

Smethwick Rolfe Street Masterplan

Strategic Transport Assessment

On behalf of Sandwell Metropolitan Borough Council



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Strategic Transport Assessment Smethwick Rolfe Street Masterplan



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1 Introduction

1.1 Background

- 1.1.1 Stantec UK Ltd (Stantec) were appointed by Sandwell Metropolitan Borough Council in October 2022 to develop a Strategic Transport Assessment in support of the development of a Masterplan for the redevelopment and regeneration of the Rolfe Street area of Smethwick as part of the Smethwick to Birmingham Corridor Strategy. Stantec formed part of a wider consultant team to develop the masterplan led by Howells.
- 1.1.2 The masterplan has been produced to set out a vision for the future of the Rolfe Street area of Smethwick, part of the Smethwick to Birmingham Corridor. Building on the work of the Smethwick to Birmingham Corridor Framework (2022), the masterplan seeks to provide a clear direction for the reinvention of the Rolfe Street area, giving strong guidance for future development.
- 1.1.3 The masterplan consulting team led by Howells together with Sandwell Metropolitan Borough Council (SMBC) developed the following vision for the Rolfe Street Masterplan:

Rolfe Street is to be an aspirational place where people want to live, a place that has a unique character which fosters a strong sense of community. This will be achieved through maximising the nationally significant history of the site, a history that connects Rolfe Street to the critical role the Black Country played in the industrial revolution. It will be underpinned by high quality architecture, streets and open spaces for all, and strong links to the existing communities in Smethwick.

1.2 Purpose of this Report

- 1.2.1 The transport strategy for the Smethwick Rolfe Street Masterplan has been developed on the basis of a land use shift from the existing light industry and poor public realm, to mixed residential led redevelopment focusing on access to public transport and active mobility within the site. The transport strategy includes lower parking provision and reallocation of road space for walking and cycling to create active mobility linkages across the site and to the Rolfe Street Train Station to promote external journeys by train or bus as well as linking to the nearby national cycle route and the new cycle lane towards Birmingham City Centre.
- 1.2.2 A strong street hierarchy provides legibility and assists in overcoming the challenge of the high vehicular movement across the site, creating quieter residential streets. A mobility hub is planned adjacent to the existing Rolfe Street Station to provide an attractive interface between first and last mile active, car alternative mobility options.
- 1.2.3 Key to this is the transformation of Rolfe Street into a lower traffic environment with traffic encouraged to use New Street instead. This could be via street treatment and changes to junctions, or more defined restrictions to create gateway features at either end of Rolfe Street which maintain safe and prioritised access for buses pedestrians and cyclist but clearly signal the change in character of Rolfe Street to potential through traffic.
- 1.2.4 This report assesses the transport and accessibility baseline for the masterplan area, current National and Local transport policy and guidance, quantifies future traffic in line with the masterplan vision and determines the high-level impact of this traffic on the local road network. This strategic transport assessment also considers the potential carbon savings from vehicle emissions comparing a transport scenario in support of the masterplan vision against a business-as-usual approach to transport provision. Proposed parking provision has been developed in line with the masterplan vision whilst taking into account a considered approach to parking requirements. Consideration is also given to the future role and transport function of Rolfe Street to support the land use shift and regeneration of the Rolfe Street masterplan area.



2 Baseline Assessment

2.1 Introduction

2.1.1 This section reviews the baseline data of the area surrounding the proposed site. It summarises key data, describes transport provision and existing traffic volumes.

2.2 Demographics

2.2.1 The demographics data used for the baseline assessment is from the 2021 Census. The proposed site falls within the geographical area of Sandwell 040 (previously Sandwell 026) as shown in Figure 2.1.

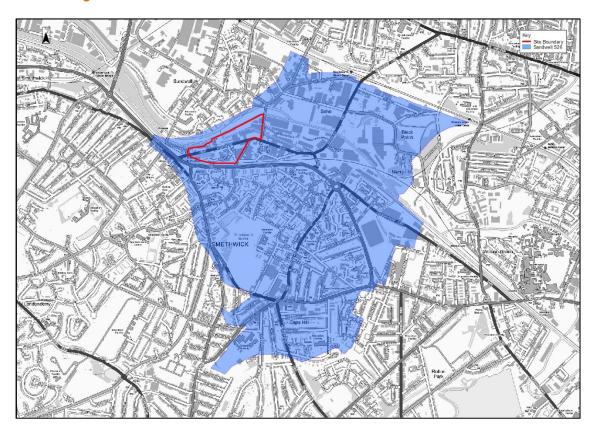


Figure 2.1 Sandwell 040 Middle Super Output Area

2.2.2 The recorded number of the population in Sandwell 040 is of 11,983, the age structure is shown in **Figure 2.2**. Working age groups hold a higher percentage of the population, suggesting that majority of the population may be travelling to and from work during peak hours.



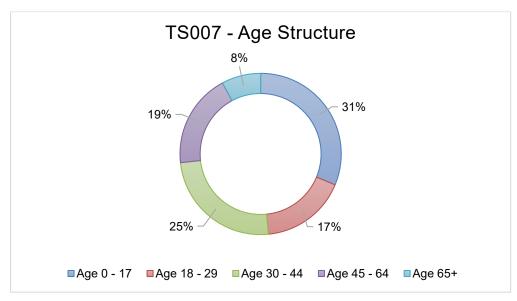


Figure 2.2 Age Structure – Census 2021 – Sandwell 040

- 2.2.3 The 2011 census data is used to establish the baseline modal split and car ownership as it is considered to provide a more realistic representation of travel patterns as opposed to the 2021 Census which was undertaken towards the end of the Covid-19 pandemic when travel patterns and modal split had not yet stabilised but which does present the propensity for people to work from home.
- 2.2.4 Car ownership statistics within the geographical area are shown in Figure 2.3. Fifty percent of households do not own a car or van. This is consistent with the area's high level of accessibility to public transport with the Smethwick Rolfe Street rail station within the census area and buses travelling along High Street B4169 as well as Rolfe Street; only 12% have 2 or more car or vans in their household.

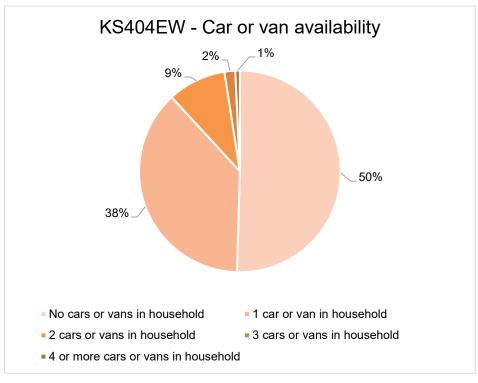


Figure 2.3 Car or Van availability – Census 2011 – Sandwell 026 (now Sandwell 040)



2.2.5 The split between different modes of transportation for journeys to work are shown in **Figure 2.4**. Car is by far the dominant mode with a 49% share, followed by bus mode with 28%. Train and metro hold a low usage percentage of 4%, this is a mode of transportation which has great potential of shifting commuters away from car usage. There is also good potential to increase the mode share for active mobility options with planned local investment into cycle infrastructure.

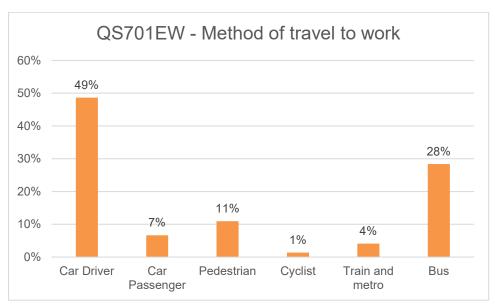


Figure 2.4 Method of travel to work – Census 2011 – Sandwell 026

2.3 Pedestrian and Cycle Provision

- 2.3.1 The site is located in an urban area and is accessible by pedestrian facilities provided around its boundary. On the northern boundary, Rolfe Street is served by pavements which offer two-metre-wide footways, along the length of the road and on both sides. New Street forms the eastern boundary of the site, similarly to Rolfe Street, it's served by pavements which offer two-metre-wide footways. The north-eastern boundary is formed by Bridge Street North which provides pavements with one and a half-metre-wide footways and travels over the canals providing access to employment areas to the north.
- 2.3.2 The area is characterised by a high concentration of cars and vans parked on the footways, which reduces pedestrian accessibility to the facilities provided. This is an aspect that will require addressing during the development of the masterplan to ensure an accessible and safe environment for pedestrians.
- 2.3.3 The north-western boundary is formed by the N Western Road which connects the Rolfe Street masterplan study area to Sandwell by crossing over the canals whilst providing two-metre wide footways. The southern boundary has limited pedestrian facilities, the A457 Tollhouse Way has a footway on the northern side which ends at Cross Street. On the A457 Soho Way, a footway is provided on the southern side between Baldwin Street and the crossroad with Soho Street. There is currently no provision for a pedestrian crossing of the A457 between the two ends of footway on the northern and southern sides.
- 2.3.4 The Rolfe Street masterplan study area is within a 20-min walk to the Windmill shopping centre with a route via Hill Street, Crocketts Lane, Chamberland Walk, Pool Road and Corbett Street. The route consists of footways, zebra crossings and green space. The Midland Metropolitan Hospital is also within a similar walking distance of 17minutes. It is reached via Rolfe Street, Soho Street, Soho Way and Cranford Street, the route is served with footways and a signalised crossing.



2.3.5 With respect to cycle provision, at Rolfe Street Station there are four sheltered bicycle parking stands and provision for parking of 5 bikes on the corner of Rolfe Street and Tollhouse Way. The site is directly served by dedicated cycle lanes as shown in Figure 2.5, a newly constructed contraflow cycle lane is provided along the A457 Tollhouse Way for approximately 620 metres which ends at crossroad with Rolfe Street station, on the western side of the site boundary. On Rolfe Street a one-way cycle lane is located on the northern side for ninety metres and ends after crossing the N Western Road approach to its junction with Rolfe Street. Additional cycle lanes are provided on the north-western, northern, and north-eastern edges of the site boundary along the canals, from the masterplan area the cycle provision is accessible via N Western Road and Bridge Street North.

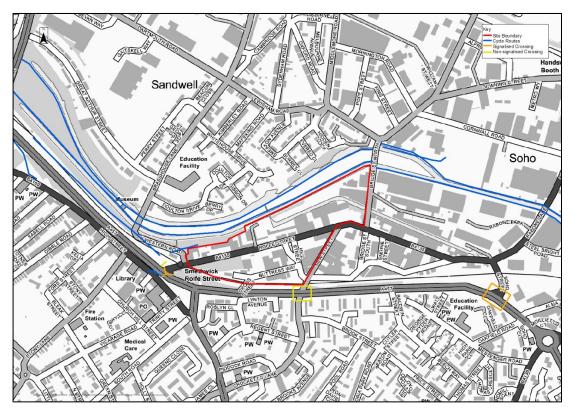


Figure 2.5 Cycle Lane Provisions and Crossings

- 2.3.6 **Figure 2.5** also highlights the crossings provision around the masterplan area. On the A457 Tollhouse Way there is a signalise crossing at the junction with Rolfe Street and a non-signalised crossing of the A457 at the junction with New Street. Further East on the A457 Soho Way, there is a signalised toucan crossing at the junction with Soho Street.
- 2.3.7 An isochrone exercise has been conducted to illustrate the geographical area that is accessible up to a maximum thirty-minute walk and a thirty-minute cycle as shown in Figure 2.6. This illustrates that within a ten-minute walk from the site there are various bus stops which serve bus services travelling in different directions. The Handsworth Booth Street metro station is within a fifteen-minute walk from the site, providing accessibility to an additional mode of transportation.



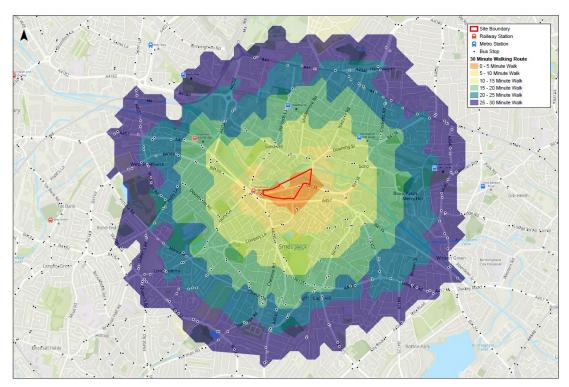


Figure 2.6 30 Minute Walking Isochrone

2.3.8 The 30 Minute Cycling Isochrone is shown in Figure 2.7. Approximately five metro stations are within a ten-minute cycle distance. The Edgbaston Reservoir green space is within a fifteen-minute cycle ride, along with the Langley Green rail station, providing access to rail services travelling towards the south-west rather than taking a train to Smethwick Galton Bridge and changing trains to the south which may take longer overall. Additionally, Birmingham city centre and Blackheath are within a twenty-five-minute cycle.

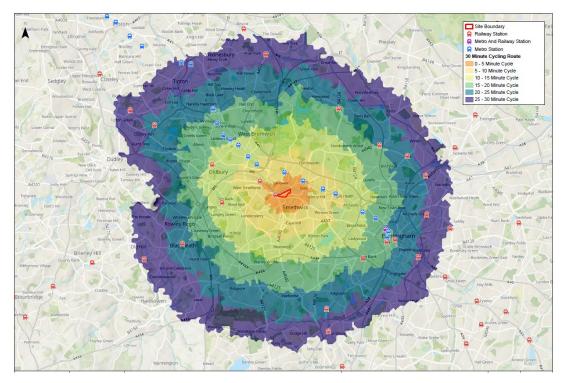


Figure 2.7 30 Minute Cycling Isochrone



2.3.9 Stantec UK Ltd undertook a site visit to assess the existing provisions within and surrounding the Rolfe Street masterplan area.

Rolfe Street

2.3.10 Figure 2.8 illustrates the footway provision on Rolfe Street at its eastern end, and Figure 2.9 captures how cars and vans are obstructing the footway provision.



Figure 2.8 Rolfe Street looking West

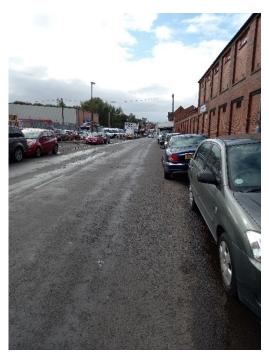


Figure 2.9 Rolfe Street looking West



New Street

2.3.11 New Street current conditions are shown in **Figure 2.10**, obstructions to pedestrian provisions are similar to Rolfe Street. The New Street/Rolfe Street junction is captured in **Figure 2.11**, which is the eastern gateway to the Rolfe Street masterplan area.



Figure 2.10 New Street Looking North



Figure 2.11 New Street / Rolfe Street junction (gateway to Rolfe Street)



Cycle provision

2.3.12 The Cycle provision highlighted in the plans Figure 2.5 were identified during the site visit. The canal side cycle provision is show in Figure 2.12, the wide paths reinforce its suitability for cyclists. The blue cycle lane on A457 Tollhouse Way is captured in Figure 2.13 and plans are in place to extend the cycle lane towards Birmingham.



Figure 2.12 Canal side cycle provision



Figure 2.13 A457 Cycle Lane (phase 2 extension under construction)

Buses on Rolfe Street

2.3.13 Buses travelling on Rolfe Street were captured during the site visit. Figure 2.14 shows how the bus was not able to park close enough to the bus stop for the user to board the bus due to a car parked too close to the bus stop. This is further evident in Google Street View2022 where cars can be seen parked in the bus stop in Rolfe Street.





Figure 2.14 Rolfe Street (bus)

2.4 Public Transport Provision

2.4.1 Public transport provision in the vicinity of masterplan area is in the form of bus, train, and metro.

Bus Services

2.4.2 Bus services can be accessed on Rolfe Street and on Blue Gates as shown in Figure 2.15. A summary of the services is listed on Table 2.1.

Table 2.1 Bus services

Buo Ston	Services	Route		Frequency		
Bus Stop	Services	Route	Mon- Fri	Sat	Sun	
	54	Europa Village, Smethwick, Cape Hill & Brandhall	Hourly	Hourly	Hourly	
Bus stop: Rolfe Street	54A	Europa Village, Smethwick, Cape Hill & Brandhall	Hourly	Hourly	No service	
	89	Birmingham - West Bromwich via Londonderry	Every 30 min	Every 30 min	Hourly	
	54	Europa Village, Smethwick, Cape Hill & Brandhall	Hourly	Hourly	Hourly	
Buo Stone	54A	Europa Village, Smethwick, Cape Hill & Brandhall	Hourly	Hourly	No service	
Bus Stop: Blue Gates (High Street)	80	West Bromwich - Birmingham via Smethwick	Every 30 min	Every 30 min	Hourly	
	87 Platinum	Dudley - Birmingham via Smethwick	Every 10 mins	Every 15 min	Every 20 min	
	89	Birmingham - West Bromwich via Londonderry Rd	Every 30 min	Every 30 min	Hourly	



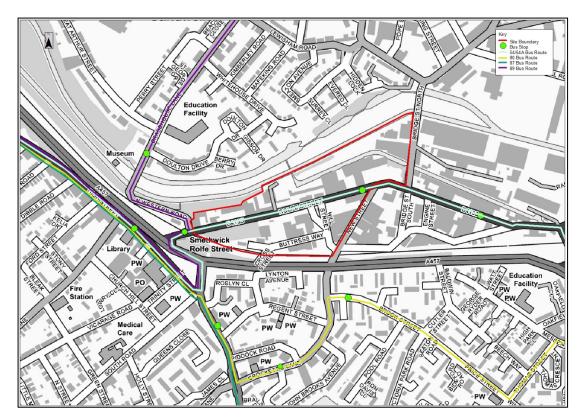


Figure 2.15 Bus Routes and Stops

Rail Services

2.4.3 Smethwick Rolfe Street Station is at the western end of the masterplan area. **Table 2.2** lists the train services accessible at this rail station. Access improvements are currently underway at Rolfe Street Station which included the provision of lifts and other enhancements to improve universal accessibility.

Table 2.2 Rail services

Doctination	tination Route via Duration	Duration	Frequency	
Destillation		Duration	Mon - Sat	Sun
Wolverhampton	Smethwick Galton Bridge, Sandwell & Dudley, Dudley Port, Tipton, Coseley	20 minutes	Every 30 min	Every 30 min
Walsall	Birmingham New Street, Duddeston, Aston, Witton, Perry Barr, Hamstead, Tame Bridge Parkway, Besot Stadium	44 minutes	Hourly	Hourly
Birmingham New Street	-	6 minutes	Every 30 min	Hourly

2.4.4 The Office of Rail and Road release an annual estimate of the number of entries/exits and interchanges at each station in Great Britain. The estimated station usage between March 2021 to April 2022 for Smethwick Rolfe Street is shown in Table 2.3



 Table 2.3
 ORR Smethwick Rolfe Street Station Usage (March 2021 – April 2022)

Entries and Exits (March 2021- April 2022)	Interchanges
292,470	13

2.4.5 It is evident that Rolfe Street station is already well used but this is expected to increase further with planned increased services as part of the West Midlands Rail Investment Plan as well as the current access improvements. The configuration of movement systems as part the Rolfe Street Masterplan also play a significant role in enabling a higher rail mode share.

Metro Services

- 2.4.6 The closest metro station to the masterplan area is at Handsworth Booth Street (approximately fifteen minute-walk from the site). The existing Metro network extends from the Edgbaston Village stop (near the five ways roundabout) via Birmingham city centre to Wolverhampton.
- 2.4.7 Service frequency is every six minutes during peak times and eight-minutes during the off-peak:
 - Monday to Friday: 4.40am to 12.15am
 - Saturday: 4.40am to 1.00am
 - Sunday: 7.20am to 12.10am (at 15-minute frequency).

60 Minute Isochrones

2.4.8 The 60-minute public transport isochrone is shown in Figure 2.16. It is based on journey times by train and metro. Birmingham and Oldbury are within the 20-30 minutes travel time from the Rolfe Street masterplan area. Additionally, Wolverhampton, Blackheath, and Birmingham Airport are in within the 40-50 minutes travel time catchment. From this it is evident that the Rolfe Street Masterplan has a reasonably high degree of accessibility.



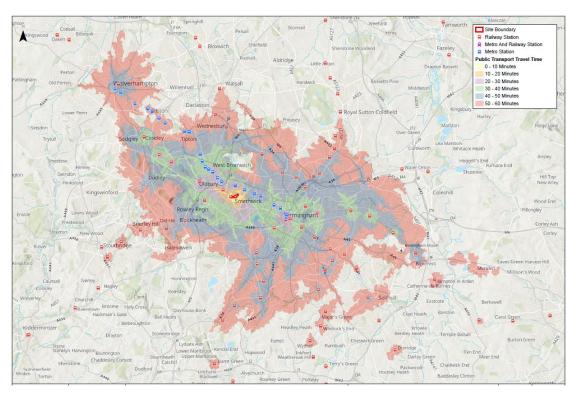


Figure 2.16 60 Minutes Public Transport Isochrone

2.4.9 The 60-minute bus isochrone is shown in Figure 2.17. This is illustrated separately as travel times are longer in comparison to rail. Bus trips are more suited for local trips within the area and, as shown by the isochrone West Bromwich and Oldbury are in the 30-40minutes catchment. Dudley and Blackheath are withing the 40-50 minutes bus catchment, and Birmingham Halesowen and Wednesbury in the 50-60 minutes catchment for bus services.

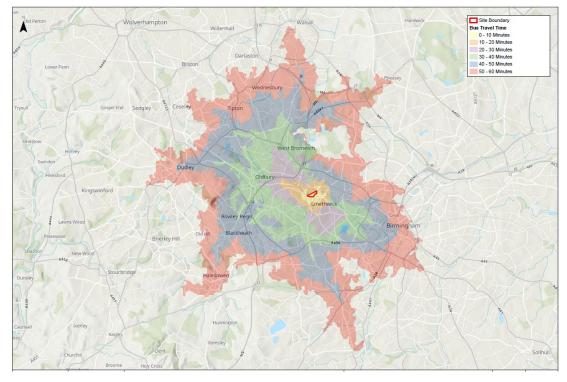


Figure 2.17 60 Minutes Bus Isochrone



2.5 Highway Network

- 2.5.1 The highway network surrounding the site is shown in **Figure 2.18**. The A457 Soho Way links to Birmingham City Centre and is approximately 3km from the A4540 ring road. The A457 Soho Way links to the M5 motorway approximately 2km west of the site. The M5 motorway provides connections to areas to the north and south of Birmingham.
- 2.5.2 Bridge Street North is accessed north of the site and connects to the A41. This road also connects to north Birmingham and Birmingham City Centre.

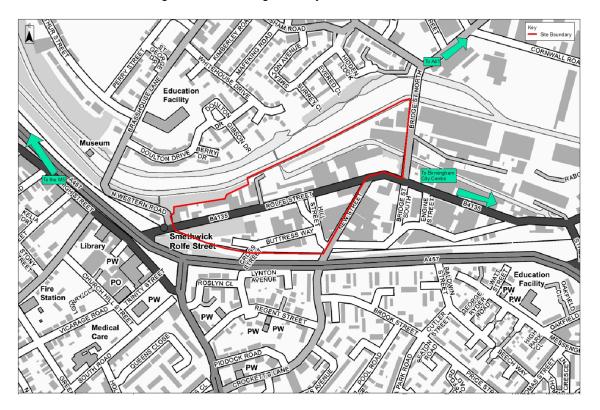


Figure 2.18 Highways Network

- 2.5.3 There are no loading bays along Rolfe Street and most parking is on street except for the sections that have double yellow lines. There are currently not surfaced public car parks within the masterplan area.
- 2.5.4 The current speed limit on the A457 in the vicinity of the site, Rolfe Street and side roads is 30mph.

2.6 Road Safety Review

- 2.6.1 The latest five years 2017-2023 of Personal Injury Collision (PIC) data has been obtained from Sandwell Metropolitan Borough Council to help understand the existing road safety conditions surrounding the site. The PIC data has been reviewed to identify any accident cluster locations and common causation factors and evaluate whether there are any existing safety issues at these locations.
- 2.6.2 A review of the PIC data identified that 40 accidents occurred within the area of analysis during the five-year period, of which 32 were classed as slight in severity, 6 as serious and 0 as fatal. These are summarised in **Table 2.5** and **Appendix B** shows the full report.



