

PROJECT No 1212

**THONGSBRIDGE MILLS,
HUDDERSFIELD ROAD,
THONGSBRIDGE**

TRANSPORT STATEMENT
JANUARY 2017



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Quality Management

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1 INTRODUCTION

- 1.1.1 Paragon Highway Consultants have been appointed to prepare this Transport Statement relating to the proposal to provide a commercial development of B1 (light industrial) units on land off Huddersfield Road, Thongsbridge in the district of Kirklees. Appendix A shows the site location in relation to the regional and local highway network.
- 1.1.2 The proposals are to provide new B1 (light industrial) units with dedicated car parking and servicing facilities. All the new units will have a suitable area to allow vehicles to load/ unload clear of the main service road. Access to the site will be via the existing access arrangements off Huddersfield Road, which has previously been considered appropriate to serve an adjacent B1 light industrial site (planning approval 2005/90017).
- 1.1.3 Drainage, suitable lighting for the proposed use and hard surfacing/ parking areas will be provided as part of the works. Turning areas within the site are proposed to allow vehicles likely to visit the site to enter and leave in a forward gear.
- 1.1.4 This Transport Statement considers such matters as access, sustainability, car parking and servicing and presents the proposals in relation to current guidance and data. The traffic impact associated with the development proposals is also presented.

2 EXISTING CONDITIONS

2.1 Site Description

- 2.1.1 The site generally consists of rough ground which has been cleared. The site is bounded by trees along the northeast, east and southeast sides, with residential properties located off Huddersfield Road to the northwest, and rough ground to the south.



Photograph 1 – Application Site

- 2.1.2 To the southeast of the site is an area of land that benefits from an existing planning approval for B1 light industrial units (planning application reference 2005/90017), although the units have not been constructed at the time of writing this report.

- 2.1.3 The application site and the adjacent B1 light industrial site will be served from the existing industrial service road off Huddersfield Road (A6024). The internal road joins Huddersfield Road via a priority junction complete with kerbed radii on both sides, giveaway markings and a right turn lane. Visibility at the access meets or exceeds 2.4m x 70m (which meets the requirements within Design Manual for Roads and Bridges for roads with 30mph traffic speeds) and is therefore considered to be suitable. The internal access road is around 7.4m in width with 1.8m wide footways provided on both sides. The carriageway contains a good quality surface although the footways require a surface course (constructed to base course only), and the access contains temporary gates to secure the site. The internal access road contains an existing spur which will be used to access the site, which contain kerbed radii.



Photograph 2 – Existing Access Road

- 2.1.4 The site is situated within Thongsbridge around 1.5km north of Holmfirth town centre, and 6.7km south of Huddersfield town centre.

2.2 Local Highway Network

- 2.2.1 The site will take access directly off Huddersfield Road, which forms part of the strategic highway network (A6024). The A6024 is a principle route that provides a suitable connection between the town of Holmfirth and A628 Woodhead Pass to the south, and Honley and the A616 to the north, leading to Huddersfield town centre and to other strategic routes.
- 2.2.2 The A6024 Huddersfield Road provides access to a mix of residential and commercial access roads, and also provides direct frontage access. Given the status of the road it is generally subject to heavy traffic volumes throughout the day.
- 2.2.3 Huddersfield Road is a two way single carriageway road with footways provided on both sides. Within the vicinity of the site access the width of the carriageway ranges between 9.2m and 9.3m and contains a right turn lane/ ghost island arrangement serving the site. The carriageway construction appears to be in good condition, with the layout and width of the road also considered to be suitable. The northwest side footway is around 1.5m in width, and the southeast side footway ranges between 4.9m and 1.0m to the northeast of the site access, and between 3.8m and 1.5m to the southwest of the site access, with the wider areas provided to facilitate the visibility splays provided for the site access junction. The footways appear to be suitable for their day to day use in terms of geometry and condition.



Photograph 3 – Huddersfield Road (to the northeast)



Photograph 4 – Huddersfield Road (to the southwest)

- 2.2.4 Huddersfield Road contains street lighting to main road standards and is subject to a 30mph speed limit. The road contains Traffic Regulation Orders generally in the form of waiting restrictions around some junction areas and other strategic locations.
- 2.2.5 There are a number of high density residential areas all within the normally accepted commuting distance for people to walk to work (2000m) as given in "Providing for Journeys on Foot" as published by the IHT.
- 2.2.6 The site is located within easy reach of the bus services available on Huddersfield Road located approximately 160m southwest of the site access junction off Huddersfield Road. Further details of the bus services available from the local fare stages are shown in Section 2.4 below.

2.3 Road Traffic Accidents

- 2.3.1 The personal injury accident records for the five year period (between 2011 and 2016) have been obtained from Crashmap.co.uk, and included a 200m length of Huddersfield Road (100m at either side of the site access junction). The accident search area is included at Appendix B.
- 2.3.2 There are no injury reported accidents along Huddersfield Road within the search area, therefore, the local highway network appears to operate safely.
- 2.3.3 The injury accident record in the vicinity of the site does not indicate a road safety problem or any trends of any significance which would warrant treatment or be a cause for concern as a result of the slight change in peak hour flows as a result of the development proposals.

