	-10,120	-10,120	-9,872	-9,872	-9,524	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
351,802	152,275	152,275	251,422	251,422	620,108	620,108	305,874	305,874	98,633	98,633	185,766	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		NHB Employers Business		NHB Education		NHB
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	
364,099	117,849	117,849	320,965	320,965	561,183	561,183	295,755	295,755	88,761	88,761	176,242	

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9487	0.9313	0.9313	0.9608	0.9608	1.1692	1.1692

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
-9,524	-5,357	-5,357	-2,875	-2,875	4,230	4,230

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
185,766	78,000	78,000	73,259	73,259	24,999	24,999

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
176,242	72,643	72,643	70,383	70,383	29,230	29,230

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8350	0.8350	1.0440	1.0440	0.8117	0.8117	0.9141	0.9141	0.8401	0.8401	0.9838

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-161,563	3,984	3,984	-563,130	-563,130	-47,734	-47,734	#####	-108,440	-3,097

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	979,200	979,200	90,536	90,536	2,990,460	2,990,460	555,990	555,990	678,115	678,115	191,257

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	817,636	817,636	94,520	94,520	2,427,330	2,427,330	508,256	508,256	569,675	569,675	188,161

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9838	0.7223	0.7223	1.2316	1.2316	0.8815	0.8815	0.9240	0.9240	0.8420	0.8420	0.9379	0.9379

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-3,097	#####	-36,478	26,604	26,604	-5,328	-5,328	-3,381	-3,381	-25,786	-25,786	-3,328	-3,328

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
191,257	#####	131,363	114,892	114,892	44,943	44,943	44,506	44,506	163,187	163,187	53,620	53,620

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
188,161	94,885	94,885	141,496	141,496	39,615	39,615	41,125	41,125	137,401	137,401	50,292	50,292

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8989	0.8989	0.9492	0.9492	1.1631	1.1631

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,911	-5,911	-2,004	-2,004	2,868	2,868

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
58,447	58,447	39,469	39,469	17,583	17,583

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
52,536	52,536	37,465	37,465	20,451	20,451

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8185	0.8185	1.0123	1.0123	0.7942	0.7942	0.8877	0.8877	0.8096	0.8096	0.9536

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-155,422	482	482	#####	-233,040	-28,590	-28,590	-23,848	-23,848	-2,363

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	856,222	856,222	39,308	39,308	#####	1,132,192	254,597	254,597	125,236	125,236	50,950

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	700,799	700,799	39,790	39,790	899,153	899,153	226,007	226,007	101,388	101,388	48,587

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9536	0.7128	0.7128	1.1570	1.1570	0.8551	0.8551	0.9196	0.9196	0.8510	0.8510	0.8823	0.8823	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-2,363	-5,746	-5,746	2,026	2,026	-3,057	-3,057	-613	-613	-1,666	-1,666	-1,529	-1,529	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
50,950	20,007	20,007	12,910	12,910	21,100	21,100	7,626	7,626	11,185	11,185	12,988	12,988	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
48,587	14,261	14,261	14,937	14,937	18,044	18,044	7,013	7,013	9,519	9,519	11,459	11,459	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8642	0.8642	0.9007	0.9007	1.1514	1.1514

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-673	-673	-404	-404	345	345

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
4,952	4,952	4,070	4,070	2,277	2,277

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
4,279	4,279	3,666	3,666	2,622	2,622

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8516	0.8516	1.0522	1.0522	0.8195	0.8195	0.9005	0.9005	0.8421	0.8421	0.9771

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-161,656	5,515	5,515	-27,518	-27,518	-2,195	-2,195	-3,009	-3,009	-307

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	1,089,252	105,574	105,574	152,451	152,451	22,053	22,053	19,056	19,056	13,412

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	927,596	927,596	111,090	111,090	124,932	124,932	19,858	19,858	16,047	16,047	13,105

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9771	0.7650	0.7650	1.2210	1.2210	0.9015	0.9015	0.9502	0.9502	0.8903	0.8903	0.9395	0.9395	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-307	-900	-900	2,505	2,505	-2,394	-2,394	-842	-842	-371	-371	-93	-93	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,412	3,830	3,830	11,337	11,337	24,297	24,297	16,918	16,918	3,385	3,385	1,532	1,532	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
13,105	2,930	2,930	13,842	13,842	21,903	21,903	16,076	16,076	3,014	3,014	1,439	1,439	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9047	0.9047	0.9509	0.9509	1.1383	1.1383

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-119	-119	-103	-103	175	175

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,245	1,245	2,099	2,099	1,268	1,268

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
1,126	1,126	1,996	1,996	1,443	1,443

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	0.8585	0.8585	1.0803	1.0803	0.8074	0.8074	0.9356	0.9356	0.8511	0.8511

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	-1,461,782	90,363	90,363	#####	-1,818,353	-199,849	-199,849	-278,628	-278,628

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	10,330,234	1,125,542	1,125,542	9,442,709	9,442,709	3,103,256	3,103,256	1,871,722	1,871,722

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	8,868,452	8,868,452	1,215,905	1,215,905	7,624,356	7,624,356	2,903,406	2,903,406	1,593,095	1,593,095

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
1.0038	1.0038	0.7427	0.7427	1.2524	1.2524	0.8989	0.8989	0.9572	0.9572	0.8629	0.8629	0.9352

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
2,778	2,778	-96,301	-96,301	105,421	105,421	-78,362	-78,362	-18,226	-18,226	-51,216	-51,216	-21,565

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
735,421	735,421	374,287	374,287	417,758	417,758	775,343	775,343	426,159	426,159	373,673	373,673	332,821

HB Recreation/Social		Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
738,199	738,199	277,986	277,986	523,179	523,179	696,981	696,981	407,933	407,933	322,457	322,457	311,255

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9352	0.9078	0.9078	0.9504	0.9504	1.1770	1.1770

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
-21,565	-18,347	-18,347	-7,816	-7,816	11,252	11,252

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
332,821	198,886	198,886	157,495	157,495	63,584	63,584

Shopping	NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Destination	Origin	Destination	Origin	Destination	Origin	Destination
311,255	180,539	180,539	149,679	149,679	74,837	74,837

**Dataset Version:** 80  
**Result Type:** Trip ends by time period  
**Base Year:** 2025  
**Future Year:** 2036  
**Trip Purpose Group:** All purposes - individually  
**Time Period:** Weekday PM peak period (1600 - 1859)  
**Trip End Type:** Origin/Destination  
**Alternative Assumptions Applied:** No

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8265	0.8265	0.9575	0.9575	0.7964	0.7964	0.8861	0.8861	0.8393	0.8393	0.9486

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-157,967	-3,321	-3,321	#####	-180,122	-134,779	-134,779	-85,957	-85,957	-26,269

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	910,539	910,539	78,197	78,197	884,867	884,867	1,183,121	1,183,121	534,948	534,948	511,356

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	752,573	752,573	74,877	74,877	704,745	704,745	1,048,342	1,048,342	448,991	448,991	485,086

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9486	0.7394	0.7394	0.8652	0.8652	0.8641	0.8641	0.9367	0.9367	0.8577	0.8577	0.9118	0.9118

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-26,269	#####	-158,563	-3,149	-3,149	-3,035	-3,035	-2,788	-2,788	-1,082	-1,082	-13,099	-13,099

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
511,356	608,358	608,358	23,359	23,359	22,341	22,341	44,043	44,043	7,602	7,602	148,428	148,428

Education/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
485,086	449,795	449,795	20,210	20,210	19,305	19,305	41,255	41,255	6,520	6,520	135,329	135,329

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8888	0.8888	0.9447	0.9447	1.2108	1.2108

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,277	-5,277	-10,275	-10,275	15,351	15,351

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
47,448	47,448	185,968	185,968	72,822	72,822

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
42,172	42,172	175,693	175,693	88,173	88,173

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8325	0.8325	0.9826	0.9826	0.8127	0.8127	0.9022	0.9022	0.8495	0.8495	0.9622

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-42,168	-42,168	-317	-317	-6,022	-6,022	-5,720	-5,720	-3,731	-3,731	-1,816

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	251,716	251,716	18,231	18,231	32,148	32,148	58,492	58,492	24,792	24,792	48,026

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recr
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	209,548	209,548	17,914	17,914	26,126	26,126	52,772	52,772	21,061	21,061	46,210

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9622	0.7503	0.7503	1.2271	1.2271	0.8913	0.8913	0.9478	0.9478	0.8767	0.8767	0.9026	0.9026	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-1,816	#####	-13,164	23,005	23,005	-129	-129	-192	-192	-77	-77	-678	-678	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
48,026	52,719	52,719	101,305	101,305	1,191	1,191	3,668	3,668	625	625	6,960	6,960	

eation/Social		iting Friends and Rel		HB Holiday/Day Trip		NHB Work		HB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
46,210	39,555	39,555	124,311	124,311	1,062	1,062	3,477	3,477	548	548	6,282	6,282	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9040	0.9040	0.9355	0.9355	1.1911	1.1911

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-375	-375	-547	-547	1,306	1,306

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
3,907	3,907	8,493	8,493	6,833	6,833

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
3,532	3,532	7,946	7,946	8,139	8,139

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8774	0.8774	1.0622	1.0622	0.8713	0.8713	0.9461	0.9461	0.8855	0.8855	1.0180

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	-608,806	-608,806	46,114	46,114	-73,168	-73,168	-117,888	-117,888	#####	-105,616	19,198

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	4,967,794	4,967,794	741,146	741,146	568,452	568,452	2,187,041	2,187,041	922,191	922,191	1,064,685

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	4,358,988	4,358,988	787,260	787,260	495,284	495,284	2,069,153	2,069,153	816,575	816,575	1,083,883

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1.0180	0.8004	0.8004	1.2454	1.2454	0.9058	0.9058	0.9671	0.9671	0.9004	0.9004	0.9481	0.9481

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
19,198	#####	-236,609	110,463	110,463	-2,976	-2,976	-10,827	-10,827	-7,182	-7,182	-22,488	-22,488

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,064,685	#####	1,185,224	450,144	450,144	31,596	31,596	328,945	328,945	72,137	72,137	433,245	433,245

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,083,883	948,615	948,615	560,607	560,607	28,620	28,620	318,117	318,117	64,955	64,955	410,757	410,757

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9320	0.9320	0.9606	0.9606	1.1588	1.1588

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-9,143	-9,143	-14,365	-14,365	15,034	15,034

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
134,366	134,366	364,837	364,837	94,690	94,690

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
125,224	125,224	350,473	350,473	109,724	109,724

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8415	0.8415	0.9898	0.9898	0.8185	0.8185	0.9055	0.9055	0.8480	0.8480	0.9726

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-147,753	-1,037	-1,037	#####	-122,371	-110,753	-110,753	-84,905	-84,905	-31,830

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	932,083	932,083	102,036	102,036	674,214	674,214	1,172,304	1,172,304	558,582	558,582	1,161,328

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recre.
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	784,330	784,330	100,999	100,999	551,843	551,843	1,061,552	1,061,552	473,676	473,676	1,129,498

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9726	0.7508	0.7508	1.2146	1.2146	0.8819	0.8819	0.9234	0.9234	0.8410	0.8410	0.9396	0.9396

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-31,830	#####	-216,163	85,967	85,967	-696	-696	-4,584	-4,584	-4,454	-4,454	-10,817	-10,817

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,161,328	867,493	867,493	400,539	400,539	5,894	5,894	59,815	59,815	28,006	28,006	179,190	179,190

ation/Social	Visiting Friends and Rela		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
1,129,498	651,330	651,330	486,506	486,506	5,198	5,198	55,231	55,231	23,552	23,552	168,373	168,373

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8993	0.8993	0.9515	0.9515	1.1600	1.1600