2.6.3 There are no PIC clusters that indicate that infrastructure improvements, are required to ensure road safety.

 Table 2.5
 Summary of PIC data

Location	Severity	Casualties
Tollhouse Way/Rolfe Street Junction	6 Slight 1 serious	9
North Western Road	1 Slight	1
Tollhouse Way/High Street Junction	2 Slight	4
Tollhouse Way / Crockett's Lane / Soho Way Junction	8 Slight	11
Tollhouse Way	4 Slight 3 Serious	6
Rolfe Street/High Street Junction	Slight	1
Rolfe Street	1 Slight	1
New Street	Serious	2
Bridge Street/North Street Junction	1 Serious 1 Slight	4
New Street/Rolfe Street Junction	1 Slight	1
New Street	1 Slight	1
Rabone Lane	3 Slight	5
Soho Way	2 Slight	3
Soho Street/Rolfe Street Junction	7 Slight	7

2.7 Existing Traffic Flows

- 2.7.1 Due to extensive road works and associated diversion routes surrounding the proposed development, traffic surveys have not been undertaken as the data would not have been representative of the normal traffic movements in and around Rolfe Street.
- 2.7.2 As a result, traffic survey data obtained from SMBC has been used to estimate the existing 2022 traffic flows in the masterplan area. A summary of the 2014 and 2022 Automatic Traffic Count data from Soho Way is shown in **Table 2.6**. Comparison between these 2 survey years reveals an average weekday traffic growth of 10%.
- 2.7.3 This growth factor was applied to the 2015 Rolfe Street turning count data provided by SMBC (site A arm A) to derive a 2022 flow count. **Table 2.7** shows the 12hr flows, AM peak and PM peak flow count on Rolfe Street for 2015 and 2022.



Table 2.6 Soho Way 2014 and 2022 ATC (24hr) data from Sandwell

	2014	2022	Growth factor
Monday	26,018	28,597	10%
Tuesday	26,546	29,147	10%
Wednesday	26,941	29,742	10%
Thursday	26,733	29,142	9%
Friday	27,288	30,788	13%
Saturday	22,170	27,196	23%
Sunday	18,412	24,232	32%
Average 5-day week growth factor	10%		
Average 7-day week growth factor	15%		

Table 2.7 Rolfe Street 2015 and 2022 derived flows

	12hr	Morning Peak (07:45 - 08:45)	Evening Peak (17:00 - 18:00)
2015	7,225	848	624
2022	7,948	933	686
Difference	(+723)	(+85)	(+62)
Difference %	10%	10%	10%

2.8 Existing Trip Generation

- 2.8.1 The trip generation for existing land use is calculated using the masterplan red line area (90,000 square metres) with the assumption that 40% of the area is taken up by roads/ footways/ infrastructure/ parking etc. This resulted in 54,000 square metres of trip generating land use. Whilst there is a small component of residential and commercial use the dominant use is business (B2). On this basis, and for the purpose of calculating the number of trips generated by the existing masterplan area, trip generation rates for B2 use have been applied to the estimated area as described above. Trip rates for the B2 land use were obtained from TRICS 7.9.4 and the outputs are shown in Appendix C.
- 2.8.2 Table 2.8 shows the multimodal total vehicle daily trip generation for the employment land use B2.

 Table 2.8
 Existing Employment Daily Trip Generation (Multimodal Total Vehicles)

	Vehicle Trip Generation		
Start	Arrival	Departure	Total
07:00	159	57	217
08:00	217	87	305
09:00	166	111	276



10:00	140	123	263
11:00	131	131	262
12:00	133	150	283
13:00	149	143	292
14:00	118	151	269
15:00	106	158	264
16:00	99	176	274
17:00	66	183	249
18:00	50	86	137
Total	1,535	1,555	3,090

2.9 Existing Trip Distribution and Assignment

2.9.1 2011 Census Journey to Work data for Sandwell 026 MSOA was reviewed to determine existing trip distribution for people travelling to employment. The main possible routes to employment out of the site are shown in Figure 2.19. The distribution of these trips based on the census data is shown in Table 2.9. With the absence of junction turning movement counts in the vicinity of the masterplan area this gives an indication of the existing local trip distribution.

 Table 2.9
 Trip Distribution

Route	% Distribution	Existing Employment Trips		
Route		Morning Peak	Evening Peak	Daily
A457 W	8%	50	37	429
A4030	0%	0	0	0
Bridge St N	0%	0	0	0
A457 E	92%	883	649	7519
Total	100%	933	686	7,948



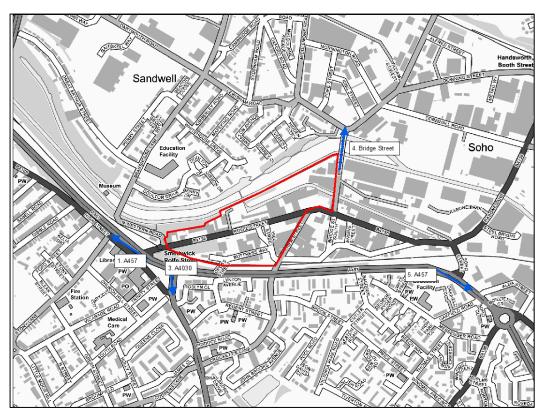


Figure 2.19 Trip Distribution Routes



3 Policy Summary and Context

3.1 Introduction

3.1.1 This section reviews the existing national and local policy and guidance, local planning history and summarises how it relates to proposed development within the Rolfe Street Masterplan area.

3.2 National Planning Context

National Planning Policy Framework (July 2021)

- 3.2.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied. The presumption in favour of sustainable development is the core objective of the NPPF (paragraph 10 states that "So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development").
- 3.2.2 In Section 9 'Promoting sustainable transport', paragraph 104 states that "Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
 - a. the potential impacts of development on transport networks can be addressed;
 - opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
 - opportunities to promote walking, cycling and public transport use are identified and pursued;
 - d. the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
 - e. patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places."
- 3.2.3 To promote sustainable transport, paragraph 110 states that "In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
 - appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location;
 - b. safe and suitable access to the site can be achieved for all users; and
 - c. the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
 - d. any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."



- 3.2.4 Paragraph 111 of the NPPF states "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."
- 3.2.5 Additionally, paragraph 113 of the NPPF states "All developments that generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."
- 3.2.6 In accordance with the NPPF, this development seeks to maximise travel by sustainable modes by providing proportionate and relevant means to promote and accommodate travel by walking, cycling and public transport.
- 3.2.7 This Strategic Transport Assessment has been prepared to support the sustainable development objectives at the application site.

Planning Practice Guidance

- 3.2.8 Planning Practice Guidance (PPG) provides links to the NPPF and identifies the following regarding Transport Assessments set out in the NPPF: "Transport Assessments and Statements are ways of assessing the potential transport impacts of developments...The Transport Assessment or Transport Statement may propose mitigation measures where these are necessary to avoid unacceptable or "severe" impacts. Travel Plans can play a pivotal role in taking forward those mitigation measures which relate to on-going and operation of the development".
- 3.2.9 Transport Assessments are important as they:
 - promote and encourage sustainable travel
 - create "accessible, connected, inclusive communities"
 - reduce the impact of trip generation
 - reduce the impact on the environment through reducing carbon emissions
 - improve quality of life, health and road safety, and
 - reduce "the need for new development to increase existing road capacity or provide new roads".
- 3.2.10 Key issues to consider at the start of preparing a Transport Assessment include:
 - "the planning context of the development proposal
 - appropriate study parameters (i.e. area, scope and duration of study)
 - assessment of public transport capacity, walking/cycling capacity and road network capacity
 - road trip generation and trip distribution methodologies and/or assumptions about the development proposal
 - measures to promote sustainable travel
 - safety implications of development, and



- mitigation measures (where applicable) including scope and implementation strategy."
- 3.2.11 In accordance with PPG, this development strives to promote safe, sustainable travel and reduce single occupancy car use.
- 3.2.12 Based on the above, the Strategic Transport Assessment addresses the potential for mode shift from single occupancy car use to more sustainable modes of travel such as walking, cycling, public transport use and car sharing.

Decarbonising Transport: A Better, Greener Britain

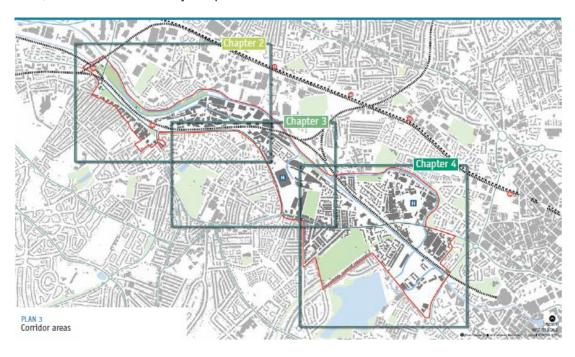
- 3.2.13 The Department for Transport (DfT) published this guidance in 2021 that sets out a post-pandemic programme that will reduce carbon production by transport systems and promote sustainable transport use. DfT aim to fulfil this vision through two key actions: 'Decarbonising all forms of transport' and 'Multi-modal decarbonisation and key enablers'.
- 3.2.14 The DfT want to achieve the 'Decarbonisation all forms of transport' by:
 - Increasing walking and cycling
 - Zero emission buses and coaches
 - Decarbonising our railways
 - A zero-emission fleet of cars, vans, motorcycles and scooter
 - Accelerating maritime decarbonisation, and
 - Accelerating aviation decarbonisation.
- 3.2.15 The DfT want to achieve 'Multi-modal decarbonisation and key enablers' by:
 - Delivering a zero-emission freight and logistics sector
 - Maximising the benefits of low carbon fuels
 - Delivering decarbonisation through places
 - Hydrogen's role in the decarbonised transport system
 - Future Transport more choice, more efficiency, and
 - Supporting UK research and development as a decarbonisation enabler.
- 3.2.16 'Delivering decarbonisation through places' is an element of this guidance that can be accomplished through sustainable development. The guidance places emphasis on 'embedding transport decarbonisation principals in spatial planning and transport policy' by 'ensuring that new developments are designed in a way that promotes sustainable choices'.
- 3.2.17 This Strategic Transport Assessment has been prepared to describe how sustainable travel is promoted at the development.



3.3 Local Policy and Guidance

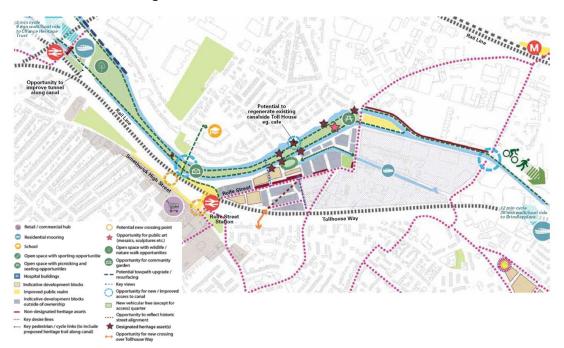
Smethwick to Birmingham Corridor Framework and Grove Lane Masterplan

- 3.3.1 This framework sets up the plan for changing the Smethwick to Birmingham corridor by
 - Creating a vision for the area and guiding principles to be used by all the delivery partners
 - Providing a joined-up transport strategy for the corridor, to be used by the councils and Transport for West Midlands to create and seek funding for a corridor-wide package of transport improvements focused on walking and cycling.
 - Adding additional detail to the planning policies of the councils (summarised in the Appendix) by providing design principles for the main allocated development sites to be applied by developers in designing their schemes and by the councils in determining planning applications.
 - Showcasing all the changes happening in the corridor and demonstrates the commitment of the delivery partners to making them happen, creating the platform for continuing private and public sector investment
- 3.3.2 The corridor is split in three sections: Smethwick Galton Bridge to Rolfe Street, Grove Lane Area, and Grove Lane to City Hospital.





Smethwick Galton Bridge to Rolfe Street



Objectives for the area

Rolfe Street station

Improve public realm and walking routes to key locations around the station, particularly crossings over the A457 to Smethwick High Street, Buttress Way and the route to Brasshouse Lane.

Smethwick High Street

- Address parking and loading issues on Smethwick High Street, initially through enforcement and over the longer term through a clear parking strategy.
- Improve areas of public space between the A457 and High Street; seek community input to ideas and implementation.

Movement networks

- Improve canal pathways and access to them.
- Improve links to Metro stations at The Hawthorns and Winson Green.
- Create clearer and safer routes between development opportunities/Brasshouse Lane and Rolfe Street Station and Smethwick High Street.

Transport Strategy

3.3.3 The Transport Strategy embedded within the Smethwick to Birmingham Corridor Framework comprises a large number of schemes, most of which are designed to make walking, cycling and public transport significantly more attractive than at present.

Walking

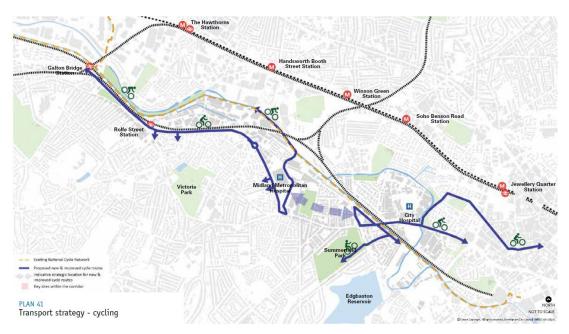
Improving footway condition.



- De-cluttering/widening footways.
- Removing footway parking.
- Narrowing bellmouth junctions.

Cycling

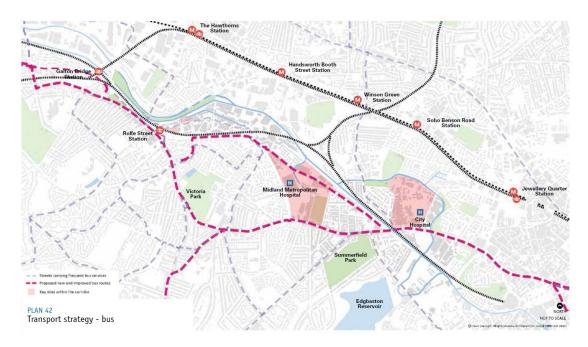
3.3.4 A focus on new protected cycleways on key routes, with supporting traffic calming and other measures on other roads and local streets. There will also be supporting measures such as secure cycle parking and cycle hire. Scheme designs will need to be in accord with new Government design guidance - LTN 1/20.



Bus

3.3.5 Enhanced bus priority on the key routes, along with possible new services and improvements to existing services, such as in connection with Midland Metropolitan Hospital (MMH) or justified by demand associated with other new development. Bus service provision to MMH will be based on a set of service enhancements, with options currently being developed by TfWM and operators. Proposed provision will be consulted on in 2022.





Movement for Growth: 2026 Delivery Plan for Transport

3.3.6 The West Midlands Combined Authority (WMCA) has set out an ambitious plan for growth in its Strategic Economic Plan and has established a 20-year vision for the transport system needed to support this. The Movement for Growth strategic transport plan (MfG) articulates this vision and provides a high-level policy framework and overall long-term approach for improving the transport system serving the West Midlands.

MfG Key Transport Priorities for the Metropolitan Tier

3.3.7 **Priority Links in the Metropolitan Cycle Network** – Birmingham Cycle Revolution (A38) and (A34), incorporation of high-quality segregated cycle route provision in future Black Country corridor improvements.

MfG Key Transport Priorities for the Local Tier

3.3.8 **Local Cycle Network Development** – Cycle Coventry network further phases, Birmingham Cycle Revolution, Solihull Connected schemes, Black Country Sustainable Transport projects.

Black Country Core Strategy (2011 - 2026)

- 3.3.9 The Black Country Core Strategy sets out how the Black Country should look in 2026 and establishes clear directions for change in order to achieve this transformation. The Government encourages local authorities to explore and exploit opportunities for joint working on Core Strategies. Partnership working has been embraced by the Black Country local authorities of Dudley, Sandwell, Walsall and Wolverhampton as a logical response to the intertwined nature of the sub-region's challenges and opportunities.
- 3.3.10 By 2026 the Core Strategy will have helped to deliver:
 - "7. A first-class transport network providing rapid, convenient and sustainable links between the Strategic Centres, existing and new communities, and employment sites. To include an enhanced, integrated public transport system, an improved highway network, including walking and cycling routes with strong links to the green infrastructure network.



Improvements to the national M5 and M6 motorways network and freight railway network will help deliver better connectivity to Regional and National networks."

- 3.3.11 **CSP5 Transport Strategy** The Core Strategy sets the agenda for the transformation of the Black Country transportation network. It identifies the key factors required to enhance the transport infrastructure and assist delivery of the Spatial Objectives for the area:
 - Improved accessibility and connectivity of an integrated public transport network.
 - Improved road network and links to the national M5 and M6 motorway network.
 - Improved access to the freight railway network.
 - Improved walking and cycling provision

3.3.12 TRANSPORT AND ACCESSIBILITY

TRAN1 Priorities for the Development of the Transport Network

3.3.13 The delivery of an improved and integrated transport network both within the Black Country and in links with regional and national networks is fundamental to achieving the Vision and in helping to transform the area, deliver housing growth and improve economic performance, and achieving Spatial Objective 7.

TRAN2 Managing Transport Impacts of New Development

3.3.14 In order to ensure that the transport elements of the Spatial Strategy are deliverable it is essential that new developments and existing facilities demonstrate their travel and transportation impacts together with proposals for mitigation. It is important that accessibility by a choice of sustainable modes of transport is maximised at all developments. Transport Assessments and Travel Plans produced by developers, employers, schools and facility operators, are essential to bring about sustainable travel solutions and help deliver Spatial Objective 7

TRAN3 The Efficient Movement of Freight

3.3.15 New freight railways and rail sidings will present an economic opportunity for Black Country businesses. Improved journey times on the highway network will further aid economic prosperity and switching traffic to rail or inland waterways will relieve the highway network of traffic, reducing congestion and improving air quality and the environment. The location of businesses producing heavy flows of freight vehicles in locations with good access to the principal highway network will also assist with environmental improvement. Improvements to the freight network are fundamental to achieving the Vision for sustainable communities, environmental transformation and economic prosperity and in particular to delivering Spatial Objectives 2, 5 and 7.

TRAN4 Creating Coherent Networks for Cycling and for Walking

3.3.16 The development of sustainable modes and encouraging people out of their cars, particularly for short and commuter journeys is an important element of Spatial Objectives 3, 5 and 7. Places need to be well connected with attractive, convenient, direct and safe routes available to users and providing real choice.

TRAN5 Influencing the Demand for Travel and Travel Choices

3.3.17 The management of the demand for road space and car parking, together with influencing travel choices, is fundamental to achieving the Vision for sustainable communities, environmental



transformation and economic prosperity and in particular to delivering Spatial Objectives 1, 2, 5 and 7.

Sandwell Vision 2030

3.3.18 Sandwell has a clear vision for what the borough should look and feel like by 2030: *In 2030, Sandwell is a thriving, optimistic and resilient community*. To achieve this vision 10 ambitions were listed.

Ambition 6 - Public Transport

- 3.3.19 Sandwell is well placed at the heart of the West Midlands transport system. We must make sure people have efficient and cost-effective ways to get to job and leisure opportunities. Around 30,000 Sandwell residents already commute to Birmingham every day.
- 3.3.20 By 2030, Sandwell will be reaping the rewards from better transport links across the region and growth in Birmingham, the rest of the Black Country and beyond.

Ambition 7 – Housing

- 3.3.21 Sandwell needs new areas of quality housing in places where people want to live and bring up their families and can easily get to jobs across the region by public transport.
- 3.3.22 To help achieve the 2030 vision:
 - Sandwell will identify major development opportunities along public transport routes and develop plans with the community and developers to make this happen; and
 - around 8,500 new homes will be built on sites with rapid transport connections into Birmingham, including the Dudley Port line, Metro and Jewellery line (Worcester to Birmingham).

Sandwell Corporate Plan 2021-2025

3.3.23 This plan sets out what the council will do to deliver Vision 2030 and Sandwell's 10 ambitions over the next five years. It is not intended to include an exhaustive list of all the functions of the council but sets out our priorities over the next five years. Our Vision and everything we do is underpinned by our values - trust, unity and progress

A Connected and Accessible Sandwell

- A1 We will work with the WMCA to ensure that our residents can access employment opportunities across the region, particularly by public transport.
- A2 We will continue to work with partners to deliver the Midlands Metro extension connecting Wednesbury to Brierley Hill and the SPRINT scheme.
- A8 We will continue to implement Sandwell's Cycling and Walking Infrastructure Plan and deliver a programme of infrastructure improvements across the borough.
- A9 We will ensure that all public transport options available locally are as green as possible, including lobbying for clean green buses for our borough.
- A10 We will maximise government funding opportunities for infrastructure through working with our partner organisations including the Black Country Transport Team and Transport for West Midlands.



- A14 We will continue to deliver our key transport infrastructure projects, namely the major upgrade of Birchley Island, metro corridor walking and cycling programme, and Blackheath interchange.
- A15 We will continue to develop and deliver projects that reduce barriers to the use of public transport and sustainable travel choices including working with Transport for West Midlands in relation to bus and metro provision and the Rail Alliance.
- A16 We will ensure Sandwell is well placed to support the move towards electric vehicles by delivering key infrastructure requirements.

Sandwell Residential design guide SPD 2014

3.3.24 The revised Supplementary Planning Guidance (2014) on residential design provides detailed design guidance for all aspects of new residential development.

Appendix 3 - Guide to the Design of New Streets

3.3.25 Section 4 of Appendix 3 provides guidance on residential parking. This includes off-street car parking requirements, off-street cycle parking requirements and disabled parking.

Off-Street Car Parking Requirements

Residential

1 to 2 Bedroom Properties 1 Dedicated parking space

3 to 4 Bedroom Properties 2 Dedicated parking spaces

5 to 6 Bedroom Properties 3 Dedicated parking spaces

7 to 8 Bedroom Properties 4 Dedicated parking spaces

Visitor

Development less than 10 properties 1 space per 3 properties

Development 10 or more properties 1 space per 4 properties

Off Street Cycle Parking Requirements

1 Bedroom Properties 1 cycle space

2 to 3 Bedroom Properties 2 cycle spaces

4 to 5 Bedroom Properties 3 cycle spaces

Disabled Parking

In car parks serving multi occupancy dwellings, apartments blocks, community facilities or schemes specially designed for disabled or elderly residents, disabled parking bays should be considered. If required, 5% of the total parking capacity should be designated for disabled users. Minimum disabled space required $3.6 \times 5.0 \text{m}$ with an additional clear 1.2 m safety zone to the rear of the space.



4 Future Transport Conditions

4.1 Introduction

4.1.1 This section quantifies the traffic that is likely to be generated by the development of the masterplan and compares two scenarios in terms a differing mode share proportions. These are based on a business-as-usual approach to mode share using the existing mode share taken from Census 2011 and a sustainable transport approach to mode share that assumes that there will be a shift towards public transport and active mobility enabled by the redevelopment in line with the vision for the Rolfe Street Masterplan.

4.2 Planning Horizon

4.2.1 The emerging SMBC Local Plan covers the growth and development of Sandwell up to 2041. For the purpose of defining a future planning horizon it is assumed that the Rolfe Street Masterplan area will be developed by the end of the local plan period and this was then used for the calculation of the future transport scenario.

4.3 Transport supporting the Vision for Smethwick Rolfe Street

4.3.1 Connectivity is a key aspect of achieving the vision for Smethwick Rolfe Street as articulated in the proposed masterplan. Building on from the Smethwick to Birmingham Corridor Framework and with the aspiration for the Rolf Street area to become an active travel exemplar it is important that the already good connectivity is leveraged further to create movement systems that enable a shift towards active mobility and public transport with less reliance on car travel and the added benefit of reduced transport related carbon.

4.4 Person Trip Generation

- 4.4.1 The person trip rates were obtained from TRICS 7.9.3, **Appendix D** presents the calculation outputs. The masterplan accommodation schedule has been used to define the person trips rates by housing type.
- 4.4.2 **Table 4.1** shows the trip rates for the privately owned townhouses, **Table 4.2** shows the trip rates for the affordable duplexes and **Table 4.3** shows the trip rates for affordable flats. The trip rates associated with the morning and evening peak hours are highlighted.