2.4 Transport Sustainability

- 2.4.1 The site is in a sustainable location within walking distance of public transport facilities and the local settlements of Thongsbridge and Holmfirth.

- 2.4.2 The National Planning Policy Framework (NPPF) was published on 27th March 2012. This document superseded a number of national Planning Policy Statements and Guidance Notes (PPS's and PPG's). The national transport policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF.
- 2.4.3 However the guidance within PPG 13 is still useful as a reference and the relevant policies within the Council's UDP still apply.
- 2.4.4 The catchment areas for the preferred maximum walking distance of 2km for staff and visitors are shown on the plan at Appendix C. The catchment shows the areas accessible by foot, which include the residential areas of Thongsbridge and the residential areas in and around Holmfirth.
- 2.4.5 With regards to cycling, PPG 13: Transport stated that "Cycling also has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport". The plan at Appendix C also shows the 5km cycle catchment area from the site. The catchment area for the site includes Thongsbridge, Stockmoor, Farnley Tyas, Honley, Upperthong, Holmbridge, Scholes, Jackson Bridge, Brockholes, and Hepworth. All these settlements are mostly all residential properties with the occasional business property and leisure facility. The train stations of Brockholes and Honley are both located within cycling distance of the site.
- 2.4.6 Kirklees Council have many different cycle routes within the area. The Calder Valley Greenway which is between Huddersfield and Dewsbury shows several different routes which can be accessed from the site at Thongsbridge by a short walk/ride to Holmfirth to connect to Cycle Route 68 (on- road route on the National Cycle Network). This cycle route connects Holmfirth to Dumford Bridge and Sowerby Bridge and can lead to other cycle routes which have destinations such as, Halifax, Brighouse, and Hebden Bridge.
- 2.4.7 This demonstrates that there are significant residential areas within this catchment, providing opportunities for potential employees and potentially some visitors to cycle from their homes or other businesses to the site.

2.4.8 The site has good public transport links with bus stops located approximately 160 meters from the site to the towns, and settlements of Holmfirth, Holme Valley, Huddersfield. The services available from the aforementioned fare stages are shown below.

Service No	From – To	Frequency Mon – Sat	Late evenings and Sundays
H6	Holmfirth – Holme Valley Hospital – Thongsbridge - Brockholes	Infrequent service	No or infrequent service
308	Huddersfield – Newsome – Honley – Holmfirth	30 mins	60 mins
310	Huddersfield – Holmfirth – Scholes – Hepworth	30 mins	60 mins
X10	Huddersfield – Honley Bridge - Holmfirth (<i>one journey a day</i>)	Infrequent service-mon- fri No service- sat	No service
X4	Holme Valley Hospital – Brockholes – Huddersfield (<i>one journey a day</i>)	Infrequent service- mon – fri No service- sat	No service
X11	Parkhead – Holmfirth – Huddersfield (<i>limited stop</i>) (<i>one weekday morning peak journey from Parkhead</i>)	Infrequent service	Infrequent service

Table 1: Bus Services

2.4.9 As can be identified from the above table there are bus services every 30 minutes to Huddersfield Town Centre, Holmfirth, and other settlements including Brockholes, Parkhead and Scholes.

2.4.10 The site is within the cycling distance of both the Brockholes and Honley railway stations. Brockholes station is located approximately 2.5km north of the application site and Honley station is located approximately 3.6km north from the application site. Both stations are on the Penistone Line and are both within Metro Card Zone 5. These provided hourly train services between the large town of Huddersfield and the city of Sheffield every day including the late evening.

2.4.11 The above information identifies that the site is located in a sustainable location with a number of alternatives, other than the private car, for travel to the site for staff and visitors.

3 THE DEVELOPMENT PROPOSALS

3.1 Proposed Development

3.1.1 The proposals are to provide B1 light industrial units on the site at Thongsbridge Mills off Huddersfield Road, Thongsbridge. The B1 light industrial units will total a floor area of 2400sqm.

3.1.2 The adjacent site benefits from planning approval (planning application number 2005/90017) for B1 light industrial use served from a new internal access road.

3.1.3 Drainage, lighting and hard surfacing will be provided as part of the works with all parking and turning spaces within the site being completed to allow all vehicles likely to enter the site to leave in a forward gear.

3.2 Vehicular Access

3.2.1 It is intended to use the existing access arrangements off Huddersfield Road (A6024) to access the proposed site. The existing access is 7.4m wide with 1.8m wide footways on both sides, generally meeting the requirements for industrial access roads, allowing for two HGVs to pass simultaneously.

3.2.2 The site access road contains suitable visibility splays onto Huddersfield Road and the junction meets Kirklees Council's geometry requirements.

3.2.3 The information available on the Crashmap database for the period 2011 – 2016 inclusive identifies that there have been no recorded injury accidents within the search area.

3.2.4 The access is therefore considered to be more than suitable to serve the proposed development.

3.3 Parking Provision

- 3.3.1 Kirklees Council's car parking standards requires B1 light industrial use to provide car parking at the same rate as B2 general industry.
- 3.3.2 Based on the site having good public transport accessibility (4 buses per hour from the nearest stops, and two railway stations within cycling distance of the site) the site would provide parking at a minimum operational requirement. It is intended to provide a level of car parking which can easily cater for demands at the site.
- 3.3.3 Suitable service vehicle parking will also be provided within the site in accordance with the requirements within Kirklees Council's car parking standards.
- 3.3.4 Given the above, the parking provision for the development is therefore considered appropriate for the development proposals.

