



#### 1.5.1 TRAVEL PLANS





## PROPOSED MIXED USE DEVELOPMENT HOLLOWAY HEAD, BIRMINGHAM

Panther Securities Transport Assessment

**June 2015** 

### Proposed Mixed-Use Development Holloway Head, Birmingham

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#### Proposed Mixed-Use Development Holloway Head, Birmingham

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#### 1.0 INTRODUCTION

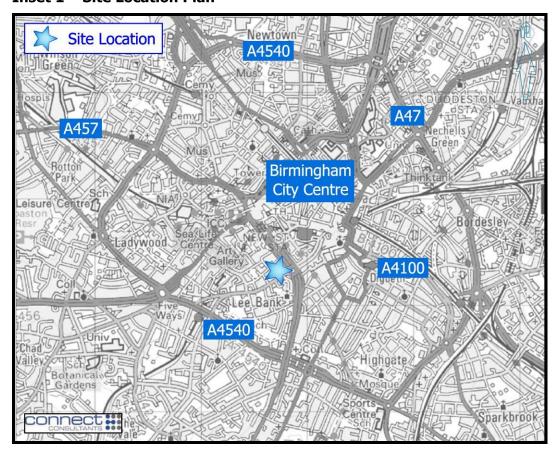
#### 1.1 Background

- 1.1.1 Connect Consultants has been commissioned to prepare a Transport Assessment (TA) in relation to a planning application for a mixed-use development comprising A1 retail units alongside residential apartments at Holloway Head, Birmingham.
- 1.1.2 The proposal site has an extant planning permission (LPA Reference: 2010/06724/PA) for an alternative mixed-use development, details of which are also provided in this report.

#### 1.2 Site Location and Characteristics

1.2.1 The site lies to the south-west of Birmingham City Centre on the northern side of Holloway Head approximately 60m to the west of the Holloway Circus Island as shown on the plan at **Inset 1**.

Inset 1 - Site Location Plan



1.2.2 The site is bound to the north by Gough Street, to the east by Ellis Street, to the south by Holloway Head and to the west by Blucher Street. The aerial photograph at **Inset 2** shows the site in its local context.







- 1.2.3 The site has been previously occupied by a mix of uses comprising offices, a car showroom / workshops, warehousing and a girl guide's centre. The existing site uses (and extant planning permission, detailed further below) result in the site having an established travel generation potential, albeit that a number of the buildings are currently vacant.
- 1.2.4 The site is located in an area which is densely developed for residential, employment and retail uses. Birmingham's main City Centre retail core is located to the north-east of the site and the retail frontage extends along Smallbrook Queensway to the Holloway Circus Island.
- 1.2.5 Birmingham New Street station, which provides Birmingham's main rail hub, is located approximately 450m to the north-east of the site.
- 1.2.6 Holloway Head and Smallbrook Queensway are bus routes and there are bus stops within easy walking distance from the site.
- 1.2.7 The site is linked to Birmingham City Centre by footways flanking Holloway Head and Smallbrook Queensway and pedestrian movements are assisted by the signalised pedestrian crossing facilities which are provided at the Holloway Circus Island.
- 1.2.8 Based on the above, the site is highly accessible by non-car travel modes by virtue of the local bus stops / Birmingham New Street Station and is located where it benefits from easy access to the vast range of local jobs, shops and services in central Birmingham.



- 1.2.9 The location of the site is therefore ideal to accommodate the proposed apartments.
- 1.2.10 The future residents of the proposed apartments will benefit from the vast range of jobs, shops and services in central Birmingham which are easily accessible by non-car travel modes from the proposal site. Thus, accommodating residential uses in this central location will minimise total travel demand when compared to a more peripheral location.
- 1.2.11 On this basis, irrespective of any local impacts, there is a soundly based justification for the re-use of the site to accommodate travel intensive land uses.

#### 1.3 Existing Site Composition

- 1.3.1 The site is currently developed to provide a range of uses including the following:-
  - Offices with a gross floor area (GFA) of 6,384 sq.m.
  - A car showroom with a GFA of 1,728 sq.m.
  - Warehousing with a GFA totalling 613 sq.m.
  - A Girl Guides Centre with a GFA of 500 sq.m.

#### 1.4 Extant Site Composition

- 1.4.1 The proposal site has an extant planning permission (LPA Reference: 2010/06724/PA) for a mixed-use development, to provide the following uses:-
  - Offices with a GFA of 9,344 sq.m.
  - A hotel with 125 rooms.
  - 303 apartments.
  - A car workshop/showroom with a GFA of 1,030 sq.m.
  - A casino with a GFA of 1,505 sq.m.
  - A replacement girl guides centre with a GFA of 990 sq.m.
  - A3 restaurants with a GFA of 505 sq.m.
  - 303 parking spaces.

#### 1.5 Proposed Site Composition

- 1.5.1 The scheme proposal is to redevelop the site to provide the following uses:-
  - 487 apartments, located in four blocks and subdivided over 14 storeys.
  - Two A1 retail units, located at ground floor level within the southernmost block, with a combined GFA of 468sq.m.
  - 200 parking spaces for the proposed residential apartments. 92 Parking spaces will be located on the southern part of the site (south of Brownsea Drive, which bisects the site), and 108 spaces will be located on the northern part of the site (to the north of Brownsea Drive).



- 1.5.2 Comparison of the extant and proposed site composition indicates that the net affect of the development would be as follows:-
  - The removal of the office floor space from the scheme (i.e. 9,344sg.m.).
  - The removal of a 125 room hotel from the scheme.
  - 487 apartments will be provided, which is an increase of 184 units from the extant proposal.
  - The removal of the 1,030sq.m car workshop/showroom from the scheme.
  - The removal of the 1,505sq.m casino from the scheme.
  - The removal of the 990sq.m girl guide's centre from the scheme.
  - The removal of the 505sq.m A3 restaurants from the scheme.
  - A1 retail will be provided, which is a 468sq.m increase compared to the extant proposal.
  - 200 parking spaces, which is 103 spaces less than the extant development proposal.

#### 1.6 Report Overview

- 1.6.1 This TA has been produced to assess the transport and traffic related changes compared to the extant planning permission and has been prepared to address the following main considerations:-
  - The accessibility of the proposal site by sustainable transport modes.
  - The accessibility of the proposal site from the existing road network.
  - The safety record of the local road network.
  - Car parking provision.
  - Traffic attraction.
- 1.6.2 The remainder of this report is separated into five further sections as detailed below.
  - **Section 2** describes highway context of the site including the safety record of the roads and junctions within a defined study area.
  - **Section 3** assesses the accessibility of the proposal site by non-car travel modes.
  - **Section 4** provides full details of the development proposals, including car parking.
  - **Section 5** provides the traffic data used for the assessment.
  - **Section 6** provides a summary along with our conclusions.



#### 2.0 HIGHWAY CONTEXT

#### 2.1 Introduction

- 2.1.1 This section of the report considers the highway context of the site including consideration of the safety record of a study area which includes Gough Street, Blucher Street, Ellis Street and Holloway Head local to the site including the Holloway Head / A41 / Smallbrook Queensway (Holloway Circus Island) junction.
- 2.1.2 A drawing showing the layout of the roads and junctions within the study area is provided at **Appendix 1**.

#### 2.2 Highway Layout

- 2.2.1 Local to the site, Holloway Head, Blucher Street, Ellis Street and Gough Street form a cordon around the development site.
- 2.2.2 Holloway Head forms the southern site boundary and is classified as the B4127 connecting Holloway Circus to the east with A4540 Islington Row Middleway to the west. Being a B class road, Holloway Head is an important local distributor road but is not part of Birmingham's strategic road network.
- 2.2.3 Holloway Head is a wide two-way road which is flanked by densely developed commercial and residential uses with high levels of associated frontage activity including on-street parking, accesses to individual properties, pedestrian crossing facilities, bus stops etc. Holloway Head has street-lighting and footways on either side of the carriageway.
- 2.2.4 Blucher Street and Ellis Street are one-way roads bounding the site to the west and east respectively. Ellis Street is restricted to one-way northbound and has a width of approximately 6.5m with on-street parking at various locations along its length. Blucher Street is a southbound one-way road with on-street parking and has a width of approximately 7m. Both Blucher Street and Ellis Street are street-lit and have footways on either side of the carriageway.
- 2.2.5 Gough Street to the north of the site is a one-way westbound road providing a connection between Ellis Street and Blucher Street. It has a width of approximately 7.5m with onstreet parking, street lighting and has footways on either side of the carriageway.
- 2.2.6 Approximately 60m to the east of the site Holloway Head meets Suffolk Street and Smallbrook Queensway at the Holloway Circus Island. The roundabout has a diameter of approximately 70m and is a 4 arm grade separated junction with the A38 Suffolk Street Queensway passing under the junction in an underpass. The A38 northbound and southbound junction arms have 3 lane approaches to the junction whilst Holloway Head and Smallbrook Queensway arms have 2 lane approaches. The junction is partially signalised and includes signalised pedestrian facilities.
- 2.2.7 The A38 forms a strategic highway link within central Birmingham linking the City Centre to the ring road, city suburbs and beyond to Birmingham's orbital motorway system.
- 2.2.8 Approximately 800m to the west of the site B4127 Bath Row (continuation of Holloway Head) meets A4540 Islington Row Middleway at a left-in/left-out T-junction. A4540 Islington Row Middleway forms part of Birmingham's ring road.



2.2.9 Overall, the site benefits from a high level of accessibility to the local road network offering easy access from Birmingham and its hinterland.

#### 2.3 Accident Analysis

2.3.1 Personal injury accident data has been obtained from Birmingham City Council for the study area for the most recent 5 year period for which data is available, this being 1<sup>st</sup> October 2008 to 31<sup>st</sup> September 2014. This shows that a total of 75 personal injury accidents have been recorded within the study area. **Inset 3** below identifies the distribution of collisions local to the proposal site.

REF 368
REF 368
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REF 388
REF 38

**Inset 3 – Accident Plan** 

- 2.3.2 Along the site frontages, the data identifies two accidents occurred at the Blucher Street / Holloway Head junction, one occurred at the Bow Street / Holloway Head junction, one occurred at the Ellis Street / Holloway Head junction and one occurred at the Blucher Street / Gough Street junction.
- 2.3.3 The Holloway Circus roundabout has a total of 27 accidents at the various nodes, including the grade separated under-pass to this junction and up to c50m of the approaches. Of these 27 accidents, there were five accidents at the Holloway Head approach (three of which were at the signalised pedestrian crossing), three accidents at the Suffolk Street southbound roundabout approach, two accidents at the Smallbrook Queensway roundabout approach, and three accidents on the Bristol Street northbound roundabout approach. All the remaining accidents occurred on the under-pass, junctions exits, and circulatory carriageway of the roundabout.



- 2.3.4 There were no specific locations (junctions or nodes at roundabout approaches or at larger junctions) where five or more accidents have occurred over the five year assessment period (i.e. 1 or more accident(s) per annum).
- 2.3.5 On this basis, and the basis of the flow data provided at **Section 5.0**, the proposed development is unlikely to materially worsen the occurrence of accidents at this location.



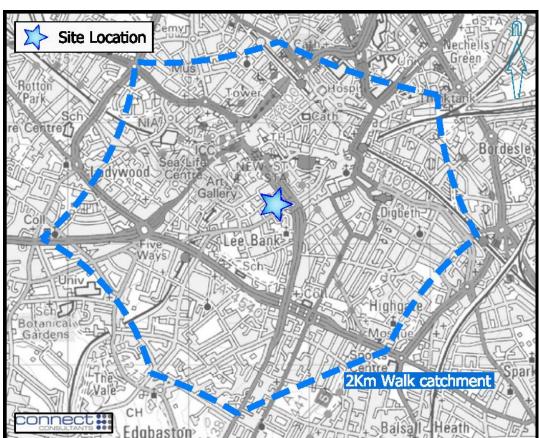
#### 3.0 SUSTAINABLE TRANSPORT CONTEXT

#### 3.1 Introduction

3.1.1 This section of the report considers the existing non-car travel opportunities which provide access to / from the site. This includes consideration of the existing pedestrian, cycle, bus and rail travel opportunities.

#### 3.2 Pedestrian Accessibility

- 3.2.1 The Department for Transport's (DfT) document entitled 'Manual for Streets' dated 2007 sets out the requirements for pedestrians at Section 4.4 stating:-
  - "Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot."
- 3.2.2 Table 3.2 of The Institute of Highways and Transportation (IHT) guidance document entitled 'Providing for Journeys on Foot' identifies a maximum walk distance of 2.0km for commuter, school and sightseeing walk trips, 800m for town centre walk trips and 1.2km for trips elsewhere.
- 3.2.3 The 2km walk catchment area is shown at **Inset 4** below.



**Inset 4 – Pedestrian Walk Catchment Isochrone** 

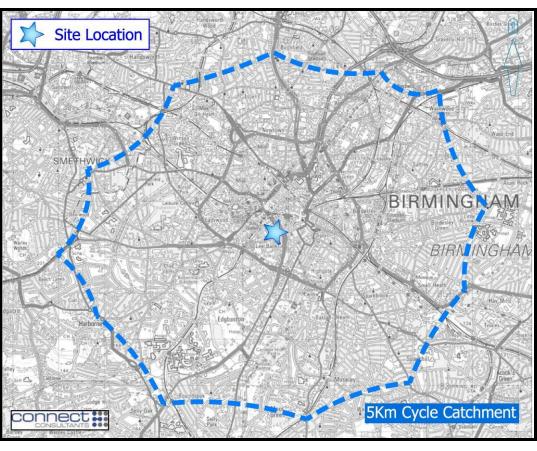


- 3.2.4 The proposal site is surrounded by a well developed pedestrian network that connects the site to local residential catchment areas along with Birmingham City Centre to the northeast of the site.
- 3.2.5 There are signalised pedestrian crossing facilities located on Holloway Head approximately 30m to the east of the site along with signalised crossing facilities at the Holloway Circus Island. These facilities provide safe and convenient connections linking the site to Birmingham City Centre and other local trip origins / destinations.
- 3.2.6 For the purposes of the assessment, it has been assumed that the area which is accessible by foot for future residents of the proposed apartments would be the area within the full 2km walk distance from the site.
- 3.2.7 On this basis, the future residents of the apartments would have access to a substantial array of jobs, shops and services by foot and a substantial number of potential visitors are located within walking distance of the site.
- 3.2.8 Overall, the proposed development is likely to result in a high proportion of trips by foot.

#### 3.3 Cycle Accessibility

- 3.3.1 Sustrans indicate in their 'Travel Behaviour Research Baseline Survey 2004' under the subheading 'measuring the potential for change' that cycling offers an alternative to car travel, and particularly for trips of less than 6 kilometres. This research is supported by the 2013 National Travel Survey, which specified average journey lengths, by cycle, of 5.3km (≈5km).
- 3.3.2 Assuming a five kilometre maximum cycle distance, the catchment area of the site by cycle is shown at **Inset 5** below, which shows that a substantial area of Birmingham is within cycle distance of the proposal site.





**Inset 5 – 5km Cycle Catchment** 

3.3.3 Cycling offers a potential alternative to car trips and provides the future residents of the apartments access to a very substantial range of employment opportunities.

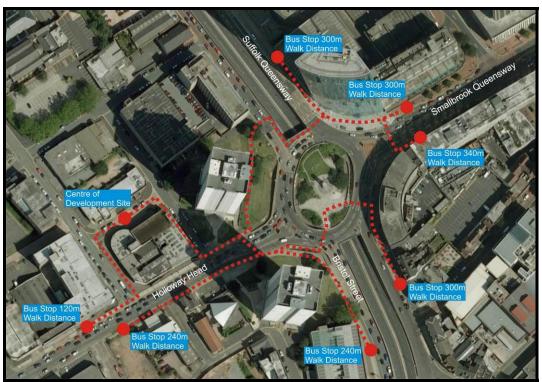
#### 3.4 Bus Accessibility

- 3.4.1 The nearest bus stop to the proposal site is an eastbound bus stop on Holloway Head which is located approximately 120m walk distance to the west of the centre of the proposal site. The nearest westbound Holloway Head bus stop is located opposite the eastbound bus stop and is approximately 240m walk distance from the centre of the site assuming that pedestrians utilise the signalised pedestrian crossing facilities to the east of the site.
- 3.4.2 In addition to this, there are bus stops located on Smallbrook Queensway, Bristol Street and Suffolk Street Queensway to the east of the site which provide access to additional bus services. All the bus stops are lit, have shelters and provide timetable information.



- 3.4.3 The publication entitled 'Planning for Public Transport in Developments' produced by the Institution of Highways and Transportation sets out that new developments should be located within 400 metres of the nearest bus stop. The proposed development clearly meets this criterion as the bus stops referred to above are within this maximum walk distance threshold.
- 3.4.4 A plan showing the site in relation to the Holloway Head, Smallbrook Queensway, Bristol Street, and Suffolk Street Queensway bus stops is provided below at **Inset 6**.





3.4.5 There are 3 bus services that operate from the Holloway Head bus stops providing 9 buses per hour each way during the day. Details of these services are provided below.

**Route 80:** This service operates every 20 minutes Monday to Saturday between Birmingham and West Bromwich (and also via Smethwick);

**Route 98**: This service operates every 20 minutes during the day Monday to Saturday between Birmingham city centre and Rubery via Selly Oak and Northfield;

**Route 99**: This service operates every 20 minutes during the day Monday to Saturday. The service operates between Birmingham and Halesowen via Harborne, Worlds End and Hurst Green.

3.4.6 In addition to the above, there are 7 services operating from the Smallbrook Queensway, Bristol Street, and Suffolk Street Queensway bus stops and these provide a total of 29 buses per hour each way during the day. Details of these services are provided below.

**Route 61**: The service operates every 10 minutes during the day Monday to Sunday between Birmingham and Gannow via Selly Oak, Northfield, and Frankley;



**Route 63**: This service operates every 10 minutes during the day Monday to Saturday and every 20 minutes during the day on a Sunday between Birmingham city centre and Great Park via Selly Oak, Northfield, Longbridge, and Rubery;

**Route 82**: This service operates every 10 minutes during the day Monday to Saturday and every 60 minutes on a Sunday between Birmingham and Bearwood via Dudley Road and Cape hill;

**Route 87**: This service operates every 10 minutes during the day Monday to Saturday and every 15-30 minutes during the day on a Sunday between Birmingham and Dudley via Cape Hill, Smethwick, and Oldbury;

**Route X64**: This service operates every 30 minutes Monday to Sunday between Birmingham and Ley Hill via Lee Bank, Selly Oak, and Bangham Pit;

**Route 144**: This service operates every 30 minutes Monday to Saturday and every 60 minutes on a Sunday between Birmingham and Worcester via Northfield, Bromsgrove, and Droitwich Spa;

**Route 146**: This service operates every 60 minutes Monday to Saturday between Birmingham and Redditch via King's Norton, West Heath, and Hopwood.

3.4.7 Considering the location of bus stops, the existing bus frequencies and the areas served by the bus routes, the site enjoys a very high level of accessibility by bus services. In conclusion, bus travel represents a viable alternative to the private car for trips to and from the proposed development.