Table 4.1 Trip Rate (Total People) - Privately Owned Townhouses

	Person Trip Rate		
Start	Arrival	Departure	Total
07:00	0.112	0.497	0.609
08:00	0.218	0.799	1.017
09:00	0.212	0.287	0.499
10:00	0.187	0.240	0.427
11:00	0.208	0.237	0.445
12:00	0.233	0.240	0.473
13:00	0.254	0.232	0.486
14:00	0.274	0.281	0.555
15:00	0.525	0.286	0.811



16:00	0.515	0.261	0.776
17:00	0.585	0.270	0.855
18:00	0.480	0.279	0.759
Total	3.803	3.909	7.712

 Table 4.2
 Trip Rate (Total People) – Affordable Duplexes

	Person Trip Rate		
Start	Arrival	Departure	Total
07:00	0.018	0.439	0.457
08:00	0.158	0.684	0.842
09:00	0.158	0.439	0.597
10:00	0.246	0.351	0.597
11:00	0.246	0.228	0.474
12:00	0.298	0.228	0.526
13:00	0.263	0.351	0.614
14:00	0.544	0.368	0.912
15:00	0.614	0.316	0.930
16:00	0.404	0.246	0.650
17:00	0.579	0.298	0.877
18:00	0.386	0.246	0.632
Total	3.914	4.194	8.108

 Table 4.3
 Trip Rate (Total People) – Affordable Flats

	Person Trip Rate			
Start	Arrival	Departure	Total	
07:00	0.064	0.313	0.377	
08:00	0.113	0.775	0.888	
09:00	0.173	0.263	0.436	
10:00	0.149	0.200	0.349	
11:00	0.177	0.227	0.404	
12:00	0.210	0.251	0.461	
13:00	0.173	0.160	0.333	
14:00	0.197	0.283	0.480	
15:00	0.506	0.289	0.795	
16:00	0.531	0.220	0.751	
17:00	0.358	0.218	0.576	



18:00	0.360	0.184	0.544
Total	3.011	3.383	6.394

4.4.3 The trip generation calculations were based on Accommodation Schedule 2426-A-SH-221202-Schd-DS-05. The breakdown is shown in **Table 4.4**, Townhouses are assumed to be privately owned units, whilst duplexes and apartments are assumed to be affordable units.

Table 4.4 Rolfe Street Accommodation Schedule 2426-A-SH-221202-Schd-DS-05

Accommodation Schedule		Split %
Townhouses (2 bed)	38	
Townhouses (3 bed)	44%	
Townhouses (4 bed)	21	
Duplexes (2 bed)	63	400/
Duplexes (3 bed)	8	12%
Apartments (1 bed)	138	450/
Apartments (2 bed)	138	45%
Total	617	100%

4.4.4 The person trip generation results are shown in **Table 4.5** for 270 privately owned townhouses, **Table 4.6** for 71 affordable duplexes and **Table 4.7** for 276 affordable flats.

 Table 4.5
 Trip Generation (Total People) - Privately Owned Townhouses

	Person Trip Generation				
Start	Arrival	Departure	Total		
07:00	30	134	164		
08:00	59	216	275		
09:00	57	77	135		
10:00	50	65	115		
11:00	56	64	120		
12:00	63	65	128		
13:00	69	63	131		
14:00	74	76	150		
15:00	142	77	219		
16:00	139	70	210		
17:00	158	73	231		
18:00	130	75	205		
Total	1,027	1,055	2,082		



 Table 4.6
 Trip Generation (Total People) – Affordable Duplexes

	Person Trip Generation					
Start	Arrival	Departure	Total			
07:00	5	119	123			
08:00	43	185	227			
09:00	43	119	161			
10:00	66	95	161			
11:00	66	62	128			
12:00	80	62	142			
13:00	71	95	166			
14:00	147	99	246			
15:00	166	85	251			
16:00	109	66	176			
17:00	156	80	237			
18:00	104	66	171			
Total	1057	1132	2189			

 Table 4.7
 Trip Generation (Total People) – Affordable Flats

	Person Trip Generation				
Start	Arrival	Departure	Total		
07:00	17	85	102		
08:00	31	209	240		
09:00	47	71	118		
10:00	40	54	94		
11:00	48	61	109		
12:00	57	68	124		
13:00	47	43	90		
14:00	53	76	130		
15:00	137	78	215		
16:00	143	59	203		
17:00	97	59	156		
18:00	97	50	147		
Total	813	913	1726		

4.4.5 The total trip generation for the proposed re-development of the masterplan area for the 12-hour period is shown in **Table 4.8**.



Table 4.8 Trip Generation – Total Residential Units (12hr)

	Person Trip Generation					
Start	Arrival	Departure	Total			
07:00	52	337	390			
08:00	132	610	742			
09:00	147	267	414			
10:00	157	214	371			
11:00	170	187	357			
12:00	200	194	394			
13:00	186	201	387			
14:00	274	252	526			
15:00	444	241	685			
16:00	392	196	588			
17:00	411	212	623			
18:00	331	191	522			
Total	2897	3101	5998			

4.5 Mode Share

- 4.5.1 Two scenarios have been developed to assess the potential benefits of the improved active mobility (walking and cycling) enabling car alternative access to public transport as part of the vision for the masterplan as opposed to more traditional car-centric approaches to development and regeneration.
 - a. **Business as Usual**: The mode share for this scenario is calculated based on the existing mode share proportions from Census 2011.
 - b. **Sustainable Approach**: This scenario based on an increase in sustainable modes (ped/ cycle and public transport) along with a reduction in car driver mode share.

Business As Usual

- 4.5.2 The total person trip generation is split according to the Method of Travel to Work percentages within Sandwell 26 (Census 2011) as described in Section 2.
- 4.5.3 Recent census data suggests working patterns have changed resulting in a higher proportion of people working from home. Data from the 2021 Census suggests 15.8% of people work from home, in the MSOA for this site. This shows an increase on the 2% of people who worked from home in the 2011 census.

Table 4.9 shows the estimated trips by mode of transportation to and from the site.



 Table 4.9
 Trip Generation split Mode of Travel to Work in Sandwell 26 from Census 2011

Mode	Mode Share	Morning Peak (8am-9am)			Evening Peak (5pm-6pm)		
Wode	%	Arr.	Dept.	Tot	Arr.	Dept.	Tot
Car Driver	49%	65	299	363	201	104	305
Car Passenger	7%	9	41	49	27	14	41
Pedestrian	11%	14	67	81	45	23	68
Cyclist	1%	2	8	10	6	3	8
Train and metro	4%	5	25	30	17	9	25
Bus	28%	37	173	210	117	60	177
Total	100%	132	610	742	411	212	623

Sustainable Approach

4.5.4 The sustainable approach allows for an increase in the mode share for train/metro and cycle. This is to leverage already good connectivity to create movement systems that enable a shift towards active mobility and public transport with less reliance on car travel and the added benefit of reduced transport related carbon. This further enables allocation of appropriate space for people over vehicles further enhancing the public realm benefitting the health and well being of the future residents of Smethwick Rolfe Street.

Rail

- 4.5.5 The West Midlands Rail Investment Strategy places Smethwick Rolfe Street in the Wolverhampton corridor. There are planned service upgrades for this corridor up to 2040. Service provision at Smethwick Rolfe Street is set to increase from just two trains per hour between Walsall and Wolverhampton to an additional two trains per hour to run between Birmingham New Street and Mid/North Wales.
- 4.5.6 Smethwick Rolfe Street station accessibility is being improved. The Access for All scheme at Rolfe Street Station is currently underway as Rolfe Street Station was one of only 8 stations in the West Midlands Rail area that did not have step free access.
- 4.5.7 The travel to work rail mode share observed in 2011 is likely to increase due to the new residents and the planned improvements to the rail services. Table 4.10 reviews the travel to work rail mode share at rail stations within rail zone 2 and 3 with similar characteristics to that of Rolfe Street station once the proposed masterplan development is completed.
- 4.5.8 Nearby Smethwick Galton Bridge rail station has a mix of residential units within its vicinity in addition to having 4 services per hour to Birmingham Snowhill (10 min journey).
- 4.5.9 Erdington rail station has various retail units and mixed residential units in its vicinity, and provides 4 services per hour to Birmingham New Street (13 min journey)



 Table 4.10
 Travel to work 2011 census rail mode share and service patten

Rail Station	Zone	2011 Rail Mode Share %	2022 Service pattern per hour	2040 Service pattern per hour
Smethwick Rolfe Street	2	4%	2	4
Smethwick Galton Bridge	2	8%	4	6
Erdington	3	12%	4	6

4.5.10 As shown in **Table 4.10**, the comparable rail stations have a rail mode share of 7%-8% with four services per hour. This suggests that once Smethwick Rolfe Street Station services per hour increase and the demand increases because of the new residents the travel to work mode share is likely to increase to Birmingham New Street (7 min journey). The current travel time to Birmingham city centre is 17-20 min, in addition to a 5-minute walk from the centre of the site to the Rolfe Street station the total journey time is approximately 25min.

Cycle

- 4.5.11 Section 3.3 of this report outlined the planned strategic cycle network through Smethwick as part of the wider Smethwick to Birmingham Corridor. This includes the improvements along the canal and the cycle lane extension along the A457 all compliant with the LTN1/20.
- 4.5.12 The proposed development will consist of a mobility hub where cycle hire will be available. Currently, the West Midlands Cycle Hire scheme covers the Birmingham area up to Heath Street by City Hospital and the West Bromwich area up to the M5. The Smethwick area is likely to be covered by the scheme in the coming years.
- 4.5.13 Recent research has shown that access to cycle hire schemes has increased the propensity for cycling. The CoMoUK annual bike share research has consistently found that bike share is a catalyst to re-engaging with cycling. In 2022, 60% of respondents (49% in 2021 and 55% in 2020) said that joining the scheme was a catalyst to them cycling for the first time in at least a year or ever. This included 26% of people who hadn't ridden for 5 years or more, and 7% who were new to cycling. Meanwhile, the number stating that they were already cycling was 38% (51% in 2021 and 45% in 2020) CoMoUK Annual Bike Share Report, 2022
- 4.5.14 The CIHT publication Planning for Cycling (2014) states that the majority of cycling trips are for short distances, with 80% being less than five miles (8 kilometres) and with 40% being less than two miles (3.2 kilometres). With a cycling speed 4.4meters per minute an 8-kilometre distance results as a 30 min journey and a 3.2-kilometre distance results as a 12min journey. Figure 2.7 shows that cycle travel time within the short distances cover areas such as West Bromwich, Birmingham, and other potential places of work. Cycle journey times from within the Rolfe Street Masterplan area to Rolfe Street Station are even shorter and could be encouraged by improved facilities and interfaces between active mobility and the train station.
- 4.5.15 The cycle mode share for travel to work is likely to increase to 3-4% as a results of the cycle infrastructure improvements, provision of cycle hires and the areas that can be reached over short distances.
- 4.5.16 **Table 4.11** shows the masterplan mode share associated with the sustainable approach.



Table 4.11 Masterplan Mode Share

Mode	2011 Census Mode	Masterplan Mode Share	Justification		orning Pe (8am-9am			vening Pe (5pm-6pm	
	Share			Arr.	Dept.	Tot	Arr.	Dept.	Tot
Car Driver	49%	39%	Reduce	51	238	289	160	83	243
Car Passenger	7%	7%		9	43	52	29	15	44
Pedestrian	11%	13%	Increase	17	79	96	53	28	81
Cyclist	1%	5%	Increase	7	30	37	21	11	31
Train and metro	4%	8%	Increase	11	49	59	33	17	50
Bus	28%	28%		37	171	208	115	59	174
Total	100%	100%		132	610	742	411	212	623

4.5.17 The mode share observed in Table 4.11 is applied to the total person trip generation presented in Section 4.3 for the proposed land use defined in the masterplan accommodation schedule.

Table 4.12 shows the difference in the number of car trips between the existing trips (generated by the existing land use) and the business-as-usual approach to the masterplan generated trips. This results in a reduction of 5% during the 12hr period and with an increase of 19% during the AM peak hour and 11% during the PM peak hour.

 Table 4.12
 Business as Usual Proposed Development Trips (Car Mode)

Business as usual					
	12hr	AM peak	PM peak		
Existing generated trips	3090	305	274		
Proposed Dev. generated trips	2939	363	305		
Trip Difference	-151	59	31		
Trip difference %	-5%	19%	11%		

4.5.18 **Table 4.13**, following the same methodology as above, shows that enabling the sustainable approach to mode share in delivering the masterplan would result in a car trip reduction of 24% during the 12hr period, 5% during the AM peak hour and 11% during the PM peak hour.

 Table 4.13
 Sustainable Approach Proposed Development Trips (Car Mode)

Sustainable approach					
	12hr	AM peak	PM peak		
Existing generated trips	3090	305	274		
Proposed Dev. generated trips	2339	289	243		
Trips Difference	-751	-15	-31		
Trips difference %	-24%	-5%	-11%		



4.5.19 **Table 4.14** shows the difference in car trips between the business-as-usual approach and sustainable approach.

 Table 4.14
 Business as Usual vs Sustainable Approach Trips Difference (Car Mode)

	12hr	AM peak	PM peak
Business as usual	7797	992	717
Sustainable approach	7197	918	655
Difference	-600	-74	-62
Difference %	-8%	-7%	-9%

- 4.5.20 As mentioned previously it has not been possible to obtain data from traffic surveys for the masterplan area due to extensive road works that would have rendered the survey results unusable. Further to this existing traffic count data is not available for the key junctions relevant to the masterplan area and so no junction capacity analysis has been undertaken as part of this assessment.
- 4.5.21 As can be seen in this section and in line with the vision for the masterplan area it is preferable to follow a sustainable approach to the transport provision to support the future community of Smethwick Rolfe Street. When comparing the trip generation of the existing land use to that of the future residential community there is likely to be a reduction in car based trips in future of 5% in the morning peak and 11% in the evening peak. By following a sustainable approach to transport with a focus on active mobility and public transport car trips can be further reduced by 7% in the morning peak and 9% in the evening peak.
- 4.5.22 It is also important to note that the future shift in land use type from industrial to residential will significantly affect the trip dynamics. As the industrial land use predominantly attracts trips in the morning as an employment land use there is an inflow of trips as a result. The opposite is true of residential land uses where there is an outflow of trips in the morning peak as people leave the area. This will result in a reversal of the peak direction for traffic generated the masterplan area when compared with the existing travel patterns in the area.
- 4.5.23 The capacity on the existing road network and associated junctions is designed to accommodate the existing peak direction of traffic but the future development generated traffic will take up capacity in the opposite peak direction than it does currently which is also likely to be different than the exiting background traffic direction associated with the surrounding land uses. The future Smethwick Rolfe Street traffic will therefore take up existing underutilised capacity in the opposite peak direct for both the morning and evening peaks. For this reason as well as the fact that there are likely to be less overall trips generated by the development it is expected that the traffic generated by the proposed masterplan area could be accommodated within the existing road network capacity without the need for major infrastructure upgrades to increase capacity. This will need to be tested through analysis as the masterplan progresses for the full development scenario as well as the phased transition towards the full masterplan development over time.



5 Carbon Reduction Potential

5.1 Introduction

5.1.1 This section compares the carbon emissions associated with the Business-as-Usual transport approach and the Sustainable Transport approach. This is based on the trip generation and mode share for each scenario as described in the preceding section of this report.

5.2 Methodology for Calculating Carbon Emissions

- 5.2.1 Traffic emissions of CO₂ are calculated using the Emission Factor Toolkit (EFT) v11.0 as published by the Department for Environment Food and Rural Affairs (DEFRA). This utilises CO₂ emission factors based on TRL/DfT data. The **Business as Usual** and **Sustainable** Approaches have been considered in order to provide a comparison between expected carbon emissions in the two different approaches.
- 5.2.2 Traffic data is entered into the EFT, along with speed and distance data to provide annual emissions for operational phase traffic related to the development. This tool calculates the "tailpipe" emissions of these vehicles only so does not take into account emissions such as those produced during production of energy or fuel for these vehicles or non-transport related emissions as well as embedded carbon. The calculations are based on the proportion of internal combustion engine (ICE) vehicles today and does not take into account the transition to electric private cars over time.
- 5.2.3 Census 2011 data has been used to determine the travel destinations from the Smethwick Rolfe Street area for car based trips and their associated distances from the masterplan area as well as the average travel speed.
- 5.2.4 The data inputs are summarised below and shown in **Table 5.1**.

 Table 5.1
 EFT Input Summary

Destination	Traffic Flow	Traffic Flows (12 Hour)		Speed	Link Length	
Destination	Business as Usual	Sustainable Approach	- % HDV	(kph)	(km)	
Sandwell 001	5	5	0.263	23	11.6	
Sandwell 005	60	56	0.263	21	8.3	
Sandwell 006	11	10	0.263	21	9.3	
Sandwell 007	27	25	0.263	22	10.2	
Sandwell 009	44	40	0.263	23	9.1	
Sandwell 012	115	106	0.263	21	7.6	
Sandwell 013	27	25	0.263	23	8.3	
Sandwell 014	16	15	0.263	23	10.1	
Sandwell 015	99	91	0.263	19	8.4	
Sandwell 016	159	147	0.263	24	7.9	
Sandwell 017	66	61	0.263	18	5.5	
Sandwell 018	82	76	0.263	21	5.7	
Sandwell 019	175	162	0.263	19	4.4	
Sandwell 020	192	177	0.263	17	11.3	
Sandwell 021	5	5	0.263	20	5.9	



				•	
Sandwell 022	323	298	0.263	18	6
Sandwell 023	181	167	0.263	24	1.2
Sandwell 024	5	5	0.263	21	2.4
Sandwell 025	619	572	0.263	18	6.7
Sandwell 026	33	30	0.263	12	1.8
Sandwell 027	49	46	0.263	18	5.4
Sandwell 028	11	10	0.263	11	1.3
Sandwell 029	49	46	0.263	18	6.6
Sandwell 030	16	15	0.263	18	4.9
Sandwell 031	11	10	0.263	14	1.9
Sandwell 032	33	30	0.263	17	3.3
Sandwell 033	164	152	0.263	16	7
Sandwell 034	22	20	0.263	11	3.3
Sandwell 036	16	15	0.263	11	1.9
Sandwell 037	16	15	0.263	17	6.3
Sandwell 038	5	5	0.263	15	9.9
BIRMINGHAM DISTRICT	3753	3465	0.263	17	8.1
DUDLEY DISTRICT	323	298	0.263	18	13.6
WALSALL DISTRICT	285	263	0.263	14	13.8
SOLIHULL DISTRICT	219	202	0.263	46	49.4
CITY OF WOLVERHAMPTON DISTRICT	153	142	0.263	18	17.8
COVENTRY DISTRICT	82	76	0.263	34	45.1
WYCHAVON DISTRICT	93	86	0.263	57	56.9
BROMSGROVE DISTRICT	38	35	0.263	44	21.9
NORTH WARWICKSHIRE DISTRICT	60	56	0.263	30	35
LEEDS DISTRICT	33	30	0.263	66	209
WARWICK DISTRICT	44	40	0.263	50	66.7
LICHFIELD DISTRICT	27	25	0.263	24	26.1
WYRE FOREST DISTRICT	44	40	0.263	35	32.4
Total	7797	7198			

5.2.5 The data from Table 5.1 is then used in the Emission Factor Toolkit (EFT) with the resultant carbon emissions calculated for each scenario shown in Table 5.2 below. As can be seen in Table 5.2 by following a Sustainable Approach to transport for the Smethwick Rolfe Street Masterplan area this potentially creates 8% less carbon dioxide per annum from vehicle emissions compared to what would be produced by the Business-as-Usual Approach was followed. This results in a carbon saving of 953 tonnes of carbon dioxide per year.



 Table 5.2
 Total Carbon Emissions

Approach	Total CO2 Emissions (tonnes/annum)
Business as Usual	12391
Sustainable Approach	11439
Difference	-953
Difference %	-8%



6 Parking

6.1 Introduction

6.1.1 This section assesses different options with regard to parking provision for the Rolfe Street Masterplan Area in support of the masterplan vision for Smethwick Rolfe Street.

6.2 Parking

- 6.2.1 Based on the Accommodation Schedule 2426-A-SH-221202-Schd-DS-05, the masterplan area will provide 617 residential units.
- 6.2.2 The sustainable transport hierarchy pyramid places the private car mode of transportation at a lowest-level, therefore reducing the provision of car parking spaces and providing sustainable transport alternatives will increase the use of sustainable modes of transportation and reduce demand on the highway network as well as create a greater potential for transport carbon reduction as demonstrated in the preceding section of this report.
- 6.2.3 As described in Section 4 above and considering the transformational objectives for the Smethwick Rolfe Street Masterplan as well as alignment with national and local strategic policy objectives a sustainable transport approach for the masterplan area is preferred. The sustainable approach allows for an increase in the mode share for train/metro and cycle. This is to leverage the already good connectivity and to create movement systems that enable a shift towards active mobility and public transport with less reliance on car travel and the added benefit of reduced transport related carbon. This further enables allocation of appropriate space for people over vehicles further enhancing the public realm and benefitting the health and well being of the future residents of Smethwick Rolfe Street. Further to this Section 5 above shows that by following a sustainable approach to transport for the masterplan area 953 tonnes of carbon dioxide from vehicle emissions could be saved per annum.
- 6.2.4 In order to determine an appropriate level of parking provision which aligns with a sustainable transport approach and takes into account the current shift in trends towards parking provision a range of parking applications were considered. Parking provision option calculations were made based on:
 - Sandwell Planning Policy Guidance -Revised Residential Design Guide 2014, a description of the policy is set out in Section 3. It is acknowledged that this document precedes the current national policy position of following sustainable approaches to development as articulated in the NPPF 2021 and vision and validate approaches to transport planning and provision as per the DfT Decarbonisation Strategy 2021 as well as the Sandwell Corporate Plan 2021 2025 policy A15 to continue to develop and deliver projects that reduce barriers to the use of public transport and sustainable travel choices.
 - Birmingham City Council (BCC) Parking SPD 2021 is a more up to date policy with parking requirements differentiated by zones with differing characteristics. Table 6.1 below provides a comparison of the characteristics of the Zones A, B and C. parking areas in the BCC parking SPD 2021. Due to the high level of public transport accessibility in the masterplan area as a result of the Rolfe Street Train Station, bus services on Rolfe Street as well as connections to cycling infrastructure the Rolfe Street Masterplan area once redeveloped in the future will have characteristics of zone A and B. The masterplan area is currently not within the Birmingham Clean Air Zone and will not have the same density as the Birmingham city centre. For this reason and for the purpose of comparable parking requirement calculations the BCC Parking SPD Zone B has been used.



Table 6.1 Parking Zone Characteristics- BCC Parking SPD 2021

Zone	Zone Characteristics	Parking Provision Characteristics
А	Very high or high public transport accessibility All locations within the Clean Air Zone High population density Well served by cycle and walking facilities Primarily retail and commercial with high density residential Comprehensive on-street parking restrictions.	Low and car free development High provision for cycling, Car Clubs, ULEV (and bike hire where appropriate). Adequate servicing and operational provision.
В	High public transport accessibility High to medium population density Well served by cycle and walking facilities Includes the most accessible urban centres and growth areas	Restricted maximum parking levels for all land uses. Unallocated parking requirement for residential. High provision for cycling, Car Clubs, ULEV. If not in place already, these locations will be prioritised for on-street parking controls in the future.
С	Medium to low public transport accessibility Medium to low population density Predominantly residential	Typical parking levels seek appropriate parking provision to ensure development doesn't generate parking pressure on local roads. Unallocated requirement for residential. Good provision for cycling and ULEV (and Car Clubs where market demand allows).

- The Port Loop Development is a recent residential based development which is of a similar nature to the vision for the redevelopment of the Smethwick Rolfe Street Masterplan area. The parking space provision applied in Port Loop was 1 space per house and 0.5 spaces per apartment.
- 6.2.5 The Smethwick Rolfe Street Masterplan proposed parking ratio is shown in Table 6.2

 Table 6.2
 Rolfe Street Masterplan Parking Provision Ratio

Type of accommodation	Parking provision ration per unit
Houses (2 bed)	1
Houses (3 bed)	1
Houses (4 bed)	1.5
Duplexes (2 bed)	1
Duplexes (3 bed)	1
Apartments (1 bed)	0.25
Apartments (2 bed)	0.5

This equates to a total proposed parking provision of 455 spaces for the proposed Masterplan. This provides an overall ratio of 0.74 parking spaces per dwelling unit.

6.2.6 **Table 6.3** provides a comparison of the minimum car parking provision when calculated using the different rates as described in 6.2.4 above and based on the proposed accommodation schedule for the proposed Masterplan.



 Table 6.3
 Total Car Parking Provision

	Total Car Parking Provision
Sandwell (2014)	1011
Birmingham City Council - Zone B	830
Port Loop	271
Smethwick Rolfe Street Masterplan	455

- 6.2.7 The comparison in Table 6.3 above shows that the Rolfe Street Masterplan proposed parking provision is below the minimum parking provision numbers according to the 2014 Sandwell policy guidance and Birmingham SPR for Zone B but significantly higher than is currently provided for the Port Loop development. The parking provision of 455 car parking spaces for the Rolfe Street Masterplan area is considered appropriate for the vision for the masterplan area and in line with National and Local planning and policy objectives. In order to create a built environment and set of movement systems that are conducive to a lower car usage environment it is important to provide for a greater focus on active mobility and public transport as well as providing for the integration between them.
- 6.2.8 There are other examples of developments of varying sizes in Birmingham that have successfully motivated for reduced parking provision as a result of similar characteristic to the Rolfe Street Master plan proposals. Some of these are listed in Table 6.4 below which provides information on the parking provision for each as well as the motivation provided for the reduction against the parking requirement in the relevant policy. Clearly there is strong precedent for reduced parking provision linked to a sustainable transport approach to development, high levels of public transport accessibility and cycling and walking infrastructure to serve primary journeys as well as linkages to public transport. The City Hospital West example below which is of similar scale to the redevelopment of the Rolfe Street Masterplan area in terms of numbers of residential units motivates for an overall parking ratio of 0.76 spaces per dwelling unit which is comparable to the 0.74 spaces per dwelling unit proposed for the Rolfe Street Masterplan.