3.4 Traffic Impact

- 3.4.1 The development proposals are to provide circa 2400sqm of B1 light industrial units. The TRICS database has been interrogated to obtain the peak time trip rates for the development of B1 light industrial units. The results are shown below and the TRICS data is shown in Appendix D.

	Morning Peak			Evening Peak		
	ARRIVE	DEPART	TOTAL	ARRIVE	DEPART	TOTAL
B1 LIGHT	1.512	0.281	1.793	0.195	1.209	1.404
INDUSTRIAL	36	7	43	5	29	34

Table 2: TRICS Data (light industrial)

3.4.3 As can be noted from the above table the new B1 light industrial units have the capacity to generate 43 trips in the morning peak and some 34 trips in the evening peak. However, given the sustainable merits of the application site these actual trip rates could be lower than anticipated.

3.4.4 The anticipated vehicle trips are relatively low and will have little impact upon the local highway network and nearby junctions. Therefore the level of traffic generated by the B1 light industrial proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not severely add to any congestion at the peak times on the local network.

4 TRANSPORT POLICY

- 4.1.1 When considering transport policy compliance for planning applications, the main thrust of local, regional and national policy is that new development should be conveniently accessible by a range of sustainable transport modes, including public transport, cycling and walking. This policy therefore sets out the framework for this Transport Assessment and the project's compliance with the policy objectives. Further details of the relevant policy documents are set out below.

National Planning Policy Framework – Promoting Sustainable Transport

- 4.1.2 The National Planning Policy Framework (NPPF) was published on 27th March 2012. This document superseded a number of national Planning Policy Statements and Guidance Notes (PPS's and PPG's). The national transport policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF.

- 4.1.3 Paragraph 35 of the NPPF states that "developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles;
- and
- consider the needs of people with disabilities by all modes of transport.

Local Transport Plan

- 4.1.4 The current Local Transport Plan is the third West Yorkshire Local Transport Plan (LTP3) which covers the period 2011 to 2026. The key objectives of the LTP3 include:

- *To improve access to jobs, education and other key services for everyone;*
- *To reduce delays to the movement of people and goods;*
- *To improve safety for all highway users;*
- *To limit transport emissions of air pollutants, greenhouse gases and noise;*
- *To improve the condition of the transport infrastructure.*

4.1.5 The LTP sets out the walking and cycling strategy for West Yorkshire to encourage more people to use these modes of travel to help reduce the dependency on private cars. With regards to cycling provision within development proposals, the WYCS seeks to 'ensure that new development proposals are located and designed to be cycle friendly and adopt guidelines for cycle parking standards. With regards to walking, the LTP seeks to improve the local environment to make walking more attractive by enhancing safety, security and environmental quality.

4.1.6 The LTP also sets out a bus strategy West Yorkshire and seeks to increase patronage for all categories of bus passenger and modal shift towards the bus and away from the car.

Kirklees UDP

4.1.7 Local transport policy is set out in the Kirklees Unitary Development Plan (UDP). Chapter 8: Transport specifically relates to transport and new developments. Relevant policy includes:

- Policy T1 states: *"Priority will be given to:*
 - *Satisfying the needs of all sections of the community through an effectively integrated transport system with emphasis on improving public transport and encouraging a modal shift away from travel by private car;*
 - *Co-ordinating land use change with transport provision so as to minimise the need to travel and locating new development where it can best be served by public transport and where it minimises the need for expansion of the highway network."*
- Policies T16 and T17 identify the need to consider pedestrian and cycling access to new developments.