#### 3.5 Rail Accessibility

- 3.5.1 Birmingham New Street Station is located approximately 450m to the north-east of the site and provides Birmingham's main rail hub linking the City to the national rail network.
- 3.5.2 The IHT's publication entitled 'Planning for Public Transport in Developments' recommends a maximum walking distance of 800m to railway stations and the site is comfortably within the catchment area of New Street Station.
- 3.5.3 Rail travel therefore represents an attractive alternative to car travel to / from the proposal site.

#### 3.6 Summary

3.6.1 The proposal site is highly accessible by a choice of travel modes including foot, cycle, bus and rail. The proposed development accords with planning policy being accessible by a choice of travel modes and because it will reduce reliance on the private car.



#### 4.0 DEVELOPMENT PROPOSALS

#### 4.1 Introduction

4.1.1 This section of the report provides details of the proposed development including its built form, access arrangements, and car parking.

#### 4.2 Built Form

- 4.2.1 The proposal is to redevelop the site to provide the following uses:-
  - 487 apartments, located in four blocks and subdivided over 14 storeys.
  - Two A1 retail units, located at ground floor level within the southernmost block, with a combined GFA of 468sq.m.
  - 200 parking spaces for the proposed residential apartments. 92 Parking spaces will be located on the southern part of the site, and 108 spaces will be located on the northern part of the site.
- 4.2.2 A drawing showing the proposed site layout is provided at **Appendix 2** along with a breakdown of the development at each floor level.

#### 4.3 Vehicular Access

- 4.3.1 The proposed site access arrangements are shown on a drawing provided at **Appendix 3**.
- 4.3.2 The car park for the apartments located on the northern part of the site will be accessed via a new junction located on the eastern boundary of the site. The junction will be a simple priority junction access that will be located c25m north of the Ellis Street / Brownsea Drive junction. The proposed access will be located at the approximate position of an existing access serving the northern part of the site.
- 4.3.3 All remaining vehicular accesses to the northern site will be closed and reinstated as footway. Overall, the proposals on the northern site boundaries result in the potential to provide c10 additional on-street parking spaces.
- 4.3.4 The car park for the apartments located on the southern part of the site will be accessed via a new junction located on the eastern boundary of the site. The junction will be a simple priority junction access that will be located c25m north of the Ellis Street / Holloway Head junction.
- 4.3.5 All remaining vehicular accesses to the southern site will be closed and reinstated as footway. The proposed access results in the loss of four existing on-street parking spaces, but overall, considering the northern site, the proposals result in the potential to provide c6 additional on-street parking spaces.
- 4.3.6 The swept path of cars using the proposed car parking areas is demonstrated on the drawings also provided at **Appendix 3**.



#### 4.4 Pedestrian / Cycle Access

- 4.4.1 Pedestrian access to the proposal site will be provided from the footways adjoining the roads that surround the site comprising Holloway Head, Brownsea Drive, Gough Street, Ellis Street, and Blucher Street.
- 4.4.2 Cycle access will be provided from the pedestrian and vehicular access arrangements, and suitable cycle storage will be provided within the car park areas and the central courtyards at ground level.

#### 4.5 Car Parking Provision

- 4.5.1 The proposal is to serve the site by circa 200 car parking spaces which will be allocated to the proposed residential dwellings.
- 4.5.2 The car parking standards that are applicable to the proposed development are set out in the Birmingham City Council (BCC) document entitled 'Car Parking Guidelines, Supplementary Planning Document' dated February 2012. The document sets out the following maximum parking standards:

**Apartments**: 1 space per residential dwelling.

**A1 Retail**: 1 space per 28sq.m for convenience retail.

- 4.5.3 By applying the maximum car parking standards to the above elements of the proposed development, the maximum permitted number of spaces for each aspect of the development has been detailed below:-
  - 487 spaces for the residential development.
  - 17 spaces for the retail development.
- 4.5.4 The proposed car parking provision of 200 spaces provides 1 space per 2.4 dwellings. No spaces are proposed for the proposed retail units; however, pay and display parking bays are located on the roads surrounding the site. Therefore, the proposed development accords with the parking requirements.



4.5.5 Data has been extracted from the 2011 Census to review statistics for the 'Super Output Area Lower Layer' areas surrounding the site, and thus determine the appropriateness of parking provisions for the proposed development. **Table 1** below includes the data.

Table 1 - Census Data

Information (Car Ownership)	Total Households	Percentage		
No Cars/Vans in Household	2,298	58%		
1 or More Cars/Vans in Household	1,638	42%		
Information (Method of Travel to Work)	Total Persons	Percentage	Percentage	
Driving a Car or Van	1,095	27%	29%	
Passenger in a Car or Van	71	2%	2970	
Walk	1,684	42%		
Cycle	54	1%	71%	
Public Transport	1,071	27%	/170	
Other	31	1%		

- 4.5.6 The above data highlights that the majority (58%) of households local to the site had no cars when the 2011 Census was undertaken, with the average number of cars per household being just 0.49.
- 4.5.7 The census data also highlights that 71% of travel to work journeys from dwellings local to the site are undertaken by non-car travel modes.
- 4.5.8 Therefore, the provision of 200 spaces, which is less than the maximum of 1 space per dwelling reflects the non-car accessibility credentials of the site along with the travel habits of existing residents. The proposed provision is slightly less than existing car ownership levels (0.41 car spaces per dwelling), but new residents will purchase / move into the flats with the knowledge of the proposed parking arrangements.
- 4.5.9 In the case of the retail use, this is likely to be ancillary to other city centre activities.



#### 4.6 Cycle Parking Provision

- 4.6.1 The relevant cycle parking standards for developments are set out in BCC's document entitled 'Car Parking Guidelines, Supplementary Planning Document' dated February 2012 which set out the following:
  - Residential 1 space per apartment.
  - Convenience Retail 1 space per 125sq.m.
- 4.6.2 By applying these standards to the proposed development quantum, the standards equate to 487 cycle spaces for the proposed dwellings and 3-4 spaces for the proposed retail.
- 4.6.3 The site is located within easy walking distance of central Birmingham such that many trips which would be made from a peripheral location by cycle will manifest as walk trips to / from this site.
- 4.6.4 That being said, it is proposed to provide cycle hoops within the central courtyards of the two development areas; each of the courtyards will benefit from good natural surveillance. It is also proposed to provide cycle storage rooms within the parking areas of both the northern and southern sites.



#### 5.0 TRAFFIC DATA

#### 5.1 Introduction

5.1.1 This section of the report considers the potential trip attraction and traffic effect of the proposed development compared to the potential traffic attraction of the existing and the extant land uses. The assessment has been undertaken using data from the TRICS database.

#### **5.2 Existing Traffic Flows**

- 5.2.1 The traffic flows obtained for the study area junctions for which an assessment has been undertaken are set out below along with the dates that each survey was undertaken.
  - Holloway Head / Blucher Street and Holloway Head / Ellis Street priority junctions Wednesday 26<sup>th</sup> February 2014.
  - Holloway Head / Smallbrook Queensway partially signalised roundabout junction Wednesday 26<sup>th</sup> February 2014.
- 5.2.2 The weekday surveys were undertaken to capture the morning and evening peak periods. This assessment focuses on the 60 minute periods when the local highway network is at its peak and is a worst case approach for assessing the impacts of the development.
- 5.2.3 The weekday morning and weekday evening peaks are as listed below. The peak hour flows are shown in the diagrams at **Appendix 4.**

Weekday AM Peak 08:15 to 09:15
 Weekday PM Peak 17:30 to 18:30

#### 5.3 Base Traffic Flows

- 5.3.1 This assessment considers the traffic flows at assumed future years of 2018 and 2020 (application year plus 5 years).
- 5.3.2 Growth factors have been applied to the 2014 traffic flows at **Appendix 4** to represent the future year to account for projected economic growth and local development forecasts.
- 5.3.3 The growth factors have been derived based on the TEMPRO version6.2 database for between 2014 and 2018/2020. This has been adjusted based on the TEMPRO output for car drivers for the graphical area of Birmingham and the results of the study are summarised below at **Table 2**.



**Table 2 – TEMPRO Traffic Growth Rates** 

	2014 to 2018	2014 to 2020		
Peak Period	Resultant Growth	Resultant Growth		
Weekday AM Peak	1.0605	1.0954		
Weekday PM Peak	1.0582	1.0918		

5.3.4 Full details of the TEMPRO assessment are contained at **Appendix 5** together with diagrams showing the projected 2018/2020 base traffic flows.

#### **5.4 Existing Site Potential Trip Attraction**

5.4.1 The vehicular attraction of the existing, permitted and proposed on-site uses has been undertaken by reference to the TRICS trip attraction assessment contained within the Connect Consultants March 2014 Transport Assessment (produced for the permitted development scheme).

**Offices** 

- 5.4.2 The potential traffic attraction of the existing offices has been assessed using the TRICS version7 database, based on all sites within the category 'Employment Offices' with a population greater than 250,000 within 5 miles of the site.
- 5.4.3 Average trip rates have been derived from the datasets and the trip rates along with the trip attraction is set out at **Table 3** below, while **Appendix 6** provides full details of the TRICS assessment.

Table 3 – Trip Attraction of the Existing Offices

Dook Hour		Trip Rates	5	Trip Attraction			
Peak Hour	In	Out	Total	In	Out	Total	
AM Peak	1.167	0.241	1.408	75	15	90	
PM Peak	0.151	0.675	0.826	10	43	53	

#### Car Showroom / Workshop

- 5.4.4 The potential traffic attraction of the existing car showroom and workshop has been assessed using version 7 of the TRICS database, based on all sites within the category 'Car Showrooms' with a population greater than 250,000 within 5 miles of the site.
- 5.4.5 Average trip rates have been derived from the dataset and the trip rates along with the trip attraction is set out at **Table 4** below while **Appendix 6** provides full details of the TRICS assessment.



**Table 4 – Trip Attraction of the Existing Car Showroom/Workshop** 

Peak Hour		Trip Rates	5	Trip Attraction		
Peak Houl	In	Out	Total	In	Out	Total
AM Peak	0.646	0.278	0.924	11	5	16
PM Peak	0.278	0.526	0.804	5	9	14

- 5.4.6 Whilst the existing composition includes a girl guides centre and warehousing, it has been assumed that the trip attraction of these elements of the existing site will be negligible during the peak hours considered during the assessment, and therefore have not been considered as part of the trip attraction assessment.
- 5.4.7 The distribution of the existing site flows has been identified at **Section 5.8** below.
- 5.4.8 The traffic attraction of the existing offices has been shown on the diagrams at **Appendix**7. The trip attraction of the car showroom/workshop is shown on the diagrams at **Appendix 8**.

#### 5.5 Extant Development Proposal Trip Attractions

- 5.5.1 The trip attraction of each aspect of the extant development has been identified below.

  Offices
- 5.5.2 Average trip rates have been derived from the dataset identified for the existing office use above and the trip rates along with the trip attraction is set out at **Table 5** below while **Appendix 6** provides full details of the TRICS assessment.

**Table 5 – Trip Attraction of the Extant Offices** 

Peak Hour	Trip Rates			Trip Attraction		
	In	Out	Total	In	Out	Total
AM Peak	1.167	0.241	1.408	109	23	132
PM Peak	0.151	0.675	0.826	14	63	77

#### <u>Hotel</u>

5.5.3 The traffic attraction of the extant hotel has been assessed using the TRICS database, based on all sites located at Town Centre or Edge of Town Centre locations within the category 'Hotel, Food and Drink - Hotel' with a population greater than 250,000 within 5 miles of the site.



5.5.4 Average trip rates have been derived from the dataset and the trip rates along with the trip attraction is set out at **Table 6** below while **Appendix 6** provides full details of the TRICS assessment.

Table 6 - Trip Attraction of the Extant Hotel

Peak Hour		Trip Rates	5	Trip Attraction		
Реак пои	In	Out	Total	In	Out	Total
AM Peak	0.063	0.090	0.153	8	11	19
PM Peak	0.078	0.053	0.131	10	7	16

#### **Apartments**

- 5.5.5 The potential traffic attraction of the extant apartments has been assessed using the TRICS database, based on all sites at Town Centre locations within the category 'Residential Flats Privately Owned' with a population greater than 250,000 within 5 miles of the site.
- 5.5.6 Average trip rates have been derived from the dataset and the trip rates along with the trip attraction is set out at **Table 7** below while **Appendix 6** provides full details of the TRICS assessment.

**Table 7 – Trip Attraction of the Extant Apartments** 

Peak Hour		Trip Rates	5	Trip Attraction			
Реак пои	In	Out	Total	In	Out	Total	
AM Peak	0.008	0.028	0.036	2	8	11	
PM Peak	0.028	0.008	0.036	8	2	11	

#### Car Showroom / Workshop

5.5.7 Average trip rates have been derived from the dataset identified for the existing car workshop identified above and the trip rates along with the trip attraction is set out at **Table 8** below while **Appendix 6** provides full details of the TRICS assessment.

**Table 8 – Trip Attraction of the Extant Car Showroom/Workshop** 

Peak Hour		Trip Rates	5	Trip Attraction			
	In	Out	Total	In	Out	Total	
AM Peak	0.646	0.278	0.924	7	3	10	
PM Peak	0.278	0.526	0.804	3	5	8	



#### Casino

- 5.5.8 The traffic attraction of the extant casino has been assessed the TRICS database, based on all sites within the category 'Casino'.
- 5.5.9 Average trip rates have been derived from the dataset and the trip rates along with the trip attraction is set out at **Table 9** below while **Appendix 6** provides full details of the TRICS assessment.

**Table 9 – Trip Attraction of the Extant Casino** 

Peak Hour	Trip Rates			Trip Attraction		
Peak Houl	In	Out	Total	In	Out	Total
AM Peak	0.000	0.000	0.000	0	0	0
PM Peak	0.011	0.000	0.011	0	0	0

5.5.10 Whilst the extant composition includes a girl guides centre and restaurants, it has been assumed that the trip attraction of girl guides centre will be negligible during the peak hours considered during the assessment and the restaurant flows will be ancillary to the casino development / complementary land uses in central Birmingham, and therefore have not been considered as part of the trip attraction assessment.

#### 5.6 Development Proposal Trip Attractions

#### **Retail Unit**

5.6.1 Similar to the treatment of the extant A3 units, whilst the development proposal includes a retail unit, the proposal does not include any specific on-site parking for this unit, and it is likely to be ancillary to other city centre activities. Therefore, it has been assumed that the trip attraction retail unit will be negligible during the peak hours considered during the assessment and so has not been considered further as part of the trip attraction assessment.

#### **Apartments**

- 5.6.2 The potential traffic attraction of the proposed apartments has been assessed using the same trip rates identified for the extant apartments.
- 5.6.3 Average trip rates have been derived from the dataset and the trip rates along with the trip attraction is set out at **Table 10** below while **Appendix 6** provides full details of the TRICS assessment.

Table 10 – Trip Attraction of the Proposed Apartments

Peak Hour	Trip Rates			Trip Attraction			
Peak Houl	In	Out	Total	In	Out	Total	
AM Peak	0.008	0.028	0.036	4	14	18	
PM Peak	0.028	0.008	0.036	14	4	18	



#### **5.7** Net Development Effect

5.7.1 The net effect of the development is determined by subtracting the total existing and extant trip generation potential of the site from the proposed traffic attraction. This has been identified at **Table 11** below.

**Table 11 – Net Development Effect** 

	Net Development Subtract Existing Trips		Net Development Subtract Extant Trips			
Peak Hour	IN	OUT	TOTAL	IN	OUT	TOTAL
AM Peak	-82	-6	-88	-122	-31	-153
PM Peak	-1	-48	-49	-21	-74	-95

#### 5.8 Trip Distributions

5.8.1 The distribution of existing, extant, and proposed trips has been undertaken assuming the proportions identified at **Table 12** below. This is judgement based having regard to the relative importance of routes and the areas which they serve.

**Table 12 – Trip Distributions** 

Origin / Destination	Percentage (%)
Holloway Head (W)	20.0%
Smallbrook Queensway (E)	0.0%
A38 (S)	40.0%
A41 (N)	40.0%

- 5.8.2 While it is possible for drivers to arrive / depart via Smallbrook Queensway, it is unlikely that they would do this unless their trip is linked with a land use in the city centre.
- 5.8.3 Given the relatively low number of additional site trips (as an absolute figure), the distribution assumptions are not particularly sensitive. Also, drivers will have the opportunity to vary their route to avoid congestion so the distribution is likely to be self adjusting to reduce congestion and not create it.
- 5.8.4 Appendices containing diagrams showing the trip attractions of each development component, along with net effect and base year scenarios have been identified as follows:-
  - Appendix 9: Total Existing Site Flows;
  - Appendix 10: Total Extant Site Flows;
  - Appendix 11: Total Proposed Site Flows;
  - **Appendix 12**: Net Development Effect (compared to both existing and extant);
  - Appendix 13: 2018 / 2020 Base Traffic Flows with Development



#### **5.9 Traffic Impact**

5.9.1 **Appendix 12** includes diagrams which indicate the net development impact within the study area network. The results indicate the following impacts at the study area junctions:-

**Table 13 – Traffic Impacts** 

AM Peak Hour	2014	2020 Base with Extant	2020 Base with Development	Percentage Impact
	Holloway	Circus Roundabout	•	
Suffolk Street	1,352	1,531	1,483	-3.2%
Smallbrook Queensway	542	594	594	0.0%
Bristol Street	597	704	656	-6.9%
Holloway Head	632	728	703	-3.5%
Total	3,123	3,558	3,435	-3.5%
	Ellis	Street Priority		
Holloway Head W	641	763	714	-6.5%
Holloway Head E	973	1,167	1,069	-8.4%
Total	1,614	1,930	1,783	-7.6%
		er Street Priority		
Holloway Head W	526	601	577	-4.1%
Blucher Street	109	165	133	-19.1%
Total	635	766	710	-7.3%
PM Peak Hour	2014	2020 Base with	2020 Base with	Percentage
THI Cak Hou	2017	l Extant	Development	Impact
			Development	211111111111111111111111111111111111111
		Circus Roundabout	Development	·
Suffolk Street	Holloway 1,186		1,300	-0.7%
Suffolk Street Smallbrook Queensway	1,186 657	Circus Roundabout 1,309 717	1,300 717	-0.7% 0.0%
	1,186	Circus Roundabout 1,309	1,300	-0.7%
Smallbrook Queensway	1,186 657	Circus Roundabout 1,309 717	1,300 717	-0.7% 0.0%
Smallbrook Queensway Bristol Street	1,186 657 792	Circus Roundabout 1,309 717 879	1,300 717 870	-0.7% 0.0% -1.0%
Smallbrook Queensway Bristol Street Holloway Head	1,186 657 792 880 3,515	Circus Roundabout 1,309 717 879 1,023	1,300 717 870 964	-0.7% 0.0% -1.0% -5.8%
Smallbrook Queensway Bristol Street Holloway Head	1,186 657 792 880 3,515	Circus Roundabout 1,309 717 879 1,023 3,928	1,300 717 870 964	-0.7% 0.0% -1.0% -5.8% -1.9%
Smallbrook Queensway Bristol Street Holloway Head Total	1,186 657 792 880 3,515	Circus Roundabout	1,300 717 870 964 3,852	-0.7% 0.0% -1.0% -5.8% -1.9%
Smallbrook Queensway Bristol Street Holloway Head Total Holloway Head W	1,186 657 792 880 3,515 Ellis	Circus Roundabout 1,309 717 879 1,023 3,928 Street Priority 1,035	1,300 717 870 964 3,852	-0.7% 0.0% -1.0% -5.8% -1.9%
Smallbrook Queensway Bristol Street Holloway Head Total Holloway Head W Holloway Head E	1,186 657 792 880 3,515 Ellis 885 908 1,793	Circus Roundabout 1,309 717 879 1,023 3,928 Street Priority 1,035 1,020	1,300 717 870 964 3,852 972 1,002	-0.7% 0.0% -1.0% -5.8% -1.9% -6.1% -1.7%
Smallbrook Queensway Bristol Street Holloway Head Total Holloway Head W Holloway Head E	1,186 657 792 880 3,515 Ellis 885 908 1,793	Circus Roundabout 1,309 717 879 1,023 3,928 Street Priority 1,035 1,020 2,055	1,300 717 870 964 3,852 972 1,002	-0.7% 0.0% -1.0% -5.8% -1.9% -6.1% -1.7%
Smallbrook Queensway Bristol Street Holloway Head Total Holloway Head W Holloway Head E Total	1,186 657 792 880 3,515 Ellis 885 908 1,793	Circus Roundabout 1,309 717 879 1,023 3,928 Street Priority 1,035 1,020 2,055 er Street Priority	1,300 717 870 964 3,852 972 1,002 1,974	-0.7% 0.0% -1.0% -5.8% -1.9% -6.1% -1.7% -3.9%

- 5.9.2 The traffic affects of the proposals shown at **Table 13** and **Appendix 12** demonstrates that the impact of the proposed redevelopment will be minimal and less than the attraction associated with the permitted development scheme (as confirmed by the negative impact figures). The effects are especially low in the context of the high background traffic flows on Holloway Head and the A38 Island.
- 5.9.3 The assessment identifies that the modelling of these junctions is not required given the negligible impact of the development and based on the above, the operation of the roads and junctions local to the site are unlikely to change as a result of the proposals.