 Table 6.4
 Birmingham Development Examples of Reduced Parking Provision

Site	Planning application	Development	Parking Provision- Car	Guidance	Justification Provided
School Road, Moseley	2018/03462/PA	20 apartments	15 parking spaces	"Car Parking Guidelines" (2012) require an average of one space per dwelling	Para 32 of the NPPF states that development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe. This will clearly not be the case with respect to this proposal.
Corkfield in Birmingham (under construction)	2018/05638/PA	374 apartments	111 car parking spaces within the curtilage, Access to a further 229 spaces at the reconfigured stadium car park which will be used flexibly between the residential mixed-use building users and Stadium users (approx 340)	2012 standards - up to 894 spaces could be provided in line with BCC's standards	The proposal stands at 82.6% provision when the disabled parking spaces are excluded from the calculation and if assuming all the flexible car parking spaces on surface car park are utilised for residential provision.



Winson Green - Great Western Close	2020/03216/PA	310 apartments	151 parking spaces (34%)	The 2012 guidance allows a reduction to 1.5 spaces per dwelling within the outer parts of the city centre on selected transport corridors.	The site is located a short walking distance from several shops and bus services and therefore the area can be described as highly sustainable. A reduction in the parking ratios is possible at this location. Para 105 of NPPF	
City Hospital West - Birmingham	2022/09354/PA	750 dwellings mixed	575 parking spaces	Total car parking provision of 948 spaces required based on BCC Zone B 2021. The Masterplan and Indicative Layout Plan demonstrates how 575 car parking spaces could be provided across the Site in a mixture of off-street provision, onstreet provision and car parking courts for apartments blocks. The car parking provision equates to 0.76 car parking spaces per residential unit.	The site is in a sustainable location, and fronted by high quality public transport and active travel network which would discourage car usage. The site also bounds the retained NHS estate that would remain a major employer within the area. In this context, the direct application of car parking standards to such a large site would reduce the efficacy of what the car parking standards are trying to achieve in reducing car dependency, healthy living, noise and air quality.	

- 6.2.9 The common thread between the developments above and the Rolfe Street Masterplan is that they are striving for transformation towards a more human oriented development future that doesn't perpetuate a built environment dominated by cars. The level of parking provision is a key driver of enabling car dependency and preventing the establishment of sustainable travel behaviours and maximising the use of car alternative modes. The Rolfe Street Masterplan represents a vision for the future of the area and should therefore be seen as aspirational. It is acknowledged that more detailed assessments, designs and adjustments will need to be undertaken as the masterplan moves forward over time but it is important now to set a vision for a desirable future rather than designing for present conditions for fear that change will not take place.
- 6.2.10 The proposed masterplan for the area provides for integrated bike and bin storage in units for the new residential led development. Car parking is provided in a combination of on and offstreet formats to maximise space for the movement of people and enable high quality public streetscapes.
- 6.2.11 At Rolfe Street, residential streets should create a strong sense of place, whilst meeting requirements for parking, servicing, safety and privacy. Sandwell Council's **Residential Design Guide** (2014) sets out principles for the design of residential streets. Illustrated **Figure 6.1** below



are two potential approaches to streets, at high and medium densities, demonstrating an approach to meeting the principles of the Guide in a way appropriate to Rolfe Street.



Figure 6.1 Masterplan approach to parking



7 Rolfe Street Re-imagined

7.1 Introduction

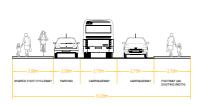
- 7.1.1 Rolfe Street is currently a narrow street characterised by poor quality public realm, an unfriendly pedestrian environment, with parked cars encroaching on the footways and bus stops, and with no provision for cyclists except for a short narrow painted cycle lane on the northern side from the A457 which stops abruptly at North Western Road. There are currently no pedestrian crossings on the entire length of Rolfe Street.
- 7.1.2 In order to provide an environment suitable for a new residential community, Rolfe Street needs to be reconfigured to resolve these issues. As the land use and character of Rolfe Street transitions through the implementation of the masterplan so too the transport character and function of Rolfe Street needs to transition to one which creates a human oriented environment where pedestrians, cyclists and buses take priority.
- 7.1.3 The proposed Rolfe Street Masterplan promotes the setting of some new development back from the existing building line and providing parking and landscaping within Rolfe Street whilst maintaining a two-way traffic flow.
- 7.1.4 As discussed in sections 4 and 5 above it is considered appropriate to follow a sustainable transport approach when considering the redevelopment of the Rolfe Street Masterplan area to maximise the potential for modal shift away from the current car dominated environment by improving accessibility to the existing high level of public transport by walking and cycling. Key to achieving this is the deprioritsation of the role of the car in the Rolfe Street Masterplan area and the appropriate allocation of space to people rather than vehicles as far as possible.
- 7.1.5 Three options have been considered in determining a preferred cross section and space allocation configuration for Rolfe Street to support the vision of the Rolfe Street Masterplan and the proposed future character of the area. The characteristics of these options are described below.

7.2 Cross Section Options for a Future Rolfe Street

Option 1

- 5.5m carriageway (suitable for two-way buses in accordance with Figure 7.1 in the MfS) but may not be preferable for some operators
- 2.0m wide on-street parking
- Widen one of the existing footways to provide 3.0m shared foot/ cycle route





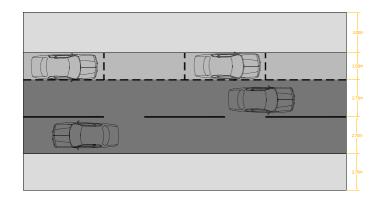
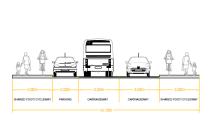


Figure 7.1 Rolfe Street Cross Section Option 1

Option 2

- 6.1m carriageway additional width compared to Option 1
- 2.0m wide on-street parking on one side only (can be staggered on alternating sides)
- Widen both existing footways to provide 3.0m shared foot/ cycle routes



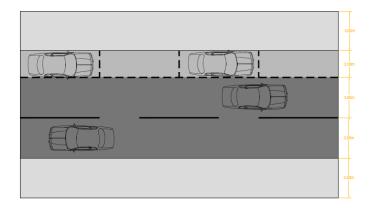
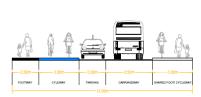


Figure 7.2 Rolfe Street Cross Section Option 2

Option 3

- 3.5m wide one-way carriageway
- 2.0m wide on-street parking on one side
- Segregated 2.0m footway/ 3.0m cycle track ideal provision in accordance with LTN 1/120





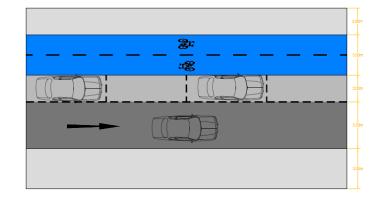


Figure 7.3 Rolfe Street Cross Section Option 3

- 7.2.1 After consideration and consultation with the masterplanning team and SMBC it was determined that the preferred cross section option is option 2 to enable enhanced space for pedestrians and cyclists, maintaining bi-directional traffic lanes that can accommodate vehicular access and buses whilst enabling enhancements to the street scape with the provision of pedestrian crossings. The widened shared cycle and footways on both sides under option 2 help to facilitate walking and cycling access to existing and future enhanced public transport serving the masterplan area in the form of buses on Rolfe Street and the Rolfe Street train station as well as linkages to existing nearby cycle routes.
- 7.2.2 This is further developed in the Rolfe Street Masterplan as shown in Figure 7.4 Below.

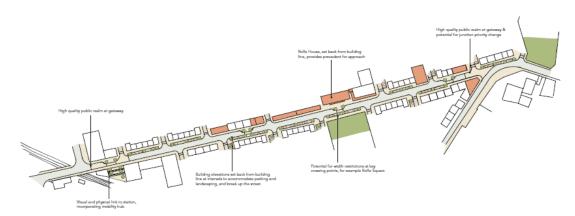


Figure 7.4 Rolfe Street Masterplan – Rolfe Street Reimagined

7.2.3 The transformation of Rolfe Street is a key element of the Rolfe Street Masterplan and the transformation of the area as a whole. Key to the achievement of this, as mentioned above, is the appropriate allocation of space to the modes of transport that are preferable in the future. Part of this would also be a reduction the volume of unnecessary through traffic to create an environment that is appropriate for the development of a new residential community with a high quality and safe public environment. This can be achieved by providing gateway features at either end of Rolfe Street which would incorporate alternative road surface treatments and high quality public realm enhancements to clearly signal a change in street character and function. At the eastern end of Rolfe Street this would include edge treatment to encourage pass by traffic flow onto New Street instead of Rolfe Street. At the western end of Rolfe Street the Station/Bath site and mobility hub would form the eastern gateway.



- 7.2.4 Whilst it cannot be quantified now due to the limited availability of traffic flow data as described in **Section 2.7** above, it can be determined from the derived traffic flows on Rolfe Street at 2022 and the trips generated by the existing B2 land use buildings, presented in **Section 2.8**. The worst case the amount of displaced traffic from Rolfe Street that would need to be accommodated on the surrounding road network would be in the order of 628 vehicles in the AM peak and 412 vehicles in the PM peak. As indicated earlier in this report the future land use together with the sustainable transport approach to the masterplan area will result in less vehicular traffic on the local road network than is experienced today.
- 7.2.5 The capacity on the existing road network and associated junctions is designed to accommodate the existing peak direction of traffic but the future development generated traffic will take up capacity in the opposite peak direction than it does currently which is also likely to be different than the exiting background traffic direction associated with the surrounding land uses. The future Smethwick Rolfe Street traffic will therefore take up existing underutilised capacity in the opposite peak direct for both the morning and evening peaks. For this reason as well as the fact that there are likely to be less overall trips generated by the development it is expected that the traffic generated by the proposed masterplan area could be accommodated within the existing road network capacity without the need for major infrastructure upgrades to increase capacity. It is acknowledged that this would need to be thoroughly tested as the Rolfe Street Masterplan progresses and any mitigation measures identified and programmed into delivery of the masterplan over time.

7.3 Active Mobility Linkages / Mobility Hub

- 7.3.1 Rolfe Street Station will be the primary gateway to the new community at Rolfe Street, providing connectivity across the West Midlands by rail and bus. The former Baths Site is key, owned by Sandwell Metropolitan Borough Council and providing a direct link to the station.
- 7.3.2 On the Baths site, a Mobility Hub should be provided, following the model proposed by Transport for the West Midlands, integrating rail and bus with cycle storage, West Midlands Cycle Hire and e-mobility, to provide a first and last mile solution. This is a key part of the West Midlands' Combined Authority's WM 2041 Plan, setting a pathway to Net Zero for the West Midlands.
- 7.3.3 The proposed mobility hub is a key element of the low car aspirations for the site as this will provide private bike storage for residents who cycle from home and take onward journeys by train or who prefer to take their bicycles with them on the train. It could also provide cycle hire and e-mobility hire options for people visiting or working in the area who are arriving by train or by bus.



8 Conclusions

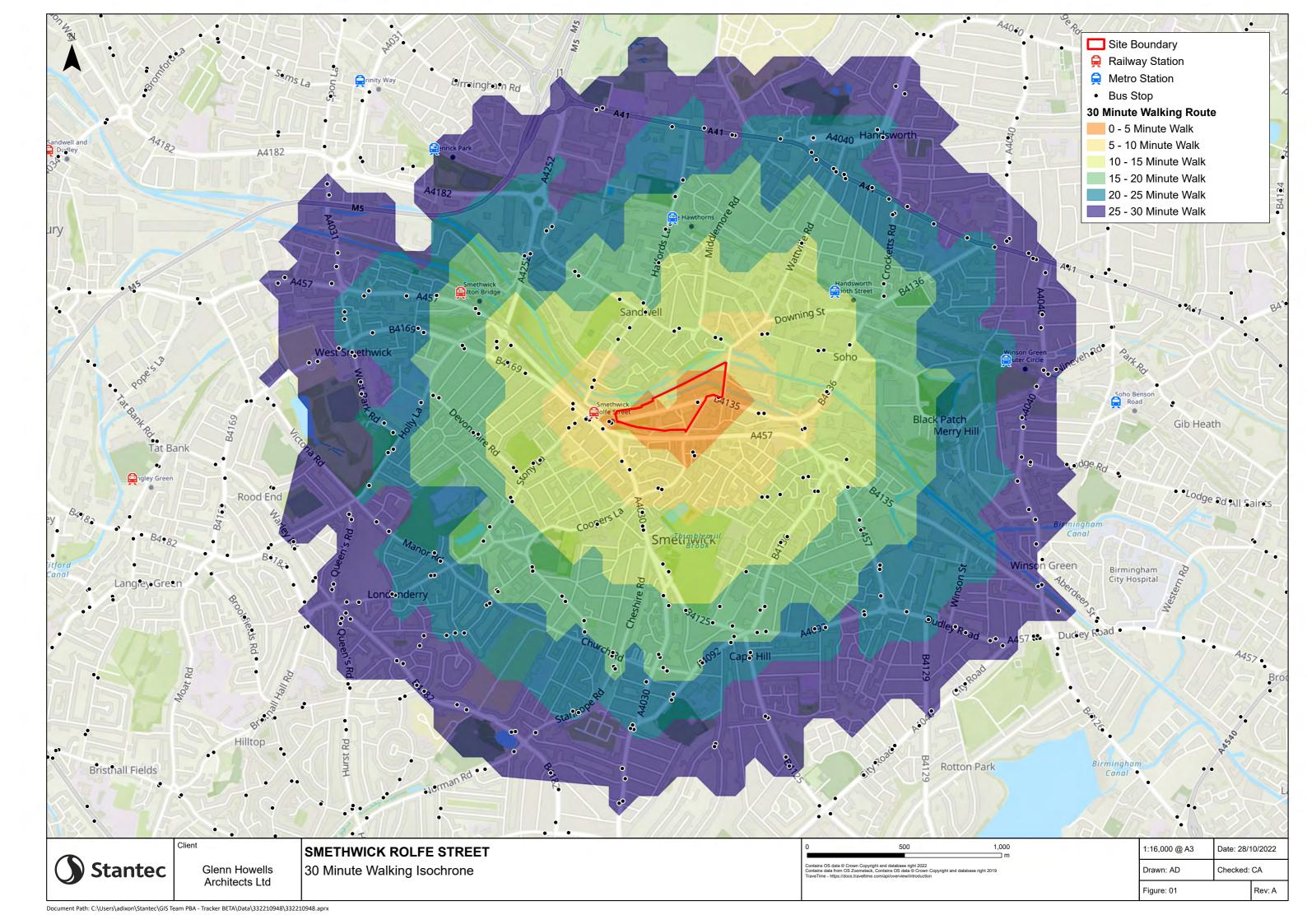
- 8.1.1 Rolfe Street is highlighted as one of the primary strategic sites in the Smethwick to Birmingham Corridor Framework (February 2022), a collaboration between Sandwell and Birmingham Councils, the West Midlands Combined Authority, and others. The document is non-statutory in Sandwell but will be a material consideration in the determination of planning applications. The Rolfe Street Masterplan builds upon and sits alongside the Framework.
- 8.1.2 Locational connectivity. The Smethwick Rolfe Street area is potentially well connected to surrounding areas and key destinations due to existing public transport and cycle routes but local connectivity to these is hampered by poor quality pedestrian and non-existent cycle facilities within the masterplan area.
- 8.1.3 2022 peak hour 2-way traffic flows on Rolfe Street derived from ATC and movement count data supplied by SMBC are 933 and 686 vehicles in the AM and PM peak hours respectively Traffic. It is likely that a proportion of this traffic is through traffic which does not currently have an origin or destination within the masterplan area. The area is characterised by constrained available carriageway width due to parked vehicles on both sides which also impacts pedestrian movements on footways as well as bus stops.
- 8.1.4 The vision for Rolfe Street as developed and articulated through the Masterplan is transformational in terms of land use and the built environment which similarly requires transformation of the transport and movement systems to support it. Key transformational transport elements of Rolfe Street Masterplan are improved pedestrian and cycle connectivity within the masterplan area as well as to the wider public transport and active mobility routes. Developing movement systems that prioritise walking and cycling either as primary trips or to provide access to public transport is underpinned by the aspiration to create a lower vehicle environment and appropriate allocation of space for active mobility.
- 8.1.5 Another important aspect of the transport related transformation of Rolfe Street is the appropriate provision of parking for the new residential community. Parking provision for residential led development is an important factor in influencing the car ownership and usage of people who live there. By considering current parking requirements in Sandwell as well as other areas that have already undergone transformation as well as parking SPDs which are designed to be transformational a parking space provision has been determined which is considered appropriate for the Rolfe Street area and which helps to achieve the transformation required to support the vision for the Rolfe Street Masterplan.
- 8.1.6 In line with the National requirement to achieve net zero transport carbon by 2050 and the vision for the masterplan two transport scenarios where developed and tested against each other to determine the carbon emission associated with each approach. The business-as-usual scenario assumes a perpetuation of the current car dominant mode share whereas the sustainable transport approach priorities a modal shift towards active mobility and public transport. By using the DfT emissions factor toolkit it has been shown that by flowing the sustainable transport approach to the trips generated by the masterplan proposal an annual saving of 953 tonnes of carbon dioxide from vehicle emissions.
- 8.1.7 When considering the redevelopment of the Rolfe Street Masterplan area to maximise the potential for modal shift away from the current car dominated environment by improving accessibility to the existing high level of public transport by walking and cycling key to achieving this is the deprioritsation of the role of the car in the Rolfe Street Masterplan area and the appropriate allocation of space to people rather than vehicles as far as possible. Options for an appropriate cross section for Rolfe Street that provides adequate space for pedestrians and cyclists but retains vehicular access for cars and buses has been assessed and the preferred option used to develop reconfiguration proposals for Rolfe Street as articulated in the masterplan. As the land use and character of Rolfe Street transitions through the

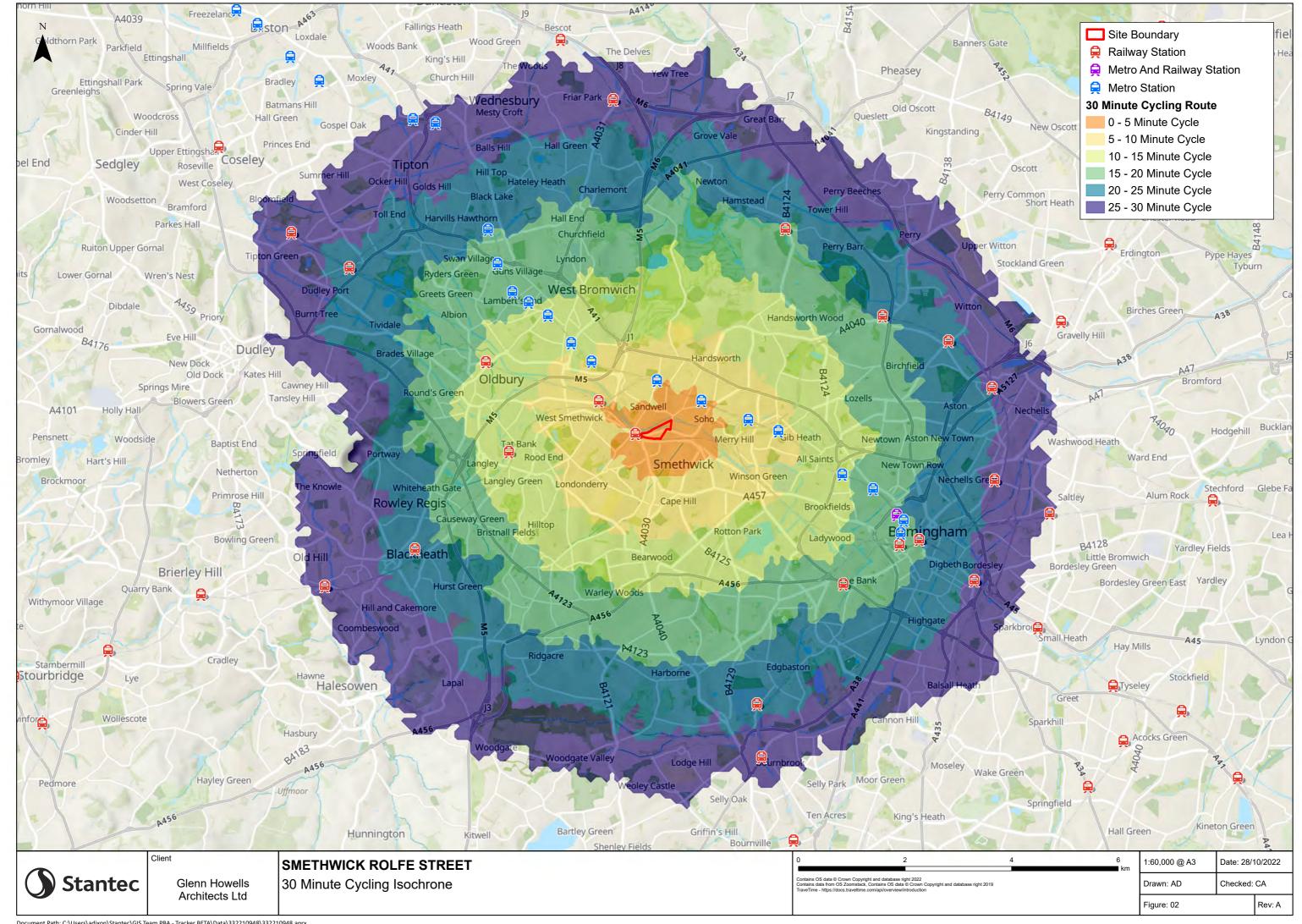


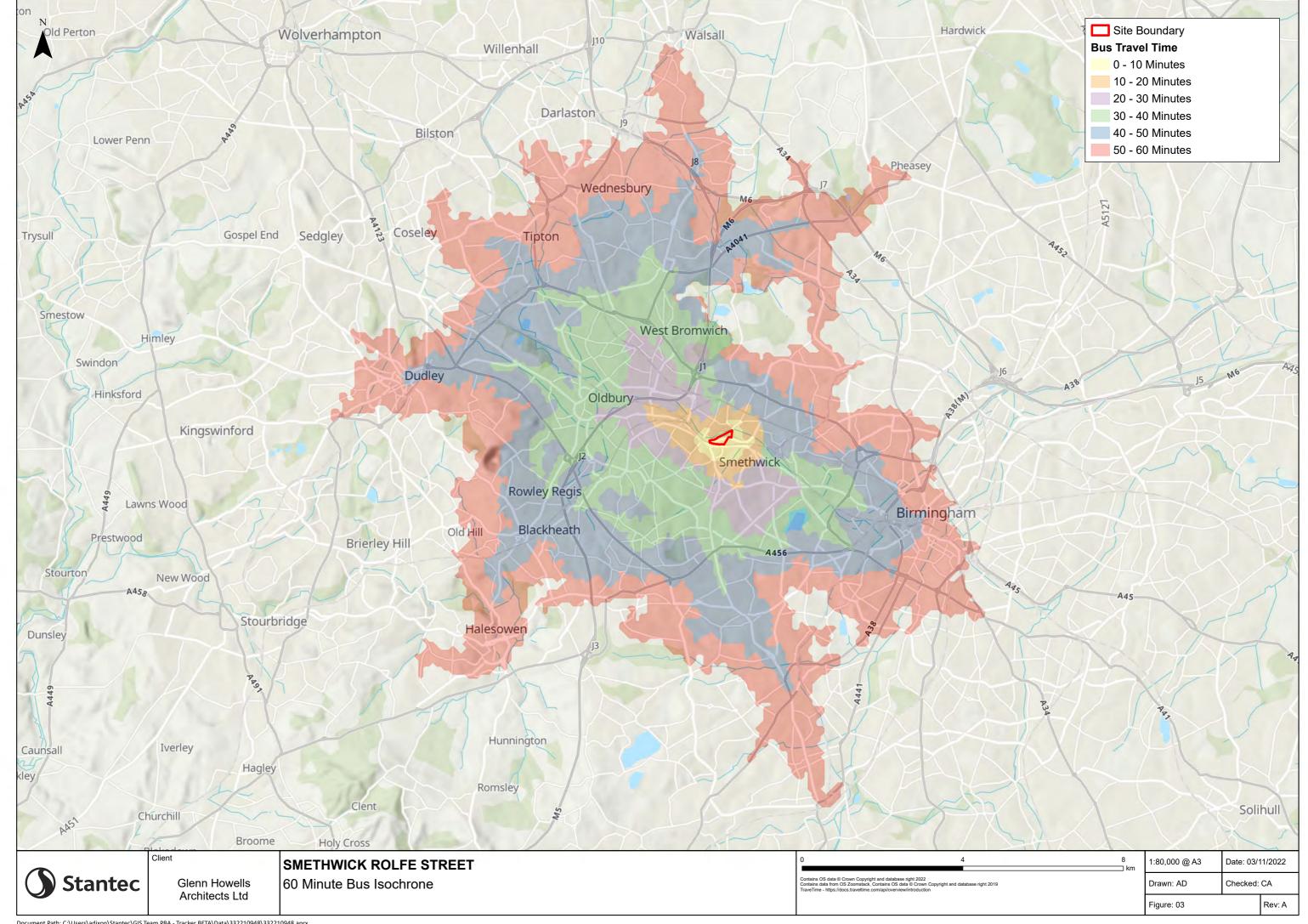
implementation of the masterplan so too the transport character and function of Rolfe Street needs to transition to one which creates a human oriented environment where pedestrians, cyclists and buses take priority. This will result in unnecessary through traffic being discouraged from using Rolfe Street by the implementation of gateway features at the western end and the reconfiguration of the Rolfe Street / New Street junction.