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-5,427	-5,427	-12,375	-12,375	20,642	20,642

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
53,896	53,896	255,322	255,322	128,996	128,996

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
48,468	48,468	242,946	242,946	149,638	149,638

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8183	0.8183	0.9458	0.9458	0.7988	0.7988	0.8751	0.8751	0.8214	0.8214	0.9392

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-124,790	-2,772	-2,772	-48,635	-48,635	-40,912	-40,912	-24,397	-24,397	-11,220

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	686,886	686,886	51,139	51,139	241,668	241,668	327,527	327,527	136,616	136,616	184,493

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	562,097	562,097	48,366	48,366	193,033	193,033	286,615	286,615	112,219	112,219	173,273

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
0.9392	0.7444	0.7444	1.1334	1.1334	0.8552	0.8552	0.9165	0.9165	0.8512	0.8512	0.8849	0.8849	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
-11,220	-50,220	-50,220	7,073	7,073	-787	-787	-764	-764	-560	-560	-3,836	-3,836	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
184,493	196,481	196,481	53,030	53,030	5,433	5,433	9,151	9,151	3,762	3,762	33,336	33,336	

Education/Social		Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	
173,273	146,261	146,261	60,104	60,104	4,646	4,646	8,387	8,387	3,202	3,202	29,500	29,500	

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.8648	0.8648	0.9020	0.9020	1.1528	1.1528

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-1,771	-1,771	-6,225	-6,225	3,403	3,403

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
13,101	13,101	63,499	63,499	22,267	22,267

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
11,330	11,330	57,274	57,274	25,670	25,670

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	0.8537	0.8537	1.0183	1.0183	0.8333	0.8333	0.8955	0.8955	0.8573	0.8573	0.9751

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	#####	-102,677	1,672	1,672	-6,917	-6,917	-7,671	-7,671	-4,844	-4,844	-1,806

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	701,623	701,623	91,293	91,293	41,481	41,481	73,393	73,393	33,956	33,956	72,592

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business		HB Recreation
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin
GB	GB	598,946	598,946	92,965	92,965	34,564	34,564	65,722	65,722	29,111	29,111	70,786

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9751	0.7905	0.7905	1.1954	1.1954	0.8995	0.8995	0.9492	0.9492	0.8903	0.8903	0.9350	0.9350

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-1,806	#####	-10,858	8,025	8,025	-334	-334	-1,139	-1,139	-367	-367	-1,296	-1,296

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
72,592	51,835	51,835	41,062	41,062	3,322	3,322	22,426	22,426	3,346	3,346	19,935	19,935

Creation/Social	Visiting Friends and Relatives		HB Holiday/Day Trip		NHB Work		HB Employers Business		NHB Education		NHB Shopping	
Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
70,786	40,977	40,977	49,087	49,087	2,988	2,988	21,287	21,287	2,979	2,979	18,640	18,640

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
0.9047	0.9047	0.9282	0.9282	1.1355	1.1355

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
-913	-913	-3,904	-3,904	2,069	2,069

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
9,578	9,578	54,360	54,360	15,269	15,269

NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination
8,665	8,665	50,456	50,456	17,338	17,338

**Growth Factor (2036 Data/2025 Data)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	0.8599	0.8599	1.0373	1.0373	0.8210	0.8210	0.9165	0.9165	0.8600	0.8600

**Future Year (2036) - Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	#####	-1,184,160	40,339	40,339	-437,235	-437,235	-417,722	-417,721	-309,451	-309,451

**Base Year (2025)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	8,450,642	8,450,642	1,082,041	1,082,041	2,442,830	2,442,830	5,001,878	5,001,878	2,211,084	2,211,084

**Future Year (2036)**

Area Description		HB Work		HB Employers Business		HB Education		HB Shopping		HB Personal Business	
Level	Name	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
GB	GB	7,266,482	7,266,482	1,122,380	1,122,380	2,005,595	2,005,595	4,584,156	4,584,156	1,901,633	1,901,633

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9823	0.9823	0.7686	0.7686	1.2164	1.2164	0.8860	0.8860	0.9566	0.9566	0.8812	0.8812

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-53,742	-53,742	-685,578	-685,578	231,384	231,384	-7,957	-7,957	-20,294	-20,294	-13,722	-13,722

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
3,042,480	3,042,480	2,962,110	2,962,110	1,069,440	1,069,440	69,777	69,777	468,048	468,048	115,477	115,477

HB Recreation/Social		Visiting Friends and Relat		HB Holiday/Day Trip		NHB Work		NHB Employers Busines		NHB Education	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
2,988,737	2,988,737	2,276,533	2,276,533	1,300,825	1,300,825	61,821	61,821	447,754	447,754	101,755	101,755

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
0.9364	0.9364	0.9127	0.9127	0.9489	0.9489	1.1696	1.1696

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
-52,213	-52,213	-22,905	-22,905	-47,692	-47,692	57,805	57,805

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
821,094	821,094	262,295	262,295	932,480	932,480	340,876	340,876

NHB Shopping		NHB Personal Business		NHB Recreation/Social		NHB Holiday/Day Trip	
Origin	Destination	Origin	Destination	Origin	Destination	Origin	Destination
768,880	768,880	239,390	239,390	884,788	884,788	398,682	398,682

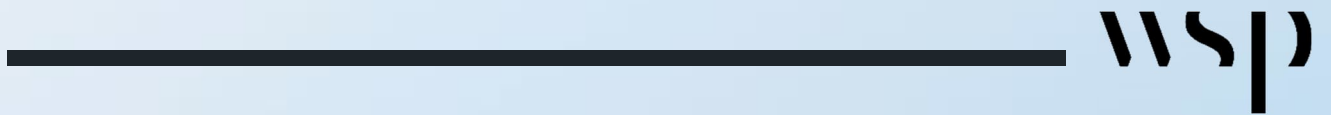


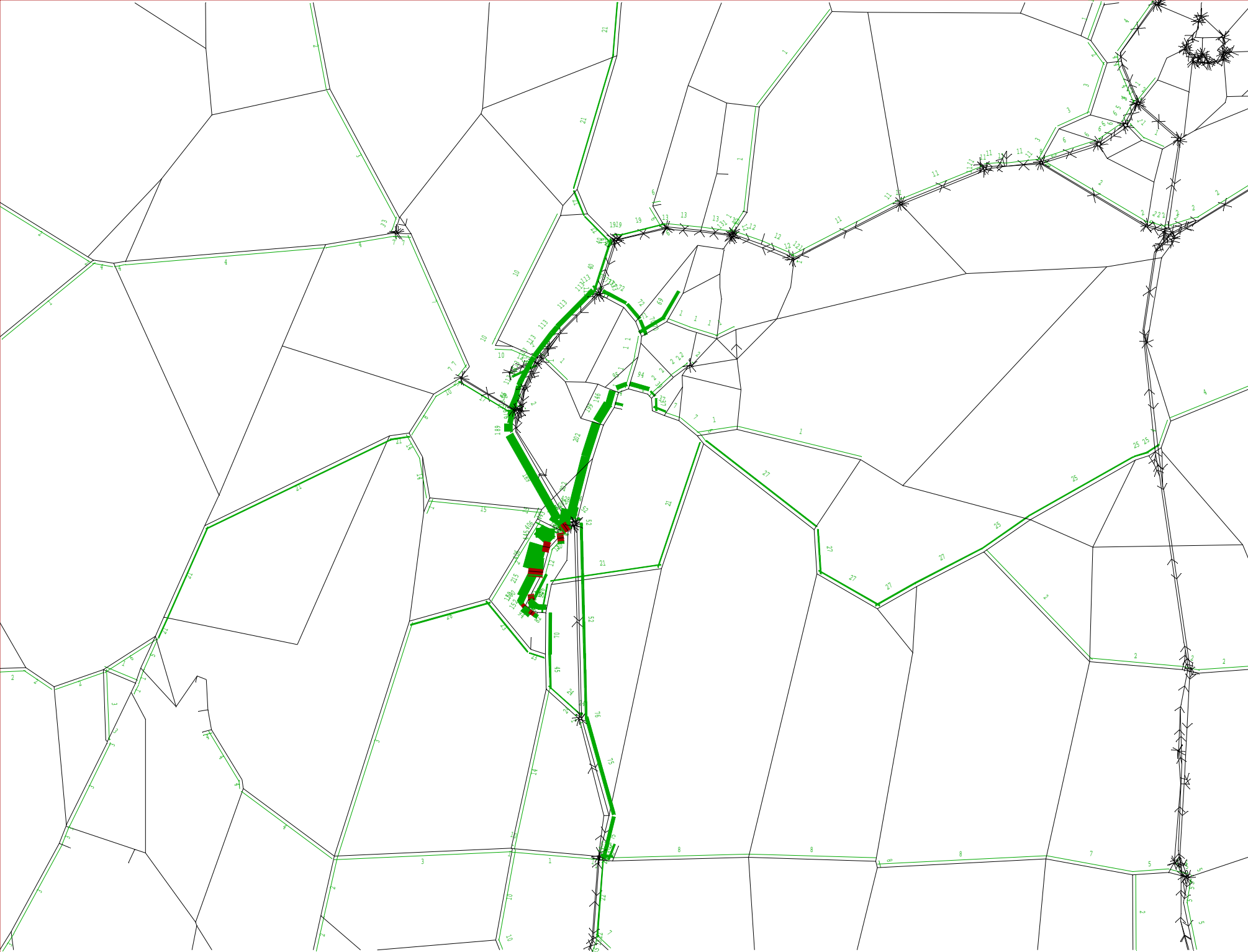
Matrix House  
Basing View  
Basingstoke, Hampshire  
RG21 4FF

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# Appendix B

Horsham Model Outputs





SATURN

Atkins Ltd /  
DVV / ITS

ict\_LP\_Pref\_  
plus\_Dev.UFS

Scale 56996

Link Annot:

S.L.A.