#### 6.0 SUMMARY & CONCLUSIONS

#### **6.1** Summary

- 6.1.1 This report has been prepared by Connect Consultants to consider proposals to re-develop a site at Holloway Head, Birmingham.
- 6.1.2 The report is considers a development comprising the following elements:-
  - 487 apartments, located in four blocks and subdivided over 14 storeys.
  - Two A1 retail units, located at ground floor level within the southernmost block, with a combined GFA of 468sq.m.
  - 200 parking spaces for the proposed residential apartments. 92 Parking spaces will be located on the southern part of the site, and 108 spaces will be located on the northern part of the site.
- 6.1.3 The report is summarised as follows:-
  - Car parking will be accommodated by 200 car parking bays, which is appropriate given the location of the development site.
  - The report has demonstrated that the site is highly accessible by a choice of means of transport, including walking, cycling and public transport.
  - The proposal to utilise the site for a high density development is soundly based given that the overall transport affect of accommodating these land uses where the benefit from the city centre travel opportunities and facilities will outweigh and local impacts.
  - A trip attraction assessment of the proposed site and the existing composition has been undertaken using trip rates derived from the TRICS database. The traffic analysis indicates that the proposed redevelopment would not significantly increase traffic flows on the local road network.
  - The proposals would not have any negative bearing on road safety given that net traffic flows would not significantly alter.

#### 6.2 Conclusions

6.2.1 The site is highly accessible by a choice of travel modes. The traffic impact of the redevelopment would be within acceptable limits and there are no road safety issues which might have an adverse bearing on its acceptability. We therefore conclude that the proposal is acceptable from a transport perspective.



# Appendix 1 Existing Highway Layout





## Appendix 2 Development Proposals

STATONSTREET SEVERN STREET SURFOLK STREET OUTSTANDING 01 GOUGHSTREET Urect aduly is feet. CHAPMANS PASSAGE

Figured dimensions only to be taken from this drawing. DO NOT SCALE. All contractors must vist the site and be responsible for checking all setting out dimensions and notifying the architect of any discrepancies prior to any manufacture or construction work.

PANTHER SECURITIES

HOLLOWAY HEAD

Drawing Title

PROPOSED LOCATION PLAN

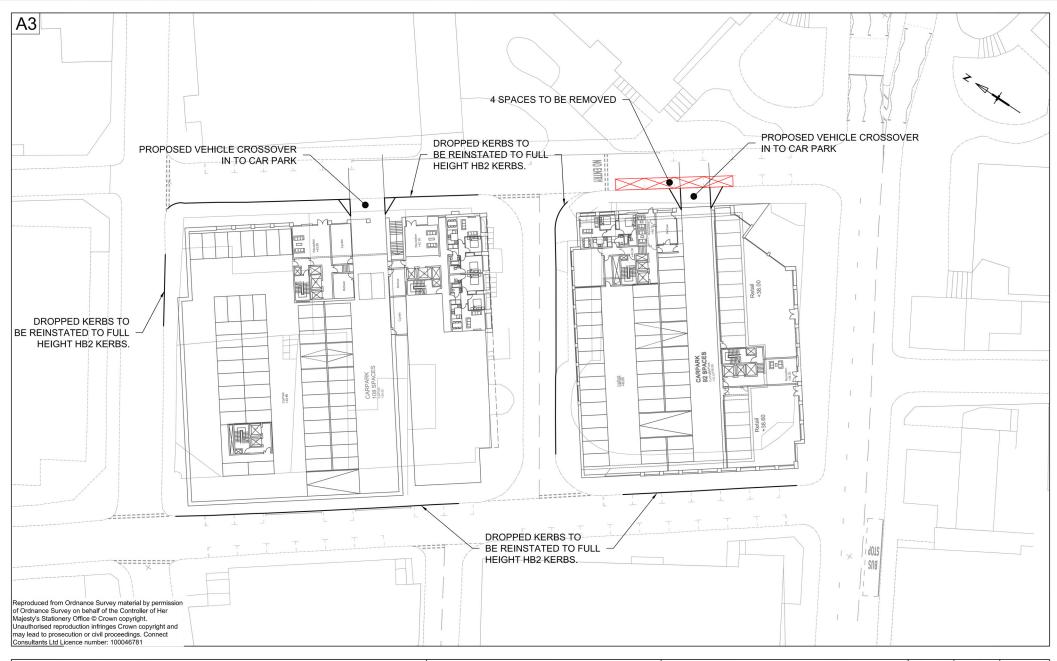
Drawn	Checked	Paper Size	Scale	Date		
TM	ML	A1	1:500		MAY 2014	
Project No			Drawing No.			Revision
1413	5		100			X

#### **CORSTORPHINE** +WRIGHT

The Old Library . Hagley Road . Stourbridge . DY8 I QH



# Appendix 3 Proposed Site Access Arrangements and Swept Path Analysis





Tel: 01454 320 220 Fax: 01454 320 099



PANTHER SECURITIES PROPOSED DEVELOPMENT HOLLOWAY ROAD,

**HOLLOWAY HEAD** 

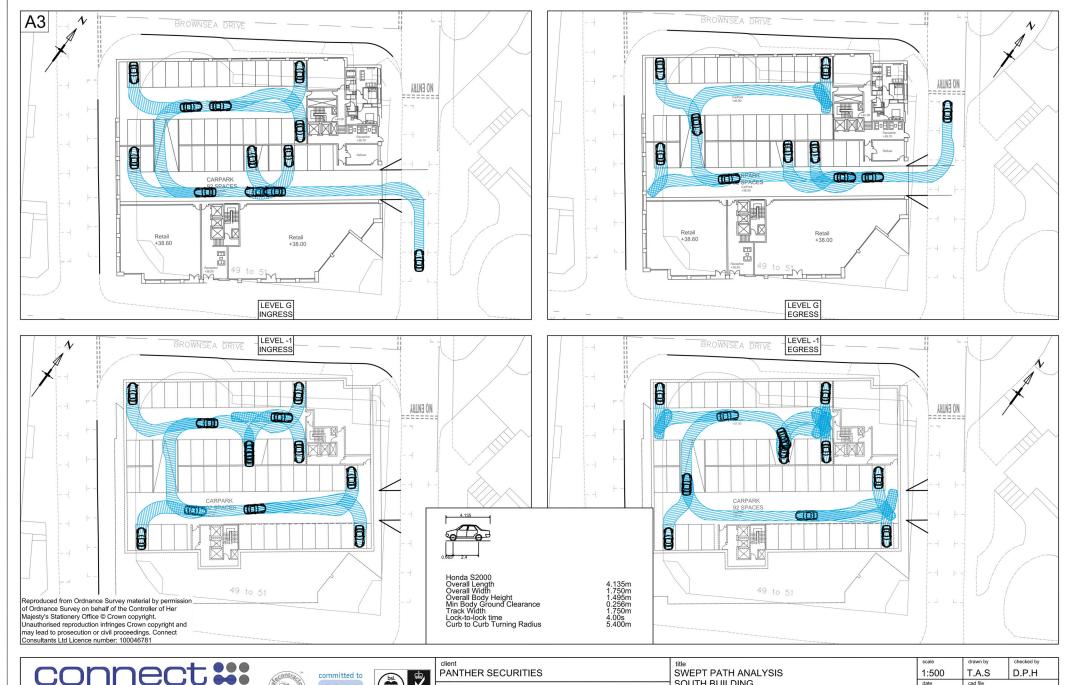
PROPOSED SITE ACCESS ARRANGEMENT

checked by 1:500 M.C.W D.P.H

JUNE 15 | 09001-010.dwg drawing number

09001-010

Web: www.connect-consultants.com Email:bristol@connect-consultants.com





Tel: 01454 320 220 Fax: 01454 320 099

Web: www.connect-consultants.com Email:bristol@connect-consultants.com





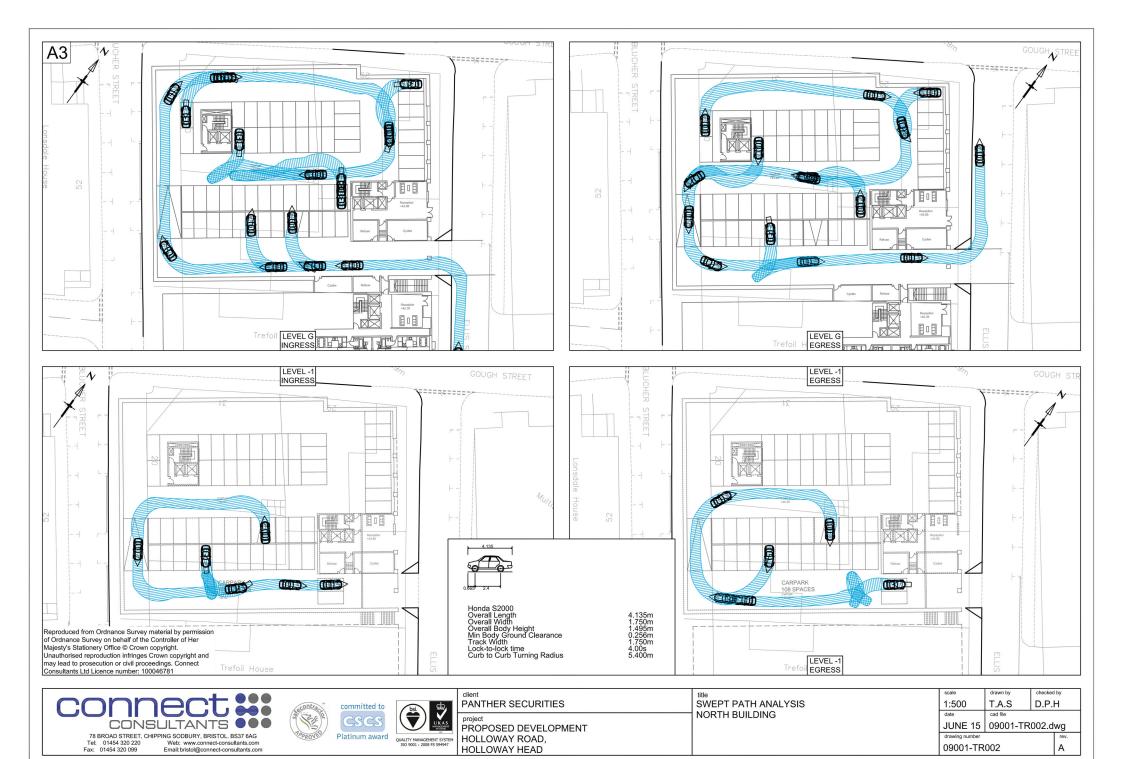


project PROPOSED DEVELOPMENT HOLLOWAY ROAD,

**HOLLOWAY HEAD** 

SOUTH BUILDING

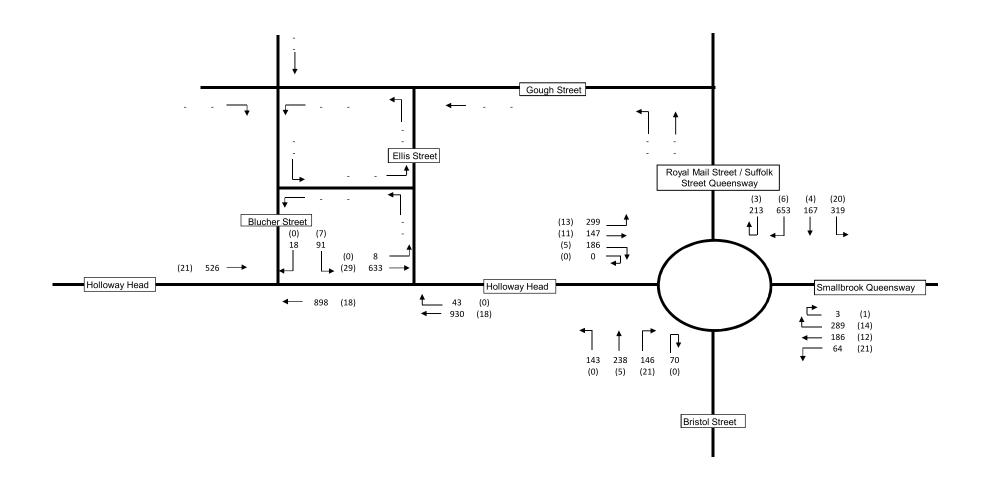
JUNE 15 | 09001-TR001.dwg drawing number 09001-TR001 Α





# Appendix 4 Surveyed 2014 Traffic Movements

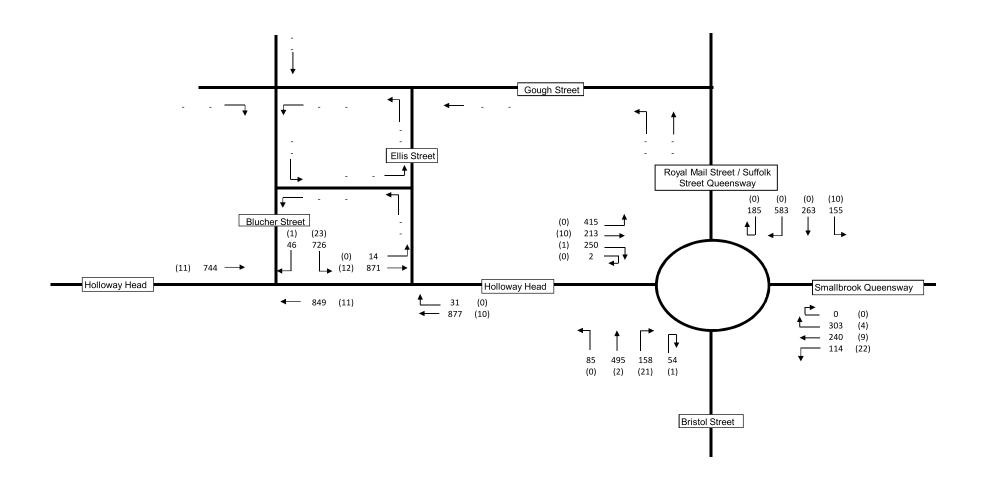




0 Total Vehicles(0) Heavy Vehicles







0 Total Vehicles(0) Heavy Vehicles





# Appendix 5 TEMPRO and 2018/2020 Base Traffic Flows



# ASSESSMENT OF TRAFFIC GROWTH TEMPRO DATABASE 19<sup>TH</sup> FEBRUARY 2015

### 1.0 - Introduction

This technical note has been produced to set out the methodology used to determine traffic growth factors for the following geographical area:-

Geographical Area	Birmingham

#### 2.0 - Method

Use of the TEMPRO software is generally recognised as the industry standard tool for determining traffic growth factors to apply to surveyed traffic movements in order to estimate the number of vehicles using roads and junctions at a future assessment year.

The TEMPRO software provides a local adjustment to the National Trip End Model (NTEM) to determine localised growth factors for geographical areas and this assessment is based on the following TEMPRO datasets (NTEM) and National Transport Model Forecasts (NTM) forecasts:-

	Version	Notes		
TEMPRO Software	6.2	This is the most recent version of the TEMPRO database produced in December 2009		
TEMPRO Dataset	NTEM 6.2	This is currently the definitive TEMPRO NTEM dataset for use. (http://www.dft.gov.uk/tempro)		
NTM Model	National Transport Model Forecasts 2009 (2003 – 2035)	NTM Forecasts are produced yearly and this is the most recent dataset released March 2010.		