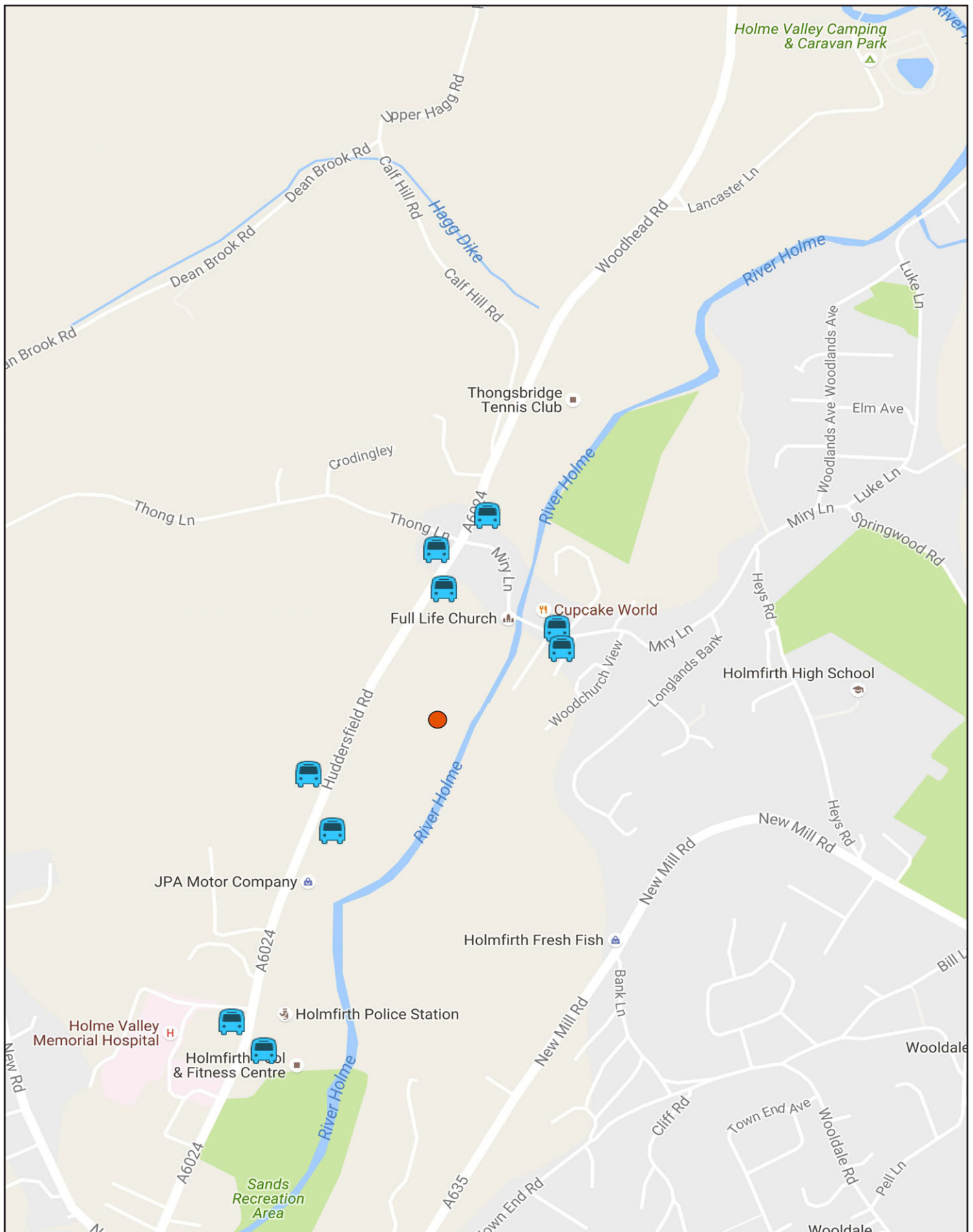
- 4.1.8 The location of the development in a sustainable position close to good bus routes and providing jobs and services for the local community generally meets the requirements of the Local and National Policy.

5 CONCLUSIONS

- 5.1.1 This report presents the proposal's to erect a commercial development of B1 (light industry) on land at the Thongsbridge Mills site off Huddersfield Road, Thongsbridge.
- 5.1.2 The report assessed the traffic generations, highway safety and access proposals and considers the sustainable elements of the scheme.
- 5.1.3 Assessment of the proposed traffic impact of the scheme shows that the level of traffic and associated trips on the local highway network will therefore have no material impact on the safe operation of the local highway and nearby junctions and will not severely add to any congestion at the peak times on the local network.
- 5.1.4 It is therefore concluded that the development is considered acceptable, and that there are no highway safety, capacity or efficiency reasons why planning consent for the proposed development should not be granted.