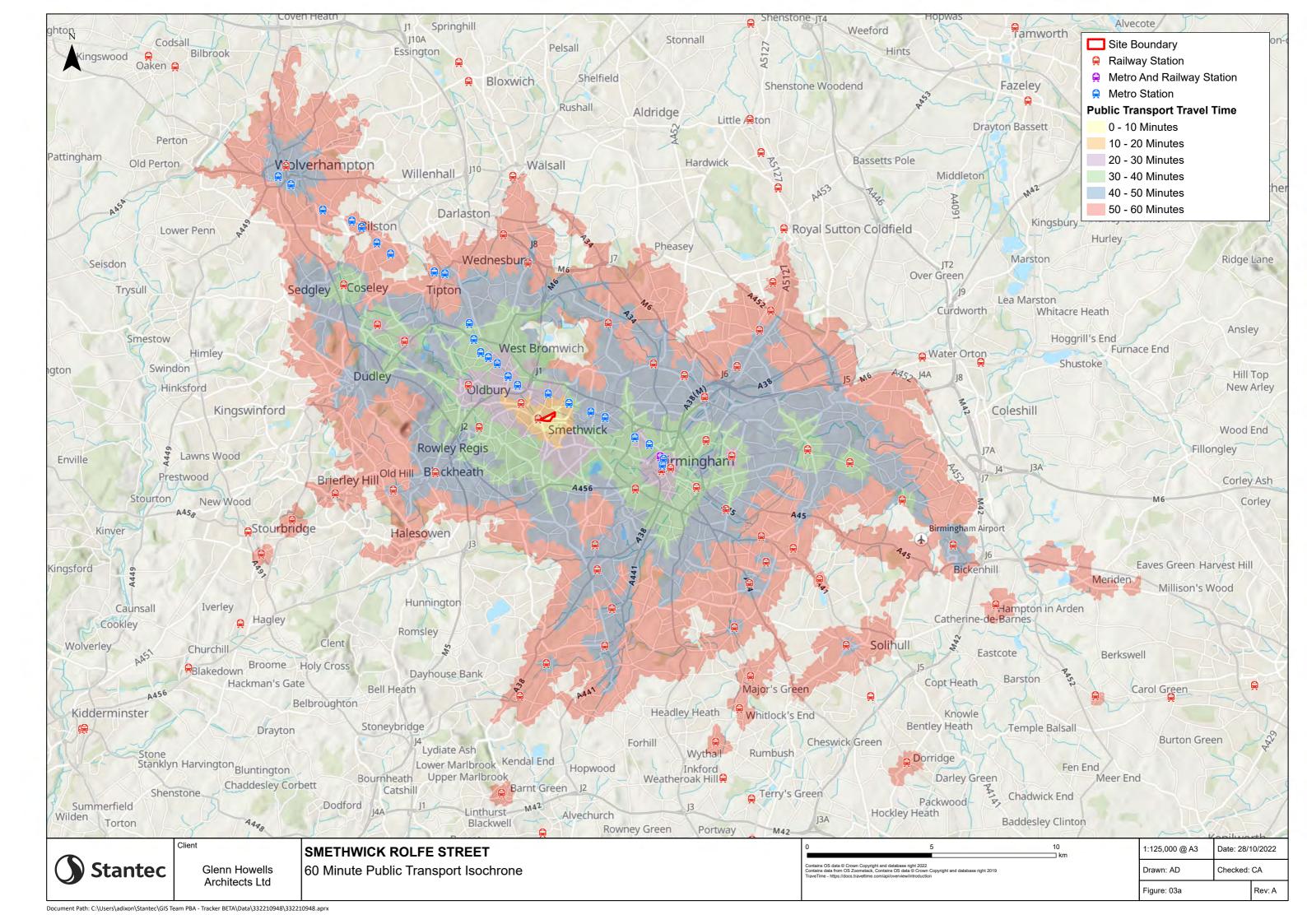
8.1.8 A detailed traffic impact assessment of the Rolfe Street Masterplan transport proposals has not been undertaken as part of this Strategic Transport Assessment largely due to the unavailability of detailed turning movement traffic flow data at key junctions. Based on the analysis of existing traffic flows, existing and future trip generation as well as the characteristics of the preferred sustainable transport scenario it is considered that future traffic associated with the development of the Rolfe Street Masterplan could be accommodated within the existing capacity available on the surrounding road network. It is acknowledged that this would need to be thoroughly tested as the Rolfe Street Masterplan progresses and any mitigation measures identified and programmed into delivery of the masterplan over time.

Appendix A Isochrone Figures

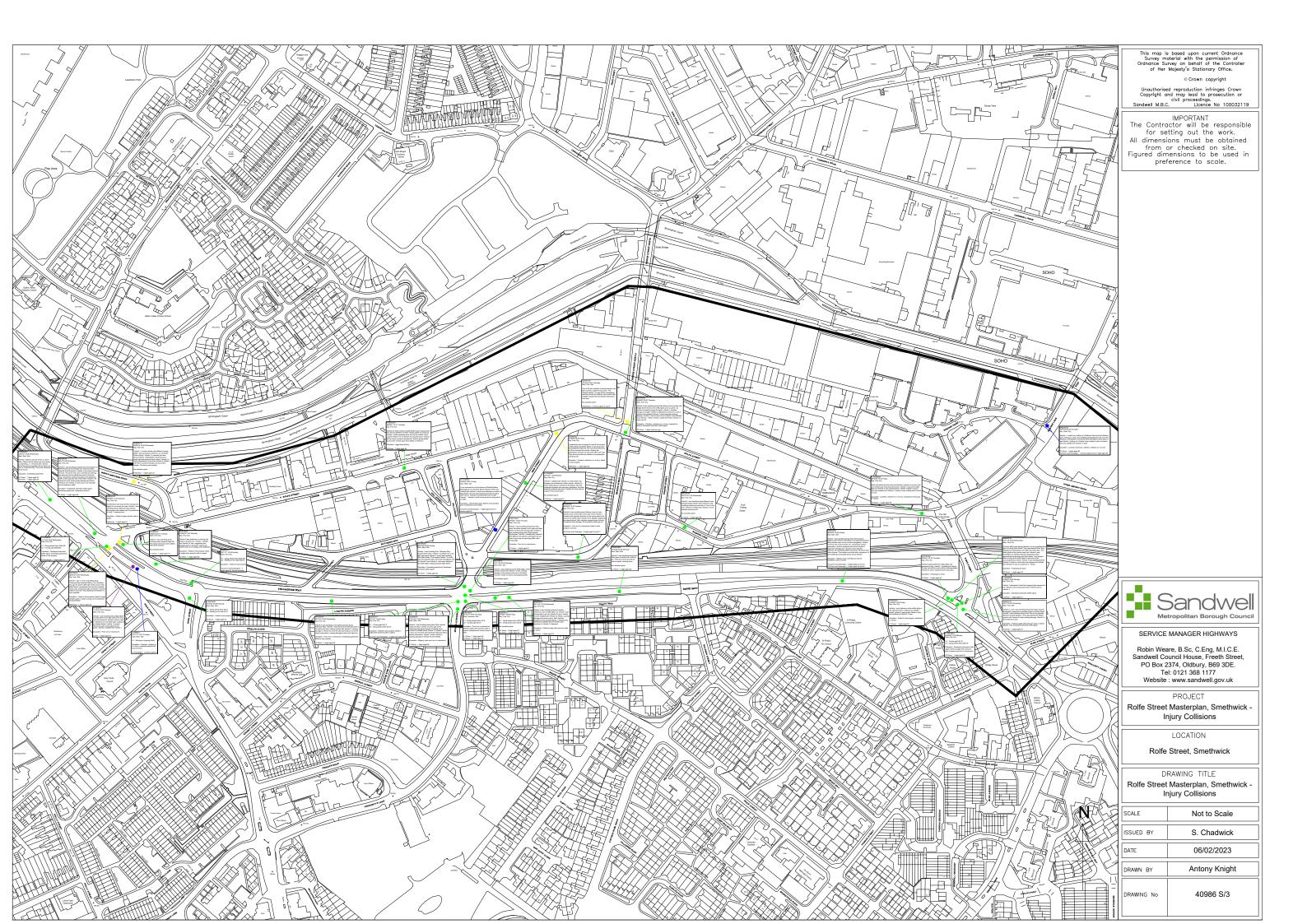








Appendix B PIC Data Report



Appendix C TRICS Trip Rate Report for Existing Land Use

Calculation Reference: AUDIT-706706-230320-0354

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Licence No: 706706

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas: 01 GREATER LONDON GREATER LONDON ΒE **BEXLEY** 1 days ВТ **BRENT** 1 days HILLINGDON HD 2 days НО **HOUNSLOW** 1 days 02 SOUTH EAST **BRIGHTON & HOVE** 1 days BH **ESSEX** 3 days ΕX 03 SOUTH WEST DV **DEVON** 1 days SD **SWINDON** 1 days 04 EAST ANGLIA PB **PETERBOROUGH** 1 days 05 **EAST MIDLANDS** DY **DERBY** 1 days 06 WEST MIDLANDS WARWICKSHIRE WK 4 days WEST MIDLANDS 1 days WO WORCESTERSHIRE 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NY NORTH YORKSHIRE 1 days SOUTH YORKSHIRE SY 1 days WY WEST YORKSHIRE 4 days 09 NORTH TYNE & WEAR 3 days TW 10 **WALES** SW **SWANSEA** 2 days VG VALE OF GLAMORGAN 1 days **SCOTLAND** 11 **ANGUS** 1 days AG 12 CONNAUGHT **ROSCOMMON** RO 1 days 13 **MUNSTER** CORK CR 4 days **LEINSTER** 14 WC WICKLOW 1 days

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

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Monday 20/03/23 Page 2 Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Primary Filtering selection:

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

Parameter: Gross floor area

Actual Range: 1138 to 150564 (units: sqm) Range Selected by User: 552 to 150564 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 06/06/22

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
 9 days

 Wednesday
 9 days

 Thursday
 7 days

 Friday
 7 days

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

Selected survey types:

Manual count 38 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) 10 Edge of Town 28

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	19
Development Zone	2
Residential Zone	3
Built-Up Zone	1
Out of Town	2
No Sub Category	11

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 16 days - Selected Servicing vehicles Excluded 23 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 38 days

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

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	8 days
10,001 to 15,000	10 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	7 days
50,001 to 100,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	2 days
75,001 to 100,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	18 days
250,001 to 500,000	5 days
500,001 or More	4 days
	9

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	18 days
1.1 to 1.5	18 days
1.6 to 2.0	2 days

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

Travel Plan:

Yes	1 days
No	37 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.

Yes

PTAL Rating:

No PTAL Present	33 days
1b Very poor	3 days
2 Poor	1 days
3 Moderate	1 days

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

Covid-19 Restrictions

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

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters

ANGUS AG-02-D-02 INDUSTRIAL ESTATE

A933 WESTWAY ARBROATH HOSPITALFIELD Edge of Town No Sub Category

78500 sqm Total Gross floor area:

Survey date: TUESDAY 25/04/17 Survey Type: MANUAL

BE-02-D-01 INDUSTRIAL ESTATE **BEXLEY**

CRABTREE MANORWAY N.

ERITH

Edge of Town Industrial Zone

3300 sqm Total Gross floor area:

Survey date: WEDNESDAY 19/09/18 Survey Type: MANUAL BRIGHTON & HOVE BH-02-D-03 INDUSTRIAL ESTATE

HUGHES ROAD BRIGHTON

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 6625 sqm

Survey date: THURSDAY 16/10/14 Survey Type: MANUAL

BT-02-D-01 INDUSTRIAL ESTATE **BRENT**

NORTH CIRCULAR ROAD

NEASDEN **BRENT PARK**

Suburban Area (PPS6 Out of Centre)

Built-Up Zone

Total Gross floor area: 5565 sqm

Survey date: WEDNESDAY Survey Type: MANUAL 14/11/18

5 CR-02-D-01 INDUSTRIAL ESTATE CORK

SARSFIELD ROAD

CORK

Edge of Town Residential Zone

65125 sqm Total Gross floor area:

Survey date: FRIDAY Survey Type: MANUAL 23/03/18

CR-02-D-02 INDUSTRIAL ESTATE CORK

EAST CORK PARKWAY

CORK **GLANMIRE** Edge of Town

Industrial Zone

Total Gross floor area: 4727 sqm

Survey date: MONDAY 14/10/19 Survey Type: MANUAL

INDUSTRIAL ESTATE CR-02-D-03 CORK

R623 CORK LITTLE ISLAND Edge of Town Industrial Zone

40229 sqm Total Gross floor area:

Survey date: TUESDAY 15/10/19 Survey Type: MANUAL

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

8 CR-02-D-04 INDUSTRIAL ESTATE

R623

CORK

LITTLE ISLAND Edge of Town

Industrial Zone

Total Gross floor area:

64400 sqm 18/06/21

Survey date: FRIDAY INDUSTRIAL ESTATE

Survey Type: MANUAL DEVON

CORK

DERBY

ESSEX

Survey Type: MANUAL

DV-02-D-07 BITTERN ROAD

EXETER

SOWTON IND. ESTATE

Edge of Town Industrial Zone

Total Gross floor area:

3600 sqm Survey date: MONDAY 03/07/17

10 DY-02-D-01 INDUSTRIAL ESTATE

SHAFTESBURY STREET

DERBY **ROSE HILL**

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Gross floor area: 5686 sqm Survey date: WEDNESDAY 25/09/19

Survey Type: MANUAL **ESSEX**

EX-02-D-03 INDUSTRIAL ESTATE

WYNCOLLS ROAD COLCHESTER

SEVERALLS INDUSTRIAL PK

Edge of Town Industrial Zone

Total Gross floor area:

4876 sqm Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

EX-02-D-04 INDUSTRIAL ESTATE

PASTURE ROAD

WITHAM

Edge of Town Industrial Zone

37130 sqm Total Gross floor area:

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

EX-02-D-05 INDUSTRIAL ESTATE **ESSEX** 13

HECKWORTH CLOSE

COLCHESTER

SEVERALLS INDUSTRIAL PK

Edge of Town Industrial Zone

Total Gross floor area: 7280 sqm

Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

INDUSTRIAL ESTATE HD-02-D-02 **HILLINGDON**

BRADFIELD ROAD

RUISLIP

SOUTH RUISLIP

Edge of Town

Industrial Zone

13850 sqm Total Gross floor area:

Survey date: THURSDAY 25/06/15 Survey Type: MANUAL

HILLINGDON

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

15 HD-02-D-03 INDUSTRIAL ESTATE

BRADFIELD ROAD **RUISLIP**

SOUTH RUISLIP

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area:

8310 sqm Survey date: MONDAY 10/06/19

Survey Type: MANUAL HO-02-D-01 I NDUSTRI AL ESTATE **HOUNSLOW**

HAMPTON ROAD WEST

FELTHAM

HANWORTH

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 7400 sam

Survey date: THURSDAY 25/06/15 Survey Type: MANUAL NORTH YORKSHIRE NY-02-D-03 INDUSTRIAL ESTATE

RACECOURSE ROAD

RICHMOND

17

Edge of Town Out of Town

Total Gross floor area:

35183 sqm

Survey date: THURSDAY 05/05/22

Survey Type: MANUAL PB-02-D-03 INDUSTRIAL ESTATE PETERBÖRÖUGH

LINCOLN ROAD PETERBOROUGH

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total Gross floor area: 4133 sqm

Survey date: TUESDAY Survey Type: MANUAL 02/12/14

19 RO-02-D-01 INDUSTRIAL ESTATE ROSCOMMON

ÁTHLONE ROAD ROSCOMMON

ARDSALLAGH MÓRE

Edge of Town

No Sub Category

2030 sqm Total Gross floor area:

Survey date: FRIDAY 27/04/18 Survey Type: MANUAL

SD-02-D-01 INDUSTRIAL ESTATE SWINDON 20

HEADLANDS GROVE

SWINDON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 10000 sqm

Survey date: TUESDAY 20/09/16 Survey Type: MANUAL

SW-02-D-01 I NDUSTRI AL ESTATE **SWANSFA**

UPPER FOREST WAY

SWANSEA

SWANSEA ENTERPRISE PK

Edge of Town Industrial Zone

Total Gross floor area: 6822 sqm

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

SW-02-D-02 INDUSTRIAL ESTATE **SWANSEA** 22

CLARION COURT

SWANSEA

SWANSEA ENTERPRISE PK

Edge of Town Industrial Zone

Total Gross floor area: 5280 sqm

Survey date: THURSDAY 10/10/19 Survey Type: MANUAL

SOUTH YORKSHIRE

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

23 SY-02-D-04 INDUSTRIAL ESTATE

MIDDLE BANK DONCASTER

Suburban Area (PPS6 Out of Centre)

Industrial Zone

Total Gross floor area: 6737 sqm

Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

24 TW-02-D-08 INDUSTRIAL ESTATE TYNE & WEAR

NORTH HYLTON ROAD SUNDERLAND

SOUTHWICK

Suburban Area (PPS6 Out of Centre)

Development Zone

Total Gross floor area: 8310 sqm

Survey date: TUESDAY 04/04/17 Survey Type: MANUAL

25 TW-02-D-09 INDUSTRIAL ESTATE TYNE & WEAR

ELEVENTH AVENUE

GATESHEAD TEAM VALLEY Edge of Town No Sub Category

Total Gross floor area: 6200 sqm

Survey date: WEDNESDAY 18/05/22 Survey Type: MANUAL

26 TW-02-D-10 INDUSTRIAL ESTATE TYNE & WEAR

ELEVENTH AVENUE GATESHEAD TEAM VALLEY Edge of Town

Edge of Town No Sub Category

Total Gross floor area: 21500 sqm

Survey date: WEDNESDAY 18/05/22 Survey Type: MANUAL
27 VG-02-D-01 INDUSTRIAL ESTATE VALE OF GLAMORGAN

77 VG-02-D-01 INDUSTRIAL ESTATE ARTHUR STREET

BARRY

Edge of Town No Sub Category

Total Gross floor area: 13091 sqm

Survey date: MONDAY 08/05/17 Survey Type: MANUAL

28 WC-02-D-01 INDUSTRIAL ESTATE WICKLOW

SOUTHERN CROSS ROAD

BRAY

Edge of Town No Sub Category

Total Gross floor area: 76704 sqm

Survey date: FRIDAY 04/10/19 Survey Type: MANUAL

29 WK-02-D-01 INDUSTRIAL ESTATE WARWICKSHIRE

CASTLE MOUND WAY

RUGBY

Edge of Town Industrial Zone

Total Gross floor area: 150564 sqm

Survey date: WEDNESDAY 27/06/18 Survey Type: MANUAL

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

WARWICKSHIRE 30 WK-02-D-02 INDUSTRIAL ESTATE

OVERVIEW WAY RUGBY

Edge of Town Industrial Zone

90535 sqm Total Gross floor area:

Survey date: WEDNESDAY 27/06/18 Survey Type: MANUAL WARWIČKŠHIRE

31 WK-02-D-03 INDUSTRIAL ESTATE EASTBORO WAY

> NUNEATON Edge of Town

Industrial Zone Total Gross floor area: 20860 sgm

Survey date: THURSDAY 26/09/19 Survey Type: MANUAL

WARWIČKŚHIRE 32 WK-02-D-04 INDUSTRIAL ESTATE

ABELES WAY **ATHERSTONE**

Edge of Town No Sub Category

Total Gross floor area: 17500 sqm

Survey date: FRIDAY 27/09/19 Survey Type: MANUAL

WM-02-D-03 INDUSTRIAL ESTATE WEST MI DLANDS

JUNCTION ROAD STOURBRIDGE AUDNAM

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1138 sqm

Survey Type: MANUAL Survey date: TUESDAY 28/11/17 **WORCESTERSHIRE**

WO-02-D-03 INDUSTRIAL ESTATE MILLENNIUM WAY

EVESHAM

Edge of Town

Out of Town Total Gross floor area: 84575 sqm

Survey date: TUESDAY Survey Type: MANUAL 26/06/18

WY-02-D-05 INDUSTRIAL ESTATE WEST YÖRKSHIRE 35

CARR WOOD ROAD **CASTLEFORD**

Edge of Town Development Zone

Total Gross floor area: 1776 sqm

Survey date: MONDAY 22/05/17 Survey Type: MANUAL WY-02-D-06 WEST YÖRKSHIRE 36 INDUSTRIAL ESTATE (PART)

PIONEER WAY CASTLEFORD

> Edge of Town Industrial Zone

4328 sqm Total Gross floor area: Survey date: TUESDAY 23/05/17

Survey Type: MANUAL WEST YÖRKSHIRE 37 WY-02-D-07 INDUSTRIAL ESTATE

THUNDERHEAD RIDGE RD

CASTLEFORD **GLASSHOUGHTON** Edge of Town No Sub Category

Total Gross floor area: 3191 sqm

> Survey date: MONDAY 15/05/17 Survey Type: MANUAL

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Monday 20/03/23 Page 9

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LIST OF SITES relevant to selection parameters (Cont.)