# 3.0 - TEMPRO Parameters

The assessment is based on the following TEMPRO parameters:-

	Version	Notes
Trip End Type	Origin / Destination	Origin / Destination or Production / Attraction
Transport Mode Car Driver		Walk / Cycle / Car Driver / Car Passenger / Bus or Coach / Rail or Underground – More than one option may be selected
Area Type	All	Urban / Rural / All
Road Type	All	Motorway / Trunk / Principal / Minor / All

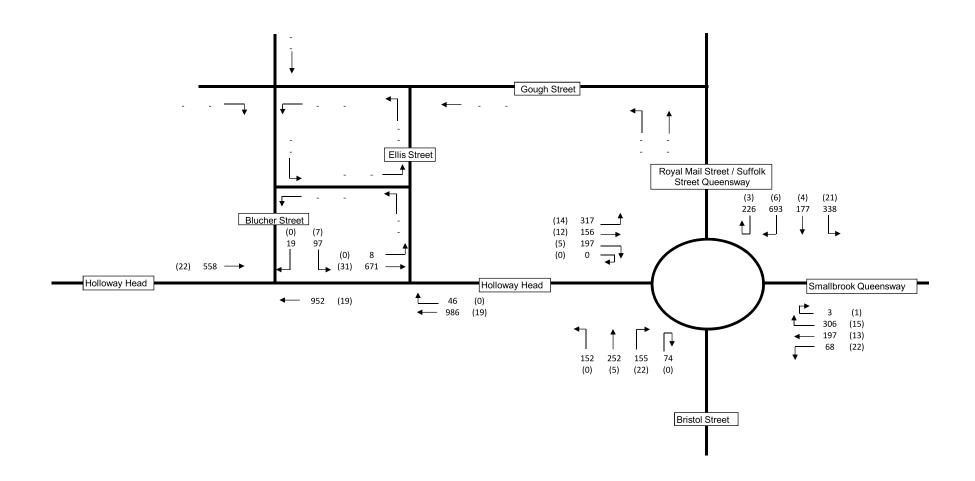


# 4.0 - Growth Factors

The assessment of traffic growth using the TEMPRO software with the aforementioned parameters results in the following local growth factors for the geographical area set out at **Section 1.0** 

Surveyed Period	Assessment Year	Time Period	Local Growth Factor
2014	2014 2018	Weekday AM Peak Period (0700 – 0959)	1.0605
2017		Weekday PM Peak Period (1600 – 1859)	1.0582
2014	2020	Weekday AM Peak Period (0700 – 0959)	1.0954
	2020	Weekday PM Peak Period (1600 – 1859)	1.0918

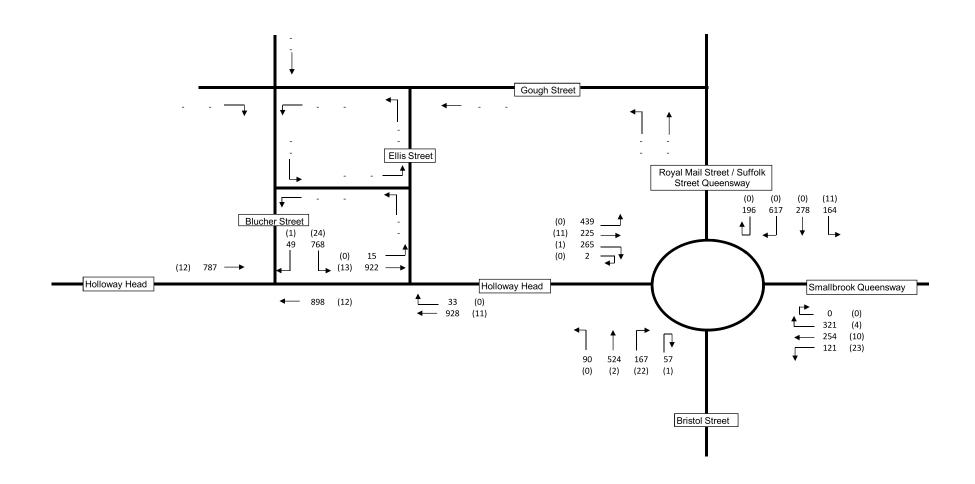




- 0 Total Vehicles
- (0) Heavy Vehicles



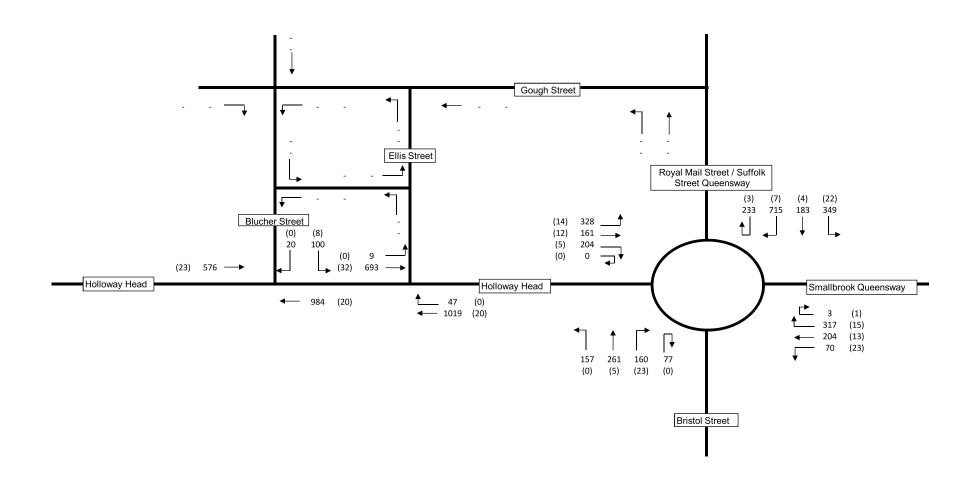




- 0 Total Vehicles
- (0) Heavy Vehicles



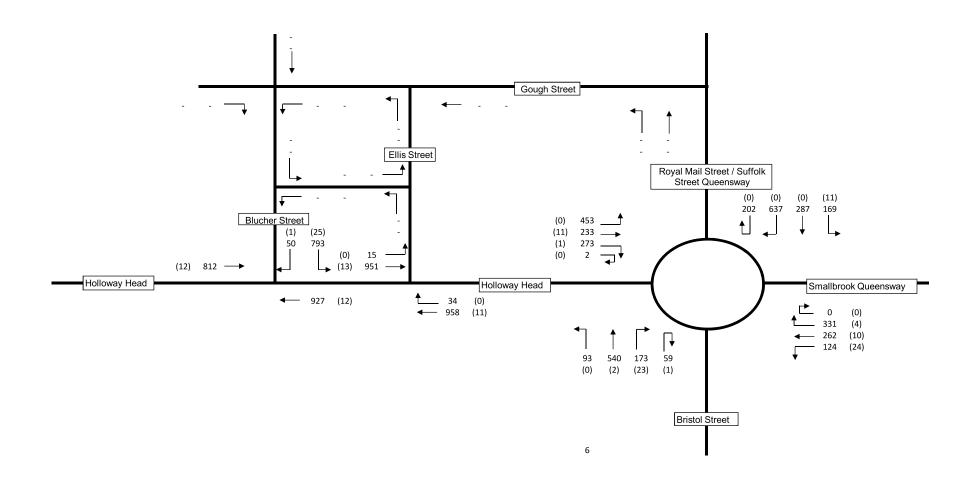




- 0 Total Vehicles
- (0) Heavy Vehicles







- 0 Total Vehicles
- (0) Heavy Vehicles





# Appendix 6 TRICS Assessment

# TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

**VEHICLES** 

Selected			
Selecteu	regions	anu	areas.

01	GREA	ATER LONDON	
	BT	BRENT	1 days
	CI	CITY OF LONDON	1 days
	CN	CAMDEN	2 days
	IS	ISLINGTON	1 days
	MR	MERTON	2 days
	SK	SOUTHWARK	2 days
	WH	WANDSWORTH	1 days
02	SOUT	TH EAST	
	ES		1 days
		HAMPSHIRE	1 days
	SC	SURREY	1 days
06		T MIDLANDS	
	WM		3 days
07		KSHIRE & NORTH LINCOLNSHIRE	
	WY	WEST YORKSHIRE	2 days
80		TH WEST	
	GM		1 days
	MS		1 days
09	NOR		
		TEES VALLEY	1 days
	TW	TYNE & WEAR	6 days
11		rland	
	GC	GLASGOW CITY	2 days
15		ATER DUBLIN	
	DL	2 0 2 2 2 1 1	3 days
17		ER (NORTHERN IRELAND)	
	AN	ANTRIM	1 days

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

# Filtering Stage 2 selection:

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

Parameter: Gross floor area

Actual Range: 645 to 70291 (units: sqm) Range Selected by User: 186 to 175000 (units: sqm)

### **Public Transport Provision:**

Selection by: Include all surveys

Date Range: 01/01/05 to 24/09/13

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

# Selected survey days:

Monday 6 days
Tuesday 8 days
Wednesday 7 days
Thursday 11 days
Friday 1 days

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

#### Selected survey types:

Manual count 33 days
Directional ATC Count 0 days

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

### Selected Locations:

Town Centre	12
Edge of Town Centre	7
Suburban Area (PPS6 Out of Centre)	9
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	2

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	1
Commercial Zone	12
Development Zone	1
Residential Zone	5
Built-Up Zone	10
High Street	1
No Sub Category	3

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.

# Filtering Stage 3 selection:

# Use Class:

A2
B1

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

# Filtering Stage 3 selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	2 days
20,001 to 25,000	6 days
25,001 to 50,000	9 days
50,001 to 100,000	8 days
101,000 or More	2 days

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

Population within 5 miles:

250,001 to 500,000 15 days 500,001 or More 18 days

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

Car ownership within 5 miles:

0.5 or Less	6 days
0.6 to 1.0	22 days
1.1 to 1.5	5 days

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

Travel Plan:

Yes 7 days No 26 days

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

Tuesday 11/03/14 Page 4

**Connect Consultants** 78 Broad Street Chipping Sodbury Licence No: 142301

# LIST OF SITES relevant to selection parameters

**OFFICES ANTRIM** AN-02-A-03

**BOUCHER ROAD** WINDSOR **BELFAST** 

Suburban Area (PPS6 Out of Centre)

Commercial Zone

Total Gross floor area: 2908 sqm

Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

BT-02-A-02 2 **OFFICE BRENT** 

WEMBLEY HILL ROAD

WEMBLEY

Suburban Area (PPS6 Out of Centre)

Built-Up Zone

Total Gross floor area: 4750 sqm

> Survey date: TUESDAY 22/06/10 Survey Type: MANUAL

CI-02-A-01 **CITY OF LONDON OFFICES** 

50 CANNON STREET CITY OF LONDON

BANK

Town Centre Built-Up Zone

Total Gross floor area: 1386 sqm

Survey date: WEDNESDAY 21/10/09 Survey Type: MANUAL

CN-02-A-01 **OFFICES CAMDEN** 

**ELY PLACE** 

**HOLBORN CIRCUS** 

**HOLBORN** 

Edge of Town Centre

Built-Up Zone

Total Gross floor area: 4062 sqm

Survey date: THURSDAY 23/10/08 Survey Type: MANUAL

CN-02-A-02 **OFFICES CAMDEN** 

**GRAYS INN ROAD** 

**CLERKENWELL** 

Town Centre Built-Up Zone

Total Gross floor area: 6056 sam

> Survey date: WEDNESDAY 22/10/08 Survey Type: MANUAL

DL-02-A-01 **OFFICES DUBLIN** 

**BLESSINGTON ROAD** 

**TALLAGHT DUBLIN** 

Neighbourhood Centre (PPS6 Local Centre)

No Sub Category

Total Gross floor area:

3344 sqm

Survey date: MONDAY 07/12/09 Survey Type: MANUAL

7 DL-02-A-02 **OFFICES DUBLIN** 

**BLESSINGTON ROAD** 

**TALLAGHT DUBLIN** 

Neighbourhood Centre (PPS6 Local Centre)

No Sub Category

Total Gross floor area: 1900 sqm

Survey date: MONDAY 07/12/09 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 DL-02-A-04 OFFICES DUBLIN

AMIENS STREET DOCKLANDS DUBLIN

Edge of Town Centre
Development Zone
Total Gross floor area

Total Gross floor area: 13827 sqm

Survey date: THURSDAY 20/05/10 Survey Type: MANUAL

9 ES-02-A-06 LEGAL & GENERAL EAST SUSSEX

CITY PARK THE DROVEWAY

HOVE

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Gross floor area: 18675 sqm

Survey date: THURSDAY 29/11/07 Survey Type: MANUAL

10 GC-02-A-01 CALL CENTRE GLASGOW CITY

ROBERTSON STREET

GLASGOW Town Centre Commercial Zone

Total Gross floor area: 10000 sqm

Survey date: MONDAY 16/06/08 Survey Type: MANUAL

11 GC-02-A-02 CALL CENTRE GLASGOW CITY

ROBERTSON STREET

GLASGOW Town Centre Commercial Zone Total Gross floor area:

Fotal Gross floor area: 9000 sqm

Survey date: THURSDAY 19/06/08 Survey Type: MANUAL

12 GM-02-A-07 LAW OFFICES GREATER MANCHESTER

MOSELEY STREET

MANCHESTER
Town Centre
Built-Up Zone
Total Gross floor are

Total Gross floor area: 4200 sqm

Survey date: WEDNESDAY 19/10/11 Survey Type: MANUAL

13 HC-02-A-11 DIY CO. HQ HAMPSHIRE

CHESTNUT AVENUE

CHANDLER'S FORD Edge of Town Commercial Zone Total Gross floor are

Total Gross floor area: 26100 sqm

Survey date: MONDAY 17/10/11 Survey Type: MANUAL

14 IS-02-A-01 OFFICES ISLINGTON

**ESSEX ROAD** 

ISLINGTON

Suburban Area (PPS6 Out of Centre)

Built-Up Zone

Total Gross floor area: 5500 sqm

Survey date: FRIDAY 24/10/08 Survey Type: MANUAL

15 MR-02-A-01 OFFICE MERTON

THE BROADWAY

WIMBLEDON

Edge of Town Centre

High Street

Total Gross floor area: 1548 sqm

Survey date: THURSDAY 10/09/09 Survey Type: MANUAL

TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

Tuesday 11/03/14 Page 6

Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

LIST OF SITES relevant to selection parameters (Cont.)

16 MR-02-A-02 OFFICES MERTON

THE BROADWAY

WIMBELDON Town Centre Residential Zone

Total Gross floor area: 1548 sqm

Survey date: THURSDAY 10/09/09 Survey Type: MANUAL

17 MS-02-A-01 OFFICES MERSEYSIDE

**CASTLE STREET** 

LIVERPOOL Town Centre Commercial Zone

Total Gross floor area: 9000 sqm

Survey date: TUESDAY 19/06/07 Survey Type: MANUAL

18 SC-02-A-17 PHARMACEUTICALS SURREY

ST GEORGE'S AVENUE

THE HEATH WEYBRIDGE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 10293 sqm

Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

19 SK-02-A-01 GLA HQ SOUTHWARK

THE QUEENS WALK

SOUTHWARK Town Centre

Commercial Zone

Total Gross floor area: 17187 sqm

Survey date: TUESDAY 21/10/08 Survey Type: MANUAL

20 SK-02-A-02 OFFICES SOUTHWARK

ST OLAV'S COURT

ROTHERHITHE Edge of Town Centre

Commercial Zone

Total Gross floor area: 2371 sqm

Survey date: MONDAY 20/10/08 Survey Type: MANUAL

21 TV-02-A-03 OFFICE TEES VALLEY

PINE STREET

MIDDLESBROUGH Town Centre

Commercial Zone

Total Gross floor area: 3482 sqm

Survey date: TUESDAY 21/06/11 Survey Type: MANUAL

22 TW-02-A-01 RADIO STUDIOS TYNE & WEAR

**CHURCH STREET** 

**GATESHEAD** 

Edge of Town Centre

Built-Up Zone

Total Gross floor area: 645 sqm

Survey date: WEDNESDAY 04/05/05 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

**UNION OFFICES TYNE & WEAR** 23 TW-02-A-02

JOHN DOBSON STREET

**NEWCASTLE-UPON-TYNE** 

Town Centre Built-Up Zone

Total Gross floor area: 1675 sqm

Survey date: TUESDAY 03/05/05 Survey Type: MANUAL

24 TW-02-A-03 **TYNE & WEAR DEVELOPMENT AGENCY** 

KINGFISHER BOULEVARD

LEMINGTON

**NEWCASTLE UPON TYNE** 

Edge of Town Commercial Zone

6480 sqm Total Gross floor area:

> 11/12/08 Survey date: THURSDAY Survey Type: MANUAL

**HOUSING CO.** 25 TW-02-A-04 **TYNE & WEAR** 

**EARLSWAY** 

TEAM VALLEY TRAD. EST.

**GATESHEAD** Edge of Town **Industrial Zone** 

Total Gross floor area: 2500 sqm

Survey date: TUESDAY 29/09/09 Survey Type: MANUAL

TW-02-A-05 **TYNE & WEAR** 26 **TELEVISION CO.** 

**DELTA BANK ROAD** METRO RIVERSIDE PARK

**GATESHEAD** 

Suburban Area (PPS6 Out of Centre)

Commercial Zone

Total Gross floor area: 1500 sqm

Survey date: TUESDAY 29/09/09 Survey Type: MANUAL

27 TW-02-A-06 **GOVERNMENT OFFICES TYNE & WEAR** 

BENTON PARK ROAD LONGBENTON

NEWCASTLE UPON TYNE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 70291 sam

Survey date: WEDNESDAY 25/11/09 Survey Type: MANUAL

WANDSWORTH 28 WH-02-A-02 **OFFICES** 

BATTERSEA PARK ROAD

BATTERSEA Town Centre Built-Up Zone

1215 sqm Total Gross floor area:

Survey date: THURSDAY 10/05/12 Survey Type: MANUAL

WEST MIDLANDS 29 WM-02-A-01 **COUNCIL OFFICES** 

A451 NORTON ROAD MARY STEVENS PARK **STOURBRIDGE** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

2725 sqm Total Gross floor area:

Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL **TRICS 7.1.1** 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium Tuesday 11/03/14 Page 8

Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

LIST OF SITES relevant to selection parameters (Cont.)