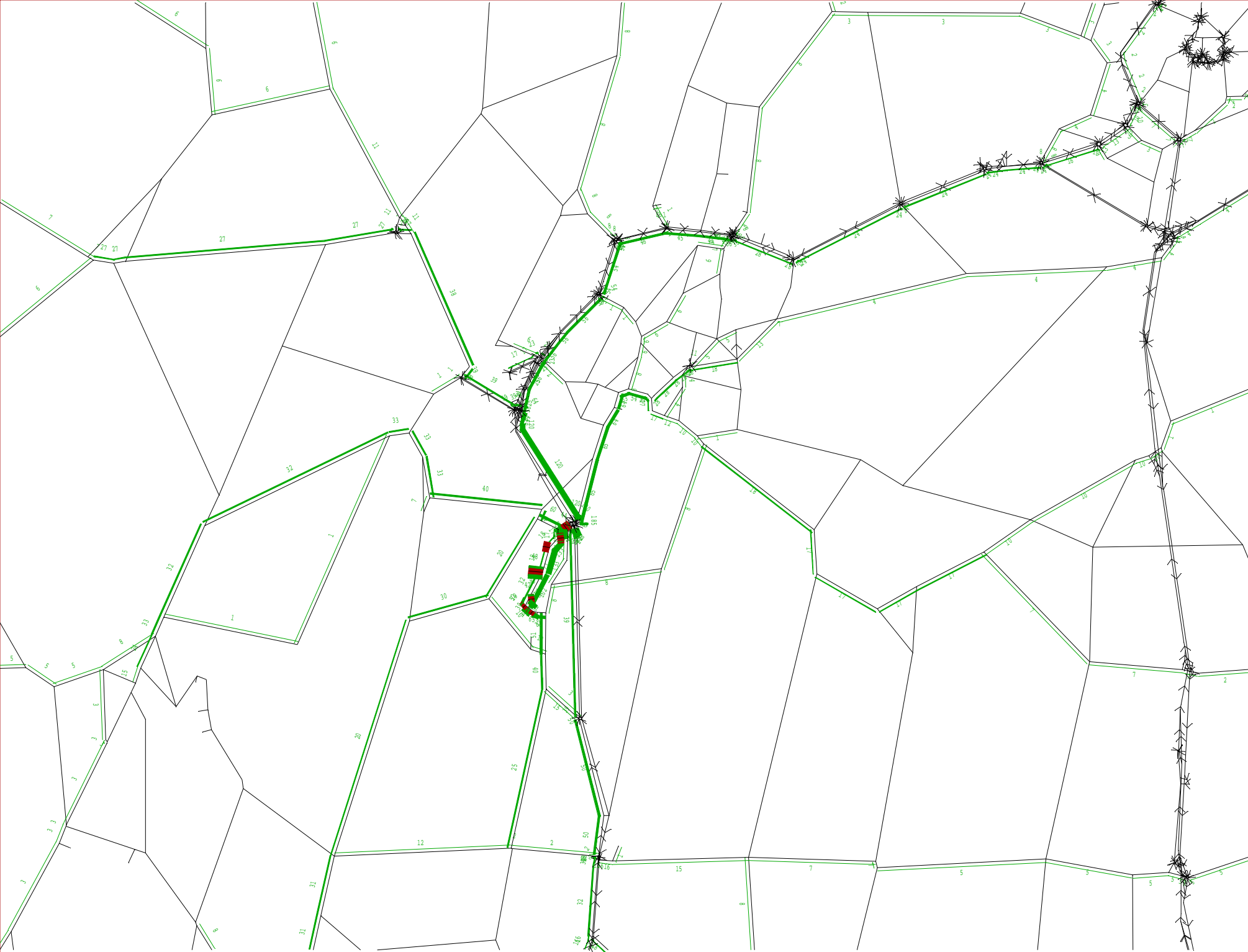
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Flow = 703

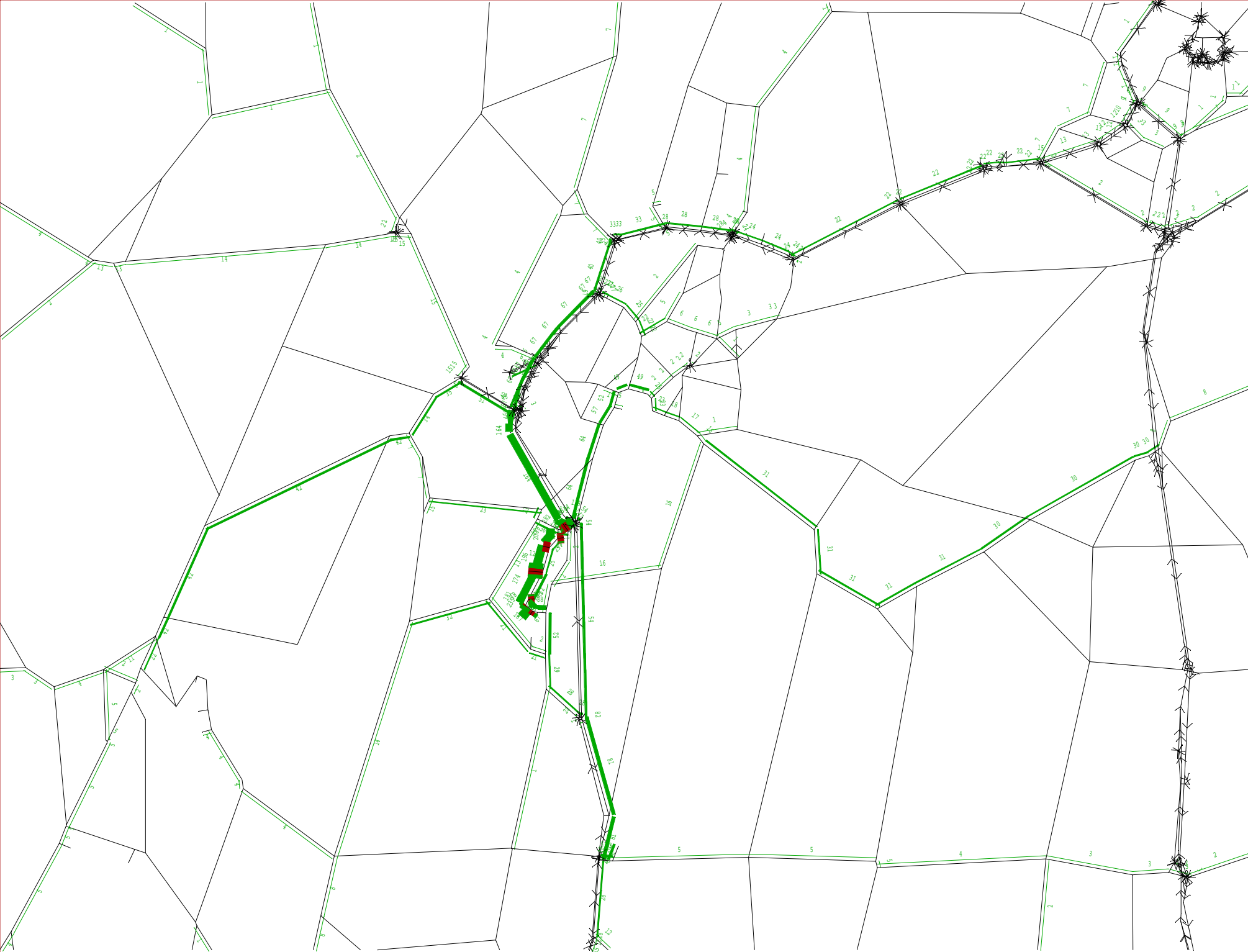
All User Cls

21- 6-22  
WSP MANEGEME



SATURN  
 Atkins Ltd /  
 DVV / ITS  
 ict\_LP\_Pref\_  
 plus\_Dev.UFS  
 Scale 56996  
 Link Annot:  
 S.L.A.  
 Bandwidths =  
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 Selected  
 Link  
 Assignment  
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 11005 11014  
 + 2 others  
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 Flow = 492  
 All User Cls

21- 6-22  
 WSP MANAGEME



SATURN

Atkins Ltd /  
DVV / ITS

ict\_LP\_Pref\_  
plus\_Dev.UFS

Scale 56996

Link Annot:

S.L.A.

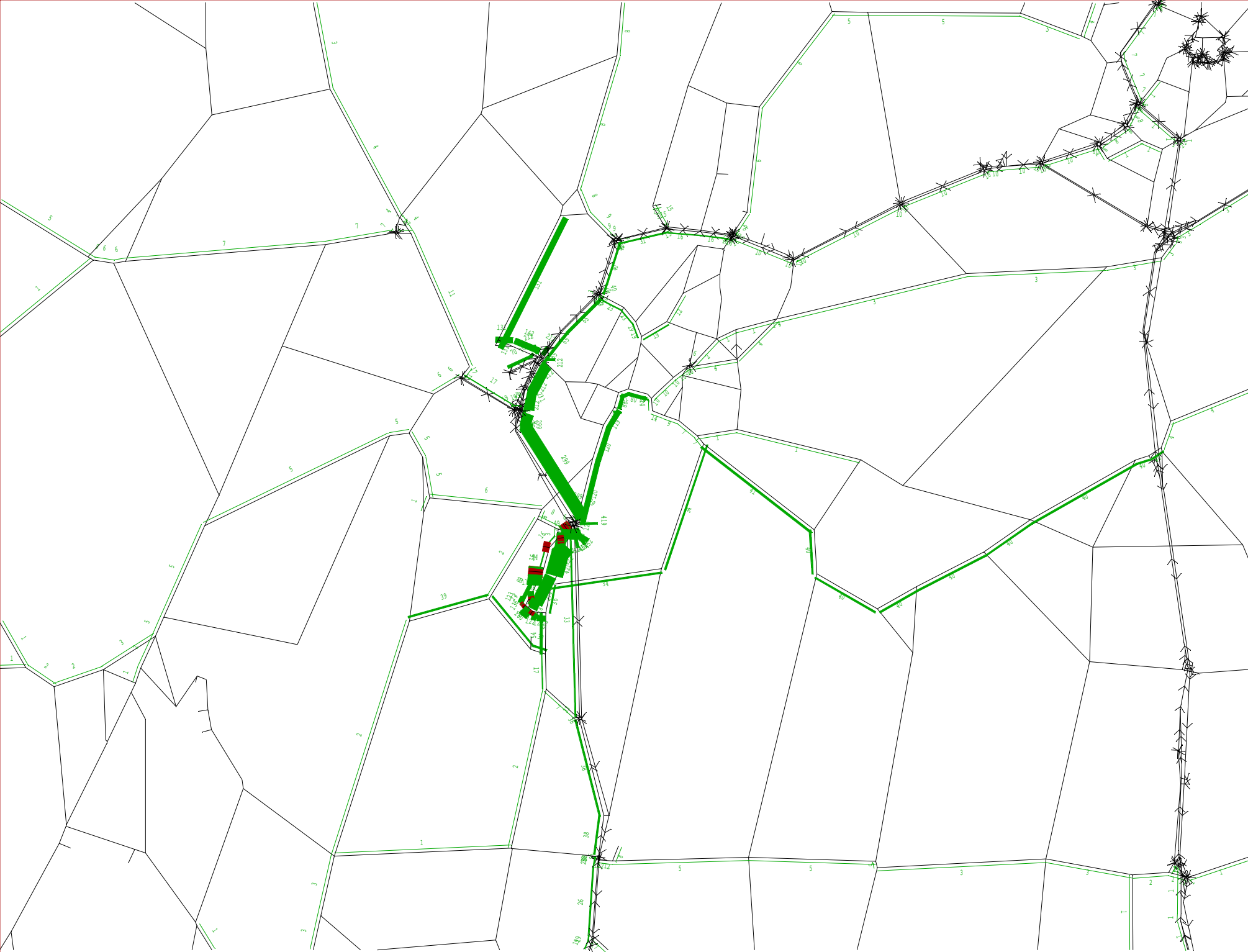
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Selected  
Link  
Assignment  
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11012 11003  
11013 11004  
11014 11005  
+ 2 others

Total Demand  
Flow = 628

All User Cls

21- 6-22  
WSP MANEGEME



SATURN

Atkins Ltd /  
DVV / ITS

ict\_LP\_Pref\_  
plus\_Dev.UFS

Scale 56996

Link Annot:

S.L.A.

Bandwidths =  
80./mm

Selected  
Link  
Assignment  
Thru links:  
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11001 11011  
11003 11012  
11004 11013  
11005 11014  
+ 2 others

Total Demand  
Flow = 802

All User Cls

21- 6-22  
WSP MANEGEME



# Transport Scoping Note Addendum

<b>DATE:</b>	27 October 2025	<b>CONFIDENTIALITY:</b>	Public
<b>SUBJECT:</b>	Transport Scoping Note Addendum		
<b>PROJECT:</b>	Land North-West of Southwater	<b>AUTHOR:</b>	Philip Moss
<b>CHECKED:</b>	David Dixon	<b>APPROVED:</b>	Allan Norcutt

## INTRODUCTION

WSP has been commissioned by Berkeley Strategic to support in the delivery of the Land North West of Southwater site (the 'site'). This application is to provide up to 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities.

The aim of this document is response to some of the comments raised by West Sussex County Council (WSCC) in their role as the Highway Authority on the scoping note. An updated Scoping note will be attached to the submitted Transport Assessment taking on board the attached amendments.

This report will be structured to first provide the comment raised by BCBC, the comment will be in italics and the response in standard text form.