38 WY-02-D-08 MILL LANE INDUSTRIAL ESTATE

WEST YORKSHIRE

HALIFAX
Edge of Town

No Sub Category Total Gross floor area:

11305 sqm

Survey date: WEDNESDAY

17/10/18 Survey Type: MANUAL

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.35

		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	15	21836	0.101	15	21836	0.017	15	21836	0.118	
06:00 - 07:00	15	21836	0.140	15	21836	0.036	15	21836	0.176	
07:00 - 08:00	38	24694	0.295	38	24694	0.106	38	24694	0.401	
08:00 - 09:00	38	24694	0.402	38	24694	0.162	38	24694	0.564	
09:00 - 10:00	38	24694	0.307	38	24694	0.205	38	24694	0.512	
10:00 - 11:00	38	24694	0.260	38	24694	0.227	38	24694	0.487	
11:00 - 12:00	38	24694	0.243	38	24694	0.242	38	24694	0.485	
12:00 - 13:00	38	24694	0.246	38	24694	0.278	38	24694	0.524	
13:00 - 14:00	38	24694	0.276	38	24694	0.264	38	24694	0.540	
14:00 - 15:00	38	24694	0.218	38	24694	0.280	38	24694	0.498	
15:00 - 16:00	38	24694	0.196	38	24694	0.292	38	24694	0.488	
16:00 - 17:00	38	24694	0.183	38	24694	0.325	38	24694	0.508	
17:00 - 18:00	38	24694	0.123	38	24694	0.339	38	24694	0.462	
18:00 - 19:00	38	24694	0.093	38	24694	0.160	38	24694	0.253	
19:00 - 20:00	16	20677	0.060	16	20677	0.103	16	20677	0.163	
20:00 - 21:00	15	21563	0.017	15	21563	0.034	15	21563	0.051	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			3.160			3.070			6.230	

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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Parameter summary

Trip rate parameter range selected: 1138 - 150564 (units: sqm) Survey date date range: 01/01/14 - 06/06/22

Number of weekdays (Monday-Friday): 38
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 1
Surveys manually removed from selection: 0

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL TAXIS
Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	15	21836	0.000	15	21836	0.000	15	21836	0.000
06:00 - 07:00	15	21836	0.000	15	21836	0.000	15	21836	0.000
07:00 - 08:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
08:00 - 09:00	38	24694	0.003	38	24694	0.003	38	24694	0.006
09:00 - 10:00	38	24694	0.002	38	24694	0.003	38	24694	0.005
10:00 - 11:00	38	24694	0.002	38	24694	0.002	38	24694	0.004
11:00 - 12:00	38	24694	0.002	38	24694	0.002	38	24694	0.004
12:00 - 13:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
13:00 - 14:00	38	24694	0.002	38	24694	0.002	38	24694	0.004
14:00 - 15:00	38	24694	0.002	38	24694	0.003	38	24694	0.005
15:00 - 16:00	38	24694	0.002	38	24694	0.002	38	24694	0.004
16:00 - 17:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
17:00 - 18:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
18:00 - 19:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
19:00 - 20:00	16	20677	0.001	16	20677	0.001	16	20677	0.002
20:00 - 21:00	15	21563	0.000	15	21563	0.000	15	21563	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.023			0.044

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	15	21836	0.004	15	21836	0.003	15	21836	0.007
06:00 - 07:00	15	21836	0.005	15	21836	0.007	15	21836	0.012
07:00 - 08:00	38	24694	0.014	38	24694	0.013	38	24694	0.027
08:00 - 09:00	38	24694	0.024	38	24694	0.020	38	24694	0.044
09:00 - 10:00	38	24694	0.027	38	24694	0.023	38	24694	0.050
10:00 - 11:00	38	24694	0.025	38	24694	0.024	38	24694	0.049
11:00 - 12:00	38	24694	0.023	38	24694	0.026	38	24694	0.049
12:00 - 13:00	38	24694	0.024	38	24694	0.022	38	24694	0.046
13:00 - 14:00	38	24694	0.021	38	24694	0.022	38	24694	0.043
14:00 - 15:00	38	24694	0.022	38	24694	0.022	38	24694	0.044
15:00 - 16:00	38	24694	0.021	38	24694	0.022	38	24694	0.043
16:00 - 17:00	38	24694	0.015	38	24694	0.017	38	24694	0.032
17:00 - 18:00	38	24694	0.011	38	24694	0.009	38	24694	0.020
18:00 - 19:00	38	24694	0.008	38	24694	0.009	38	24694	0.017
19:00 - 20:00	16	20677	0.002	16	20677	0.003	16	20677	0.005
20:00 - 21:00	15	21563	0.002	15	21563	0.001	15	21563	0.003
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.248			0.243			0.491

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Γ	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	15	21836	0.000	15	21836	0.000	15	21836	0.000
06:00 - 07:00	15	21836	0.000	15	21836	0.000	15	21836	0.000
07:00 - 08:00	38	24694	0.000	38	24694	0.002	38	24694	0.002
08:00 - 09:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
09:00 - 10:00	38	24694	0.002	38	24694	0.001	38	24694	0.003
10:00 - 11:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
11:00 - 12:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
12:00 - 13:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
13:00 - 14:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
14:00 - 15:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
15:00 - 16:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
16:00 - 17:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
17:00 - 18:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
18:00 - 19:00	38	24694	0.002	38	24694	0.000	38	24694	0.002
19:00 - 20:00	16	20677	0.000	16	20677	0.000	16	20677	0.000
20:00 - 21:00	15	21563	0.000	15	21563	0.000	15	21563	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.008			0.021

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL CYCLISTS Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Γ	DEPARTURES	3	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	15	21836	0.002	15	21836	0.000	15	21836	0.002	
06:00 - 07:00	15	21836	0.002	15	21836	0.000	15	21836	0.002	
07:00 - 08:00	38	24694	0.005	38	24694	0.001	38	24694	0.006	
08:00 - 09:00	38	24694	0.005	38	24694	0.001	38	24694	0.006	
09:00 - 10:00	38	24694	0.002	38	24694	0.001	38	24694	0.003	
10:00 - 11:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
11:00 - 12:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
12:00 - 13:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
13:00 - 14:00	38	24694	0.003	38	24694	0.002	38	24694	0.005	
14:00 - 15:00	38	24694	0.002	38	24694	0.003	38	24694	0.005	
15:00 - 16:00	38	24694	0.001	38	24694	0.005	38	24694	0.006	
16:00 - 17:00	38	24694	0.001	38	24694	0.004	38	24694	0.005	
17:00 - 18:00	38	24694	0.002	38	24694	0.007	38	24694	0.009	
18:00 - 19:00	38	24694	0.002	38	24694	0.001	38	24694	0.003	
19:00 - 20:00	16	20677	0.000	16	20677	0.001	16	20677	0.001	
20:00 - 21:00	15	21563	0.000	15	21563	0.000	15	21563	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00									·	
Total Rates:			0.030			0.029			0.059	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[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	15	21836	0.110	15	21836	0.019	15	21836	0.129	
06:00 - 07:00	15	21836	0.163	15	21836	0.038	15	21836	0.201	
07:00 - 08:00	38	24694	0.374	38	24694	0.125	38	24694	0.499	
08:00 - 09:00	38	24694	0.514	38	24694	0.190	38	24694	0.704	
09:00 - 10:00	38	24694	0.386	38	24694	0.240	38	24694	0.626	
10:00 - 11:00	38	24694	0.322	38	24694	0.270	38	24694	0.592	
11:00 - 12:00	38	24694	0.295	38	24694	0.296	38	24694	0.591	
12:00 - 13:00	38	24694	0.304	38	24694	0.339	38	24694	0.643	
13:00 - 14:00	38	24694	0.341	38	24694	0.325	38	24694	0.666	
14:00 - 15:00	38	24694	0.273	38	24694	0.360	38	24694	0.633	
15:00 - 16:00	38	24694	0.245	38	24694	0.376	38	24694	0.621	
16:00 - 17:00	38	24694	0.240	38	24694	0.415	38	24694	0.655	
17:00 - 18:00	38	24694	0.160	38	24694	0.458	38	24694	0.618	
18:00 - 19:00	38	24694	0.121	38	24694	0.220	38	24694	0.341	
19:00 - 20:00	16	20677	0.063	16	20677	0.121	16	20677	0.184	
20:00 - 21:00	15	21563	0.019	15	21563	0.037	15	21563	0.056	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			3.930			3.829			7.759	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL PEDESTRIANS Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	3	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	15	21836	0.003	15	21836	0.000	15	21836	0.003
06:00 - 07:00	15	21836	0.013	15	21836	0.001	15	21836	0.014
07:00 - 08:00	38	24694	0.016	38	24694	0.007	38	24694	0.023
08:00 - 09:00	38	24694	0.022	38	24694	0.009	38	24694	0.031
09:00 - 10:00	38	24694	0.013	38	24694	0.007	38	24694	0.020
10:00 - 11:00	38	24694	0.008	38	24694	0.008	38	24694	0.016
11:00 - 12:00	38	24694	0.009	38	24694	0.009	38	24694	0.018
12:00 - 13:00	38	24694	0.017	38	24694	0.018	38	24694	0.035
13:00 - 14:00	38	24694	0.025	38	24694	0.022	38	24694	0.047
14:00 - 15:00	38	24694	0.016	38	24694	0.014	38	24694	0.030
15:00 - 16:00	38	24694	0.010	38	24694	0.014	38	24694	0.024
16:00 - 17:00	38	24694	0.010	38	24694	0.017	38	24694	0.027
17:00 - 18:00	38	24694	0.010	38	24694	0.022	38	24694	0.032
18:00 - 19:00	38	24694	0.007	38	24694	0.012	38	24694	0.019
19:00 - 20:00	16	20677	0.003	16	20677	0.017	16	20677	0.020
20:00 - 21:00	15	21563	0.002	15	21563	0.005	15	21563	0.007
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									·
Total Rates:			0.184			0.182			0.366

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Г	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	15	21836	0.001	15	21836	0.000	15	21836	0.001	
06:00 - 07:00	15	21836	0.005	15	21836	0.000	15	21836	0.005	
07:00 - 08:00	38	24694	0.017	38	24694	0.002	38	24694	0.019	
08:00 - 09:00	38	24694	0.015	38	24694	0.001	38	24694	0.016	
09:00 - 10:00	38	24694	0.009	38	24694	0.002	38	24694	0.011	
10:00 - 11:00	38	24694	0.004	38	24694	0.002	38	24694	0.006	
11:00 - 12:00	38	24694	0.004	38	24694	0.003	38	24694	0.007	
12:00 - 13:00	38	24694	0.006	38	24694	0.009	38	24694	0.015	
13:00 - 14:00	38	24694	0.014	38	24694	0.007	38	24694	0.021	
14:00 - 15:00	38	24694	0.003	38	24694	0.011	38	24694	0.014	
15:00 - 16:00	38	24694	0.002	38	24694	0.013	38	24694	0.015	
16:00 - 17:00	38	24694	0.003	38	24694	0.008	38	24694	0.011	
17:00 - 18:00	38	24694	0.002	38	24694	0.012	38	24694	0.014	
18:00 - 19:00	38	24694	0.001	38	24694	0.006	38	24694	0.007	
19:00 - 20:00	16	20677	0.000	16	20677	0.007	16	20677	0.007	
20:00 - 21:00	15	21563	0.000	15	21563	0.002	15	21563	0.002	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.086			0.085			0.171	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS			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	15	21836	0.000	15	21836	0.000	15	21836	0.000	
06:00 - 07:00	15	21836	0.002	15	21836	0.000	15	21836	0.002	
07:00 - 08:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
08:00 - 09:00	38	24694	0.003	38	24694	0.000	38	24694	0.003	
09:00 - 10:00	38	24694	0.003	38	24694	0.000	38	24694	0.003	
10:00 - 11:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
11:00 - 12:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
12:00 - 13:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
13:00 - 14:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
14:00 - 15:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
15:00 - 16:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
16:00 - 17:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
17:00 - 18:00	38	24694	0.000	38	24694	0.003	38	24694	0.003	
18:00 - 19:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
19:00 - 20:00	16	20677	0.000	16	20677	0.002	16	20677	0.002	
20:00 - 21:00	15	21563	0.000	15	21563	0.002	15	21563	0.002	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.013			0.015			0.028	

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	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	15	21836	0.000	15	21836	0.000	15	21836	0.000	
06:00 - 07:00	15	21836	0.000	15	21836	0.000	15	21836	0.000	
07:00 - 08:00	38	24694	0.000	38	24694	0.002	38	24694	0.002	
08:00 - 09:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
09:00 - 10:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
10:00 - 11:00	38	24694	0.000	38	24694	0.000	38	24694	0.000	
11:00 - 12:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
12:00 - 13:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
13:00 - 14:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
14:00 - 15:00	38	24694	0.000	38	24694	0.001	38	24694	0.001	
15:00 - 16:00	38	24694	0.001	38	24694	0.001	38	24694	0.002	
16:00 - 17:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
17:00 - 18:00	38	24694	0.001	38	24694	0.000	38	24694	0.001	
18:00 - 19:00	38	24694	0.002	38	24694	0.000	38	24694	0.002	
19:00 - 20:00	16	20677	0.000	16	20677	0.000	16	20677	0.000	
20:00 - 21:00	15	21563	0.000	15	21563	0.000	15	21563	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.009			0.006			0.015	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	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	15	21836	0.001	15	21836	0.000	15	21836	0.001	
06:00 - 07:00	15	21836	0.007	15	21836	0.000	15	21836	0.007	
07:00 - 08:00	38	24694	0.018	38	24694	0.005	38	24694	0.023	
08:00 - 09:00	38	24694	0.018	38	24694	0.002	38	24694	0.020	
09:00 - 10:00	38	24694	0.013	38	24694	0.002	38	24694	0.015	
10:00 - 11:00	38	24694	0.005	38	24694	0.003	38	24694	0.008	
11:00 - 12:00	38	24694	0.005	38	24694	0.004	38	24694	0.009	
12:00 - 13:00	38	24694	0.008	38	24694	0.010	38	24694	0.018	
13:00 - 14:00	38	24694	0.016	38	24694	0.008	38	24694	0.024	
14:00 - 15:00	38	24694	0.004	38	24694	0.013	38	24694	0.017	
15:00 - 16:00	38	24694	0.003	38	24694	0.016	38	24694	0.019	
16:00 - 17:00	38	24694	0.004	38	24694	0.009	38	24694	0.013	
17:00 - 18:00	38	24694	0.003	38	24694	0.016	38	24694	0.019	
18:00 - 19:00	38	24694	0.003	38	24694	0.008	38	24694	0.011	
19:00 - 20:00	16	20677	0.000	16	20677	0.009	16	20677	0.009	
20:00 - 21:00	15	21563	0.000	15	21563	0.003	15	21563	0.003	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.108			0.108			0.216	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL TOTAL PEOPLE Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.35

		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	15	21836	0.117	15	21836	0.020	15	21836	0.137	
06:00 - 07:00	15	21836	0.185	15	21836	0.039	15	21836	0.224	
07:00 - 08:00	38	24694	0.414	38	24694	0.139	38	24694	0.553	
08:00 - 09:00	38	24694	0.559	38	24694	0.202	38	24694	0.761	
09:00 - 10:00	38	24694	0.415	38	24694	0.250	38	24694	0.665	
10:00 - 11:00	38	24694	0.336	38	24694	0.282	38	24694	0.618	
11:00 - 12:00	38	24694	0.311	38	24694	0.310	38	24694	0.621	
12:00 - 13:00	38	24694	0.330	38	24694	0.369	38	24694	0.699	
13:00 - 14:00	38	24694	0.384	38	24694	0.358	38	24694	0.742	
14:00 - 15:00	38	24694	0.295	38	24694	0.390	38	24694	0.685	
15:00 - 16:00	38	24694	0.259	38	24694	0.411	38	24694	0.670	
16:00 - 17:00	38	24694	0.255	38	24694	0.444	38	24694	0.699	
17:00 - 18:00	38	24694	0.175	38	24694	0.503	38	24694	0.678	
18:00 - 19:00	38	24694	0.134	38	24694	0.242	38	24694	0.376	
19:00 - 20:00	16	20677	0.066	16	20677	0.148	16	20677	0.214	
20:00 - 21:00	15	21563	0.021	15	21563	0.045	15	21563	0.066	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			4.256			4.152			8.408	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Ţ	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	15	21836	0.079	15	21836	0.008	15	21836	0.087	
06:00 - 07:00	15	21836	0.095	15	21836	0.016	15	21836	0.111	
07:00 - 08:00	38	24694	0.209	38	24694	0.047	38	24694	0.256	
08:00 - 09:00	38	24694	0.286	38	24694	0.064	38	24694	0.350	
09:00 - 10:00	38	24694	0.193	38	24694	0.093	38	24694	0.286	
10:00 - 11:00	38	24694	0.145	38	24694	0.114	38	24694	0.259	
11:00 - 12:00	38	24694	0.134	38	24694	0.127	38	24694	0.261	
12:00 - 13:00	38	24694	0.142	38	24694	0.171	38	24694	0.313	
13:00 - 14:00	38	24694	0.176	38	24694	0.169	38	24694	0.345	
14:00 - 15:00	38	24694	0.122	38	24694	0.179	38	24694	0.301	
15:00 - 16:00	38	24694	0.107	38	24694	0.195	38	24694	0.302	
16:00 - 17:00	38	24694	0.109	38	24694	0.238	38	24694	0.347	
17:00 - 18:00	38	24694	0.084	38	24694	0.282	38	24694	0.366	
18:00 - 19:00	38	24694	0.071	38	24694	0.129	38	24694	0.200	
19:00 - 20:00	16	20677	0.049	16	20677	0.087	16	20677	0.136	
20:00 - 21:00	15	21563	0.012	15	21563	0.026	15	21563	0.038	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			2.013			1.945			3.958	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Ţ	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	15	21836	0.016	15	21836	0.006	15	21836	0.022	
06:00 - 07:00	15	21836	0.039	15	21836	0.013	15	21836	0.052	
07:00 - 08:00	38	24694	0.069	38	24694	0.044	38	24694	0.113	
08:00 - 09:00	38	24694	0.087	38	24694	0.075	38	24694	0.162	
09:00 - 10:00	38	24694	0.083	38	24694	0.085	38	24694	0.168	
10:00 - 11:00	38	24694	0.086	38	24694	0.086	38	24694	0.172	
11:00 - 12:00	38	24694	0.083	38	24694	0.087	38	24694	0.170	
12:00 - 13:00	38	24694	0.077	38	24694	0.082	38	24694	0.159	
13:00 - 14:00	38	24694	0.075	38	24694	0.069	38	24694	0.144	
14:00 - 15:00	38	24694	0.071	38	24694	0.075	38	24694	0.146	
15:00 - 16:00	38	24694	0.065	38	24694	0.070	38	24694	0.135	
16:00 - 17:00	38	24694	0.056	38	24694	0.066	38	24694	0.122	
17:00 - 18:00	38	24694	0.025	38	24694	0.044	38	24694	0.069	
18:00 - 19:00	38	24694	0.012	38	24694	0.020	38	24694	0.032	
19:00 - 20:00	16	20677	0.007	16	20677	0.011	16	20677	0.018	
20:00 - 21:00	15	21563	0.003	15	21563	0.006	15	21563	0.009	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.854			0.839			1.693	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL MOTOR CYCLES Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		Γ	DEPARTURES	3	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	15	21836	0.002	15	21836	0.000	15	21836	0.002
06:00 - 07:00	15	21836	0.001	15	21836	0.000	15	21836	0.001
07:00 - 08:00	38	24694	0.002	38	24694	0.000	38	24694	0.002
08:00 - 09:00	38	24694	0.003	38	24694	0.000	38	24694	0.003
09:00 - 10:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
10:00 - 11:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
11:00 - 12:00	38	24694	0.001	38	24694	0.001	38	24694	0.002
12:00 - 13:00	38	24694	0.000	38	24694	0.001	38	24694	0.001
13:00 - 14:00	38	24694	0.001	38	24694	0.000	38	24694	0.001
14:00 - 15:00	38	24694	0.000	38	24694	0.001	38	24694	0.001
15:00 - 16:00	38	24694	0.001	38	24694	0.002	38	24694	0.003
16:00 - 17:00	38	24694	0.001	38	24694	0.002	38	24694	0.003
17:00 - 18:00	38	24694	0.000	38	24694	0.002	38	24694	0.002
18:00 - 19:00	38	24694	0.000	38	24694	0.001	38	24694	0.001
19:00 - 20:00	16	20677	0.000	16	20677	0.000	16	20677	0.000
20:00 - 21:00	15	21563	0.000	15	21563	0.000	15	21563	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.011			0.025

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.

Appendix D TRICS Trip Rate Report for Proposed Development

Monday 07/11/22 Page 1

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE

BIRMINGHAM

Licence No: 706706

Calculation Reference: AUDIT-706706-221107-1122

TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL Land Use

: D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

GREATER LONDON BT **BRENT** 2 days HARROW НΑ 1 days HARINGEY HG 1 days IS **ISLINGTON** 1 days 02 SOUTH EAST **BRIGHTON & HOVE** BH 1 days 05 EAST MIDLANDS LN LINCOLNSHIRE 1 days NG **NOTTINGHAM** 1 days 10 **WALES**

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

Primary Filtering selection:

CF

CARDIFF

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.

1 days

Parameter: No of Dwellings 15 to 247 (units:) Actual Range: Range Selected by User: 6 to 467 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 20/04/22

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 1 days Tuesday 1 days 2 days Wednesday Thursday 3 days Friday 2 days

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

Selected survey types:

Manual count 9 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:

Edge of Town Centre 1 Suburban Area (PPS6 Out of Centre) 5 Neighbourhood Centre (PPS6 Local Centre) 3

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:

Residential Zone

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

Secondary Filtering selection:

Use Class:

23 9 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 500m Range:

All Surveys Included <u>Population within 1 mile:</u>

 15,001 to 20,000
 1 days

 25,001 to 50,000
 3 days

 50,001 to 100,000
 3 days

 100,001 or More
 2 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	3 days
500,001 or More	5 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	7 days
1.1 to 1.5	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:

Yes	2 days
No	7 days

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

PTAL Rating:

No PTAL Present	4 days
2 Poor	1 days
3 Moderate	1 days
4 Good	1 days
5 Very Good	1 days
6a Excellent	1 days

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM Licence No: 706706

LIST OF SITES relevant to selection parameters

1 BH-03-D-03 FLATS & HOUSES BRIGHTON & HOVE

WELLINGTON ROAD BRIGHTON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 15

Survey date: THURSDAY 16/10/14 Survey Type: MANUAL

BT-03-D-01 BLOCKS OF FLATS BRENT

FLOWERS CLOSE DOLLIS HILL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 160

Survey date: THURSDAY 26/06/14 Survey Type: MANUAL

BT-03-D-02 BLOCK OF FLATS BRENT

CANTERBURY ROAD

KILBURN

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 38

Survey date: WEDNESDAY 20/04/22 Survey Type: MANUAL

CF-03-D-01 BLOCKS OF FLATS CARDIFF

TYN-Y-PARC ROAD

CARDIFF

WHITCHURCH

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 24

Survey date: FRIDAY 07/10/16 Survey Type: MANUAL

5 HA-03-D-01 BLOCKS OF FLATS HARROW

THE MALL KINGSBURY

KINGSBURY CIRCLE

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 88

Survey date: THURSDAY 17/07/14 Survey Type: MANUAL

5 HG-03-D-03 BLOCKS OF FLATS HARINGEY

COMMERCE ROAD WOOD GREEN

WOODSIDE PARK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 90

Survey date: FRIDAY 26/09/14 Survey Type: MANUAL

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM Licence No: 706706

LIST OF SITES relevant to selection parameters (Cont.)