30 WM-02-A-02 **BRITISH TELECOM WEST MIDLANDS** 

**BRINDLEY PLACE** 

**BIRMINGHAM** Edge of Town Centre Commercial Zone

Total Gross floor area: 12200 sqm

Survey date: THURSDAY 27/11/08 Survey Type: MANUAL

WM-02-A-03 31 **WEST MIDLANDS BANK ADMIN** 

**BRUNSWICK STREET BRINDLEY PLACE BIRMINGHAM** Town Centre Commercial Zone

8200 sqm Total Gross floor area:

27/11/08 Survey Type: MANUAL Survey date: THURSDAY

**WEST YORKSHIRE** 32 WY-02-A-01 **CALL CENTRE** 

**FILEY STREET** 

**BRADFORD** 

Edge of Town Centre

Built-Up Zone

Total Gross floor area: 2400 sqm

Survey date: MONDAY 09/05/05 Survey Type: MANUAL

33 WY-02-A-03 **WEST YORKSHIRE OFFICE** 

VICTORIA ROAD **HEADINGLEY** 

**LEEDS** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 2696 sqm

Survey date: THURSDAY 17/06/10 Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

**VEHICLES** 

**Calculation factor: 100 sqm** 

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 00:30				·			·		
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00	1	70291	0.838	1	70291	0.235	1	70291	1.073
07:00 - 07:30	33	8172	0.282	33	8172	0.069	33	8172	0.351
07:30 - 08:00	33	8172	0.416	33	8172	0.104	33	8172	0.520
08:00 - 08:30	33	8172	0.572	33	8172	0.129	33	8172	0.701
08:30 - 09:00	33	8172	0.595	33	8172	0.112	33	8172	0.707
09:00 - 09:30	33	8172	0.412	33	8172	0.116	33	8172	0.528
09:30 - 10:00	33	8172	0.271	33	8172	0.077	33	8172	0.348
10:00 - 10:30	33	8172	0.172	33	8172	0.068	33	8172	0.240
10:30 - 11:00	33	8172	0.142	33	8172	0.062	33	8172	0.204
11:00 - 11:30	33	8172	0.128	33	8172	0.072	33	8172	0.200
11:30 - 12:00	33	8172	0.112	33	8172	0.088	33	8172	0.200
12:00 - 12:30	33	8172	0.108	33	8172	0.116	33	8172	0.224
12:30 - 13:00	33	8172	0.106	33	8172	0.115	33	8172	0.221
13:00 - 13:30	33	8172	0.118	33	8172	0.121	33	8172	0.239
13:30 - 14:00	33	8172	0.132	33	8172	0.093	33	8172	0.225
14:00 - 14:30	33	8172	0.131	33	8172	0.118	33	8172	0.249
14:30 - 15:00	33	8172	0.121	33	8172	0.168	33	8172	0.289
15:00 - 15:30	33	8172	0.121	33	8172	0.225	33	8172	0.346
15:30 - 16:00	33	8172	0.124	33	8172	0.307	33	8172	0.431
16:00 - 16:30	33	8172	0.108	33	8172	0.412	33	8172	0.520
16:30 - 17:00	33	8172	0.114	33	8172	0.487	33	8172	0.601
17:00 - 17:30	33	8172	0.096	33	8172	0.586	33	8172	0.682
17:30 - 18:00	33	8172	0.080	33	8172	0.394	33	8172	0.474
18:00 - 18:30	33	8172	0.071	33	8172	0.281	33	8172	0.352
18:30 - 19:00	33	8172	0.043	33	8172	0.149	33	8172	0.192
19:00 - 19:30	1	70291	0.095	1	70291	0.128	1	70291	0.223
19:30 - 20:00	1	70291	0.080	1	70291	0.090	1	70291	0.170
20:00 - 20:30	1	70291	0.088	1	70291	0.115	1	70291	0.203
20:30 - 21:00	1	70291	0.097	1	70291	0.083	1	70291	0.180
21:00 - 21:30	1	70291	0.085	1	70291	0.184	1	70291	0.269
21:30 - 22:00				_	<del>-</del>				
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			5.858			5.304			11.162

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

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

TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

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Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

# **Parameter summary**

Trip rate parameter range selected: 645 - 70291 (units: sqm) Survey date date range: 01/01/05 - 24/09/13

Number of weekdays (Monday-Friday):33Number of Saturdays:0Number of Sundays:0Surveys manually removed from selection:5

Licence No: 142301

Connect Consultants 78 Broad Street Chipping Sodbury

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

**OGVS** 

Calculation factor: 100 sqm

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

	ARRIVALS				DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 00:30	·			·						
00:30 - 01:00										
01:00 - 01:30										
01:30 - 02:00										
02:00 - 02:30										
02:30 - 03:00										
03:00 - 03:30										
03:30 - 04:00										
04:00 - 04:30										
04:30 - 05:00										
05:00 - 05:30										
05:30 - 06:00										
06:00 - 06:30										
06:30 - 07:00	1	70291	0.006	1	70291	0.003	1	70291	0.009	
07:00 - 07:30	33	8172	0.001	33	8172	0.001	33	8172	0.002	
07:30 - 08:00	33	8172	0.004	33	8172	0.003	33	8172	0.007	
08:00 - 08:30	33	8172	0.003	33	8172	0.003	33	8172	0.006	
08:30 - 09:00	33	8172	0.004	33	8172	0.003	33	8172	0.007	
09:00 - 09:30	33	8172	0.004	33	8172	0.004	33	8172	0.008	
09:30 - 10:00	33	8172	0.006	33	8172	0.005	33	8172	0.011	
10:00 - 10:30	33	8172	0.003	33	8172	0.003	33	8172	0.006	
10:30 - 11:00	33	8172	0.002	33	8172	0.003	33	8172	0.005	
11:00 - 11:30	33	8172	0.001	33	8172	0.001	33	8172	0.002	
11:30 - 12:00	33	8172	0.004	33	8172	0.004	33	8172	0.008	
12:00 - 12:30	33	8172	0.002	33	8172	0.002	33	8172	0.004	
12:30 - 13:00	33	8172	0.002	33	8172	0.002	33	8172	0.004	
13:00 - 13:30	33	8172	0.001	33	8172	0.001	33	8172	0.002	
13:30 - 14:00	33	8172	0.002	33	8172	0.003	33	8172	0.005	
14:00 - 14:30	33	8172	0.003	33	8172	0.001	33	8172	0.004	
14:30 - 15:00	33	8172	0.001	33	8172	0.002	33	8172	0.003	
15:00 - 15:30	33	8172	0.002	33	8172	0.003	33	8172	0.005	
15:30 - 16:00	33	8172	0.001	33	8172	0.001	33	8172	0.002	
16:00 - 16:30	33	8172	0.001	33	8172	0.000	33	8172	0.001	
16:30 - 17:00	33	8172	0.002	33	8172	0.001	33	8172	0.003	
17:00 - 17:30	33	8172	0.000	33	8172	0.001	33	8172	0.001	
17:30 - 18:00	33	8172	0.000	33	8172	0.000	33	8172	0.000	
18:00 - 18:30	33	8172	0.000	33	8172	0.000	33	8172	0.000	
18:30 - 19:00	33	8172	0.000	33	8172	0.000	33	8172	0.000	
19:00 - 19:30	1	70291	0.001	1	70291	0.000	1	70291	0.001	
19:30 - 20:00	1	70291	0.000	1	70291	0.001	1	70291	0.001	
20:00 - 20:30	1	70291	0.000	1	70291	0.001	1	70291	0.001	
20:30 - 21:00	1	70291	0.000	1	70291	0.000	1	70291	0.000	
21:00 - 21:30	1	70291	0.000	1	70291	0.000	1	70291	0.000	
21:30 - 22:00		. 3232	2.000	-	. 0201	3.000	-	. 5251	3.000	
22:00 - 22:30										
22:30 - 23:00										
23:00 - 23:30										
23:30 - 24:00										
Total Rates:			0.056			0.052			0.108	
. Juli Rucesi			0.050			0.002			3.100	

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.

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TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

Tuesday 11/03/14
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Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

# **Parameter summary**

Trip rate parameter range selected: 645 - 70291 (units: sqm) Survey date date range: 01/01/05 - 24/09/13

Number of weekdays (Monday-Friday):33Number of Saturdays:0Number of Sundays:0Surveys manually removed from selection:5

1 days

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 14 - CAR SHOW ROOMS : A - CAR SHOW ROOMS Category

**VEHICLES** 

Selected regions and areas:

01 **GREATER LONDON** BM **BROMLEY** 1 days 02 **SOUTH EAST** KC **KENT** 1 days SC SURREY 1 days **SOUTH WEST** 03 DV DEVON 1 days 05 **EAST MIDLANDS** 

06 **WEST MIDLANDS** 

WM WEST MIDLANDS 1 days

YORKSHIRE & NORTH LINCOLNSHIRE 07

**LEICESTERSHIRE** 

WEST YORKSHIRE WY 1 days

09 **NORTH** 

LE

TYNE & WEAR TW 2 days

**15 GREATER DUBLIN** 

> DL **DUBLIN** 3 days

**ULSTER (NORTHERN IRELAND)** 17

> ΑN **ANTRIM** 1 days

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

### Filtering Stage 2 selection:

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

Parameter: Gross floor area

Actual Range: 875 to 9800 (units: sqm) Range Selected by User: 425 to 9800 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 04/10/13

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:

Tuesday 2 days Wednesday 3 days Thursday 2 days Friday 6 days

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

Selected survey types:

Manual count 13 days **Directional ATC Count** 0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre) 8 Edge of Town 5

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

TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

Tuesday 11/03/14
Page 2

Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

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.

## Filtering Stage 3 selection:

Use Class:

Sui Generis 13 days

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

Population within 1 mile:

 10,001 to 15,000
 5 days

 15,001 to 20,000
 2 days

 25,001 to 50,000
 6 days

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

Population within 5 miles:

250,001 to 500,000 9 days 500,001 or More 4 days

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 days

 0.6 to 1.0
 6 days

 1.1 to 1.5
 6 days

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

Travel Plan:

No 13 days

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

LIST OF SITES relevant to selection parameters

1 AN-14-A-02 FORD ANTRIM

BOUCHER ROAD WINDSOR

BELFAST

Suburban Area (PPS6 Out of Centre)

Commercial Zone

Total Gross floor area:

875 sqm

Survey date: WEDNESDAY 13/09/06 Survey Type: MANUAL

2 BM-14-A-01 AUDI BROMLEY

CROYDON ROAD

**BECKENHAM** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 915 sqm

Survey date: FRIDAY 18/09/09 Survey Type: MANUAL

3 DL-14-A-01 FORD DUBLIN

NORTH CIRCULAR ROAD

**DUBLIN** 

Suburban Area (PPS6 Out of Centre)

Built-Up Zone

Total Gross floor area: 2500 sqm

Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

4 DL-14-A-02 NISSAN & PEUGEOT DUBLIN

NEVINSTOWN LANE

SWORDS DUBLIN Edge of Town No Sub Category

Total Gross floor area: 2659 sqm

Survey date: FRIDAY 21/09/12 Survey Type: MANUAL

5 DL-14-A-03 VOLKSWAGEN DUBLIN

**NEVISTOWN LANE** 

SWORDS DUBLIN Edge of Town Retail Zone

Total Gross floor area: 1393 sqm

Survey date: FRIDAY 21/09/12 Survey Type: MANUAL

6 DV-14-A-01 MERCEDES BENZ DEVON

TAVISTOCK ROAD DERRIFORD PLYMOUTH

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Gross floor area: 2900 sqm

Survey date: WEDNESDAY 06/07/05 Survey Type: MANUAL

7 KC-14-A-02 CAR SHOW ROOM KENT

UPPER ELMERS END ROAD

EDEN PARK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1290 sqm

Survey date: FRIDAY 09/03/07 Survey Type: MANUAL

8 LE-14-A-04 BMW & MINI LEICESTERSHIRE

MERIDIAN EAST BRAUNSTONE LEICESTER Edge of Town Commercial Zone

Total Gross floor area: 9800 sqm

Survey date: THURSDAY 25/06/09 Survey Type: MANUAL

# LIST OF SITES relevant to selection parameters (Cont.)

9 SC-14-A-02 HONDA SURREY

QUEENS ROAD

WEYBRIDGE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1700 sqm

Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

10 TW-14-A-01 SAAB TYNE & WEAR

A191 WHITLEY ROAD BELLWAY IND. ESTATE

NEWCASTLE Edge of Town Industrial Zone

Total Gross floor area: 1920 sqm

Survey date: FRIDAY 10/11/06 Survey Type: MANUAL

11 TW-14-A-02 RENAULT TYNE & WEAR

STONEYGATE CLOSE

**GATESHEAD** 

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 2200 sqm

Survey date: FRIDAY 04/10/13 Survey Type: MANUAL

12 WM-14-A-02 HONDA WEST MIDLANDS

LONDON ROAD WILLENHALL COVENTRY

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 951 sqm

Survey date: TUESDAY 14/02/06 Survey Type: MANUAL

13 WY-14-A-02 FORD WEST YORKSHIRE

MOORSIDE MOORSIDE NEAR HALIFAX Edge of Town No Sub Category

Total Gross floor area: 1870 sqm

Survey date: WEDNESDAY 14/09/05 Survey Type: MANUAL

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

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS

**VEHICLES** 

**Calculation factor: 100 sqm** 

BOLD print indicates peak (busiest) period

	ARRIVALS		[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 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	2749	0.214	9	2749	0.016	9	2749	0.230
08:00 - 09:00	13	2383	0.646	13	2383	0.278	13	2383	0.924
09:00 - 10:00	13	2383	0.588	13	2383	0.436	13	2383	1.024
10:00 - 11:00	13	2383	0.630	13	2383	0.565	13	2383	1.195
11:00 - 12:00	13	2383	0.555	13	2383	0.659	13	2383	1.214
12:00 - 13:00	13	2383	0.568	13	2383	0.520	13	2383	1.088
13:00 - 14:00	13	2383	0.552	13	2383	0.571	13	2383	1.123
14:00 - 15:00	13	2383	0.568	13	2383	0.597	13	2383	1.165
15:00 - 16:00	13	2383	0.571	13	2383	0.613	13	2383	1.184
16:00 - 17:00	13	2383	0.462	13	2383	0.652	13	2383	1.114
17:00 - 18:00	13	2383	0.278	13	2383	0.526	13	2383	0.804
18:00 - 19:00	13	2383	0.077	13	2383	0.197	13	2383	0.274
19:00 - 20:00	7	1744	0.082	7	1744	0.156	7	1744	0.238
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.791			5.786			11.577

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.

# **Parameter summary**

Trip rate parameter range selected: 875 - 9800 (units: sqm) Survey date date range: 01/01/05 - 04/10/13

Number of weekdays (Monday-Friday): 13
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS

**OGVS** 

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2749	0.008	9	2749	0.000	9	2749	0.008
08:00 - 09:00	13	2383	0.019	13	2383	0.026	13	2383	0.045
09:00 - 10:00	13	2383	0.010	13	2383	0.003	13	2383	0.013
10:00 - 11:00	13	2383	0.026	13	2383	0.019	13	2383	0.045
11:00 - 12:00	13	2383	0.016	13	2383	0.023	13	2383	0.039
12:00 - 13:00	13	2383	0.006	13	2383	0.013	13	2383	0.019
13:00 - 14:00	13	2383	0.013	13	2383	0.010	13	2383	0.023
14:00 - 15:00	13	2383	0.010	13	2383	0.010	13	2383	0.020
15:00 - 16:00	13	2383	0.006	13	2383	0.006	13	2383	0.012
16:00 - 17:00	13	2383	0.006	13	2383	0.003	13	2383	0.009
17:00 - 18:00	13	2383	0.000	13	2383	0.003	13	2383	0.003
18:00 - 19:00	13	2383	0.000	13	2383	0.000	13	2383	0.000
19:00 - 20:00	7	1744	0.000	7	1744	0.000	7	1744	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.116			0.236

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.

### **Parameter summary**

Trip rate parameter range selected: 875 - 9800 (units: sqm) Survey date date range: 01/01/05 - 04/10/13

Number of weekdays (Monday-Friday): 13
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : C - FLATS PRIVATELY OWNED

**VEHICLES** 

# Selected regions and areas:

01 GREATER LONDON

HK HACKNEY 1 days

08 NORTH WEST

GM GREATER MANCHESTER 2 days

15 GREATER DUBLIN

DL DUBLIN 1 days

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

# **Filtering Stage 2 selection:**

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

Parameter: Number of dwellings Actual Range: 9 to 154 (units: ) Range Selected by User: 8 to 372 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 16/09/13

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:

Tuesday 2 days Thursday 1 days Friday 1 days

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

Selected survey types:

Manual count 4 days
Directional ATC Count 0 days

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

Selected Locations:

Town Centre

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.

4

Selected Location Sub Categories:

Development Zone 1
Built-Up Zone 3

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.

TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium

Tuesday 11/03/14
Page 2

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# Filtering Stage 3 selection:

Use Class:

C3 4 days

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

Population within 1 mile:

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

Population within 5 miles:

250,001 to 500,000 1 days 500,001 or More 3 days

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 days 0.6 to 1.0 3 days

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

Travel Plan:

No 4 days

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

TRICS 7.1.1 230214 B16.30 (C) 2014 JMP Consultants Ltd on behalf of the TRICS Consortium Tues

Tuesday 11/03/14

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LIST OF SITES relevant to selection parameters

1 DL-03-C-03 BLOCKS OF FLATS DUBLIN

**SUMMERHILL** 

DUBLIN Town Centre Development Zone

Total Number of dwellings: 65

Survey date: TUESDAY 27/02/07 Survey Type: MANUAL
2 GM-03-C-02 BLOCK OF FLATS GREATER MANCHESTER

WHITWORTH STREET W.

MANCHESTER Town Centre Built-Up Zone

Total Number of dwellings: 154

Survey date: THÜRSDAY 13/10/11 Survey Type: MANUAL
GM-03-C-03 BLOCK OF FLATS GREATER MANCHESTER

3 GM-03-C-03 BLOCK FAIRFIELD STREET

MANCHESTER Town Centre Built-Up Zone

Total Number of dwellings: 20

Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

4 HK-03-C-02 BLOCK OF FLATS HACKNEY

**HOXTON** 

SHOREDITCH Town Centre Built-Up Zone

Total Number of dwellings: 9

Survey date: TUESDAY 11/11/08 Survey Type: MANUAL

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

Connect Consultants 78 Broad Street Chipping Sodbury

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**VEHICLES** 

**Calculation factor: 1 DWELLS** 

BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	62	0.000	4	62	0.028	4	62	0.028
08:00 - 09:00	4	62	0.008	4	62	0.028	4	62	0.036
09:00 - 10:00	4	62	0.008	4	62	0.024	4	62	0.032
10:00 - 11:00	4	62	0.016	4	62	0.016	4	62	0.032
11:00 - 12:00	4	62	0.012	4	62	0.004	4	62	0.016
12:00 - 13:00	4	62	0.008	4	62	0.012	4	62	0.020
13:00 - 14:00	4	62	0.012	4	62	0.020	4	62	0.032
14:00 - 15:00	4	62	0.016	4	62	0.016	4	62	0.032
15:00 - 16:00	4	62	0.008	4	62	0.008	4	62	0.016
16:00 - 17:00	4	62	0.028	4	62	0.008	4	62	0.036
17:00 - 18:00	4	62	0.028	4	62	0.008	4	62	0.036
18:00 - 19:00	4	62	0.012	4	62	0.008	4	62	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00							·		
23:00 - 24:00									
Total Rates:			0.156			0.180			0.336

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.

### **Parameter summary**

9 - 154 (units: ) Trip rate parameter range selected: Survey date date range: 01/01/05 - 16/09/13

Number of weekdays (Monday-Friday): 4 Number of Saturdays: 0 Number of Sundays: 0 Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**TAXIS** 

**Calculation factor: 1 DWELLS** 

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

	ARRIVALS			[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	62	0.000	4	62	0.000	4	62	0.000
08:00 - 09:00	4	62	0.000	4	62	0.000	4	62	0.000
09:00 - 10:00	4	62	0.000	4	62	0.000	4	62	0.000
10:00 - 11:00	4	62	0.000	4	62	0.000	4	62	0.000
11:00 - 12:00	4	62	0.000	4	62	0.000	4	62	0.000
12:00 - 13:00	4	62	0.000	4	62	0.000	4	62	0.000
13:00 - 14:00	4	62	0.004	4	62	0.004	4	62	0.008
14:00 - 15:00	4	62	0.004	4	62	0.004	4	62	0.008
15:00 - 16:00	4	62	0.000	4	62	0.000	4	62	0.000
16:00 - 17:00	4	62	0.000	4	62	0.000	4	62	0.000
17:00 - 18:00	4	62	0.000	4	62	0.000	4	62	0.000
18:00 - 19:00	4	62	0.000	4	62	0.000	4	62	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

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.