### WSCC COMMENT AND WSP RESPONSE

*Firstly, have any discussions been undertaken with Horsham DC regarding employment needs that may then influence the type of employment use? From experience of another strategic site in Horsham, the District Council have there advised of a demand for a greater element of storage/warehousing compared with office/business park type uses. This could be quite relevant to the trip generation.*

*Secondly, and related to the above, there are an increasing number of parcel distribution type uses coming forward especially in locations that are adjacent to the strategic and primary road network. These can exhibit higher trip rates compared with commercial warehousing. Subject to agreement, it may be appropriate to include an element of parcel distribution within the assessment.*

*Lastley, it's presumed that the Class E uses will be restricted to only offices and research and development (i.e. the old B1 type uses). As you'll appreciated, Class E otherwise permits a wide range of uses that may need to be assessed. The local example of Billingshurst Trade Park is a prime example of a development originally permitted for employment uses that has subsequently diversified to include a wide range of uses.*

The Employment site would be market led with parcel distribution a potential option. The vision is not to be office space led, although the assessment allows for a proportion should this be needed. As such an assessment of the TRICs has been undertaken for the Parcel Delivery element of the employment land. The split of employment land in the original Transport Scope was for a 50:50 split between Industrial Estate and Business Park. In this Transport Scope Addendum, the split will be amended to comprise of the following mix:

- 25% - Parcel Distribution Centre (3,938sqm)
- 25% - Industrial Estate (3,938sqm)
- 50% - Business Park (7,875sqm); and
- **Total – 15,750sqm GFA**



## PARCEL DELIVERY

A search of the 'Parcel Distribution Centres' category of TRICS was completed, the sites selected are located in London and the East Midlands. Parcel Distribution Centres are relatively new to the TRICS database

The TRICS outputs are included at **Appendix A** whilst the peak hour vehicle trip rates that were derived from the search are provided in the following table, along with the volume of vehicle trips that would be generated based on the projected 3,938sqm floor area.

*Table 1 - Vehicular Employment Trip Rates and Generation (Parcel Distribution Centres) 3,938sqm*

Period	Trip Rates (per 100sqm)			Trip Generation (3,938sqm)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM Peak	0.280	0.784	1.064	11	31	42
PM Peak	0.373	0.411	0.784	15	16	31

The Industrial Estate trip rates from the original transport scoping document and have applied the proposed floor area of 3,938sqm a reduction from 7,875sqm. The subsequent trip generation is presented in Table 2.

*Table 2 - Vehicular Employment Trip Rates and Generation (Industrial) 3,938sqm*

Period	Trip Rates (per 100sqm)			Trip Generation (3,938sqm)		
	Arrival	Departure	Total	Arrival	Departure	Total
AM Peak	0.365	0.158	0.523	14	6	21
PM Peak	0.127	0.309	0.436	5	12	17

The Parcel Distribution Centre and the Industrial estate elements is forecast to generate 63 two-way movements in the AM peak and 48 two-way movements in the PM peak.

## TOTAL EMPLOYMENT

As the split of the employment differs between this document and the previous transport scoping document, as the total employment traffic The figures at Table 1 and Table 2 from this document and Table 2-5 from the original transport scoping document have been combined to establish the total trip generation associated with the employment element (15,750 sqm). This is presented below in Table 3.

Table 3 – Vehicular Trip Generation – Total Employment Use (15,750sqm)

Period	Total Trip Generation – 15,750sqm		
	Arrival	Departure	Total
AM Peak	130	55	185
PM Peak	41	102	143

Based on the above, it is envisaged that the proposed employment element could generate a forecast of 185 two-way movements in the AM peak and 143 two-way movements in the PM peak.

The original transport scope had an internalisation factor of 10% for trips between the employment and residential element of the development. Table 4 and Table 5 presents the employment and residential work purpose vehicular trips splitting it between External and Internal.

Table 4 - Distribution of Employment Vehicular Trips – 15,750 sqm GFA

External/ Internal	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-way	%	Arr.	Dep.	Two-way	%
External	117	50	167	90	37	92	129	90
Internal	13	6	19	10	4	10	14	10

Table 5 - Distribution of Residential Work Purpose Vehicular Trips – 1,000 Dwellings

External/ Internal	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-way	%	Arr.	Dep.	Two-way	%
External	82	219	301	94	145	64	209	94
Internal	6	13	19	6	10	4	14	6

2.4.1 – It should be determined with WSCC as Education Authority what the local needs are and therefore how likely it is for the school to be built as a 6FE or 8FE, acknowledging of course that the development needs only to cover its forecast needs. Even so, for the purposes of the TA, it's then whether 6FE or 8FE should be modelled. If the school is to be built as a 6FE, would there be merit in a sensitivity test that accounts for the 8FE?

The Secondary School on site will be assessed as an 8FE and the trip generation submitted is on this basis.

3.2.24 to 3.2.26 – Similar to the comments made for retail trips, it's unknown at present what leisure type uses will be available in the development. There is nothing in the development description to suggest any significant leisure uses comparable with those off-site locations. As such, WSCC consider a much lower number of internal trips would be appropriate. Likewise, whilst there is of course the potential for some walking/cycling trips to Blue Coats in Christs Hospital, given the proposed vehicular access onto Two Mile

Ash Road (making driving to Christs Hospital very convenient) and that Downs Link is unlit and has no bound surface, more trips are expected by car.

During the highway meeting between WSP and WSCC it was agreed that instead of 50% of the trips being internal or going to Christ Hospital, this would reduce to 25% and the remaining trips would be split equally to Horsham Town Centre and Broadbridge Heath. Table 1 below presents an updated leisure trip distribution.

Table 6 - Distribution of Residential Leisure / Other Purpose Vehicular Trips – 1,000 Dwellings

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
Horsham Town Centre	6	17	24	37.5%	37	16	53	37.5%
Broadbridge Heath	6	17	24	37.5%	37	16	53	37.5%
Internal/ Christ Hospital (Walking and Cycling)	4	12	16	25%	25	11	35	25%
Total	17	46	63	100%	98	43	141	100%

In terms of residential leisure / other trips, it is apparent that there would be in the order 48 and 106 external two-way vehicular movements during the AM and PM peak hours, respectively.

3.2.27 to 3.2.28 – As per the above comments, there will need to be some further discussion to agree vehicular trips. The figures in table 3-7 for the time being are not agreed.

Table 7 below presents the update trip distribution based on the amendments presented in Table 4 and Table 5 and Table 6 above and is an updated version of Table 3-7 from the Transport Scoping Document.

Table 7 - Distribution of Residential Vehicular Trips (All Purposes) – 1,000 Dwellings

Destination	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Only) – to be distributed by the traffic model	85	218	304	58.7%	145	65	209	42.2%
Horsham Town Centre (Non Work Trips)	12	32	45	8.6%	57	25	82	16.5%
Broadbridge Heath (Non Work Trips)	12	32	45	8.6%	57	25	82	16.5%
Internal / Lintot Square / Christ's Hospital (Walking and Cycling)	33	92	125	24.1%	87	36	122	24.7%
Total	143	374	518		345	151	495	



It is forecast that the residential element of the proposals would generate a total of 394 and 373 two-way external vehicular trips during the AM and PM peak hours respectively. The remaining trips (125 AM peak / 122 PM peak) would be internal or to Lintot Square / Christ's Hospital.

Table 8 presents an updated Table 3-11 from the Transport Scoping document which presents the total distribution from all the combined uses.

*Table 8 - Total Distribution of Vehicular Trips – All Site Uses Combined\**

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	82	219	301	52.3	145	64	209	41.1
External (Work Trips Arrivals)	117	50	167	29.0	37	92	129	25.4
Horsham Town Centre (Non Work Trips)	12	32	45	7.8	57	25	82	16.1
Broadbridge Heath (Non Work Trips)	12	32	45	7.8	57	25	82	16.1
Horsham Golf Course	12	5	17	3.0	2	4	6	1.2
<b>Total</b>	<b>235</b>	<b>338</b>	<b>575</b>		<b>298</b>	<b>210</b>	<b>508</b>	

It is forecast that the total development traffic would be in the order of 575 and 508 external two-way vehicular movements during the AM and PM peak hours respectively.

*3.6.4 – The trips within table 3.12 will need to be updated and agreed to reflect WSCC comments above. The trips in table 3.12 cannot be agreed at present.*

Table 9 has been updated based on Table 8 above and reflects the adjustments made within the Transport Scope.

Table 9 - Vision Led Total Distribution of Vehicular Trips in the AM and PM Peak

Destinations	AM Peak Hour (0800-0900)				PM Peak Hour (1700-1800)			
	Arr.	Dep.	Two-Way	%	Arr.	Dep.	Two-Way	%
External (Work Trips Departures)	77	196	271	51.3	131	59	188	39.7
External (Work Trips Arrivals)	105	45	150	28.5	33	83	116	24.5
Horsham Town Centre (Non Work Trips)	12	32	45	8.5	57	25	82	17.3
Broadbridge Heath (Non Work Trips)	12	32	45	8.5	57	25	82	17.3
Horsham Golf Course	12	5	17	3.2	2	4	6	1.3
<b>Total</b>	<b>215</b>	<b>311</b>	<b>528</b>		<b>280</b>	<b>194</b>	<b>474</b>	

The forecast Vision Led trip generation is 528 and 474 external two-way vehicular movements during the AM and PM peak hours respectively. We would welcome WSCC view on the use of the above trip generation as the basis for the core traffic modelling assessment suggested below in Section 4. The previous planning application from the Summer of 2022 had a two-way trip generation of 762 in the AM peak and 690 in the PM peak.

4.1.1. – *The extent of the study area seems reasonable although until trips have been distributed the total extent of the area cannot be agreed. The only matter that would be flagged is whether more junctions into and within Horsham may need to be assessed. This includes the signalised junction forming part of DC/23/1178.*

After the Horsham District Council Strategic Traffic Model has been run, the outputs will be reviewed to determine if any additional junctions require further assessment. This review will consider the signalised junction access into the Park & Ride and the Golf Course Planning Application. In addition, WSP will evaluate whether the two junctions at Hop Oast Roundabout and Park & Ride should be integrated into a single Linsig model.

6.1.1 to 6.1.2 – *The comments here are noted. There will need to be further discussions with WSCC and Metrobus concerning potential improvements both to infrastructure and services.*

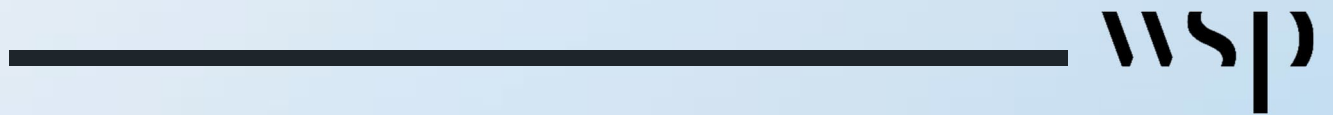
WSP met Metro bus to discuss the public transport opportunities and next steps. WSP will produce a separate public transport strategy that builds upon these discussions which will primarily look at improvements to the existing 23 Service that operates through Southwater.

## SUMMARY

This Transport Scoping Addendum provides updates to the queries raised by West Sussex County Council in their response to the Transport Scoping Note; this follows a meeting between WSP and WSSC highway authority to agree the proposed way forward.