7 IS-03-D-04 BLOCKS OF FLATS ISLINGTON

LIVERPOOL ROAD HIGHBURY

Edge of Town Centre

Residential Zone
Total No of Dwellings: 247

Survey date: MONDAY 27/06/16 Survey Type: MANUAL

8 LN-03-D-02 FLATS LINCOLNSHÎRE

ADDISON DRIVE LINCOLN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 22

Survey date: WEDNESDAY 01/07/15 Survey Type: MANUAL

NG-03-D-01 BLOCK OF FLATS NOTTI NĞHÂM

WATCOMBE ROAD NOTTINGHAM CARRINGTON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 22

Survey daté: TUESDAY 23/06/15 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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 4.10

		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	9	78	0.037	9	78	0.072	9	78	0.109	
08:00 - 09:00	9	78	0.054	9	78	0.139	9	78	0.193	
09:00 - 10:00	9	78	0.054	9	78	0.069	9	78	0.123	
10:00 - 11:00	9	78	0.052	9	78	0.067	9	78	0.119	
11:00 - 12:00	9	78	0.059	9	78	0.058	9	78	0.117	
12:00 - 13:00	9	78	0.054	9	78	0.072	9	78	0.126	
13:00 - 14:00	9	78	0.037	9	78	0.041	9	78	0.078	
14:00 - 15:00	9	78	0.051	9	78	0.052	9	78	0.103	
15:00 - 16:00	9	78	0.088	9	78	0.081	9	78	0.169	
16:00 - 17:00	9	78	0.084	9	78	0.068	9	78	0.152	
17:00 - 18:00	9	78	0.089	9	78	0.059	9	78	0.148	
18:00 - 19:00	9	78	0.079	9	78	0.055	9	78	0.134	
19:00 - 20:00	2	143	0.077	2	143	0.060	2	143	0.137	
20:00 - 21:00	2	143	0.039	2	143	0.021	2	143	0.060	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.854			0.914			1.768	

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

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

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Parameter summary

Trip rate parameter range selected: 15 - 247 (units:)
Survey date date range: 01/01/14 - 20/04/22

Number of weekdays (Monday-Friday): 9
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

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

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	3	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	9	78	0.006	9	78	0.006	9	78	0.012	
08:00 - 09:00	9	78	0.006	9	78	0.007	9	78	0.013	
09:00 - 10:00	9	78	0.003	9	78	0.003	9	78	0.006	
10:00 - 11:00	9	78	0.003	9	78	0.003	9	78	0.006	
11:00 - 12:00	9	78	0.000	9	78	0.000	9	78	0.000	
12:00 - 13:00	9	78	0.006	9	78	0.006	9	78	0.012	
13:00 - 14:00	9	78	0.003	9	78	0.003	9	78	0.006	
14:00 - 15:00	9	78	0.001	9	78	0.001	9	78	0.002	
15:00 - 16:00	9	78	0.008	9	78	0.008	9	78	0.016	
16:00 - 17:00	9	78	0.004	9	78	0.004	9	78	0.008	
17:00 - 18:00	9	78	0.007	9	78	0.006	9	78	0.013	
18:00 - 19:00	9	78	0.003	9	78	0.004	9	78	0.007	
19:00 - 20:00	2	143	0.004	2	143	0.004	2	143	0.008	
20:00 - 21:00	2	143	0.004	2	143	0.004	2	143	0.008	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.058			0.059			0.117	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL 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	9	78	0.001	9	78	0.001	9	78	0.002
08:00 - 09:00	9	78	0.001	9	78	0.000	9	78	0.001
09:00 - 10:00	9	78	0.003	9	78	0.004	9	78	0.007
10:00 - 11:00	9	78	0.003	9	78	0.001	9	78	0.004
11:00 - 12:00	9	78	0.001	9	78	0.003	9	78	0.004
12:00 - 13:00	9	78	0.001	9	78	0.001	9	78	0.002
13:00 - 14:00	9	78	0.001	9	78	0.001	9	78	0.002
14:00 - 15:00	9	78	0.001	9	78	0.001	9	78	0.002
15:00 - 16:00	9	78	0.003	9	78	0.003	9	78	0.006
16:00 - 17:00	9	78	0.000	9	78	0.000	9	78	0.000
17:00 - 18:00	9	78	0.000	9	78	0.000	9	78	0.000
18:00 - 19:00	9	78	0.000	9	78	0.000	9	78	0.000
19:00 - 20:00	2	143	0.000	2	143	0.000	2	143	0.000
20:00 - 21:00	2	143	0.000	2	143	0.000	2	143	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00							•		·
Total Rates:			0.015			0.015			0.030

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL PSVS

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	9	78	0.001	9	78	0.000	9	78	0.001	
08:00 - 09:00	9	78	0.001	9	78	0.003	9	78	0.004	
09:00 - 10:00	9	78	0.000	9	78	0.000	9	78	0.000	
10:00 - 11:00	9	78	0.000	9	78	0.000	9	78	0.000	
11:00 - 12:00	9	78	0.000	9	78	0.000	9	78	0.000	
12:00 - 13:00	9	78	0.000	9	78	0.000	9	78	0.000	
13:00 - 14:00	9	78	0.001	9	78	0.001	9	78	0.002	
14:00 - 15:00	9	78	0.000	9	78	0.000	9	78	0.000	
15:00 - 16:00	9	78	0.003	9	78	0.001	9	78	0.004	
16:00 - 17:00	9	78	0.000	9	78	0.001	9	78	0.001	
17:00 - 18:00	9	78	0.000	9	78	0.000	9	78	0.000	
18:00 - 19:00	9	78	0.000	9	78	0.000	9	78	0.000	
19:00 - 20:00	2	143	0.000	2	143	0.000	2	143	0.000	
20:00 - 21:00	2	143	0.000	2	143	0.000	2	143	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.006			0.006			0.012	

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL 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	9	78	0.001	9	78	0.006	9	78	0.007	
08:00 - 09:00	9	78	0.003	9	78	0.006	9	78	0.009	
09:00 - 10:00	9	78	0.000	9	78	0.006	9	78	0.006	
10:00 - 11:00	9	78	0.003	9	78	0.003	9	78	0.006	
11:00 - 12:00	9	78	0.001	9	78	0.006	9	78	0.007	
12:00 - 13:00	9	78	0.000	9	78	0.004	9	78	0.004	
13:00 - 14:00	9	78	0.001	9	78	0.001	9	78	0.002	
14:00 - 15:00	9	78	0.013	9	78	0.011	9	78	0.024	
15:00 - 16:00	9	78	0.006	9	78	0.008	9	78	0.014	
16:00 - 17:00	9	78	0.006	9	78	0.010	9	78	0.016	
17:00 - 18:00	9	78	0.008	9	78	0.004	9	78	0.012	
18:00 - 19:00	9	78	0.010	9	78	0.001	9	78	0.011	
19:00 - 20:00	2	143	0.000	2	143	0.000	2	143	0.000	
20:00 - 21:00	2	143	0.004	2	143	0.011	2	143	0.015	
21:00 - 22:00				·						
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.056			0.077			0.133	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL VEHICLE OCCUPANTS

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	9	78	0.034	9	78	0.076	9	78	0.110
08:00 - 09:00	9	78	0.057	9	78	0.276	9	78	0.333
09:00 - 10:00	9	78	0.059	9	78	0.093	9	78	0.152
10:00 - 11:00	9	78	0.055	9	78	0.076	9	78	0.131
11:00 - 12:00	9	78	0.064	9	78	0.072	9	78	0.136
12:00 - 13:00	9	78	0.071	9	78	0.082	9	78	0.153
13:00 - 14:00	9	78	0.047	9	78	0.050	9	78	0.097
14:00 - 15:00	9	78	0.062	9	78	0.068	9	78	0.130
15:00 - 16:00	9	78	0.137	9	78	0.093	9	78	0.230
16:00 - 17:00	9	78	0.152	9	78	0.095	9	78	0.247
17:00 - 18:00	9	78	0.119	9	78	0.086	9	78	0.205
18:00 - 19:00	9	78	0.113	9	78	0.076	9	78	0.189
19:00 - 20:00	2	143	0.112	2	143	0.056	2	143	0.168
20:00 - 21:00	2	143	0.042	2	143	0.032	2	143	0.074
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00							•		
Total Rates:			1.124			1.231			2.355

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL PEDESTRIANS 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	9	78	0.020	9	78	0.057	9	78	0.077	
08:00 - 09:00	9	78	0.042	9	78	0.245	9	78	0.287	
09:00 - 10:00	9	78	0.095	9	78	0.115	9	78	0.210	
10:00 - 11:00	9	78	0.069	9	78	0.067	9	78	0.136	
11:00 - 12:00	9	78	0.089	9	78	0.106	9	78	0.195	
12:00 - 13:00	9	78	0.110	9	78	0.110	9	78	0.220	
13:00 - 14:00	9	78	0.089	9	78	0.067	9	78	0.156	
14:00 - 15:00	9	78	0.082	9	78	0.126	9	78	0.208	
15:00 - 16:00	9	78	0.262	9	78	0.154	9	78	0.416	
16:00 - 17:00	9	78	0.227	9	78	0.091	9	78	0.318	
17:00 - 18:00	9	78	0.127	9	78	0.088	9	78	0.215	
18:00 - 19:00	9	78	0.113	9	78	0.088	9	78	0.201	
19:00 - 20:00	2	143	0.168	2	143	0.175	2	143	0.343	
20:00 - 21:00	2	143	0.084	2	143	0.039	2	143	0.123	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.577			1.528			3.105	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL BUS/TRAM PASSENGERS

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	9	78	0.006	9	78	0.123	9	78	0.129
08:00 - 09:00	9	78	0.010	9	78	0.166	9	78	0.176
09:00 - 10:00	9	78	0.018	9	78	0.018	9	78	0.036
10:00 - 11:00	9	78	0.018	9	78	0.033	9	78	0.051
11:00 - 12:00	9	78	0.018	9	78	0.033	9	78	0.051
12:00 - 13:00	9	78	0.027	9	78	0.033	9	78	0.060
13:00 - 14:00	9	78	0.025	9	78	0.030	9	78	0.055
14:00 - 15:00	9	78	0.025	9	78	0.058	9	78	0.083
15:00 - 16:00	9	78	0.079	9	78	0.023	9	78	0.102
16:00 - 17:00	9	78	0.120	9	78	0.014	9	78	0.134
17:00 - 18:00	9	78	0.069	9	78	0.030	9	78	0.099
18:00 - 19:00	9	78	0.072	9	78	0.010	9	78	0.082
19:00 - 20:00	2	143	0.032	2	143	0.007	2	143	0.039
20:00 - 21:00	2	143	0.056	2	143	0.000	2	143	0.056
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.575			0.578			1.153

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL RAIL PASSENGERS

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	9	78	0.003	9	78	0.051	9	78	0.054	
08:00 - 09:00	9	78	0.001	9	78	0.082	9	78	0.083	
09:00 - 10:00	9	78	0.000	9	78	0.031	9	78	0.031	
10:00 - 11:00	9	78	0.003	9	78	0.021	9	78	0.024	
11:00 - 12:00	9	78	0.004	9	78	0.010	9	78	0.014	
12:00 - 13:00	9	78	0.001	9	78	0.021	9	78	0.022	
13:00 - 14:00	9	78	0.010	9	78	0.010	9	78	0.020	
14:00 - 15:00	9	78	0.014	9	78	0.020	9	78	0.034	
15:00 - 16:00	9	78	0.018	9	78	0.010	9	78	0.028	
16:00 - 17:00	9	78	0.027	9	78	0.010	9	78	0.037	
17:00 - 18:00	9	78	0.034	9	78	0.010	9	78	0.044	
18:00 - 19:00	9	78	0.051	9	78	0.008	9	78	0.059	
19:00 - 20:00	2	143	0.063	2	143	0.025	2	143	0.088	
20:00 - 21:00	2	143	0.025	2	143	0.007	2	143	0.032	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.254			0.316			0.570	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL COACH PASSENGERS

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	9	78	0.000	9	78	0.000	9	78	0.000
08:00 - 09:00	9	78	0.000	9	78	0.000	9	78	0.000
09:00 - 10:00	9	78	0.000	9	78	0.000	9	78	0.000
10:00 - 11:00	9	78	0.000	9	78	0.000	9	78	0.000
11:00 - 12:00	9	78	0.000	9	78	0.000	9	78	0.000
12:00 - 13:00	9	78	0.000	9	78	0.000	9	78	0.000
13:00 - 14:00	9	78	0.000	9	78	0.003	9	78	0.003
14:00 - 15:00	9	78	0.000	9	78	0.000	9	78	0.000
15:00 - 16:00	9	78	0.003	9	78	0.000	9	78	0.003
16:00 - 17:00	9	78	0.000	9	78	0.000	9	78	0.000
17:00 - 18:00	9	78	0.000	9	78	0.000	9	78	0.000
18:00 - 19:00	9	78	0.000	9	78	0.000	9	78	0.000
19:00 - 20:00	2	143	0.000	2	143	0.000	2	143	0.000
20:00 - 21:00	2	143	0.000	2	143	0.000	2	143	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	3	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	9	78	0.008	9	78	0.174	9	78	0.182
08:00 - 09:00	9	78	0.011	9	78	0.248	9	78	0.259
09:00 - 10:00	9	78	0.018	9	78	0.050	9	78	0.068
10:00 - 11:00	9	78	0.021	9	78	0.054	9	78	0.075
11:00 - 12:00	9	78	0.023	9	78	0.042	9	78	0.065
12:00 - 13:00	9	78	0.028	9	78	0.054	9	78	0.082
13:00 - 14:00	9	78	0.035	9	78	0.042	9	78	0.077
14:00 - 15:00	9	78	0.040	9	78	0.078	9	78	0.118
15:00 - 16:00	9	78	0.101	9	78	0.033	9	78	0.134
16:00 - 17:00	9	78	0.147	9	78	0.024	9	78	0.171
17:00 - 18:00	9	78	0.103	9	78	0.040	9	78	0.143
18:00 - 19:00	9	78	0.123	9	78	0.018	9	78	0.141
19:00 - 20:00	2	143	0.095	2	143	0.032	2	143	0.127
20:00 - 21:00	2	143	0.081	2	143	0.007	2	143	0.088
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.834			0.896			1.730

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 4.10

		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	9	78	0.064	9	78	0.313	9	78	0.377
08:00 - 09:00	9	78	0.113	9	78	0.775	9	78	0.888
09:00 - 10:00	9	78	0.173	9	78	0.263	9	78	0.436
10:00 - 11:00	9	78	0.149	9	78	0.200	9	78	0.349
11:00 - 12:00	9	78	0.177	9	78	0.227	9	78	0.404
12:00 - 13:00	9	78	0.210	9	78	0.251	9	78	0.461
13:00 - 14:00	9	78	0.173	9	78	0.160	9	78	0.333
14:00 - 15:00	9	78	0.197	9	78	0.283	9	78	0.480
15:00 - 16:00	9	78	0.506	9	78	0.289	9	78	0.795
16:00 - 17:00	9	78	0.531	9	78	0.220	9	78	0.751
17:00 - 18:00	9	78	0.358	9	78	0.218	9	78	0.576
18:00 - 19:00	9	78	0.360	9	78	0.184	9	78	0.544
19:00 - 20:00	2	143	0.375	2	143	0.263	2	143	0.638
20:00 - 21:00	2	143	0.211	2	143	0.088	2	143	0.299
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.597			3.734			7.331

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL CARS

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	9	78	0.021	9	78	0.055	9	78	0.076
08:00 - 09:00	9	78	0.035	9	78	0.118	9	78	0.153
09:00 - 10:00	9	78	0.034	9	78	0.041	9	78	0.075
10:00 - 11:00	9	78	0.031	9	78	0.042	9	78	0.073
11:00 - 12:00	9	78	0.035	9	78	0.037	9	78	0.072
12:00 - 13:00	9	78	0.034	9	78	0.054	9	78	0.088
13:00 - 14:00	9	78	0.028	9	78	0.028	9	78	0.056
14:00 - 15:00	9	78	0.042	9	78	0.042	9	78	0.084
15:00 - 16:00	9	78	0.057	9	78	0.058	9	78	0.115
16:00 - 17:00	9	78	0.069	9	78	0.047	9	78	0.116
17:00 - 18:00	9	78	0.072	9	78	0.045	9	78	0.117
18:00 - 19:00	9	78	0.064	9	78	0.045	9	78	0.109
19:00 - 20:00	2	143	0.060	2	143	0.042	2	143	0.102
20:00 - 21:00	2	143	0.028	2	143	0.014	2	143	0.042
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.610			0.668			1.278

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL LGVS

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	9	78	0.007	9	78	0.010	9	78	0.017
08:00 - 09:00	9	78	0.010	9	78	0.010	9	78	0.020
09:00 - 10:00	9	78	0.011	9	78	0.018	9	78	0.029
10:00 - 11:00	9	78	0.014	9	78	0.016	9	78	0.030
11:00 - 12:00	9	78	0.021	9	78	0.016	9	78	0.037
12:00 - 13:00	9	78	0.013	9	78	0.011	9	78	0.024
13:00 - 14:00	9	78	0.003	9	78	0.007	9	78	0.010
14:00 - 15:00	9	78	0.006	9	78	0.007	9	78	0.013
15:00 - 16:00	9	78	0.016	9	78	0.007	9	78	0.023
16:00 - 17:00	9	78	0.007	9	78	0.014	9	78	0.021
17:00 - 18:00	9	78	0.008	9	78	0.007	9	78	0.015
18:00 - 19:00	9	78	0.010	9	78	0.004	9	78	0.014
19:00 - 20:00	2	143	0.007	2	143	0.007	2	143	0.014
20:00 - 21:00	2	143	0.000	2	143	0.000	2	143	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.133			0.134			0.267

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL MOTOR CYCLES
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	9	78	0.000	9	78	0.000	9	78	0.000	
08:00 - 09:00	9	78	0.000	9	78	0.001	9	78	0.001	
09:00 - 10:00	9	78	0.003	9	78	0.003	9	78	0.006	
10:00 - 11:00	9	78	0.001	9	78	0.004	9	78	0.005	
11:00 - 12:00	9	78	0.001	9	78	0.003	9	78	0.004	
12:00 - 13:00	9	78	0.000	9	78	0.000	9	78	0.000	
13:00 - 14:00	9	78	0.000	9	78	0.000	9	78	0.000	
14:00 - 15:00	9	78	0.000	9	78	0.000	9	78	0.000	
15:00 - 16:00	9	78	0.001	9	78	0.003	9	78	0.004	
16:00 - 17:00	9	78	0.003	9	78	0.001	9	78	0.004	
17:00 - 18:00	9	78	0.003	9	78	0.001	9	78	0.004	
18:00 - 19:00	9	78	0.003	9	78	0.001	9	78	0.004	
19:00 - 20:00	2	143	0.007	2	143	0.007	2	143	0.014	
20:00 - 21:00	2	143	0.007	2	143	0.004	2	143	0.011	
21:00 - 22:00				·						
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.029			0.028			0.057	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL Scooters
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	9	78	0.000	9	78	0.000	9	78	0.000
08:00 - 09:00	9	78	0.000	9	78	0.003	9	78	0.003
09:00 - 10:00	9	78	0.000	9	78	0.001	9	78	0.001
10:00 - 11:00	9	78	0.000	9	78	0.000	9	78	0.000
11:00 - 12:00	9	78	0.001	9	78	0.000	9	78	0.001
12:00 - 13:00	9	78	0.001	9	78	0.001	9	78	0.002
13:00 - 14:00	9	78	0.000	9	78	0.000	9	78	0.000
14:00 - 15:00	9	78	0.000	9	78	0.000	9	78	0.000
15:00 - 16:00	9	78	0.000	9	78	0.000	9	78	0.000
16:00 - 17:00	9	78	0.003	9	78	0.000	9	78	0.003
17:00 - 18:00	9	78	0.000	9	78	0.000	9	78	0.000
18:00 - 19:00	9	78	0.000	9	78	0.000	9	78	0.000
19:00 - 20:00	2	143	0.000	2	143	0.000	2	143	0.000
20:00 - 21:00	2	143	0.000	2	143	0.000	2	143	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.005			0.010

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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Calculation Reference: AUDIT-706706-221107-1118

Monday 07/11/22

Page 1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

BARNET

Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01 GREATER LONDON

1 days

05 EAST MIDLANDS

BN

LR LEICESTER 1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings Actual Range: 19 to 38 (units:) Range Selected by User: 14 to 280 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 04/11/21

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

Selected survey days:

Thursday 1 days Friday 1 days

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

Selected survey types:

Manual count 2 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) 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:

Residential Zone

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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PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Secondary Filtering selection:

Use Class: C3

C3 2 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 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000 1 days 50,001 to 100,000 1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0 1 days 1.1 to 1.5 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:

lo 2 days

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

PTAL Rating:

No PTAL Present 1 days 0 None 1 days

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

Monday 07/11/22 Page 3

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM Licence No: 706706

LIST OF SITES relevant to selection parameters

1 BN-03-B-01 SEMI-DETACHED & TERRACED BARNET

LUTHER CLOSE EDGWARE

Edge of Town
Residential Zone
Total No of Dwellin

Total No of Dwellings: 19

Survey date: THURSDAY 04/11/21 Survey Type: MANUAL

2 LR-03-B-01 SEMI-DETACHED & TERRACED LEICESTER

COLEMAN ROAD LEICESTER

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 38

Survey date: FRIDAY 22/10/21 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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.37

		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	2	29	0.000	2	29	0.158	2	29	0.158	
08:00 - 09:00	2	29	0.105	2	29	0.211	2	29	0.316	
09:00 - 10:00	2	29	0.088	2	29	0.140	2	29	0.228	
10:00 - 11:00	2	29	0.175	2	29	0.228	2	29	0.403	
11:00 - 12:00	2	29	0.105	2	29	0.070	2	29	0.175	
12:00 - 13:00	2	29	0.105	2	29	0.070	2	29	0.175	
13:00 - 14:00	2	29	0.105	2	29	0.175	2	29	0.280	
14:00 - 15:00	2	29	0.140	2	29	0.140	2	29	0.280	
15:00 - 16:00	2	29	0.140	2	29	0.105	2	29	0.245	
16:00 - 17:00	2	29	0.175	2	29	0.105	2	29	0.280	
17:00 - 18:00	2	29	0.316	2	29	0.175	2	29	0.491	
18:00 - 19:00	2	29	0.175	2	29	0.105	2	29	0.280	
19:00 - 20:00	1	19	0.316	1	19	0.158	1	19	0.474	
20:00 - 21:00	1	19	0.158	1	19	0.105	1	19	0.263	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			2.103			1.945			4.048	

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

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

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Parameter summary

Trip rate parameter range selected: 19 - 38 (units:)
Survey date date range: 01/01/14 - 04/11/21

Number of weekdays (Monday-Friday):2Number of Saturdays:0Number of Sundays:0Surveys automatically removed from selection:0Surveys manually removed from selection:0

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

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TAXIS

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	2	29	0.000	2	29	0.000	2	29	0.000
08:00 - 09:00	2	29	0.018	2	29	0.018	2	29	0.036
09:00 - 10:00	2	29	0.018	2	29	0.018	2	29	0.036
10:00 - 11:00	2	29	0.018	2	29	0.018	2	29	0.036
11:00 - 12:00	2	29	0.000	2	29	0.000	2	29	0.000
12:00 - 13:00	2	29	0.000	2	29	0.000	2	29	0.000
13:00 - 14:00	2	29	0.018	2	29	0.018	2	29	0.036
14:00 - 15:00	2	29	0.018	2	29	0.018	2	29	0.036
15:00 - 16:00	2	29	0.000	2	29	0.000	2	29	0.000
16:00 - 17:00	2	29	0.000	2	29	0.000	2	29	0.000
17:00 - 18:00	2	29	0.018	2	29	0.018	2	29	0.036
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.108			0.108			0.216

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL 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	2	29	0.000	2	29	0.000	2	29	0.000
08:00 - 09:00	2	29	0.018	2	29	0.018	2	29	0.036
09:00 - 10:00	2	29	0.018	2	29	0.000	2	29	0.018
10:00 - 11:00	2	29	0.018	2	29	0.035	2	29	0.053
11:00 - 12:00	2	29	0.000	2	29	0.000	2	29	0.000
12:00 - 13:00	2	29	0.000	2	29	0.000	2	29	0.000
13:00 - 14:00	2	29	0.000	2	29	0.000	2	29	0.000
14:00 - 15:00	2	29	0.000	2	29	0.000	2	29	0.000
15:00 - 16:00	2	29	0.000	2	29	0.000	2	29	0.000
16:00 - 17:00	2	29	0.000	2	29	0.000	2	29	0.000
17:00 - 18:00	2	29	0.000	2	29	0.000	2	29	0.000
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.054			0.053			0.107

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL CYCLISTS
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	2	29	0.000	2	29	0.018	2	29	0.018
08:00 - 09:00	2	29	0.000	2	29	0.035	2	29	0.035
09:00 - 10:00	2	29	0.000	2	29	0.035	2	29	0.035
10:00 - 11:00	2	29	0.000	2	29	0.000	2	29	0.000
11:00 - 12:00	2	29	0.018	2	29	0.035	2	29	0.053
12:00 - 13:00	2	29	0.035	2	29	0.018	2	29	0.053
13:00 - 14:00	2	29	0.000	2	29	0.000	2	29	0.000
14:00 - 15:00	2	29	0.035	2	29	0.018	2	29	0.053
15:00 - 16:00	2	29	0.018	2	29	0.000	2	29	0.018
16:00 - 17:00	2	29	0.035	2	29	0.000	2	29	0.035
17:00 - 18:00	2	29	0.053	2	29	0.035	2	29	0.088
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.194			0.194			0.388

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL VEHICLE OCCUPANTS

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	2	29	0.000	2	29	0.193	2	29	0.193
08:00 - 09:00	2	29	0.088	2	29	0.246	2	29	0.334
09:00 - 10:00	2	29	0.070	2	29	0.246	2	29	0.316
10:00 - 11:00	2	29	0.175	2	29	0.281	2	29	0.456
11:00 - 12:00	2	29	0.123	2	29	0.088	2	29	0.211
12:00 - 13:00	2	29	0.158	2	29	0.088	2	29	0.246
13:00 - 14:00	2	29	0.105	2	29	0.193	2	29	0.298
14:00 - 15:00	2	29	0.211	2	29	0.158	2	29	0.369
15:00 - 16:00	2	29	0.193	2	29	0.140	2	29	0.333
16:00 - 17:00	2	29	0.228	2	29	0.175	2	29	0.403
17:00 - 18:00	2	29	0.368	2	29	0.228	2	29	0.596
18:00 - 19:00	2	29	0.298	2	29	0.175	2	29	0.473
19:00 - 20:00	1	19	0.421	1	19	0.158	1	19	0.579
20:00 - 21:00	1	19	0.211	1	19	0.105	1	19	0.316
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.649			2.474			5.123

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PEDESTRIANS 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	2	29	0.018	2	29	0.158	2	29	0.176
08:00 - 09:00	2	29	0.070	2	29	0.193	2	29	0.263
09:00 - 10:00	2	29	0.070	2	29	0.070	2	29	0.140
10:00 - 11:00	2	29	0.070	2	29	0.053	2	29	0.123
11:00 - 12:00	2	29	0.053	2	29	0.070	2	29	0.123
12:00 - 13:00	2	29	0.070	2	29	0.070	2	29	0.140
13:00 - 14:00	2	29	0.105	2	29	0.105	2	29	0.210
14:00 - 15:00	2	29	0.211	2	29	0.140	2	29	0.351
15:00 - 16:00	2	29	0.193	2	29	0.140	2	29	0.333
16:00 - 17:00	2	29	0.088	2	29	0.053	2	29	0.141
17:00 - 18:00	2	29	0.053	2	29	0.018	2	29	0.071
18:00 - 19:00	2	29	0.053	2	29	0.070	2	29	0.123
19:00 - 20:00	1	19	0.053	1	19	0.000	1	19	0.053
20:00 - 21:00	1	19	0.053	1	19	0.000	1	19	0.053
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.160			1.140			2.300