Appendix A

Location plan



 SITE LOCATION

 BUS STOP LOCATION

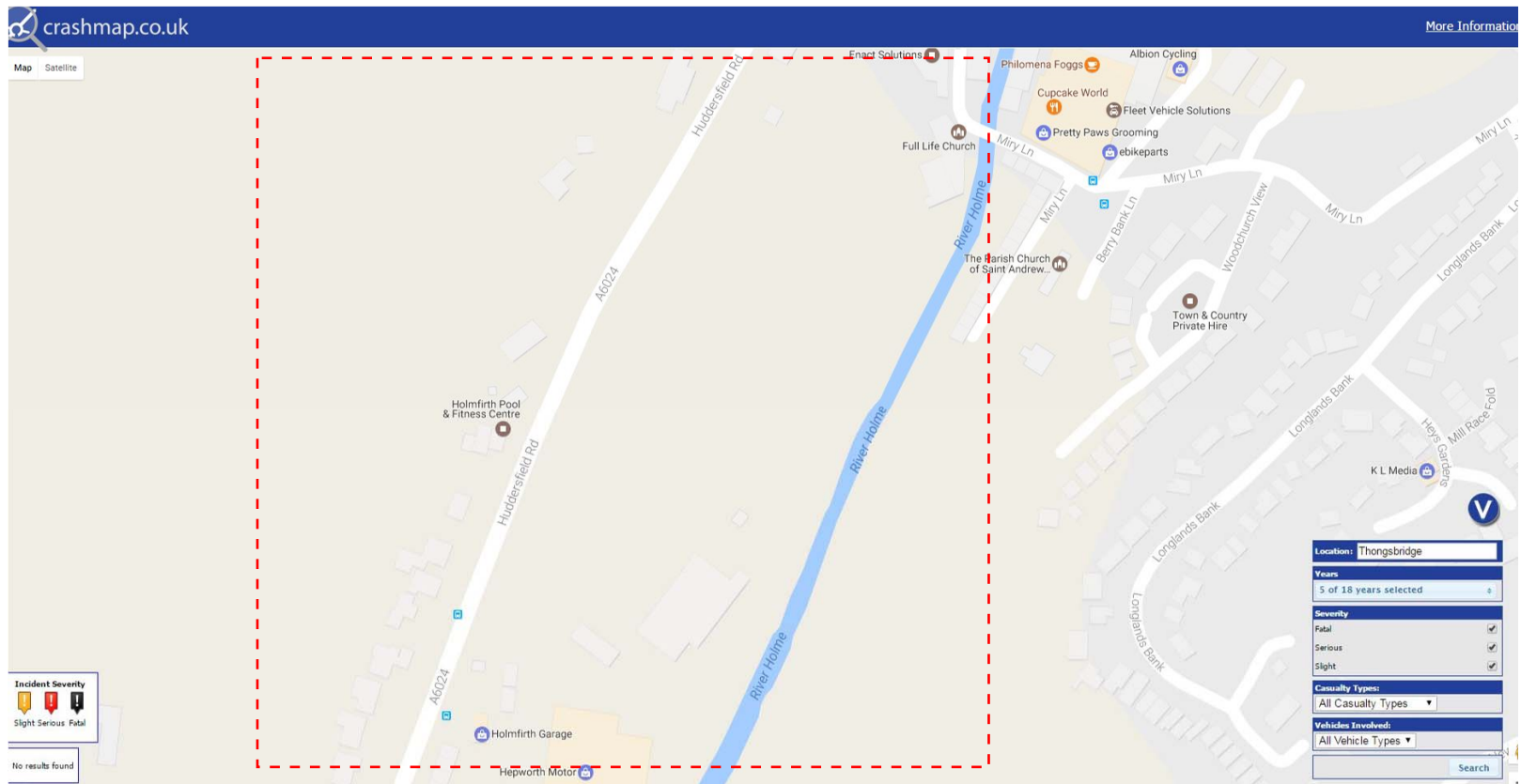


UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

Appendix B

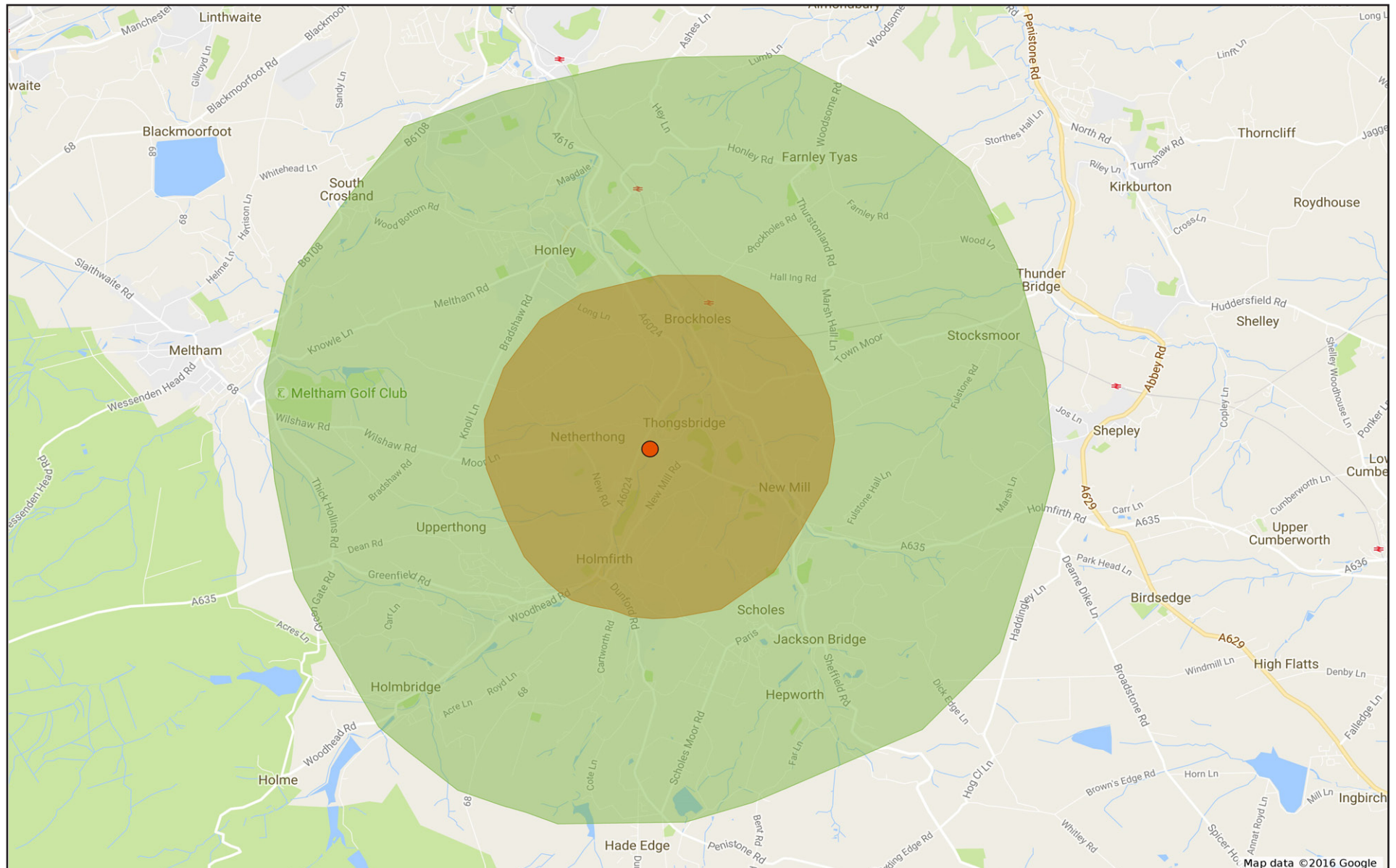
Road Traffic Accident Data

ROAD TRAFFIC ACCIDENT SEARCH AREA 2011 TO 2016



Appendix C

Pedestrian & Cycle Catchment



- 5km CYCLE CATCHMENT
- 2km WALKING CATCHMENT
- SITE LOCATION

Appendix D

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : B - BUSINESS PARK

VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BU BUCKINGHAMSHIRE	1 days
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
	OX OXFORDSHIRE	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	3 days
	WM WEST MIDLANDS	1 days
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NO NORTH LINCOLNSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	TW TYNE & WEAR	4 days
10	WALES	
	CF CARDIFF	2 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Range: 975 to 121275 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 22/06/09

Selected survey days:

Monday	3 days
Tuesday	6 days
Wednesday	2 days
Thursday	8 days
Friday	4 days

Selected survey types:

Manual count	23 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	1
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	6
Edge of Town	15

Selected Location Sub Categories:

Industrial Zone	8
Commercial Zone	5
Residential Zone	2
Retail Zone	1
Built-Up Zone	2
No Sub Category	5

LIST OF SITES relevant to selection parameters

1	BU-02-B-01 LONDON ROAD	BUSINESS PARK, HIGH WYCOMBE	BUCKINGHAMSHIRE
	HIGH WYCOMBE Edge of Town No Sub Category Total Gross floor area: 13300 sqm		
2	CF-02-B-01 FORTTRAN ROAD	BUSINESS PARK, CARDIFF	CARDIFF
	ST MELLONS CARDIFF Edge of Town Industrial Zone Total Gross floor area: 12000 sqm		
3	CF-02-B-02 CRICKHOWELL ROAD	BUSINESS/TECH. UNITS, CARDIFF	CARDIFF
	ST MELLONS CARDIFF Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: 2587 sqm		
4	DC-02-B-01 COMMERCIAL ROAD	BUSINESS PARK, POOLE	DORSET
	POOLE Suburban Area (PPS6 Out of Centre) Built-Up Zone Total Gross floor area: 1570 sqm		