# Appendix A

TRICs Outputs





Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

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**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use: 02 - EMPLOYMENT

Category: G - PARCEL DISTRIBUTION CENTRES

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

01	<b>GREATER LONDON</b>		
	HO	HOUNSLOW	1 day
05	<b>EAST MIDLANDS</b>		
	LN	LINCOLNSHIRE	1 day

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

Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

**Primary Filtering Selection:**

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

Parameter:	GFA
Actual Range:	763 to 50000 (units:sqm)
Range Selected by User:	763 to 20000 (units:sqm)
Parking Spaces Range:	20 - 798

**Public Transport Provision:**

Selection by:	All Surveys Included
Date Range:	01/01/16 to 23/11/23

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

**Selected survey days:**

Friday	2 days
--------	--------

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

**Selected survey types:**

Manual count	2
Direction ATC Count	0

*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	1 days
Suburban Area (PPS6 Out of Centre)	1 days

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

**Selected Location Sub Categories:**

Commercial Zone	1 days
Industrial Zone	1 days

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

**Inclusion of Servicing Vehicle Counts:**

Servicing vehicles Excluded	1 days
Servicing vehicles Included	1 days

Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

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Secondary Filtering Selection:

Use Class:

B8	2 surveys
----	-----------

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

Population within 500m Range:

520 - 3570

Population within 1 mile:

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

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

Population within 5 miles:

125,001 to 250,000	1 surveys
250,001 to 500,000	1 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	1 surveys
1.1 to 1.5	1 surveys

*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.*



Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

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**Petrol filling station:**

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

**Travel Plan:**

No	1 surveys
Yes	1 surveys

*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:**

1b - Very poor	1 surveys
No PTAL Present	1 surveys

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

**COVID-19 Restrictions:**

No



Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

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1	HO-02-G-06	DPD & DPD LOCAL	HOUNSLOW
FOREST ROAD FELTHAM Suburban Area (PPS6 Out of Centre) Commercial Zone Gross floor area: 3862 sqm Survey date: Friday 26/04/2019			
			Survey Type: Unknown
2	LN-02-G-01	PARCELFORCE WORLDWIDE	LINCOLNSHIRE
WHISBY WAY LINCOLN BIRCHWOOD Edge of Town Industrial Zone Gross floor area: 1496 sqm Survey date: Friday 28/06/2019			
			Survey Type: Unknown

Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

Total Vehicles

Calculation factor: 100 sqm

\*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	2	2679	0.392	0.037	0.429
06:00-07:00	2	2679	1.586	0.093	1.679
07:00-08:00	2	2679	0.784	0.448	1.232
08:00-09:00	2	2679	0.280	0.784	1.064
09:00-10:00	2	2679	0.149	0.971	1.120
10:00-11:00	2	2679	0.075	0.467	0.542
11:00-12:00	2	2679	0.056	0.224	0.280
12:00-13:00	2	2679	0.168	0.504	0.672
13:00-14:00	2	2679	0.205	0.299	0.504
14:00-15:00	2	2679	0.317	0.317	0.634
15:00-16:00	2	2679	0.317	0.392	0.709
16:00-17:00	2	2679	0.579	0.523	1.102
17:00-18:00	2	2679	0.373	0.411	0.784
18:00-19:00	2	2679	0.056	0.093	0.149
19:00-20:00	1	1496	0.067	0.000	0.067
20:00-21:00	1	1496	0.067	0.000	0.067
21:00-22:00					
22:00-23:00					
23:00-00:00					
<b>Total Rates:</b>			5.471	5.563	11.034

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

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

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Audit Code: 728f5221-f33f-4a52-b1be-42bf23fdcfec

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Parameter Summary:

Trip rate parameter range selected:	763 - 20000 (units: sqm)
Survey date date range:	26/04/2019 - 28/06/2019
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

## WEST SUSSEX COUNTY COUNCIL CONSULTATION

<b>TO:</b>	Developer (Developer Pre App Only) FAO: David Dixon/Philip Moss
<b>FROM:</b>	WSCC – Highways Authority
<b>DATE:</b>	12 September 2025
<b>LOCATION:</b>	Land North West of Southwater RH13 9AU
<b>SUBJECT:</b>	PRE-75-25 Proposed commercial and retail area in square metres: 15,750 sqm (£15,795+3,159=18,954)
<b>DATE OF SITE VISIT:</b>	TBA
<b>RECOMMENDATION:</b>	Advice

Comments are made against,

- Land North West of Southwater – Transport Scoping Note, August 2025

Unless stated otherwise, the following comments are made against the specific numbered points in the submitted scoping document.

2.2.1 to 2.2.4 – The proposal to use TRICS data is accepted. Given the level of filtering applied and that the 'privately owned houses' category has been used, WSCC have no issue with the trip rates presented.

Whilst it's appreciated that the TSN primarily covers traffic modelling, from experience ATE will require trip estimates for walking and cycling too. The agreed selection criteria would need to be applied to estimate walking and cycling trips.

2.3.1 to 2.3.4 – It's acknowledged that the composition of the employment space is presently unknown and that a number of assumptions have been made for the purposes of the TSN and subsequent modelling. WSCC have no particular issue with this approach in-principle but three general comments would be made regarding the employment uses,

Firstly, have any discussions been undertaken with Horsham DC regarding employment needs that may then influence the type of employment use? From experience of another strategic site in Horsham, the District Council have there advised of a demand for a greater element of storage/warehousing compared with office/business park type uses. This could be quite relevant to the trip generation.

Secondly, and related to the above, there are an increasing number of parcel distribution type uses coming forward especially in locations that are adjacent to the strategic and primary road network. These can exhibit higher trip rates compared with commercial warehousing. Subject to agreement, it may be appropriate to include an element of parcel distribution within the assessment.

Lastley, it's presumed that the Class E uses will be restricted to only offices and research and development (i.e. the old B1 type uses). As you'll appreciate, Class E otherwise permits a wide range of uses that may need to be assessed. The local example of Billingshurst Trade Park is a prime example of a development originally permitted for employment uses that has subsequently diversified to include a wide range of uses.

If the mix of employment uses does vary, it may be appropriate to update the modelling assumptions accordingly. This would need to be agreed with WSCC.

2.3.6 to 2.3.9 – The comparison of 'industrial estate' and 'warehousing' trip rates are noted. It's recognised that the 'industrial estate' trip rate is to be used for the purposes of the assessment. The trip rates presented are accepted.

2.3.10 to 2.3.12 – The proposed business park trip rates are noted and accepted.

2.4.1 – It should be determined with WSCC as Education Authority what the local needs are and therefore how likely it is for the school to be built as a 6FE or 8FE, acknowledging of course that the development needs only to cover its forecast needs. Even so, for the purposes of the TA, it's then whether 6FE or 8FE should be modelled. If the school is to be built as a 6FE, would there be merit in a sensitivity test that accounts for the 8FE?

At the time of writing, the decision on DC/23/1178 (Horsham Golf) is the subject of a judicial review. WSCC are not aware of the exact time lines associated with this process. For the purposes of external trips however, it's likely that these will be drawn from Horsham and therefore have similar traffic impacts should trips arise from Horsham Golf.

2.4.2 to 2.4.3 – The secondary school trip rates are noted and accepted.

3.2.1 to 3.2.8 – There are no particular issues with the approach applied within these paragraphs.

3.2.9 to 3.2.14 – It's accepted that it would be difficult to say with any certainty how many residents could be employed at the proposed employment uses. However, there is the possibility that some future residents may work within the proposed development or for that matter at other existing employment uses within Southwater. The same situation applies for existing Southwater residents who could work at the uses proposed, and therefore would not drive beyond the village. Either way, the number of internal trips within table 3.4 is quite small and realistically discounting these from the total trip generation would have no particular impacts on the overall modelling.

3.2.15 to 3.2.18 – There are no particular issues with the approach applied within these paragraphs. High quality and direct walking and cycling routes will need to be demonstrated through the master planning to ensure the aspirational modal shift has a chance of being realised. With the primary school in particular, this will be for local needs originating within the development or the surrounding local area.

3.2.19 to 3.2.22 – At present, it's unknown what retail uses will be available within the proposed development. The ability for these uses to meet retail needs is therefore unknown. Likewise, Lintott Square has some retail but this is limited with those retail provisions in Horsham and Broadbridge Heath being far more significant. The linear nature of the proposed development will also affect walking distance to Lintott Square

from certain phases of the development. In practice, more trips are anticipated to travel off-site for retail than suggested.

In saying the above, the bus service into Horsham is such that this would be a realistic alternative to driving. As such, whilst WSCC consider it likely that more trips will be external, there is the potential for a proportion of these trips to be made via bus instead of car.

3.2.24 to 3.2.26 – Similar to the comments made for retail trips, it's unknown at present what leisure type uses will be available in the development. There is nothing in the development description to suggest any significant leisure uses comparable with those off-site locations. As such, WSCC consider a much lower number of internal trips would be appropriate. Likewise, whilst there is of course the potential for some walking/cycling trips to Blue Coats in Christs Hospital, given the proposed vehicular access onto Two Mile Ash Road (making driving to Christs Hospital very convenient) and that Downs Link is unlit and has no bound surface, more trips are expected by car.

It's suggested that further discussion is needed over leisure trips.

3.2.27 to 3.2.28 – As per the above comments, there will need to be some further discussion to agree vehicular trips. The figures in table 3.7 for the time being are not agreed.

3.3.1 to 3.3.3 – There are no further comments on these paragraphs.

3.4.1 to 3.4.8 – A number of comments have been made regarding the secondary school in paragraphs above. Certain assumptions within these paragraphs may need to be amended pending discussion with WSCC Education regarding needs.

In-principle, the assumptions made are not unreasonable. There is the potential for trips from a wider area given the school will have no catchment and accounting for parental preferences. However given that the baseline trip generation that presently includes trips from Southwater to external secondary schools is not being adjusted (3.4.3), it would be unreasonable for potential inbound trips to the proposed school to be included. For this reason, WSCC wouldn't require any assumptions to cover vehicle trips to the secondary school from beyond Southwater.

3.6.3 – The suggested 10% trip reduction seems reasonable although greater detail will be required to support the 'vision' and what measures are intended to achieve this. It needs to be clear how the 'vision' ties in with any travel plan, and whether any further trip reductions are intended as part of this.

3.6.4 – The trips within table 3.12 will need to be updated and agreed to reflect WSCC comments above. The trips in table 3.12 cannot be agreed at present.

4.1.1. – The extent of the study area seems reasonable although until trips have been distributed the total extent of the area cannot be agreed. The only matter that would be flagged is whether more junctions into and within Horsham may need to be assessed. This includes the signalised junction forming part of DC/23/1178.

4.1.3 – The scenarios set out appear sensible. WSCC would though suggest an additional scenario that incorporate a partially met 'vision' led scenario; this way the

modelling will look at a fully achieved 'vision' and a more conservative situation where the 'vision' is partly achieved. This partly achieved 'vision' could then include some of the uncertainty suggested within the comments given that isn't not clear what retail or leisure uses for example will be provided within the development, as well as the uncertainty regarding the internalisation of employment trips.

5.1.1. to 5.1.8 – There will need to be further discussions concerning the on and off-site walking and cycling strategy to ensure this as best as possible complies with best practice. The guidance produced by Active Travel England should also be used given that ATE will be a consultee. The ATE guidance is in any case useful for the purposes of the assessment.

With 5.1.5, it's suggested that 1.6km/1mile is used as walking radius. This isn't suggested as an ultimate threshold but this distance is more commonly referenced in association with the findings of the National Travel Survey that determined that the majority of walking trips are below 1 mile/1.6km.

6.1.1 to 6.1.2 – The comments here are noted. There will need to be further discussions with WSCC and Metrobus concerning potential improvements both to infrastructure and services.

7.1.1 to 7.1.4 – The framework travel plan will need to be subject to further discussions. It's recommended that the proposed transport 'vision' for the site is incorporated as part of the travel plan. The monitoring that will be required for the travel plan can then incorporate the monitoring associated with the 'vision'.

As a final comment, it's understood that the Horsham District Council Strategic Traffic Model will be used as part of the highway assessment. Further discussion will be required with WSCC to agree a methodology for the use of the model. This will include agreeing approaches covering any required updates and adjustments to the model.