### **Parameter summary**

Trip rate parameter range selected: 9 - 154 (units: )
Survey date date range: 01/01/05 - 16/09/13

Number of weekdays (Monday-Friday): 4
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**OGVS** 

**Calculation factor: 1 DWELLS** 

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	4	62	0.000	4	62	0.000	4	62	0.000	
08:00 - 09:00	4	62	0.000	4	62	0.000	4	62	0.000	
09:00 - 10:00	4	62	0.000	4	62	0.000	4	62	0.000	
10:00 - 11:00	4	62	0.000	4	62	0.000	4	62	0.000	
11:00 - 12:00	4	62	0.000	4	62	0.000	4	62	0.000	
12:00 - 13:00	4	62	0.000	4	62	0.000	4	62	0.000	
13:00 - 14:00	4	62	0.000	4	62	0.000	4	62	0.000	
14:00 - 15:00	4	62	0.000	4	62	0.000	4	62	0.000	
15:00 - 16:00	4	62	0.000	4	62	0.000	4	62	0.000	
16:00 - 17:00	4	62	0.000	4	62	0.000	4	62	0.000	
17:00 - 18:00	4	62	0.000	4	62	0.000	4	62	0.000	
18:00 - 19:00	4	62	0.000	4	62	0.000	4	62	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.000			0.000			0.000	

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

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

### **Parameter summary**

Trip rate parameter range selected: 9 - 154 (units: )
Survey date date range: 01/01/05 - 16/09/13

Number of weekdays (Monday-Friday): 4
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**PSVS** 

**Calculation factor: 1 DWELLS** 

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	4	62	0.000	4	62	0.000	4	62	0.000	
08:00 - 09:00	4	62	0.000	4	62	0.000	4	62	0.000	
09:00 - 10:00	4	62	0.000	4	62	0.000	4	62	0.000	
10:00 - 11:00	4	62	0.000	4	62	0.000	4	62	0.000	
11:00 - 12:00	4	62	0.000	4	62	0.000	4	62	0.000	
12:00 - 13:00	4	62	0.000	4	62	0.000	4	62	0.000	
13:00 - 14:00	4	62	0.000	4	62	0.000	4	62	0.000	
14:00 - 15:00	4	62	0.000	4	62	0.000	4	62	0.000	
15:00 - 16:00	4	62	0.000	4	62	0.000	4	62	0.000	
16:00 - 17:00	4	62	0.000	4	62	0.000	4	62	0.000	
17:00 - 18:00	4	62	0.000	4	62	0.000	4	62	0.000	
18:00 - 19:00	4	62	0.000	4	62	0.000	4	62	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00	<u> </u>							<u> </u>		
23:00 - 24:00										
Total Rates:			0.000			0.000			0.000	

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

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

### **Parameter summary**

Trip rate parameter range selected: 9 - 154 (units: )
Survey date date range: 01/01/05 - 16/09/13

Number of weekdays (Monday-Friday): 4
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**CYCLISTS** 

**Calculation factor: 1 DWELLS** 

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	4	62	0.000	4	62	0.004	4	62	0.004	
08:00 - 09:00	4	62	0.000	4	62	0.008	4	62	0.008	
09:00 - 10:00	4	62	0.004	4	62	0.008	4	62	0.012	
10:00 - 11:00	4	62	0.000	4	62	0.000	4	62	0.000	
11:00 - 12:00	4	62	0.000	4	62	0.000	4	62	0.000	
12:00 - 13:00	4	62	0.000	4	62	0.012	4	62	0.012	
13:00 - 14:00	4	62	0.000	4	62	0.000	4	62	0.000	
14:00 - 15:00	4	62	0.000	4	62	0.000	4	62	0.000	
15:00 - 16:00	4	62	0.000	4	62	0.000	4	62	0.000	
16:00 - 17:00	4	62	0.000	4	62	0.000	4	62	0.000	
17:00 - 18:00	4	62	0.016	4	62	0.000	4	62	0.016	
18:00 - 19:00	4	62	0.004	4	62	0.000	4	62	0.004	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.024			0.032			0.056	

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.

### **Parameter summary**

Trip rate parameter range selected: 9 - 154 (units: )
Survey date date range: 01/01/05 - 16/09/13

Number of weekdays (Monday-Friday): 4
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK

Category : A - HOTELS

**VEHICLES** 

Selected regions and areas:

GREATER LONDON
GR GREENWICH 2 days
HK HACKNEY 2 days
HO HOUNSLOW 2 days

03 SOUTH WEST

DV DEVON 1 days

05 EAST MIDLANDS

DS DERBYSHIRE 1 days
NT NOTTINGHAMSHIRE 1 days

06 WEST MIDLANDS

WM WEST MIDLANDS 1 days

07 YORKSHIRE & NORTH LINCOLNSHIRE

WY WEST YORKSHIRE 1 days

09 NORTH

TV TEES VALLEY 1 days

10 WALES

CF CARDIFF 3 days

15 GREATER DUBLIN

DL DUBLIN 1 days

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

### Filtering Stage 2 selection:

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

Parameter: Number of bedrooms Actual Range: 82 to 224 (units: ) Range Selected by User: 4 to 483 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 24/06/13

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

Selected survey days:

Monday 6 days
Tuesday 4 days
Wednesday 5 days
Thursday 1 days

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

Selected survey types:

Manual count 16 days
Directional ATC Count 0 days

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

Selected Locations:

Town Centre 7
Edge of Town Centre 9

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:

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Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

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.

### Filtering Stage 3 selection:

### Use Class:

C1 15 days

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

### Population within 1 mile:

15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	8 days
50,001 to 100,000	5 days

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

### Population within 5 miles:

250,001 to 500,000	8 days
500,001 or More	8 days

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

### Car ownership within 5 miles:

0.5 or Less	5 days
0.6 to 1.0	5 days
1.1 to 1.5	5 days
2.1 to 2.5	1 days

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

### Travel Plan:

No 16 days

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

LIST OF SITES relevant to selection parameters

CF-06-A-02 **MACDONALD HOTEL CARDIFF** 

EAST TYNDALL STREET ATLANTIC WHARF

**CARDIFF** 

Edge of Town Centre Industrial Zone

Total Number of bedrooms: 100

17/10/06 Survey date: TUESDAY Survey Type: MANUAL

2 CF-06-A-03 **CARDIFF HOLIDAY INN EXPRESS** 

LONGUEIL CLOSE

**CARDIFF** 

Edge of Town Centre Residential Zone

Total Number of bedrooms: 87

Survey date: MONDAY 16/07/12 Survey Type: MANUAL

3 CF-06-A-04 **TRAVELODGE CARDIFF** 

THE FRIARY

**CARDIFF** Town Centre

Built-Up Zone

Total Number of bedrooms: 96

16/07/12 Survey date: MONDAY Survey Type: MANUAL

DL-06-A-02 HOTEL **DUBLIN** 

**AMIENS STREET** CONNOLLY

**DUBLIN** 

Edge of Town Centre

Built-Up Zone

Total Number of bedrooms: 175

Survey date: WEDNESDAY 09/12/09 Survey Type: MANUAL

5 DS-06-A-02 **JURY'S INN DERBYSHIRE** 

KING STREET

**DERBY** 

Town Centre Commercial Zone

Total Number of bedrooms: 213

Survey date: TUESDAY 19/07/11 Survey Type: MANUAL

DV-06-A-02 **PREMIER INN DEVON** 

SUTTON ROAD SUTTON HARBOUR

**PLYMOUTH** 

Edge of Town Centre No Sub Category

Total Number of bedrooms: 107

Survey date: WEDNESDAY 21/10/09 Survey Type: MANUAL

7 **IBIS GREENWICH** GR-06-A-01

STOCKWELL STREET

**GREENWICH** Town Centre No Sub Category

Total Number of bedrooms: 82

Survey date: MONDAY 19/10/09 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 GR-06-A-02 NOVOTEL GREENWICH

GREENWICH HIGH ROAD

**GREENWICH** 

Edge of Town Centre No Sub Category

Total Number of bedrooms: 151

Survey date: MONDAY 19/10/09 Survey Type: MANUAL

9 HK-06-A-01 EXPRESS HOL.INN HACKNEY

**OLD STREET** 

SHOREDITCH Town Centre High Street

Total Number of bedrooms: 224

Survey date: THURSDAY 06/11/08 Survey Type: MANUAL

10 HK-06-A-02 HOTEL HACKNEY

GREAT EASTERN STREET

SHOREDITCH

Town Centre Built-Up Zone

Total Number of bedrooms: 205

Survey date: WEDNESDAY 05/11/08 Survey Type: MANUAL

11 HO-06-A-01 DAYS HOTEL HOUNSLOW

LAMPTON ROAD

**HOUNSLOW** 

Edge of Town Centre Commercial Zone

Total Number of bedrooms: 96

Survey date: WEDNESDAY 16/06/10 Survey Type: MANUAL

12 HO-06-A-02 ETAP HOTEL HOUNSLOW

STAINES ROAD

HOUNSLOW

Edge of Town Centre

Retail Zone

Total Number of bedrooms: 148

Survey date: WEDNESDAY 16/06/10 Survey Type: MANUAL

13 NT-06-A-02 PREMIER INN NOTTINGHAMSHIRE

LONDON ROAD

NOTTINGHAM Edge of Town Centre

Built-Up Zone

Total Number of bedrooms: 87

Survey date: MONDAY 24/06/13 Survey Type: MANUAL

14 TV-06-A-03 THISTLE TEES VALLEY

FRY STREET

MIDDLESBROUGH Town Centre

Commercial Zone

Total Number of bedrooms: 132

Survey date: MONDAY 27/06/11 Survey Type: MANUAL

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LIST OF SITES relevant to selection parameters (Cont.)

WM-06-A-01 **HOTEL WEST MIDLANDS** 15

LICHFIELD ROAD

WOLVERHAMPTON Town Centre No Sub Category

Total Number of bedrooms: 117

Survey date: TUESDAY 21/02/06 Survey Type: MANUAL **WEST YORKSHIRE** WY-06-A-01 16 **EXPRESS BY HOL. INN** 

THE LEISURE EXCHANGE

**BRADFORD** 

Edge of Town Centre No Sub Category

Total Number of bedrooms: 120

Survey date: TUESDAY 17/05/05 Survey Type: MANUAL

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

**VEHICLES** 

Calculation factor: 1 BEDRMS
BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	BEDRMS	Rate	Days	BEDRMS	Rate	Days	BEDRMS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	134	0.030	16	134	0.071	16	134	0.101
08:00 - 09:00	16	134	0.063	16	134	0.090	16	134	0.153
09:00 - 10:00	16	134	0.063	16	134	0.076	16	134	0.139
10:00 - 11:00	16	134	0.050	16	134	0.047	16	134	0.097
11:00 - 12:00	16	134	0.025	16	134	0.038	16	134	0.063
12:00 - 13:00	16	134	0.029	16	134	0.035	16	134	0.064
13:00 - 14:00	16	134	0.035	16	134	0.037	16	134	0.072
14:00 - 15:00	16	134	0.037	16	134	0.026	16	134	0.063
15:00 - 16:00	16	134	0.045	16	134	0.039	16	134	0.084
16:00 - 17:00	16	134	0.056	16	134	0.044	16	134	0.100
17:00 - 18:00	16	134	0.078	16	134	0.053	16	134	0.131
18:00 - 19:00	16	134	0.068	16	134	0.046	16	134	0.114
19:00 - 20:00	15	135	0.070	15	135	0.046	15	135	0.116
20:00 - 21:00	15	135	0.044	15	135	0.028	15	135	0.072
21:00 - 22:00	13	139	0.043	13	139	0.023	13	139	0.066
22:00 - 23:00			·						·
23:00 - 24:00					<u> </u>				
Total Rates:			0.736			0.699			1.435

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.

### **Parameter summary**

Trip rate parameter range selected: 82 - 224 (units: )
Survey date date range: 01/01/05 - 24/06/13

Number of weekdays (Monday-Friday): 16
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 1

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

**OGVS** 

Calculation factor: 1 BEDRMS
BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	BEDRMS	Rate	Days	BEDRMS	Rate	Days	BEDRMS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	16	134	0.002	16	134	0.003	16	134	0.005	
08:00 - 09:00	16	134	0.002	16	134	0.002	16	134	0.004	
09:00 - 10:00	16	134	0.004	16	134	0.004	16	134	0.008	
10:00 - 11:00	16	134	0.001	16	134	0.001	16	134	0.002	
11:00 - 12:00	16	134	0.001	16	134	0.001	16	134	0.002	
12:00 - 13:00	16	134	0.001	16	134	0.001	16	134	0.002	
13:00 - 14:00	16	134	0.001	16	134	0.001	16	134	0.002	
14:00 - 15:00	16	134	0.000	16	134	0.001	16	134	0.001	
15:00 - 16:00	16	134	0.000	16	134	0.000	16	134	0.000	
16:00 - 17:00	16	134	0.000	16	134	0.000	16	134	0.000	
17:00 - 18:00	16	134	0.001	16	134	0.001	16	134	0.002	
18:00 - 19:00	16	134	0.000	16	134	0.000	16	134	0.000	
19:00 - 20:00	15	135	0.001	15	135	0.000	15	135	0.001	
20:00 - 21:00	15	135	0.000	15	135	0.000	15	135	0.000	
21:00 - 22:00	13	139	0.000	13	139	0.000	13	139	0.000	
22:00 - 23:00							·			
23:00 - 24:00					<u> </u>					
Total Rates:			0.014			0.015			0.029	

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.

### **Parameter summary**

Trip rate parameter range selected: 82 - 224 (units: )
Survey date date range: 01/01/05 - 24/06/13

Number of weekdays (Monday-Friday): 16
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 1

Chipping Sodbury Licence No: 142301

### TRIP RATE CALCULATION SELECTION PARAMETERS:

78 Broad Street

Land Use : 07 - LEISURE Category : R - CASINO

**VEHICLES** 

Connect Consultants

Selected regions and areas:

02 SOUTH EAST

ES EAST SUSSEX 1 days

08 NORTH WEST

LC LANCASHIRE 1 days

09 NORTH

TV TEES VALLEY 1 days

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

### **Filtering Stage 2 selection:**

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

Parameter: Gross floor area

Actual Range: 450 to 6000 (units: sqm) Range Selected by User: 450 to 8000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 30/11/07

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:

Wednesday1 daysThursday1 daysFriday1 days

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

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

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

Selected Locations:

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

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

Selected Location Sub Categories:

Development Zone 1
Built-Up Zone 1
No Sub Category 1

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

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### Filtering Stage 3 selection:

Use Class:

D2 3 days

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

Population within 1 mile:

 10,001 to 15,000
 1 days

 15,001 to 20,000
 1 days

 25,001 to 50,000
 1 days

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

Population within 5 miles:

100,001 to 125,000 1 days 250,001 to 500,000 2 days

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

Car ownership within 5 miles:

0.6 to 1.0 3 days

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

Travel Plan:

No 3 days

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

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### LIST OF SITES relevant to selection parameters

1 ES-07-R-01 CASINO EAST SUSSEX

**GRAND JUNCTION ROAD** 

BRIGHTON Town Centre Built-Up Zone

Total Gross floor area: 3100 sqm

Survey date: FRIDAY 30/11/07 Survey Type: MANUAL

2 LC-07-R-01 STANLEY CASINO LANCASHIRE

SOUTH PROMENADE SAINT ANNES BLACKPOOL

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Gross floor area: 450 sqm

Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

3 TV-07-R-02 CASINO TEES VALLEY

AINTREE OVAL ROAD

STOCKTON-ON-TEES Edge of Town Development Zone

Total Gross floor area: 6000 sqm

Survey date: WEDNESDAY 19/09/07 Survey Type: MANUAL

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

TRIP RATE for Land Use 07 - LEISURE/R - CASINO

**VEHICLES** 

**Calculation factor: 100 sqm** 

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00	3	3183	0.346	3	3183	0.482	3	3183	0.828
01:00 - 02:00	3	3183	0.178	3	3183	0.471	3	3183	0.649
02:00 - 03:00	3	3183	0.199	3	3183	0.335	3	3183	0.534
03:00 - 04:00	2	4550	0.198	2	4550	0.374	2	4550	0.572
04:00 - 05:00	2	4550	0.077	2	4550	0.121	2	4550	0.198
05:00 - 06:00	1	3100	0.161	1	3100	0.355	1	3100	0.516
06:00 - 07:00	1	3100	0.000	1	3100	0.097	1	3100	0.097
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00									
11:00 - 12:00									
12:00 - 13:00									
13:00 - 14:00	1	3100	0.097	1	3100	0.000	1	3100	0.097
14:00 - 15:00	1	3100	0.161	1	3100	0.032	1	3100	0.193
15:00 - 16:00	1	3100	0.032	1	3100	0.097	1	3100	0.129
16:00 - 17:00	1	3100	0.000	1	3100	0.032	1	3100	0.032
17:00 - 18:00	2	4550	0.011	2	4550	0.000	2	4550	0.011
18:00 - 19:00	3	3183	0.262	3	3183	0.031	3	3183	0.293
19:00 - 20:00	3	3183	1.016	3	3183	0.178	3	3183	1.194
20:00 - 21:00	3	3183	0.471	3	3183	0.188	3	3183	0.659
21:00 - 22:00	3	3183	0.335	3	3183	0.545	3	3183	0.880
22:00 - 23:00	3	3183	0.513	3	3183	0.503	3	3183	1.016
23:00 - 24:00	3	3183	0.408	3	3183	0.565	3	3183	0.973
Total Rates:			4.465			4.406			8.871

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.