5	GM-02-B-03 CROSS STREET	BUSINESS PARK, SALE	GREATER MANCHESTER
	SALE Edge of Town Industrial Zone Total Gross floor area: 3985 sqm		
6	HC-02-B-01 CROCKFORD LANE	BUSINESS PARK, BASINGSTOKE	HAMPSHIRE
	CHINEHAM BUSINESS PARK BASINGSTOKE Edge of Town Commercial Zone Total Gross floor area: 121275 sqm		
7	HF-02-B-01 ST ALBANS ROAD WEST	BUSINESS PARK, HATFIELD	HERTFORDSHIRE
	HATFIELD Edge of Town Commercial Zone Total Gross floor area: 26000 sqm		
8	LN-02-B-01 BISHOPS ROAD	BUSINESS PARK, LINCOLN	LINCOLNSHIRE
	LINCOLN Edge of Town Industrial Zone Total Gross floor area: 4460 sqm		
9	NF-02-B-02 WHITING ROAD	BUSINESS PARK, NORWICH	NORFOLK
	LONG JOHN'S HILL NORWICH Edge of Town Retail Zone Total Gross floor area: 7400 sqm		

LIST OF SITES relevant to selection parameters (Cont.)

10	NO-02-B-02 DONCASTER ROAD	BUSINESS PARK, SCUNTHORPE	NORTH LINCOLNSHIRE
	SCUNTHORPE Edge of Town Residential Zone Total Gross floor area:	1574 sqm	
11	NT-02-B-01 PARK LANE	BUSINESS PARK, NOTTINGHAM	NOTTINGHAMSHIRE
	NOTTINGHAM Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area:	2321 sqm	
12	OX-02-B-01 GARSINGTON ROAD COWLEY OXFORD	BUSINESS PARK, OXFORD	OXFORDSHIRE
	Edge of Town Commercial Zone Total Gross floor area:	33105 sqm	
13	SF-02-B-01 KEMPSON WAY	BUSINESS PK, BURY ST EDMUNDS	SUFFOLK
	BURY ST EDMUNDS Edge of Town Industrial Zone Total Gross floor area:	2480 sqm	
14	SH-02-B-01 WELSHPOOL ROAD	BUSINESS PARK, SHREWSBURY	SHROPSHIRE
	SHREWSBURY Edge of Town Commercial Zone Total Gross floor area:	17197 sqm	
15	SH-02-B-02 STAFFORD COURT	BUSINESS PARK, TELFORD	SHROPSHIRE
	TELFORD Edge of Town Centre Commercial Zone Total Gross floor area:	9500 sqm	
16	SH-02-B-03 CASTLE STREET HADLEY TELFORD	BUSINESS CENTRE, TELFORD	SHROPSHIRE
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area:	1300 sqm	
17	TW-02-B-01 ST THOMAS STREET	BUSINESS PARK, NEWCASTLE	TYNE & WEAR
	NEWCASTLE Town Centre Built-Up Zone Total Gross floor area:	975 sqm	
18	TW-02-B-02 HIGH FLATWORTH	BUSINESS PARK,NORTH SHIELDS	TYNE & WEAR
	NORTH SHIELDS Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	27142 sqm	

LIST OF SITES relevant to selection parameters (Cont.)