**Ian Gledhill**  
**West Sussex County Council – Planning Services**

Moss, Philip

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From: Ian Gledhill <ian.gledhill@westsussex.gov.uk>  
Sent: 07 November 2025 11:14  
To: Moss, Philip  
Cc: Guy Parfect; Dixon, David  
Subject: RE: Transport Scoping Note - Land North West of Southwater

Morning Philip, thanks for the note. Apologies for the slight delay in responding.

In short, barring the two following comments/observations, everything in the Addendum is as previously discussed and therefore agreed.

With the employment land percentages, I'm presuming these will in some way be controlled as part of the overall planning consent. If they were to vary, there would be the opportunity to look again at the potential traffic generation.

As for the use of the vision-led trip generation in table 9 for the core modelling scenarios, I'm not entirely against this. I'm mindful that we don't yet have any details on those measures to underpin the vision itself. In saying that, the difference in trip generation between table 8 (without vision) and table 9 (with vision) are not that great, and once assigned and distributed, the differences are such that these are unlikely to make any great difference for the overall assessment. On this basis, I'm content for the trip rates in table 9 to be used initially.

I would caveat the above by saying that if as part of detailed assessment (i.e. through Arcady/Picady/LinSig) certain junctions are identified as being close to or over capacity, it would then be useful to model these using the trip generation in table 8 (i.e. without vision). This should then present a worst case with the development and should the vision fail. Hopefully this approach is agreeable and provides an additional level of investigation where specific issues are identified rather than necessitating multiple with and without vision scenarios for all junctions.

As ever, happy to discuss further as needed.

Kind regards

Ian Gledhill

[Ian Gledhill](#) BSc MCIHT | Principal Planner – County Highways (Development Management) - Planning Services, [West Sussex County Council](#) | Location: Ground Floor Northleigh, County Hall, Chichester, PO19 1RH  
Internal: 25717 | External: 0330 222 5717  
E-mail: [ian.gledhill@westsussex.gov.uk](mailto:ian.gledhill@westsussex.gov.uk)

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From: Moss, Philip <Philip.Moss@wsp.com>  
Sent: 27 October 2025 15:34  
To: Ian Gledhill <ian.gledhill@westsussex.gov.uk>; Dixon, David <David.Dixon@wsp.com>  
Cc: Guy Parfect <guy.parfect@westsussex.gov.uk>  
Subject: RE: Transport Scoping Note - Land North West of Southwater

**\*\*EXTERNAL\*\***

Hi Ian,

I hope you had a good weekend. Please see the attached Transport Scoping Note Addendum taking account of the comments raised by West Sussex highways to the Transport Scoping Document.

If you have any further queries please not hesitate to ask.

Furthermore, could you please share a plan with the safe-guarded route along the eastern side of Worthing Road including Hop Oast Roundabout, if that is in dwg format that would be much appreciated.

Kind regards,

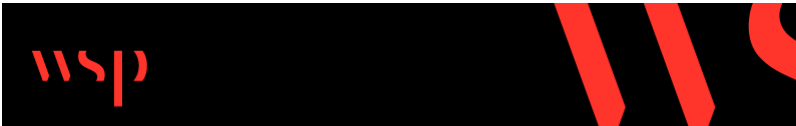
**Philip Moss**

Associate Transport Planner  
BSC (Hons)

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From: Ian Gledhill [ian.gledhill@westsussex.gov.uk](mailto:ian.gledhill@westsussex.gov.uk)  
Sent: 12 September 2025 12:11  
To: Dixon, David [David.Dixon@wsp.com](mailto:David.Dixon@wsp.com); Moss, Philip [Philip.Moss@wsp.com](mailto:Philip.Moss@wsp.com)  
Cc: Guy Parfect [guy.parfect@westsussex.gov.uk](mailto:guy.parfect@westsussex.gov.uk)  
Subject: RE: Transport Scoping Note - Land North West of Southwater

Hello David, yes, happy to have a quick run through.

In terms of times, both Guy's and my diaries are free all day next Thursday. I can otherwise offer, Tuesday at 1330, or Friday PM (ideally finishing before 1500).

See what works best for you and send through a Teams invite.

Ian

[Ian Gledhill](#) BSc MCIHT | Principal Planner – County Highways (Development Management) - Planning Services, [West Sussex County Council](#) | Location: Ground Floor Northleigh, County Hall, Chichester, PO19 1RH  
Internal: 25717 | External: 0330 222 5717  
E-mail: [ian.gledhill@westsussex.gov.uk](mailto:ian.gledhill@westsussex.gov.uk)

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From: Dixon, David <[David.Dixon@wsp.com](mailto:David.Dixon@wsp.com)>  
Sent: 12 September 2025 12:04  
To: Ian Gledhill <[ian.gledhill@westsussex.gov.uk](mailto:ian.gledhill@westsussex.gov.uk)>; Moss, Philip <[Philip.Moss@wsp.com](mailto:Philip.Moss@wsp.com)>  
Cc: Guy Parfect <[guy.parfect@westsussex.gov.uk](mailto:guy.parfect@westsussex.gov.uk)>  
Subject: Re: Transport Scoping Note - Land North West of Southwater

**\*\*EXTERNAL\*\***

Ian,

Thanks for sending this across, we will take a full review and incorporate these points within our proposals.

I know we have arranged an on site meeting with will be predominately to discuss walking / cycling opportunities etc, however I did wonder whether it would be useful to arrange a short 30-minute call next week to just run through these comments and agree a suggested way forward. Notably around elements on retail and leisure trips and how we can appropriately incorporate within the assessment.

If that's ok, please let me know any availability next week and I will schedule something in.

Thanks in advance and look forward to speaking soon.

Regards

**David Dixon**

Associate Director

MSc MCIHT

T +44 (0)1256 318661



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From: Ian Gledhill <[ian.gledhill@westsussex.gov.uk](mailto:ian.gledhill@westsussex.gov.uk)>  
Sent: Friday, September 12, 2025 11:46  
To: Moss, Philip <[Philip.Moss@wsp.com](mailto:Philip.Moss@wsp.com)>  
Cc: Dixon, David <[David.Dixon@wsp.com](mailto:David.Dixon@wsp.com)>; Guy Parfect <[guy.parfect@westsussex.gov.uk](mailto:guy.parfect@westsussex.gov.uk)>  
Subject: Transport Scoping Note - Land North West of Southwater

Philip, thanks for the Transport Scoping Note associated with the above. Please find attached WSCC Highways comments on the Note.

I'm of course happy to discuss further to clarify any comments made.

Kind regards

Ian Gledhill

[Ian Gledhill](#) BSc MCIHT | Principal Planner – County Highways (Development Management) -  
Planning Services, [West Sussex County Council](#) | Location: Ground Floor Northleigh, County Hall,  
Chichester, PO19 1RH  
Internal: 25717 | External: 0330 222 5717  
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# Advice Note 01

## Spatial Planning Framework Commission

<b>Job number:</b>	SB698		
<b>Job title:</b>	Land North West of Southwater		
<b>LPA name:</b>	Horsham District Council	<b>LPA Ref:</b>	N/A
<b>To:</b>	Nigel De Wit	<b>cc:</b>	
<b>Topic:</b>	Transport Scoping Note Review		
	<b>Prepared:</b>	<b>Checked/Approved</b>	
<b>Name:</b>	Harry Robinson	Derek Jones	
<b>Date:</b>	29/09/2025	01/10/2025	

Throughout this response any **ACTION POINTS** for the applicant are shown as **bold underlined**.

## Introduction

- 1 In September 2025, Berkeley Strategic (the Applicant) submitted pre-application scoping request application for the construction of 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities on land north west of Southwater.
- 2 The Local Planning Authority (LPA) is Horsham District Council (HDC) and the Applicant's transport consultant is WSP.
- 3 WSP has prepared two notes: a shorter note tailored to the Strategic Road Network (SRN), titled the "National Highways Scoping Note," and a more detailed "Transport Scoping Note" (TSN).
- 4 On behalf of National Highways, the Jacobs SYSTRA Joint Venture (JSJV) has reviewed the above-mentioned notes and would offer the following comments.

## Site History

- 5 A planning application for the site was originally submitted in 2022 (reference: DC/22/1916); however, this was subsequently withdrawn due to delays in local plan making. Nonetheless, National Highways previously responded to the 2022 application in February 2023, recommending that planning permission not be granted for a specified period and indicating that further information was needed. The National Highways response is summarised below:
  - **Policy Context:** Transport Assessment (TA) must refer to and comply with Department for

Transport Circular 01/2022.

- **Vehicular Trip Generation:** Vehicular trip generation forecasts were accepted.
- **Trip Distribution/Assignment:** Directional distribution/assignment for both residential and employment uses needs to be extended to the Strategic Road Network (SRN), namely the A23.
- **Junction Assessments:** Updated trip distribution/assignment is required before advising on the need for SRN assessment.
- **Highway Safety:** Once the SRN impact is identified, the highway safety assessment area may need to be expanded to include the SRN along with a detailed STATS 19 collision analysis.

## Development Proposals

- 6 As previously stated, the proposed development consists of a 1,000 homes, approximately 4ha of employment land, primary and secondary schools and associated facilities on land north west of Southwater.
- 7 The previous 2022 application proposed a similar overall scale of development as the current 2025 application, except that the number of residential units has been reduced from 1,500 to 1,000 in the 2025 proposal. **Table 1** presents the differences in development proposals between the 2022 and 2025 applications.

*Table 1. Comparison of existing and proposed development land use*

Land Use	2022	2025	Difference
Residential (dwellings)	1,500	1,000	-500
Employment (sqm)	15,750	15,750	+0
Flexible Community Facilities (sqm)	2,900	2,900	+0
Education Facilities	Nursery, Primary and Secondary Schools	Nursery, Primary and Secondary Schools	N/A
Traveller Pitches	Five Traveller Pitches	Five Traveller Pitches	N/A

- 8 As shown in **Table 1**, the proposed scheme will remain largely the same as the 2022 application, except for a reduction of 500 dwellings.

## Site Location

- 9 As can be seen in **Figure 1** the site is located 10km to the southwest of M23 junction 11 and 12km northwest of the A23 / A272 junction.