### **Parameter summary**

Trip rate parameter range selected: 450 - 6000 (units: sqm) Survey date date range: 01/01/05 - 30/11/07

Number of weekdays (Monday-Friday): 3
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

TRIP RATE for Land Use 07 - LEISURE/R - CASINO

**OGVS** 

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
01:00 - 02:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
02:00 - 03:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
03:00 - 04:00	2	4550	0.000	2	4550	0.000	2	4550	0.000
04:00 - 05:00	2	4550	0.000	2	4550	0.000	2	4550	0.000
05:00 - 06:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
06:00 - 07:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00									
11:00 - 12:00									
12:00 - 13:00									
13:00 - 14:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
14:00 - 15:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
15:00 - 16:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
16:00 - 17:00	1	3100	0.000	1	3100	0.000	1	3100	0.000
17:00 - 18:00	2	4550	0.000	2	4550	0.000	2	4550	0.000
18:00 - 19:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
19:00 - 20:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
20:00 - 21:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
21:00 - 22:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
22:00 - 23:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
23:00 - 24:00	3	3183	0.000	3	3183	0.000	3	3183	0.000
Total Rates:			0.000			0.000			0.000

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

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

### **Parameter summary**

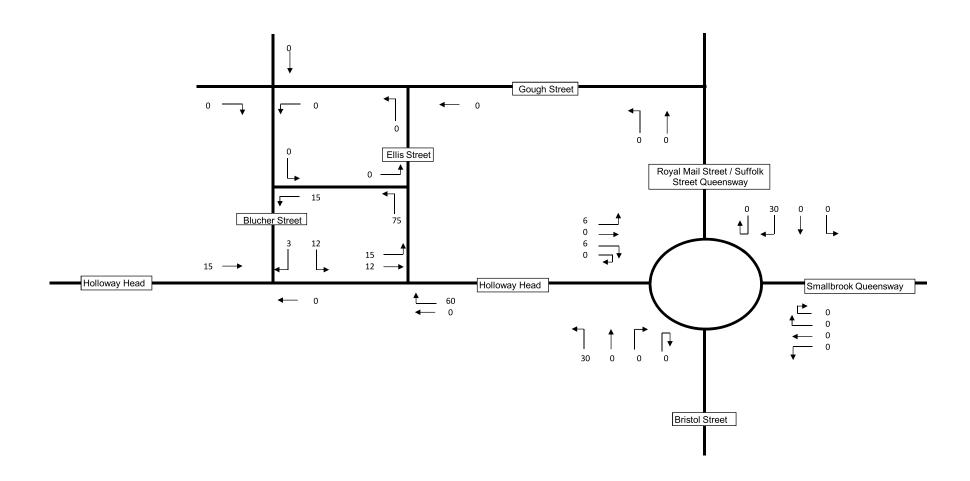
Trip rate parameter range selected: 450 - 6000 (units: sqm) Survey date date range: 01/01/05 - 30/11/07

Number of weekdays (Monday-Friday): 3
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0



## Appendix 7 Existing Office Flows

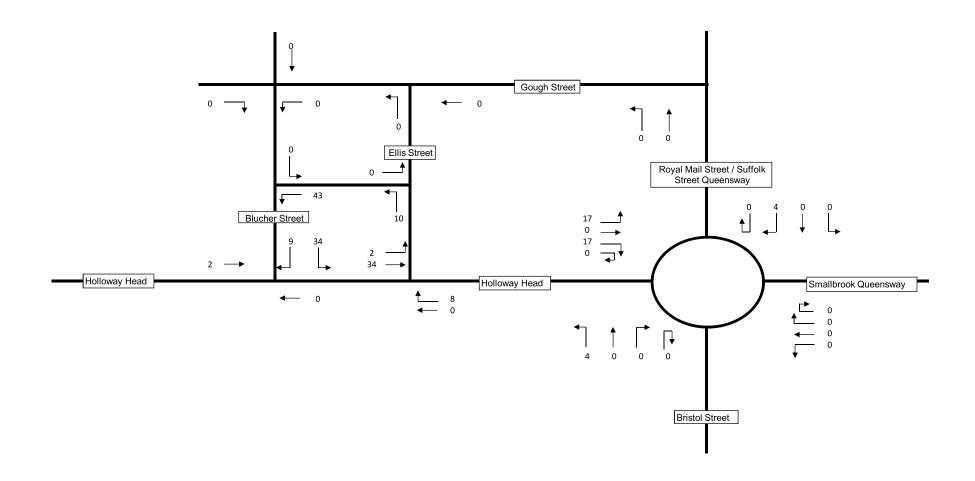




- 0 Total Vehicles
- (0) Heavy Vehicles







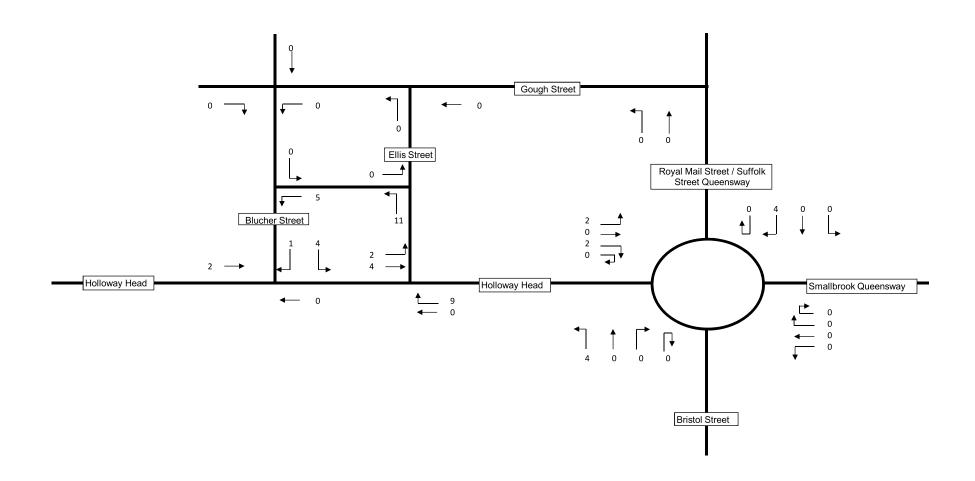
- 0 Total Vehicles
- (0) Heavy Vehicles





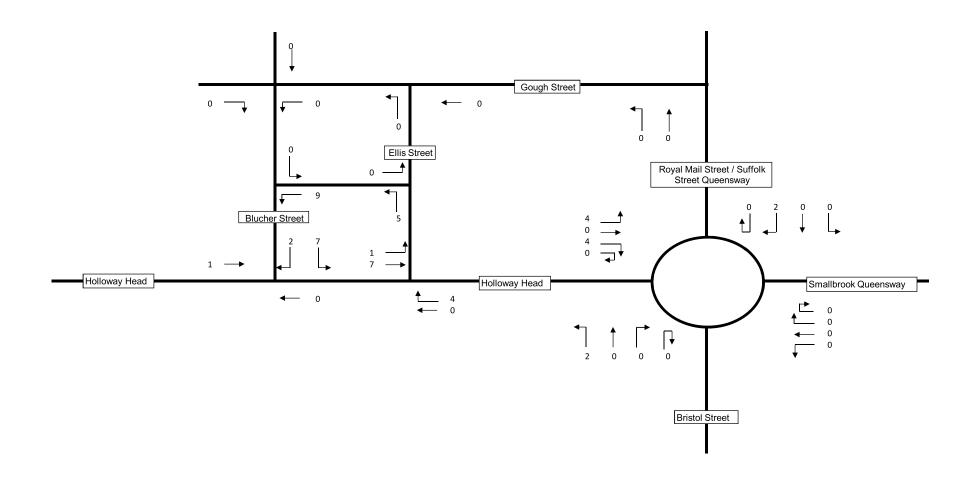
# Appendix 8 Existing Car Workshop/Sales Flows