19	TW-02-B-03	BUSINESS PARK, SUNDERLAND	TYNE & WEAR
	CITY WAY		
	EAST HERRINGTON		
	SUNDERLAND		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	77513 sqm	
20	TW-02-B-04	BUSINESS PARK, NEWCASTLE	TYNE & WEAR
	KINGFISHER BOULEVARD		
	LEMINGTON		
	NEWCASTLE UPON TYNE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	38853 sqm	
21	WL-02-B-01	BUSINESS PK,WOOTTON BASSETT	WILTSHIRE
	HIGH STREET		
	COPED HALL		
	WOOTTON BASSETT		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	2600 sqm	
22	WM-02-B-01	BUSINESS PARK, COVENTRY	WEST MIDLANDS
	COURTALD WAY		
	FOLESHILL		
	COVENTRY		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	30042 sqm	
23	WO-02-B-01	BUSINESS PARK, REDDITCH	WORCESTERSHIRE
	BURNT MEADOW ROAD		
	MOORS MOAT NTH IND. EST		
	REDDITCH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3525 sqm	

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	23	19161	0.164	23	19161	0.044	23	19161	0.208
07:30 - 08:00	23	19161	0.432	23	19161	0.084	23	19161	0.516
08:00 - 08:30	23	19161	0.662	23	19161	0.130	23	19161	0.792
08:30 - 09:00	23	19161	0.850	23	19161	0.151	23	19161	1.001
09:00 - 09:30	23	19161	0.504	23	19161	0.126	23	19161	0.630
09:30 - 10:00	23	19161	0.278	23	19161	0.121	23	19161	0.399
10:00 - 10:30	23	19161	0.158	23	19161	0.113	23	19161	0.271
10:30 - 11:00	23	19161	0.126	23	19161	0.114	23	19161	0.240
11:00 - 11:30	23	19161	0.126	23	19161	0.123	23	19161	0.249
11:30 - 12:00	23	19161	0.144	23	19161	0.139	23	19161	0.283
12:00 - 12:30	23	19161	0.161	23	19161	0.300	23	19161	0.461
12:30 - 13:00	23	19161	0.225	23	19161	0.233	23	19161	0.458
13:00 - 13:30	23	19161	0.252	23	19161	0.285	23	19161	0.537
13:30 - 14:00	23	19161	0.262	23	19161	0.175	23	19161	0.437
14:00 - 14:30	23	19161	0.140	23	19161	0.164	23	19161	0.304
14:30 - 15:00	23	19161	0.139	23	19161	0.171	23	19161	0.310
15:00 - 15:30	23	19161	0.125	23	19161	0.199	23	19161	0.324
15:30 - 16:00	23	19161	0.128	23	19161	0.231	23	19161	0.359
16:00 - 16:30	23	19161	0.108	23	19161	0.372	23	19161	0.480
16:30 - 17:00	23	19161	0.142	23	19161	0.481	23	19161	0.623
17:00 - 17:30	23	19161	0.109	23	19161	0.691	23	19161	0.800
17:30 - 18:00	23	19161	0.086	23	19161	0.518	23	19161	0.604
18:00 - 18:30	23	19161	0.065	23	19161	0.301	23	19161	0.366
18:30 - 19:00	23	19161	0.049	23	19161	0.140	23	19161	0.189
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			5.435			5.406			10.841

Parameter summary

Trip rate parameter range selected:	975 - 121275 (units: sqm)
Survey date range:	01/01/02 - 22/06/09
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	23	19161	0.002	23	19161	0.003	23	19161	0.005
07:30 - 08:00	23	19161	0.002	23	19161	0.006	23	19161	0.008
08:00 - 08:30	23	19161	0.010	23	19161	0.006	23	19161	0.016
08:30 - 09:00	23	19161	0.007	23	19161	0.007	23	19161	0.014
09:00 - 09:30	23	19161	0.008	23	19161	0.010	23	19161	0.018
09:30 - 10:00	23	19161	0.009	23	19161	0.008	23	19161	0.017
10:00 - 10:30	23	19161	0.009	23	19161	0.011	23	19161	0.020
10:30 - 11:00	23	19161	0.005	23	19161	0.008	23	19161	0.013
11:00 - 11:30	23	19161	0.008	23	19161	0.008	23	19161	0.016
11:30 - 12:00	23	19161	0.006	23	19161	0.005	23	19161	0.011
12:00 - 12:30	23	19161	0.004	23	19161	0.008	23	19161	0.012
12:30 - 13:00	23	19161	0.005	23	19161	0.005	23	19161	0.010
13:00 - 13:30	23	19161	0.006	23	19161	0.006	23	19161	0.012
13:30 - 14:00	23	19161	0.004	23	19161	0.006	23	19161	0.010
14:00 - 14:30	23	19161	0.005	23	19161	0.004	23	19161	0.009
14:30 - 15:00	23	19161	0.006	23	19161	0.005	23	19161	0.011
15:00 - 15:30	23	19161	0.005	23	19161	0.007	23	19161	0.012
15:30 - 16:00	23	19161	0.003	23	19161	0.004	23	19161	0.007
16:00 - 16:30	23	19161	0.004	23	19161	0.004	23	19161	0.008
16:30 - 17:00	23	19161	0.002	23	19161	0.002	23	19161	0.004
17:00 - 17:30	23	19161	0.003	23	19161	0.002	23	19161	0.005
17:30 - 18:00	23	19161	0.001	23	19161	0.002	23	19161	0.003
18:00 - 18:30	23	19161	0.000	23	19161	0.001	23	19161	0.001
18:30 - 19:00	23	19161	0.001	23	19161	0.000	23	19161	0.001
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.115	0.128			0.243		