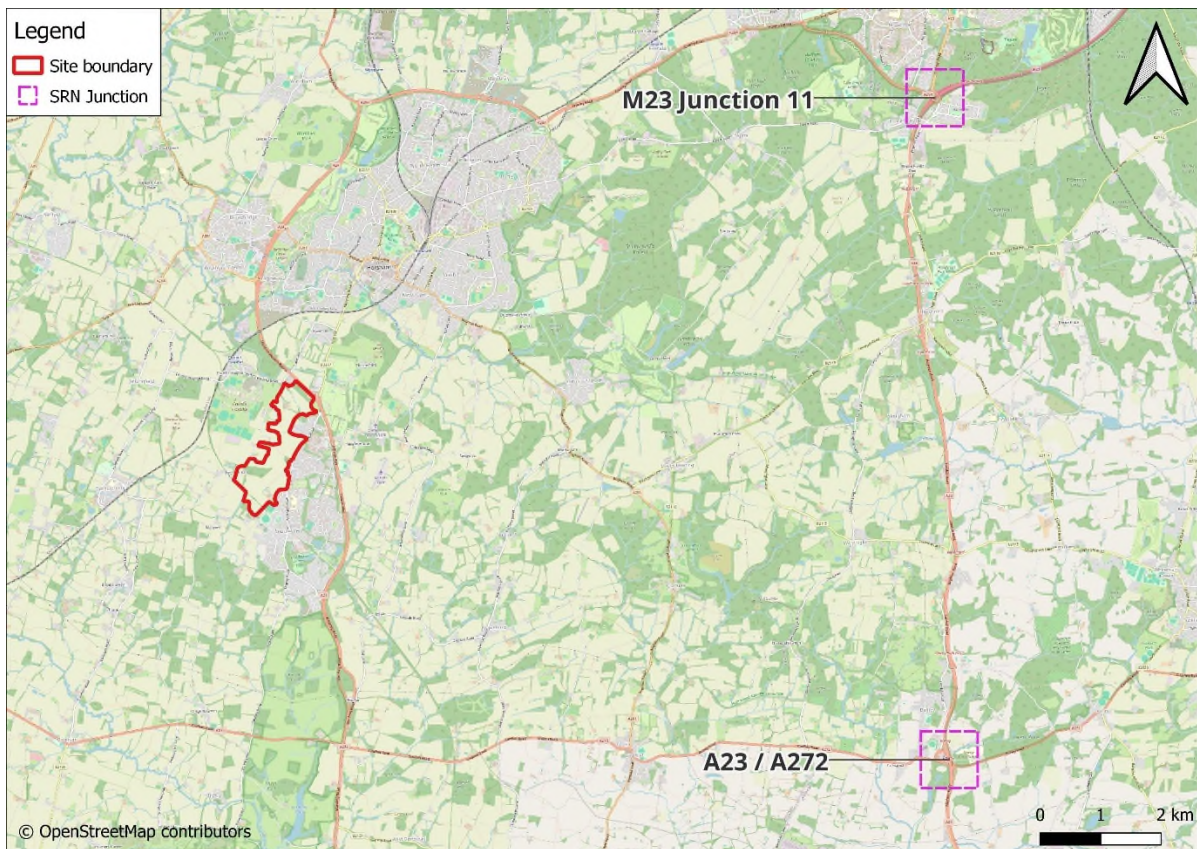


Figure 1. Site location in relation to the SRN

## National Highways Scoping Note

- 10 The National Highways Scoping Note summarises WSP's methodology for assessing the proposed developments impact on the SRN.
- 11 Given the distance from the SRN, WSP notes that it is expected that the majority of daily trips generated by the development will not interact with the SRN.
- 12 WSP notes that the 2022 Transport Assessment included an analysis of the development's impact on the SRN, and this information has been carried forward for reference in the current review. The future application will use the Horsham Strategic Model to distribute work-related trips from residential and commercial elements, as agreed with Horsham District Council and West Sussex County Council, consistent with previous assessments. Trips related to education, shopping, and leisure have been assigned to local facilities, reflecting likely travel patterns.
- 13 As shown in **Figure 2** (Information taken from the Transport Assessment from 2022), WSP forecast figures from the Saturn model indicate a minimal impact on the SRN: during the AM peak, just six two-way trips are expected north on the M23, decreasing to five in the PM; south on the A23, five two-way trips are forecast for the AM peak, dropping to one in the PM. The current application proposes 500 fewer residential units, suggesting that these impacts will likely be lower than previously assessed.

Table 2 – Information taken from Appendix J of the Transport Assessment from Summer 2022.

National Highways Link	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
M23 Pease Pottage Junction (Northbound)	4	2	6	3	2	5
A23 A272 Junction (Southbound)	0	5	5	1	0	1

Figure 2. Vehicle trip distribution at SRN

- 14 WSP, therefore, anticipate the development to have a minimal impact on the SRN and that no additional assessment of SRN impact will be required, subject to confirmation from National Highways that traffic flows remain below specified thresholds.
- 15 The JSJV suggests that the traffic movements shown in **Figure 2** (Table 2) are unlikely to result in a severe impact on the Strategic Road Network or an unacceptable impact on highway safety. However, **within the Transport Assessment process, WSP should confirm that the Horsham Strategic Model is calibrated and validated, and present traffic flow diagrams to demonstrate that the vehicle trip distribution has been correctly applied at any impacted SRN junctions.**

## Transport Scoping Note

### Vehicle Trip Rates and Generation

- 16 Within the TSN, WSP has presented vehicle trip rates and generation for each proposed land use.
- 17 It is noted that this trip generation analysis supersedes the agreed trip rates section from the previously submitted TA in 2022. The trip rates have been updated to take into account any recent surveys undertaken.
- 18 Notwithstanding this, WSP states that details of the projected multi-modal trip generation and impacts associated with the proposed development will be included within the Transport Assessment.
- 19 Considering the distance from the SRN, the JSJV suggests that only vehicle trips associated with the residential and employment aspects of the proposed development will likely have the potential to impact the SRN.
- 20 Consequently, at this time, we have only assessed WSP's proposed employment and residential trip rates.
- 21 Considering that National Highways previously accepted the vehicle trip rates from the previous 2022 TA as appropriate, the JSJV has compared these to the newly proposed trip rates in the TSN, as well as providing our own comparison to trip rates derived from TRICS by ourselves.

### Proposed Residential Trip Rates and Generation

- 22 WSP's TSN proposed residential vehicle trip rates are presented in **Table 2**, along with a comparison to the residential trip rates and generation from the 2022 application. The JSJV has

also compared the 2022 trip rates to those of the newly proposed development, considering both scenarios as comprising 1,000 dwellings.

*Table 2. Residential trip rates*

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
2022 TA trip rate	0.141	0.38	0.521	0.35	0.173	0.523
2022 TA trip generation (1,500 dwell.)	212	570	782	525	260	785
2022 TA trip generation (1,000 dwell.)	141	380	521	350	173	523
TSN trip rate	0.143	0.375	0.518	0.345	0.15	0.495
TSN trip generation (1,000 dwell.)	143	375	518	345	150	495
<b>Variance to 2022 (1,500 dwell.)</b>	<b>-69</b>	<b>-195</b>	<b>-264</b>	<b>-180</b>	<b>-110</b>	<b>-290</b>
<b>Variance to 2022 (1,000 dwell.)</b>	<b>+2</b>	<b>-5</b>	<b>-3</b>	<b>-5</b>	<b>-23</b>	<b>-28</b>

- 23 As shown in **Table 2**, WSP forecasts that the residential aspect of the proposed development will generate 264 fewer two-way vehicle trips during the AM peak and 290 fewer two-way vehicle trips during the PM peak, compared to the previous 1,500-dwelling proposal from 2022.
- 24 When assessing both trip rates for 1,000 dwellings, WSP forecasts that the proposed development will generate 3 fewer two-way vehicle trips in the AM peak and 28 fewer two-way vehicle trips in the PM peak, compared to the previous 2022 trip rates for 1,000 dwellings.
- 25 Consequently, WSP forecasts that the residential aspect of the proposed development will generate fewer trips than were previously proposed in the 2022 application.

## Proposed Employment Trip Rates and Generation

- 26 WSP notes that the proposed employment area within the development is expected to comprise 15,750 sqm (GFA). The exact use of the employment space remains flexible at this stage, with permission being sought for a range of employment uses. The anticipated mix includes approximately one third office/research and development (Class E(g)(i)), one third industrial (Class B2), and one third storage and distribution (Class B8). For assessment purposes, it has been assumed that the total employment floor space will be split evenly, with 50% allocated to industrial or logistics units and 50% to business park use (7,875 sqm each). Final details may be subject to further discussion and design development.
- 27 The JSJV considers this approach appropriate; **however, if the exact split of employment uses remains unknown at the planning application stage, WSP should consider presenting a worst-case employment mix scenario in the TA.**
- 28 WSP's proposed employment vehicle trip rates are presented in **Tables 3** and **4**, along with a comparison to the employment trip rates and generation from the 2022 application.
- 29 For B2 use, WSP has utilised the "industrial estate" land use category in TRICS, and for office (E(g)(i)) space, the "business park" category.

Table 3. Industrial (B2) trip rates

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
2022 TA trip rate	0.716	0.242	0.958	0.174	0.642	0.816
2022 TA trip generation (7,875sqm)	56	19	75	14	51	64
TSN trip rate	0.365	0.158	0.523	0.127	0.309	0.436
TSN trip generation (7,875sqm)	29	12	41	10	24	34
<b>Variance to 2022</b>	<b>-28</b>	<b>-7</b>	<b>-34</b>	<b>-4</b>	<b>-26</b>	<b>-30</b>

Table 4. Business (E(g)(i)) trip rates

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
2022 TA trip rate	1.493	0.215	1.708	0.171	1.158	1.329
2022 TA trip generation (7,875sqm)	118	17	135	13	91	105
TSN trip rate	1.33	0.226	1.556	0.273	0.935	1.208
TSN trip generation (7,875sqm)	105	18	123	21	74	95
<b>Variance to 2022</b>	<b>-13</b>	<b>+1</b>	<b>-12</b>	<b>+8</b>	<b>-18</b>	<b>-10</b>

30 As shown in **Tables 3** and **4**, WSP’s updated trip rate analysis forecasts that the industrial and business aspects of the proposed development will generate fewer two-way vehicle trips during both the AM and PM peak periods compared to the 2022 application.

## Proposed Total Vehicle Trip Generation

31 In **Table 5**, the JSJV has compared the total vehicle trip generation of the newly proposed development (as presented within the TSN) with that of the 2022 TA, combining both residential and employment trip generation.

Table 5. Total proposed vehicle trip generation

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
2022 TA Total (1,500 dwell.)	385	606	991	552	401	953
2023 TA Total (1,000 dwell.)	315	416	731	377	315	692
TSN Total	276	405	682	377	248	624

<b>Variance to 2022 (1,500 dwell.)</b>	<b>-109</b>	<b>-201</b>	<b>-310</b>	<b>-176</b>	<b>-153</b>	<b>-329</b>
<b>Variance to 2022 (1,000 dwell.)</b>	<b>-38</b>	<b>-11</b>	<b>-49</b>	<b>-1</b>	<b>-67</b>	<b>-67</b>

- 32** As shown in **Table 5**, WSP forecasts that the residential and employment aspect of the proposed development will generate 310 fewer two-way vehicle trips during the AM peak and 329 fewer two-way vehicle trips during the PM peak, compared to the previous 2022 application when considering a 1,500-dwelling proposal.
- 33** When assessing both trip rates for 1,000 dwellings and employment use, WSP forecasts that the proposed development will generate 49 fewer two-way vehicle trips in the AM peak and 67 fewer two-way vehicle trips in the PM peak, compared to the previous 2022 trip rates.

## JSJV Analysis

- 34** The JSJV has reviewed the proposed site trip rates and generation presented by WSP, as shown in **Table 6**.

*Table 6. JSJV analysis*

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
JSJV resi trip rate (1,000 dwell.)	0.143	0.375	0.518	0.345	0.15	0.495
JSJV resi trip gen (1,000 dwell.)	143	375	518	345	150	495
<b>Variance to TSN (1,000 dwell.)</b>	<b>+0</b>	<b>+0</b>	<b>+0</b>	<b>+0</b>	<b>+0</b>	<b>+0</b>
JSJV B2 trip rate (7,875sqm)	0.418	0.148	0.566	0.109	0.367	0.476
JSJV B2 trip gen (7,875sqm)	33	12	45	9	29	37
<b>Variance to TSN B2 (7,875sqm)</b>	<b>+4</b>	<b>-1</b>	<b>+3</b>	<b>-1</b>	<b>+5</b>	<b>+3</b>
JSJV E(g)(i) trip rate (7,875sqm)	1.158	0.175	1.333	0.246	1.149	1.395
JSJV E(g)(i) trip gen (7,875sqm)	91	14	105	19	90	110
<b>Variance to TSN E(g)(i) (7,875sqm)</b>	<b>-14</b>	<b>-4</b>	<b>-18</b>	<b>-2</b>	<b>+17</b>	<b>+15</b>
TSN Total	276	405	682	377	248	624
JSJV Total	267	400	668	373	269	642
<b>Variance</b>	<b>-9</b>	<b>-5</b>	<b>-14</b>	<b>-4</b>	<b>+21</b>	<b>+18</b>

- 35** As shown in **Table 6**, the JSJV forecasts that the total proposed development will generate 14 fewer two-way vehicle trips than proposed by WSP in the AM peak, and 18 more two-way vehicle trips in the PM peak.