- 0 Total Vehicles
- (0) Heavy Vehicles



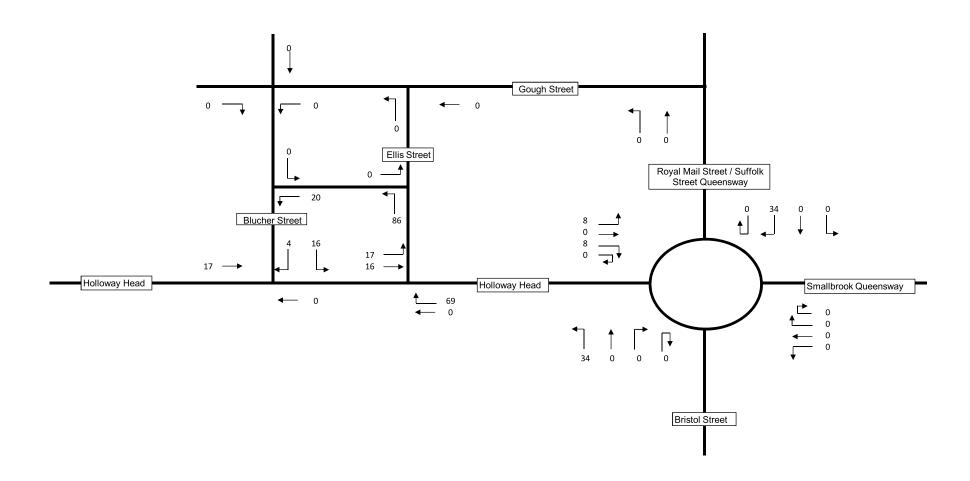


- 0 Total Vehicles
- (0) Heavy Vehicles



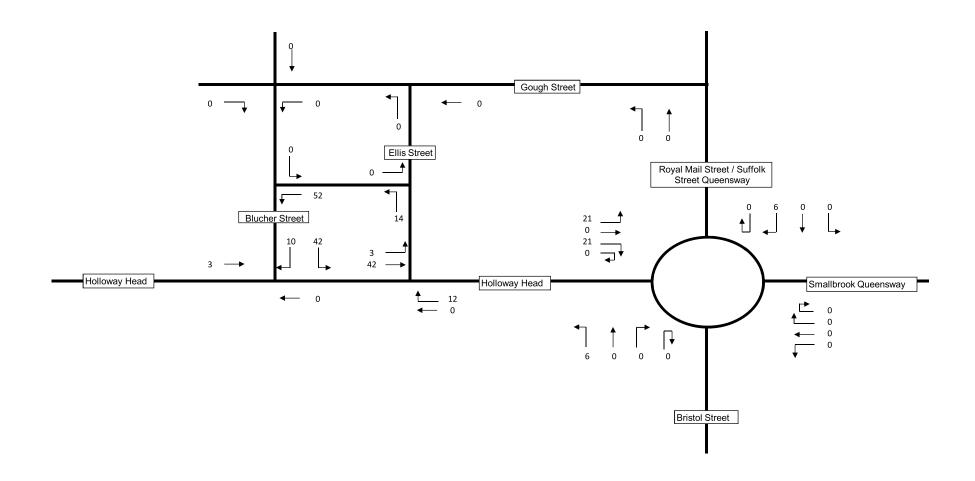
# Appendix 9 Total Existing Site Flows





- 0 Total Vehicles
- (0) Heavy Vehicles





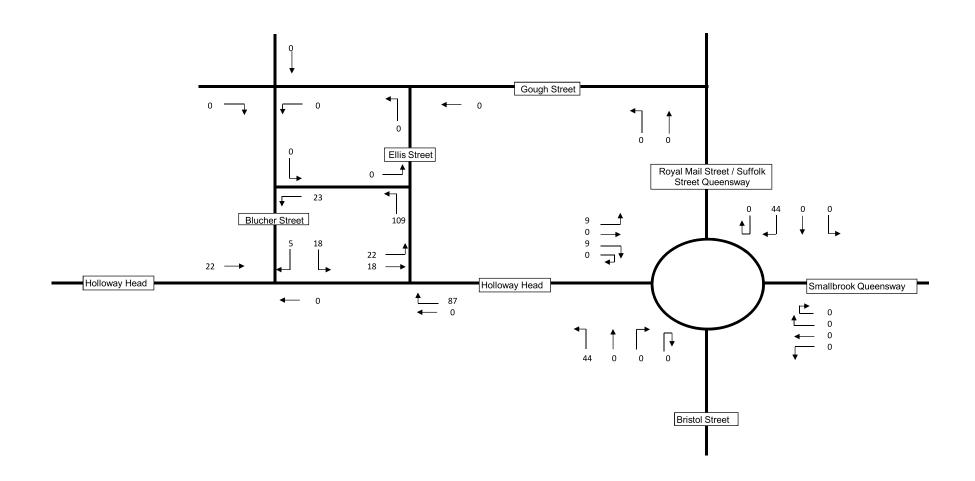
- 0 Total Vehicles
- (0) Heavy Vehicles





### Appendix 10 Total Extant Site Flows

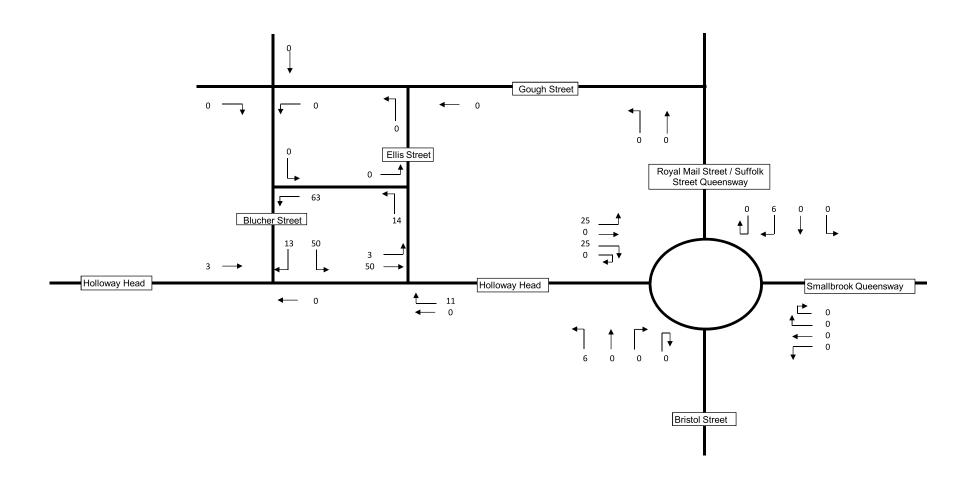




- 0 Total Vehicles
- (0) Heavy Vehicles



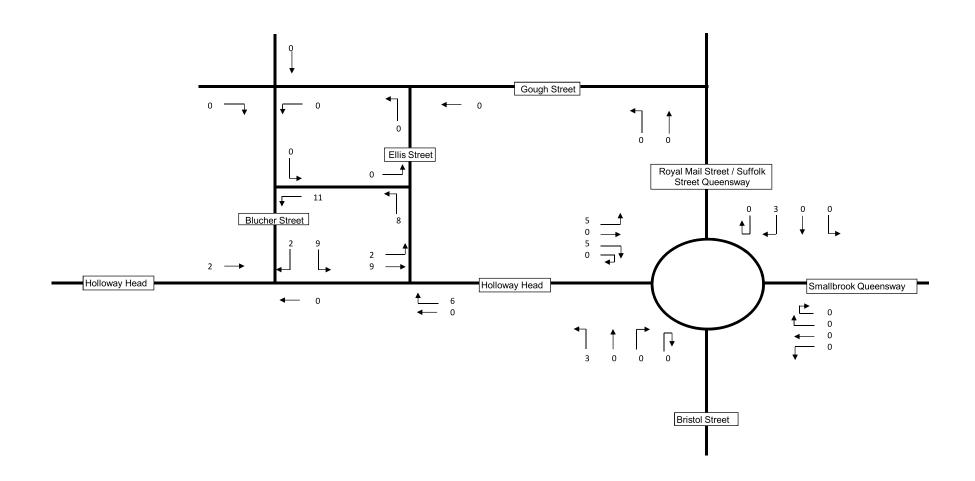




- 0 Total Vehicles
- (0) Heavy Vehicles

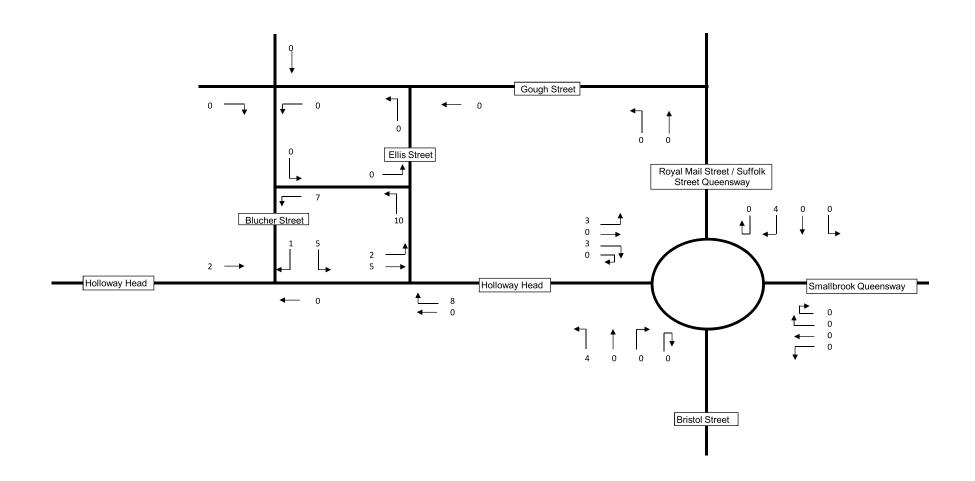






- 0 Total Vehicles
- (0) Heavy Vehicles

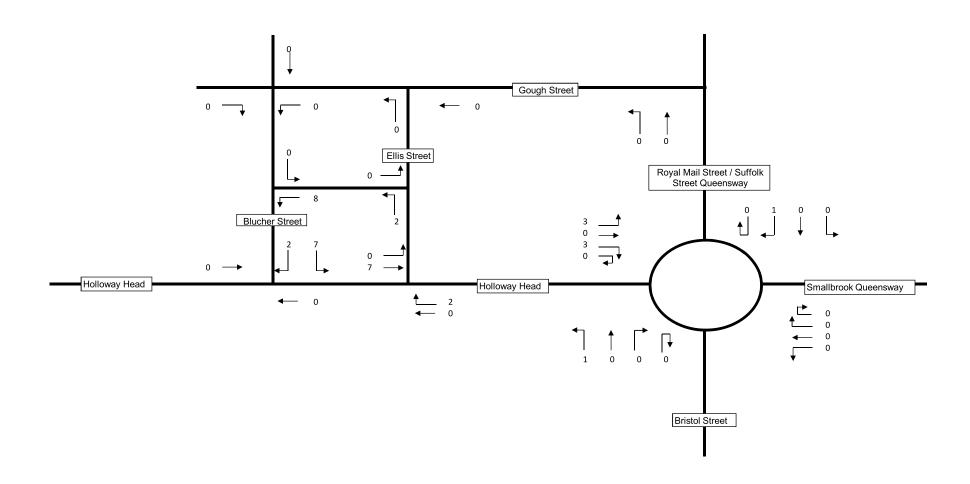




- 0 Total Vehicles
- (0) Heavy Vehicles



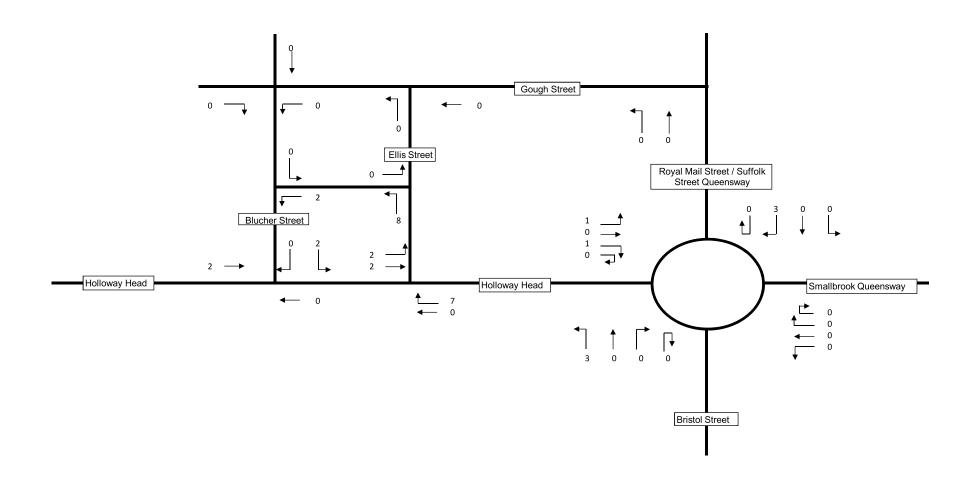




- 0 Total Vehicles
- (0) Heavy Vehicles



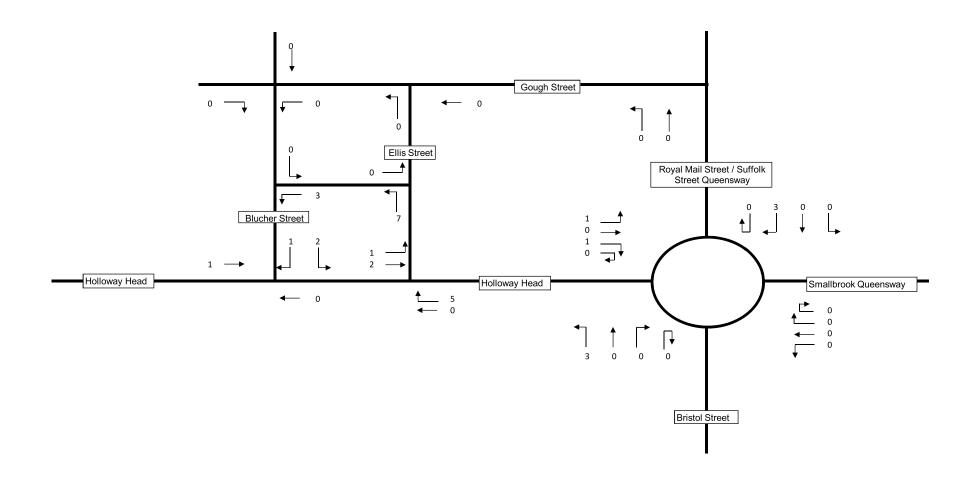




- 0 Total Vehicles
- (0) Heavy Vehicles

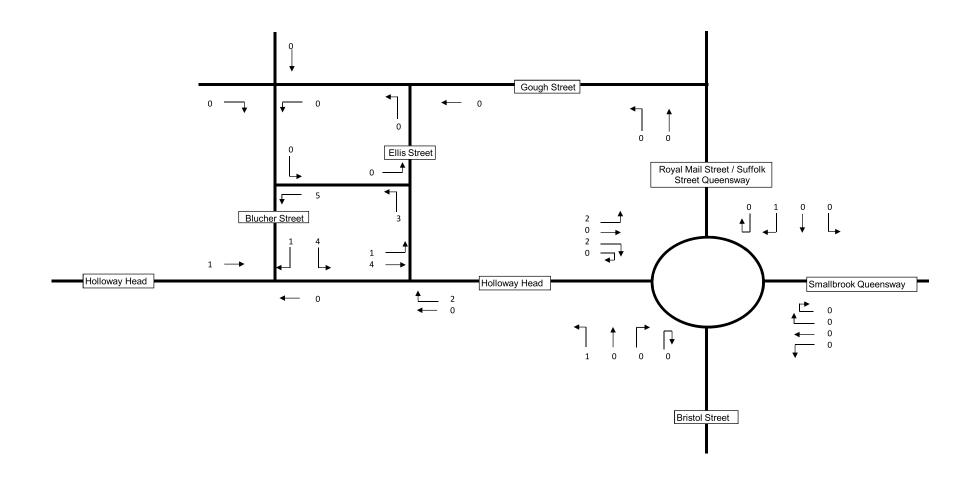






- 0 Total Vehicles
- (0) Heavy Vehicles

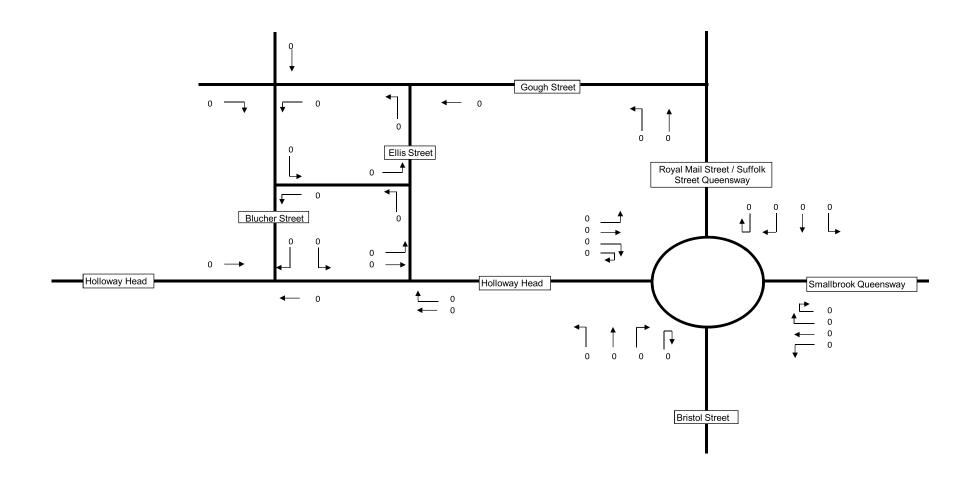




- 0 Total Vehicles
- (0) Heavy Vehicles

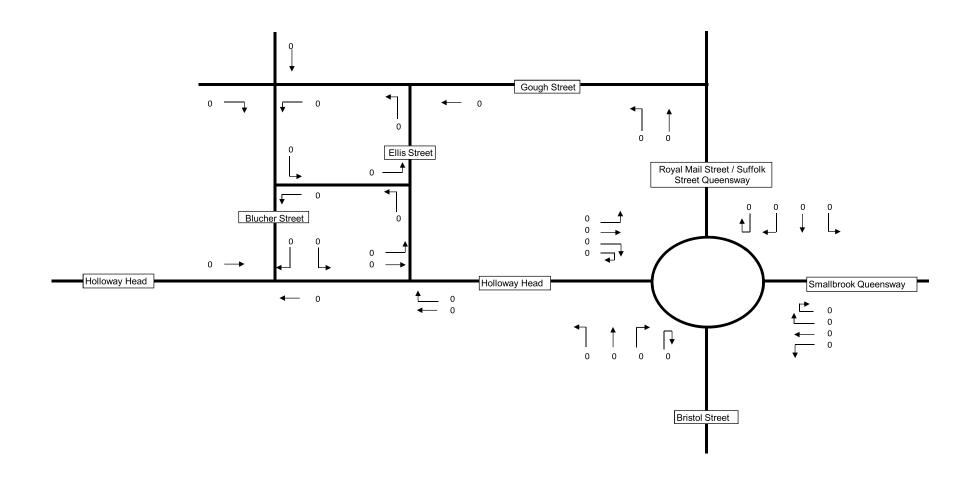






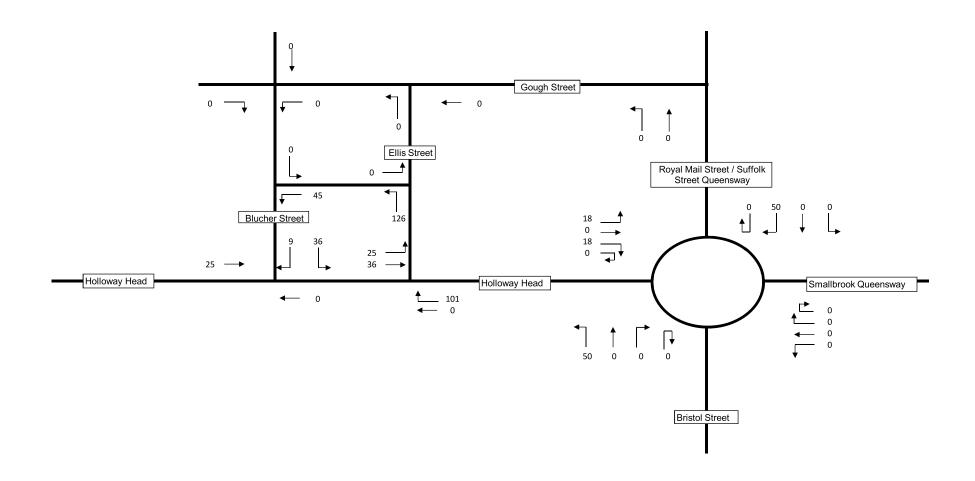
- 0 Total Vehicles
- (0) Heavy Vehicles





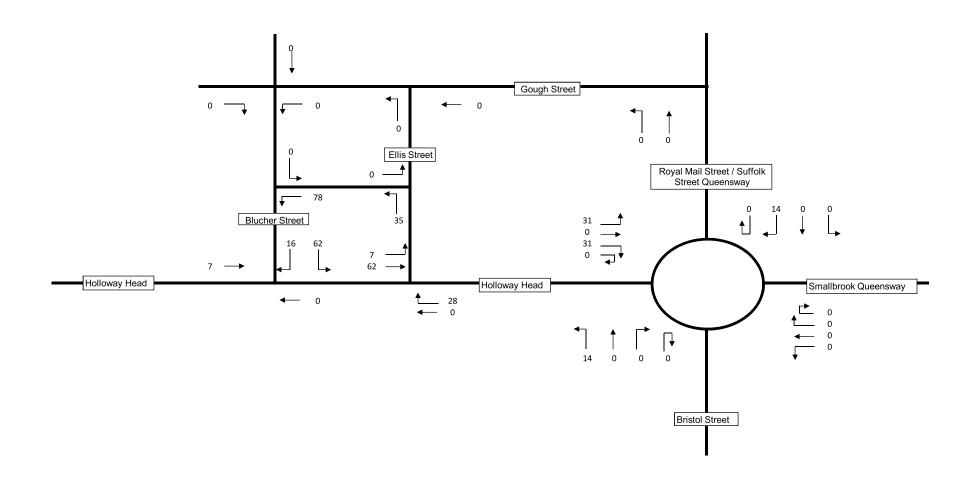
- 0 Total Vehicles
- (0) Heavy Vehicles





- 0 Total Vehicles
- (0) Heavy Vehicles





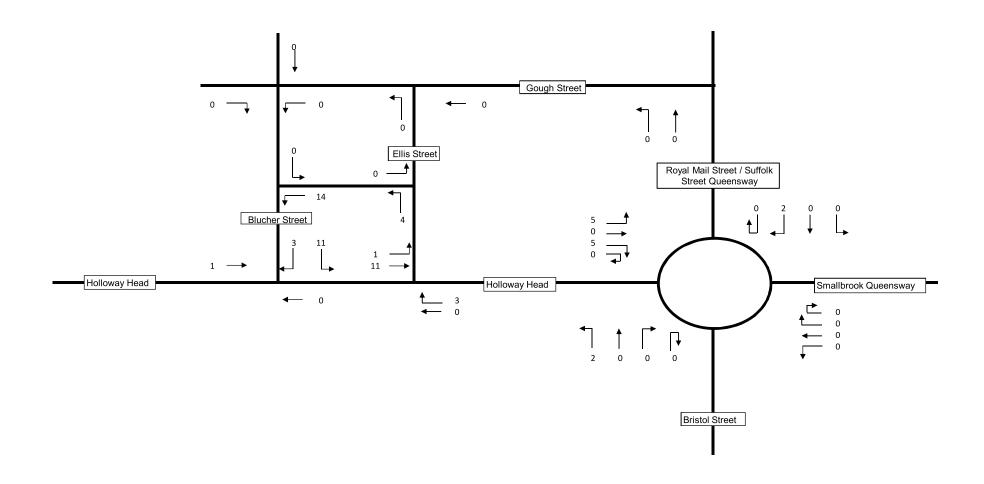
- 0 Total Vehicles
- (0) Heavy Vehicles





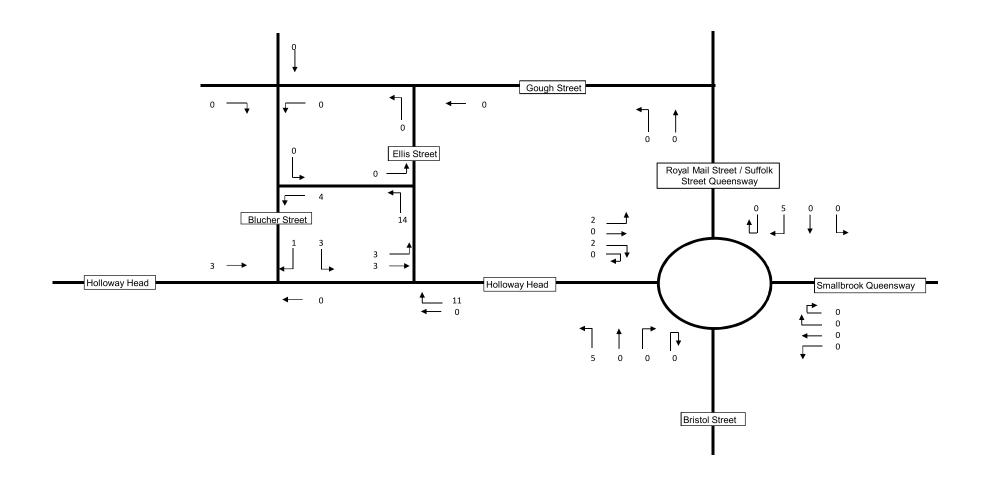
### Appendix 11 Total Proposed Site Flows









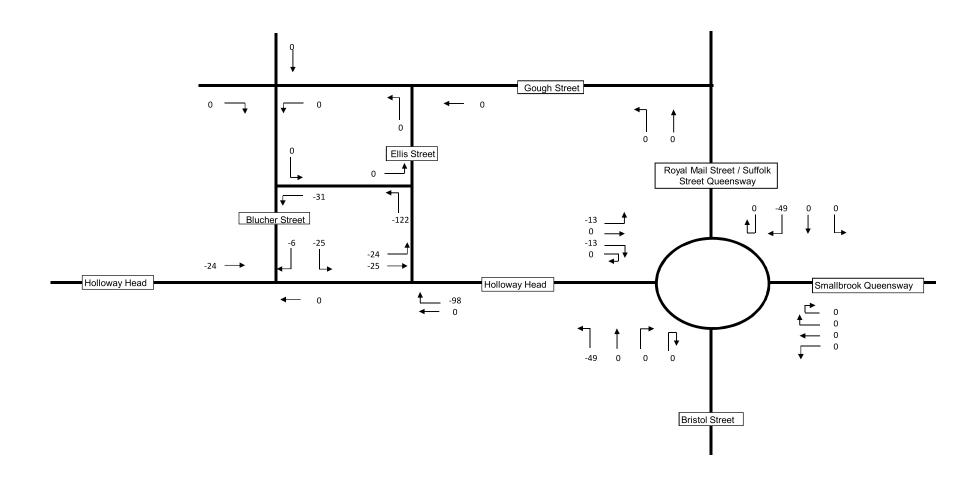






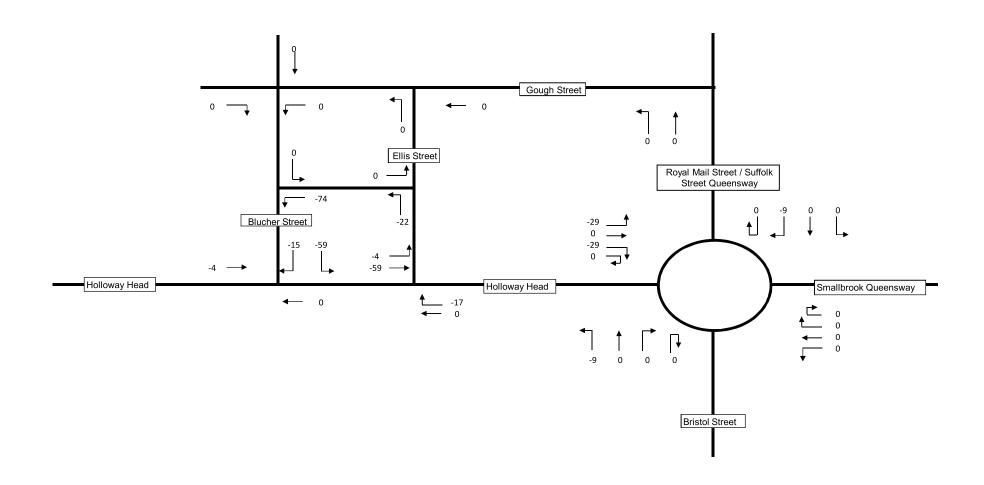
## Appendix 12 Net Development Effect





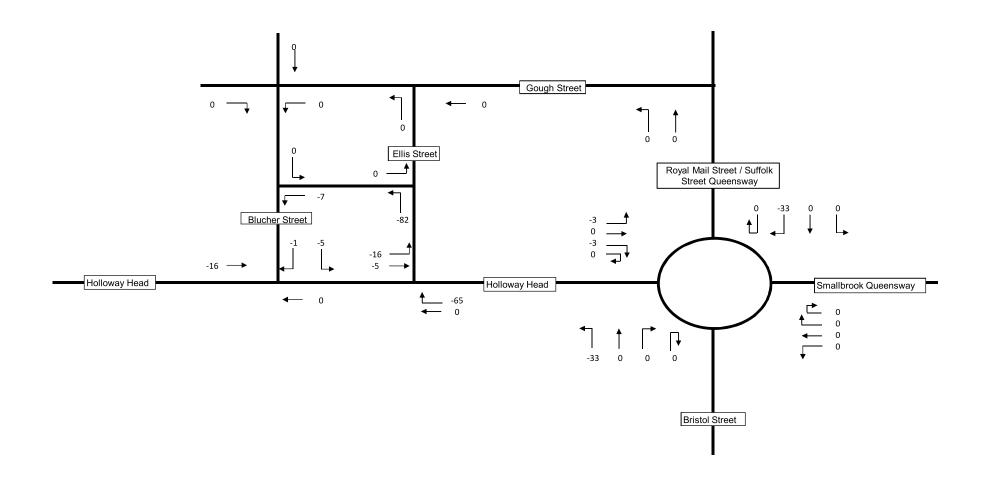






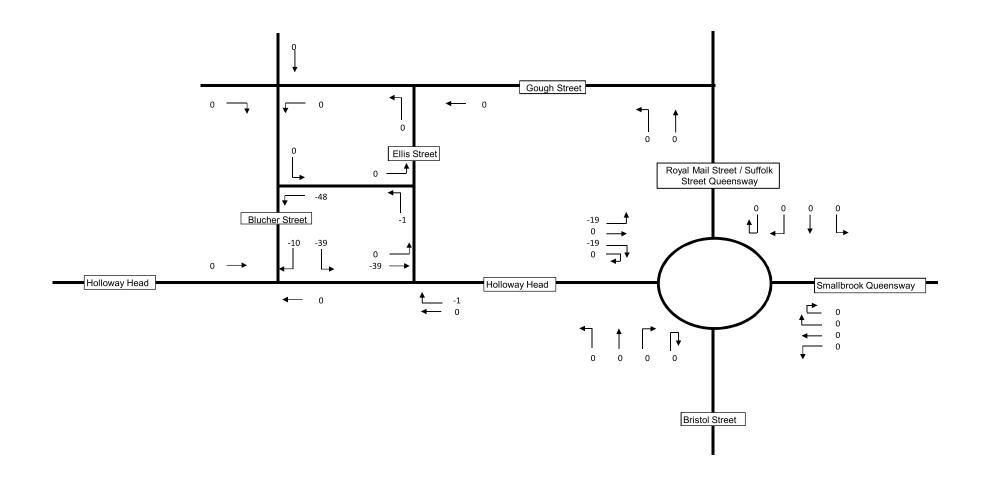
















## Appendix 13 2018/2020 Base Traffic Flows with Development