Parameter summary

Trip rate parameter range selected:	975 - 121275 (units: sqm)
Survey date range:	01/01/02 - 22/06/09
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	23	19161	0.001	23	19161	0.001	23	19161	0.002
07:30 - 08:00	23	19161	0.002	23	19161	0.002	23	19161	0.004
08:00 - 08:30	23	19161	0.002	23	19161	0.001	23	19161	0.003
08:30 - 09:00	23	19161	0.002	23	19161	0.003	23	19161	0.005
09:00 - 09:30	23	19161	0.002	23	19161	0.002	23	19161	0.004
09:30 - 10:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
10:00 - 10:30	23	19161	0.001	23	19161	0.000	23	19161	0.001
10:30 - 11:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
11:00 - 11:30	23	19161	0.001	23	19161	0.000	23	19161	0.001
11:30 - 12:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
12:00 - 12:30	23	19161	0.001	23	19161	0.001	23	19161	0.002
12:30 - 13:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
13:00 - 13:30	23	19161	0.002	23	19161	0.002	23	19161	0.004
13:30 - 14:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
14:00 - 14:30	23	19161	0.001	23	19161	0.001	23	19161	0.002
14:30 - 15:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
15:00 - 15:30	23	19161	0.001	23	19161	0.000	23	19161	0.001
15:30 - 16:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
16:00 - 16:30	23	19161	0.001	23	19161	0.002	23	19161	0.003
16:30 - 17:00	23	19161	0.002	23	19161	0.002	23	19161	0.004
17:00 - 17:30	23	19161	0.002	23	19161	0.002	23	19161	0.004
17:30 - 18:00	23	19161	0.001	23	19161	0.002	23	19161	0.003
18:00 - 18:30	23	19161	0.002	23	19161	0.002	23	19161	0.004
18:30 - 19:00	23	19161	0.002	23	19161	0.001	23	19161	0.003
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.033			0.031			0.064

Parameter summary

Trip rate parameter range selected:	975 - 121275 (units: sqm)
Survey date range:	01/01/02 - 22/06/09
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	23	19161	0.003	23	19161	0.001	23	19161	0.004
07:30 - 08:00	23	19161	0.007	23	19161	0.000	23	19161	0.007
08:00 - 08:30	23	19161	0.009	23	19161	0.001	23	19161	0.010
08:30 - 09:00	23	19161	0.012	23	19161	0.001	23	19161	0.013
09:00 - 09:30	23	19161	0.006	23	19161	0.000	23	19161	0.006
09:30 - 10:00	23	19161	0.003	23	19161	0.000	23	19161	0.003
10:00 - 10:30	23	19161	0.001	23	19161	0.000	23	19161	0.001
10:30 - 11:00	23	19161	0.001	23	19161	0.000	23	19161	0.001
11:00 - 11:30	23	19161	0.000	23	19161	0.001	23	19161	0.001
11:30 - 12:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
12:00 - 12:30	23	19161	0.002	23	19161	0.001	23	19161	0.003
12:30 - 13:00	23	19161	0.001	23	19161	0.001	23	19161	0.002
13:00 - 13:30	23	19161	0.001	23	19161	0.002	23	19161	0.003
13:30 - 14:00	23	19161	0.002	23	19161	0.002	23	19161	0.004
14:00 - 14:30	23	19161	0.000	23	19161	0.002	23	19161	0.002
14:30 - 15:00	23	19161	0.000	23	19161	0.001	23	19161	0.001
15:00 - 15:30	23	19161	0.000	23	19161	0.001	23	19161	0.001
15:30 - 16:00	23	19161	0.000	23	19161	0.003	23	19161	0.003
16:00 - 16:30	23	19161	0.001	23	19161	0.006	23	19161	0.007
16:30 - 17:00	23	19161	0.002	23	19161	0.007	23	19161	0.009
17:00 - 17:30	23	19161	0.003	23	19161	0.008	23	19161	0.011
17:30 - 18:00	23	19161	0.001	23	19161	0.009	23	19161	0.010
18:00 - 18:30	23	19161	0.001	23	19161	0.004	23	19161	0.005
18:30 - 19:00	23	19161	0.000	23	19161	0.002	23	19161	0.002
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.057			0.054			0.111

Parameter summary

Trip rate parameter range selected:	975 - 121275 (units: sqm)
Survey date range:	01/01/02 - 22/06/09
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0