- 36 Based on the above, we consider the applicants vehicle trip *rates* as representative. However, **should the mix of employment uses change, or the development size of the employment and/or residential uses change, then there will be a need to revisit the vehicular trip generation forecast.**

## Travel Plan

- 37 WSP notes that a Travel Plan will be produced in addition to the TA.
- 38 We agree that the expected forthcoming application should be supported by a Travel Plan which should support the vision of what the development is seeking to achieve.

## Conclusion

**Further information required** – ideally at the pre-application stage

## Active Travel England Planning Response Detailed Response to an Application for Planning Permission

From: Planning & Development Division, Active Travel England  
To: Horsham District Council

Application Ref: EIA/25/0006  
Site Address: Land West of Southwater, West Sussex

**Description of development:** residential-led development of up to 1,000 homes, an employment, retail, community and leisure facilities, nursery provision, primary and secondary school, gypsy and traveller pitches, landscaping, open space and infrastructure.

### 1.0 Background

- 1.1 Active Travel England (ATE) welcomes the opportunity to comment on pre-application proposals for a mixed-use community for 2,500 residents, in addition to local facilities to provide primary and secondary education, retail, leisure and community facilities. As such, the application must be considered as a destination as well as an origin of trips.
- 1.2 The expectations set out by ATE in its published guidance and within these recommendations is for walking, wheeling (trips made by wheelchair and mobility scooters) and cycling to be seen as the most convenient, desirable and affordable way to travel while also providing access to public transport.
- 1.3 As a statutory consultee to the planning process, ATE is keen to work with councils and applicants to help boost overall levels of walking, wheeling and cycling across England. This will assist in delivering healthy and active communities, and in doing so supporting each of the government's priorities for housing delivery, public health and integrating transport modes.
- 1.4 Towards the above objectives, ATE requires all consultants preparing Transport Assessments (TAs) to undertake a vision-led approach to assessing developments, pursuant to **paragraphs 109 and 118** of the [National Planning Policy Framework \(NPPF\)](#) in respect of prioritising sustainable modes of travel, while delivering safe and healthy places which support active lifestyles and social interaction in accordance with **NPPF paragraphs 96 and 135**. The prioritisation and improvement of local walking, wheeling and cycling networks both on and off-site in a way that offers a genuine choice of modes is expected by **NPPF paragraphs 110, 115 and 117**. This represents a considerable policy shift and requires an updated approach from the traditional approach to peak-hour traffic-only assessments.

## 2.0 Assessment Requirements

2.1 In accordance with the above policies, ATE recommends the following methodology in order to consider and quantify the accessibility needs of all members of the community and provide a comprehensive assessment of the local area in the context of promoting healthy communities and prioritising sustainable transport.

1) Critically assess proposals against the [\*ATE Planning Assessment Toolkit\*](#) and provide this assessment in full and as part of the TA. Some of the criteria within the toolkit will be informed by the completion (or otherwise) of the assessments below.

2) Produce a geographical plot of local facilities, employment and other destinations upon which future residents / employees will rely, identifying distances (using an isochrone rather than concentric crow-fly distances) between the site and destinations identified.

3) Identify on a plan the routes (existing and proposed) that the new community will rely on to reach the above facilities to inform step 4, below:

4) Undertake a qualitative analysis including photographic evidence (rather than a simple verbal description) of the local routes established above from the perspective of walkers, wheelers, cyclists and public transport users of all abilities, ages and gender considering their design, safety, attractiveness and influence on personal security all times of the day and night.

5) Forecast the daily person trips (arrivals and departures) generated by all uses within the development, derived from TRICS person trips or other suitable evidence base that could usefully inform the proposals. Establish the number of trips by purpose\*

6) Forecast the mode share for each trip purpose\*, according to the distance to and availability of key destinations and the quality / quantity of connections.

7) Forecast mode share targets should be influenced by and derived from: a) the applicant's ambition to prioritise active travel for all trips and b): the quality of existing and proposed infrastructure in line with ***NPPF paragraphs 115, and 117***, demonstrating how the application will meet (or make significant progress towards meeting) the CWIS2 objectives for 50% of all journeys in towns and cities to be made by active modes.

8) Undertake a distribution and assignment mapping exercise which quantifies the number of two-way walking, cycling and public transport trips generated by the development once fully occupied, providing both a daily and peak hour analysis to inform infrastructure requirements.

**\*NB: The reliance upon historic census journey-to-work data from 2011 to inform mode shares for all movements will not be supported. It is recommended that the National Travel Survey is interrogated for this purpose to support ambition-led mode share targets.**

### 3.0 Off-site infrastructure

3.1 The assessment of surrounding infrastructure (above) will usefully inform further discussions regarding potential improvements to the local area to support active and healthy lifestyles. From an initial review and informed by the **Horsham District Council Infrastructure Delivery Plan (2024)** and **Horsham LCWIP (2020)**, ATE would highlight the following key destinations and considerations that should be taken into account. It should be noted that this list is not exhaustive and precedes the above assessment work which may highlight further areas for consideration.

- Improved linkage to and cycle parking facilities at **Christ's Hospital Railway Station** – potential for a *quiet-lane* approach that encourages speed reduction
- Improved linkage to **Lintot Square local centre** via a combination of routes, including (but not limited to) the **Downs Link** (potential surface improvements), **Eames View Public Right of Way** (assessment of lighting).
- **Worthing Road** and the provision of conveniently located crossing facilities at regular intervals that can accommodate both pedestrians and cyclists and which compliment routes to and from the development and offer permeability to the existing built-up area. Consideration of a scheme of traffic calming enhancements that would enable safe cycling along relevant sections of Worthing Road, or where not possible the consideration of an alternative temporary parallel route through the site itself.
- Acknowledging the demand for movement into / from the site from and to the north, particularly from the recently consented golf course application, across the **A24 and along Worthing Road**, including in the vicinity of the proposed northern site access, enhancing crossing facilities through the delivery of signal-controlled facilities at and around the **Hop Oast** and **Blakes Farm Road roundabouts**.
- A **public transport proposal** that not only delivers permeability within the site but also supports high-quality services through: convenient and direct access to public transport stops; high-class passenger waiting facilities; attractive bus frequencies and access to key destinations.
- Physical enhancements, including surfacing, lighting and overlooking to the Public Rights of Way network, including improvements to the footpaths **between Worthing Road and Two Mile Ash Road (Bridleway 1662)** and where linkages continue further west, considering financial contributions to West Sussex County Council to enhance where appropriate linkages to the **Downs Way (south of Christ's Hospital School)**; in addition to the rural network to the south, including to **Church Lane, Shaw's Lane, Southwater Country Park** and **Broadacres recreational facilities**.

Any proposed enhancements to the local cycling network would be expected to conform with the design requirements set out in [Local Transport Note 1/20 \(LTN1/20\)](#) while enhancements to the walking and wheeling network would be expected to conform with the design requirements of [Inclusive Mobility, Manual for Streets](#), [National Design Guide](#) and [Building for a Healthy Life](#) in respect of providing safe, direct, convenient and accessible routes for people of all abilities.

## 4.0 Masterplanning

4.1 ATE will review the package of submitted drawings, including any illustrative masterplans and parameters plans and seek that all opportunities for a porous and connected form of development are exploited in the interests of integrating the community with its surroundings in a way that fosters active, healthy lifestyles, social interaction and wider connectivity. Initial observations from reviewing illustrative masterplan are as follows:

- **Severance** there is potential for separation from the existing built-up area which risks creating separation between neighbourhoods, unless all identified arrows and dotted lines shown on the illustrative masterplan (particularly to the east) are assessed, pursued and implemented to modern standards.
- **Personal Security** - routes to local area must benefit from generous natural and passive surveillance, avoiding sharp turns, unlit areas or routes through dense vegetation. Such infrastructure is particularly unattractive and does little to foster feelings of personal safety, particularly amongst women and girls.
- **Local Centre** - centrally placed local facilities appears to make sense in terms of future accessibility although it is anticipated it may be some time before these facilities are delivered and until this time, the new community will be wholly reliant upon accessing existing facilities at Lintot Square and elsewhere along Worthing Road.
- **Permeability** - the masterplan should aim to achieve porous series of direct and inclusive walking and cycling routes that criss-cross the masterplan and avoid convoluted or circuitous journeys. Accesses and linkages for non-motorised users should outnumber those for vehicles, while public transport priority should be incorporated wherever possible to provide journey time advantage over general traffic.
- **Leisure routes** these must be designed to be inclusive and usable by all, and at all times of year. The use of loose-bound gravel will not be supported as this creates a barrier to access by buggies, wheelchairs and mobility scooters preventing the enjoyment of these facilities by all sections of the community, particularly during winter months where water, frost and silting results in pooling, silting, cracking and other surface degradation which renders routes inaccessible and unattractive. ATE will insist that the use of a grey or buff-coloured bound tarmac surface is embedded in planning conditions / future design codes.
- **Public Rights of Way (PRoW)** Potential exists to link to and upgrade the PRoW network beyond the site including along Bridleway 1662, as well as the north-south routes to Church Lane. These opportunities should be fully investigated and agreed with relevant landowners to avoid missed opportunities to deliver valuable connections.
- **A Design and Access Statement (DAS)** setting out an indicative route and street hierarchy for active travel as well as vehicular movements will be expected as part of the forthcoming submission to inform the agreement of parameters plans. ATE supports the provision of shared space streets and reduced corner radii where traffic levels are low and car parking is effectively managed / designed, in addition

to continuous crossings and protected parking bays to ensure pedestrian and cyclist priority in line with policy.

- **Design parameters** Further assessment of the masterplan will assist in determining street typologies and specification, for instance whether active travel routes will require a 5m walking / cycling segregated route, a 3m shared facility or whether street design can enable cycling along the carriageway. ATE supports the incorporation of principles set out in [Manual for Streets \(MfS\)](#) and the [National Model Design Code](#) where the use of shared surfaces is supported, subject to dialogue and the design expectations set out by the highway authority. Where possible, street design should seek to incorporate features to avoid the need for retrospective measures (i.e. speed cushions) to address sections of carriageway where likely speeds may exceed 20mph.
- **Cycle Parking provision** An important consideration to be raised at this stage is the location of cycle parking. While this may initially not be considered relevant to an outline application, this has implications for plot design, size, garaging and garden space. The assumption that a single garden shed is sufficient for bicycle storage remains unacceptable given the likely competition for space with other needs (i.e. garden chairs, barbecues, garden tools, mowers, camping equipment etc). Specific and separate bicycle storage facilities that are located to the front of houses and therefore providing convenient access to the highway (in the absence of a suitably sized garage) are required in order to effectively promote prioritise this mode of travel in line with policy.

## 5.0 Next steps

- 5.1 ATE is content to be involved in further dialogue as proposals develop further towards submission. It should however be noted that the recommendations given by Active Travel England (ATE) in this response are based on information supplied at the time of the pre-application consultation and are reflective of the quality and detail contained within the submission. Subsequently, these recommendations should not be considered to constitute an exhaustive and comprehensive response to a later planning application.
- 5.2 As such, these comments are made without prejudice to any other matters which may arise from further submissions, correspondence or assessment work containing more detailed information and subject to internal consultation with appropriate sections of ATE; particularly if in the opinion of ATE safety and accessibility standards cannot be achieved. These recommendations therefore cannot be considered as confirmation that any subsequent planning application will be acceptable to ATE.