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL BUS/TRAM PASSENGERS

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	2	29	0.000	2	29	0.070	2	29	0.070	
08:00 - 09:00	2	29	0.000	2	29	0.123	2	29	0.123	
09:00 - 10:00	2	29	0.018	2	29	0.070	2	29	0.088	
10:00 - 11:00	2	29	0.000	2	29	0.018	2	29	0.018	
11:00 - 12:00	2	29	0.035	2	29	0.035	2	29	0.070	
12:00 - 13:00	2	29	0.018	2	29	0.053	2	29	0.071	
13:00 - 14:00	2	29	0.053	2	29	0.035	2	29	0.088	
14:00 - 15:00	2	29	0.070	2	29	0.053	2	29	0.123	
15:00 - 16:00	2	29	0.158	2	29	0.035	2	29	0.193	
16:00 - 17:00	2	29	0.035	2	29	0.018	2	29	0.053	
17:00 - 18:00	2	29	0.105	2	29	0.018	2	29	0.123	
18:00 - 19:00	2	29	0.035	2	29	0.000	2	29	0.035	
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000	
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.527			0.528			1.055	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL RAIL PASSENGERS

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	2	29	0.000	2	29	0.000	2	29	0.000	
08:00 - 09:00	2	29	0.000	2	29	0.088	2	29	0.088	
09:00 - 10:00	2	29	0.000	2	29	0.018	2	29	0.018	
10:00 - 11:00	2	29	0.000	2	29	0.000	2	29	0.000	
11:00 - 12:00	2	29	0.018	2	29	0.000	2	29	0.018	
12:00 - 13:00	2	29	0.018	2	29	0.000	2	29	0.018	
13:00 - 14:00	2	29	0.000	2	29	0.018	2	29	0.018	
14:00 - 15:00	2	29	0.018	2	29	0.000	2	29	0.018	
15:00 - 16:00	2	29	0.053	2	29	0.000	2	29	0.053	
16:00 - 17:00	2	29	0.018	2	29	0.000	2	29	0.018	
17:00 - 18:00	2	29	0.000	2	29	0.000	2	29	0.000	
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000	
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000	
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.125			0.124			0.249	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PUBLIC TRANSPORT USERS

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	2	29	0.000	2	29	0.070	2	29	0.070
08:00 - 09:00	2	29	0.000	2	29	0.211	2	29	0.211
09:00 - 10:00	2	29	0.018	2	29	0.088	2	29	0.106
10:00 - 11:00	2	29	0.000	2	29	0.018	2	29	0.018
11:00 - 12:00	2	29	0.053	2	29	0.035	2	29	0.088
12:00 - 13:00	2	29	0.035	2	29	0.053	2	29	0.088
13:00 - 14:00	2	29	0.053	2	29	0.053	2	29	0.106
14:00 - 15:00	2	29	0.088	2	29	0.053	2	29	0.141
15:00 - 16:00	2	29	0.211	2	29	0.035	2	29	0.246
16:00 - 17:00	2	29	0.053	2	29	0.018	2	29	0.071
17:00 - 18:00	2	29	0.105	2	29	0.018	2	29	0.123
18:00 - 19:00	2	29	0.035	2	29	0.000	2	29	0.035
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.651			0.652			1.303

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.37

	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	2	29	0.018	2	29	0.439	2	29	0.457
08:00 - 09:00	2	29	0.158	2	29	0.684	2	29	0.842
09:00 - 10:00	2	29	0.158	2	29	0.439	2	29	0.597
10:00 - 11:00	2	29	0.246	2	29	0.351	2	29	0.597
11:00 - 12:00	2	29	0.246	2	29	0.228	2	29	0.474
12:00 - 13:00	2	29	0.298	2	29	0.228	2	29	0.526
13:00 - 14:00	2	29	0.263	2	29	0.351	2	29	0.614
14:00 - 15:00	2	29	0.544	2	29	0.368	2	29	0.912
15:00 - 16:00	2	29	0.614	2	29	0.316	2	29	0.930
16:00 - 17:00	2	29	0.404	2	29	0.246	2	29	0.650
17:00 - 18:00	2	29	0.579	2	29	0.298	2	29	0.877
18:00 - 19:00	2	29	0.386	2	29	0.246	2	29	0.632
19:00 - 20:00	1	19	0.474	1	19	0.158	1	19	0.632
20:00 - 21:00	1	19	0.263	1	19	0.105	1	19	0.368
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.651			4.457			9.108

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL CARS

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	2	29	0.000	2	29	0.140	2	29	0.140
08:00 - 09:00	2	29	0.070	2	29	0.175	2	29	0.245
09:00 - 10:00	2	29	0.035	2	29	0.123	2	29	0.158
10:00 - 11:00	2	29	0.088	2	29	0.105	2	29	0.193
11:00 - 12:00	2	29	0.105	2	29	0.070	2	29	0.175
12:00 - 13:00	2	29	0.105	2	29	0.070	2	29	0.175
13:00 - 14:00	2	29	0.070	2	29	0.140	2	29	0.210
14:00 - 15:00	2	29	0.088	2	29	0.088	2	29	0.176
15:00 - 16:00	2	29	0.105	2	29	0.088	2	29	0.193
16:00 - 17:00	2	29	0.175	2	29	0.088	2	29	0.263
17:00 - 18:00	2	29	0.263	2	29	0.158	2	29	0.421
18:00 - 19:00	2	29	0.158	2	29	0.088	2	29	0.246
19:00 - 20:00	1	19	0.316	1	19	0.158	1	19	0.474
20:00 - 21:00	1	19	0.158	1	19	0.105	1	19	0.263
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.736			1.596			3.332

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL LGVS

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	2	29	0.000	2	29	0.018	2	29	0.018
08:00 - 09:00	2	29	0.000	2	29	0.000	2	29	0.000
09:00 - 10:00	2	29	0.018	2	29	0.000	2	29	0.018
10:00 - 11:00	2	29	0.053	2	29	0.070	2	29	0.123
11:00 - 12:00	2	29	0.000	2	29	0.000	2	29	0.000
12:00 - 13:00	2	29	0.000	2	29	0.000	2	29	0.000
13:00 - 14:00	2	29	0.018	2	29	0.018	2	29	0.036
14:00 - 15:00	2	29	0.035	2	29	0.035	2	29	0.070
15:00 - 16:00	2	29	0.035	2	29	0.018	2	29	0.053
16:00 - 17:00	2	29	0.000	2	29	0.018	2	29	0.018
17:00 - 18:00	2	29	0.018	2	29	0.000	2	29	0.018
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.177			0.177			0.354

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL MOTOR CYCLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS		Į.	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	2	29	0.000	2	29	0.000	2	29	0.000
08:00 - 09:00	2	29	0.000	2	29	0.000	2	29	0.000
09:00 - 10:00	2	29	0.000	2	29	0.000	2	29	0.000
10:00 - 11:00	2	29	0.000	2	29	0.000	2	29	0.000
11:00 - 12:00	2	29	0.000	2	29	0.000	2	29	0.000
12:00 - 13:00	2	29	0.000	2	29	0.000	2	29	0.000
13:00 - 14:00	2	29	0.000	2	29	0.000	2	29	0.000
14:00 - 15:00	2	29	0.000	2	29	0.000	2	29	0.000
15:00 - 16:00	2	29	0.000	2	29	0.000	2	29	0.000
16:00 - 17:00	2	29	0.000	2	29	0.000	2	29	0.000
17:00 - 18:00	2	29	0.018	2	29	0.000	2	29	0.018
18:00 - 19:00	2	29	0.018	2	29	0.018	2	29	0.036
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.036			0.018			0.054

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL Underground Passengers

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	2	29	0.000	2	29	0.000	2	29	0.000
08:00 - 09:00	2	29	0.000	2	29	0.000	2	29	0.000
09:00 - 10:00	2	29	0.000	2	29	0.000	2	29	0.000
10:00 - 11:00	2	29	0.000	2	29	0.000	2	29	0.000
11:00 - 12:00	2	29	0.000	2	29	0.000	2	29	0.000
12:00 - 13:00	2	29	0.000	2	29	0.000	2	29	0.000
13:00 - 14:00	2	29	0.000	2	29	0.000	2	29	0.000
14:00 - 15:00	2	29	0.000	2	29	0.000	2	29	0.000
15:00 - 16:00	2	29	0.018	2	29	0.000	2	29	0.018
16:00 - 17:00	2	29	0.000	2	29	0.000	2	29	0.000
17:00 - 18:00	2	29	0.000	2	29	0.000	2	29	0.000
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.000			0.018

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL Bus Passengers 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	2	29	0.000	2	29	0.018	2	29	0.018
08:00 - 09:00	2	29	0.000	2	29	0.000	2	29	0.000
09:00 - 10:00	2	29	0.000	2	29	0.018	2	29	0.018
10:00 - 11:00	2	29	0.000	2	29	0.018	2	29	0.018
11:00 - 12:00	2	29	0.000	2	29	0.018	2	29	0.018
12:00 - 13:00	2	29	0.000	2	29	0.018	2	29	0.018
13:00 - 14:00	2	29	0.000	2	29	0.000	2	29	0.000
14:00 - 15:00	2	29	0.018	2	29	0.000	2	29	0.018
15:00 - 16:00	2	29	0.018	2	29	0.000	2	29	0.018
16:00 - 17:00	2	29	0.000	2	29	0.000	2	29	0.000
17:00 - 18:00	2	29	0.070	2	29	0.000	2	29	0.070
18:00 - 19:00	2	29	0.000	2	29	0.000	2	29	0.000
19:00 - 20:00	1	19	0.000	1	19	0.000	1	19	0.000
20:00 - 21:00	1	19	0.000	1	19	0.000	1	19	0.000
21:00 - 22:00				·					
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.106			0.090			0.196

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.

Licence No: 706706

Calculation Reference: AUDIT-706706-221107-1107

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED MULTI-MODAL TOTAL VEHICLES

Selec	cted regions and areas:	
01	GREATER LONDON	
	EN ENFIELD	1 days
	HO HOUNSLOW	1 days
	WF WALTHAM FOREST	1 days
02	SOUTH EAST	
	CT CENTRAL BEDFORDSHIRE	1 days
	ES EAST SUSSEX	4 days
	EX ESSEX	1 days
	HC HAMPSHIRE	7 days
	HF HERTFORDSHIRE	2 days
	KC KENT	3 days
	MW MEDWAY	1 days
	SC SURREY	3 days
	SP SOUTHAMPTON	1 days
	WS WEST SUSSEX	5 days
03	SOUTH WEST	
	BC BOURNEMOUTH CHRISTCHURCH & POOLE	1 days
0.4	SM SOMERSET	1 days
04	EAST ANGLIA	0.1
	NF NORFOLK	8 days
0.5	SF SUFFOLK	2 days
05	EAST MI DLANDS	1 -1
	DY DERBY	1 days
	LN LINCOLNSHIRE	1 days
04	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days 1 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	i days
07	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	z days
	EC CHESHIRE EAST	1 days
09	NORTH	. aayo
	CB CUMBRIA	1 days
	DH DURHAM	1 days
10	WALES	,
	PS POWYS	1 days
	VG VALE OF GLAMORGAN	1 days
13	MUNSTER	,
	TI TIPPERARY	1 days
	WA WATERFORD	1 days
14	LEINSTER	
	WC WICKLOW	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	DN DONEGAL	3 days
	MG MONAGHAN	1 days
17	ULSTER (NORTHERN I RELAND)	
	TY TYRONE	1 days

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

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Monday 07/11/22 Page 2 Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Primary Filtering selection:

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

Parameter: No of Dwellings Actual Range: 6 to 984 (units:) Range Selected by User: 4 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 30/06/22

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
 16 days

 Tuesday
 14 days

 Wednesday
 19 days

 Thursday
 13 days

 Friday
 5 days

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

Selected survey types:

Manual count 67 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:

Edge of Town Centre 10 Edge of Town 57

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
Residential Zone 62
Out of Town 4

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

Secondary Filtering selection:

Use Class:

C3 67 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 500m Range:

All Surveys Included

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PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	4 days
5,001 to 10,000	15 days
10,001 to 15,000	25 days
15,001 to 20,000	8 days
20,001 to 25,000	7 days
25,001 to 50,000	4 days
50,001 to 100,000	2 days

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

Population within 5 miles:

5,000 or Less	1 days
5,001 to 25,000	13 days
25,001 to 50,000	6 days
50,001 to 75,000	8 days
75,001 to 100,000	8 days
100,001 to 125,000	2 days
125,001 to 250,000	20 days
250,001 to 500,000	6 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	17 days
1.1 to 1.5	44 days
1.6 to 2.0	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	27 days
No	40 days

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

PTAL Rating:

No PTAL Present	64 days
1b Very poor	1 days
3 Moderate	1 days
5 Very Good	1 davs

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

Covid-19 Restrictions

Yes

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

Licence No: 706706

LIST OF SITES relevant to selection parameters

BOURNEMOUTH CHRISTCHURCH & POOLE BC-03-A-02 **BUNGALOWS**

HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone

Total No of Dwellings: 28

Survey date: MONDAY 24/03/14 Survey Type: MANUAL

CB-03-A-05 DETACHED/TERRACED HOUSING **CUMBRIA**

MACADAM WAY **PENRITH**

Edge of Town Centre Residential Zone

Total No of Dwellings: 50

Survey date: TUESDAY 21/06/16 Survey Type: MANUAL CENTRAL BÉDFORDSHIRE CT-03-A-01 MI XED HOUSES

ARLESEY ROAD **STOTFOLD**

Edge of Town Residential Zone

Total No of Dwellings: 46

22/06/22 Survey date: WEDNESDAY Survey Type: MANUAL

DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM

PILGRIMS WAY **DURHAM**

Edge of Town Residential Zone

Total No of Dwellings: 57

Survey date: FRIDAY 19/10/18 Survey Type: MANUAL

5 DL-03-A-10 SEMI DETACHED & DETACHED **DUBLIN**

R124 MALAHIDE SAINT HELENS Edge of Town Residential Zone

Total No of Dwellings: 65

Survey date: WEDNESDAY 20/06/18 Survey Type: MANUAL

DN-03-A-03 DETACHED/SEMI-DETACHED **DONEGAL**

THE GRANGE LETTERKENNY GLENCAR IRISH Edge of Town Residential Zone

Total No of Dwellings: 50

Survey date: MONDAY 01/09/14 Survey Type: MANUAL

DN-03-A-04 **SEMI-DETACHED** DONEGAL

GORTLEE ROAD LETTERKENNY GORTLEE Edge of Town Residential Zone

Total No of Dwellings: 83

Survey date: FRIDAY 26/09/14 Survey Type: MANUAL

DN-03-A-06 **DETACHED HOUSING** DONEGAL 8

GLENFIN ROAD BALLYBOFEY

> Edge of Town Residential Zone Total No of Dwellings:

Survey date: WEDNESDAY 10/10/18 Survey Type: MANUAL

6

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LICT OF CITES and another and advantage and and a

LIST OF SITES relevant to selection parameters (Cont.)

RADBOURNE LANE

DY-03-A-01

DERBY

Edge of Town Residential Zone

Total No of Dwellings: 371

Survey date: TUESDAY 10/07/18

MI XED HOUSES

EC-03-A-06 TERRACED HOUSES CHESHIRE EAST

GREYSTOKE ROAD MACCLESFIELD HURDSFIELD Edge of Town

Residential Zone Total No of Dwellings:

Survey date: MONDAY 24/11/14 Survey Type: MANUAL

11 EN-03-A-01 TERRACED & SEMI-DETACHED ENFIELD

BOLLINGBROKE PARK

COCKFOSTERS

Edge of Town Residential Zone

Total No of Dwellings: 32

Survey date: WEDNESDAY 24/11/21 Survey Type: MANUAL

DERBY

Survey Type: MANUAL

12 ES-03-A-03 MI XED HOUSES & FLATS EAST SUSSEX

SHEPHAM LANE POLEGATE

> Edge of Town Residential Zone

Total No of Dwellings: 212

Survey date: MONDAY 11/07/16 Survey Type: MANUAL

3 ES-03-A-04 MI XED HOUSES & FLATS EAST SUSSEX

NEW LYDD ROAD

CAMBER

Edge of Town
Residential Zone

Total No of Dwellings: 134

Survey date: FRIDAY 15/07/16 Survey Type: MANUAL

14 ES-03-A-05 MIXED HOUSES & FLATS EAST SUSSEX

RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone

Total No of Dwellings: 99

Survey date: WEDNESDAY 05/06/19 Survey Type: MANUAL

15 ES-03-A-07 MI XED HOUSES & FLATS EAST SUSSEX

NEW ROAD HAILSHAM HELLINGLY Edge of Town Residential Zone

Total No of Dwellings:

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

EX-03-A-03 **KESTREL GROVE** RAYLEIGH

Edge of Town Residential Zone

Total No of Dwellings: 123

MI XED HOUSES

Survey date: MONDAY 27/09/21 Survey Type: MANUAL

ESSEX

HC-03-A-21 TERRACED & SEMI-DETACHED **HAMPSHIRE**

PRIESTLEY ROAD **BASINGSTOKE HOUNDMILLS** Edge of Town Residential Zone

Total No of Dwellings: 39

Survey date: TUESDAY 13/11/18 Survey Type: MANUAL

HC-03-A-22 HAMPSHÍ RÉ 18 MI XED HOUSES

BOW LAKE GARDENS NEAR EASTLEIGH **BISHOPSTOKE** Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: WEDNESDAY 31/10/18 Survey Type: MANUAL

HC-03-A-24 MIXED HOUSES & FLATS HAMPSHI RE

STONEHAM LANE **EASTLEIGH**

Edge of Town Residential Zone

Total No of Dwellings: 243

Survey Type: MANUAL Survey date: WEDNESDAY 10/11/21

20 HC-03-A-26 MIXED HOUSES & FLATS **HAMPSHIRE**

BOTLEY ROAD WHITELEY

Edge of Town Out of Town

270 Total No of Dwellings:

Survey date: THURSDAY 24/06/21 Survey Type: MANUAL

HC-03-A-27 MIXED HOUSES **HAMPSHIRE** 21

DAIRY ROAD **ANDOVER**

Edge of Town Residential Zone

Total No of Dwellings: 73

Survey date: TUESDAY 16/11/21 Survey Type: MANUAL

HC-03-A-28 MIXED HOUSES & FLATS **HAMPSHIRE**

EAGLE AVENUE WATERLOOVILLE LOVEDEAN Edge of Town Residential Zone

Total No of Dwellings: 125

Survey date: MONDAY 08/11/21 Survey Type: MANUAL

Licence No: 706706

LIST OF SITES relevant to selection parameters (Cont.)

23 HC-03-A-29 MI XED HOUSES & FLATS HAMPSHI RE

CROW LANE RINGWOOD CROW Edge of Town Residential Zone

Total No of Dwellings: 195

Survey date: THURSDAY 30/06/22 Survey Type: MANUAL

24 HF-03-A-03 MI XED HOUSES HERTFORDSHIRE

HARE STREET ROAD BUNTINGFORD

Edge of Town
Residential Zone

Total No of Dwellings: 160

Survey date: MONDAY 08/07/19 Survey Type: MANUAL

25 HF-03-A-04 TERRACED HOUSES HERTFORDSHIRE

HOLMSIDE RISE WATFORD SOUTH OXHEY Edge of Town Residential Zone

Total No of Dwellings: 8

Survey date: TUESDAY 08/06/21 Survey Type: MANUAL

26 HO-03-A-02 MI XED HOUSES HOUNSLOW

HIBERNIAN ROAD HOUNSLOW

> Edge of Town Centre Residential Zone

Total No of Dwellings: 50

Survey date: MONDAY 29/06/15 Survey Type: MANUAL

27 KC-03-A-04 SEMI-DETACHED & TERRACED KENT

KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No. of Dwellings

Total No of Dwellings: 110

Survey date: FRIDAY 22/09/17 Survey Type: MANUAL

28 KC-03-A-07 MI XED HOUSES KENT

RECULVER ROAD HERNE BAY

Edge of Town Residential Zone

Total No of Dwellings: 288

Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

29 KC-03-A-09 MI XED HOUSES & FLATS KENT

WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone

Total No of Dwellings: 14

Survey date: WEDNESDAY 09/06/21 Survey Type: MANUAL

30 LN-03-A-04 DETACHED & SEMI-DETACHED LI NCOLŇSHÍ RE

EGERTON ROAD

LINCOLN

Edge of Town Centre
Residential Zone

Total No of Dwellings: 30

Survey date: MONDAY 29/06/15 Survey Type: MANUAL

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

31 MG-03-A-02 MI XED HOUSES

MONAGHAN

MEDWAY

NORFOLK

Survey Type: MANUAL

Survey Type: MANUAL

Survey Type: MANUAL

NORTH ÉAST LINCOLNSHIRE

GLEN ROAD MONAGHAN

Edge of Town Centre Residential Zone

Total No of Dwellings: 76

Survey date: TUESDAY 12/10/21

MW-03-A-02 32 MIXED HOUSES

OTTERHAM QUAY LANE

RAINHAM

Edge of Town Residential Zone

Total No of Dwellings: 19

Survey date: MONDAY 06/06/22

NE-03-A-03 33 PRIVATE HOUSES

STATION ROAD **SCUNTHORPE**

Edge of Town Centre Residential Zone

Total No of Dwellings: 180

Survey date: TUESDAY 20/05/14

NF-03-A-03 **DETACHED HOUSES**

HALING WAY **THETFORD**

Edge of Town Residential Zone

Total No of Dwellings: 10

Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL NORFOLK

NF-03-A-04 MIXED HOUSES

NORTH WALSHAM ROAD NORTH WALSHAM

Edge of Town Residential Zone

Total No of Dwellings: 70

Survey date: WEDNESDAY 18/09/19 Survey Type: MANUAL NORFOLK

NF-03-A-05 MIXED HOUSES 36

HEATH DRIVE

HOLT

Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: THURSDAY 19/09/19 Survey Type: MANUAL NORFOLK

NF-03-A-06 37 MI XED HOUSES

> **BEAUFORT WAY GREAT YARMOUTH BRADWELL** Edge of Town

Residential Zone

Total No of Dwellings: 275

Survey date: MONDAY 23/09/19 Survey Type: MANUAL

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

NORFOLK 38 NF-03-A-09 MIXED HOUSES & FLATS

ROUND HOUSE WAY NORWICH

CRINGLEFORD Edge of Town Residential Zone

Total No of Dwellings:

984 Survey date: TUESDAY 24/09/19 Survey Type: MANUAL

39 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK

SILFIELD ROAD **WYMONDHAM**

Edge of Town Out of Town

Total No of Dwellings: 514

Survey date: WEDNESDAY 22/09/21 Survey Type: MANUAL

40 NF-03-A-25 MIXED HOUSES & FLATS NORFOLK

WOODFARM LANE GORLESTON-ON-SEA

Edge of Town Residential Zone

Total No of Dwellings: 55

Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

NF-03-A-30 MIXED HOUSES NORFOLK

BRANDON ROAD SWAFFHAM

> Edge of Town Residential Zone

Total No of Dwellings: 266

Survey Type: MANUAL Survey date: THURSDAY 23/09/21 NOTTI NGHAMSHI RE

42 NT-03-A-08 **DETACHED HOUSES**

WIGHAY ROAD HUCKNALL

Edge of Town Residential Zone Total No of Dwellings:

36

Survey date: MONDAY 18/10/21 Survey Type: MANUAL NY-03-A-12 **TOWN HOUSES** NORTH YORKSHIRE 43

RACECOURSE LANE NORTHALLERTON

> Edge of Town Centre Residential Zone

Total No of Dwellings: 47

Survey date: TUESDAY 27/09/16 Survey Type: MANUAL NORTH YORKSHIRE NY-03-A-14 **DETACHED & BUNGALOWS**

PALACE ROAD **RIPON**

Edge of Town Residential Zone

Total No of Dwellings: 45

18/05/22 Survey date: WEDNESDAY Survey Type: MANUAL

45 PS-03-A-01 MIXED HOUSES **POWYS**

BRYN GLAS WELSHPOOL

> Edge of Town Centre Residential Zone

Total No of Dwellings: 16

> Survey date: MONDAY 11/05/15 Survey Type: MANUAL

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

SURREY 46 SC-03-A-04 **DETACHED & TERRACED**

HIGH ROAD **BYFLEET**

Residential Zone

Edge of Town

Total No of Dwellings: 71

23/01/14 Survey date: THURSDAY Survey Type: MANUAL

SC-03-A-07 47 MI XED HOUSES **SURREY**

FOLLY HILL FARNHAM

Edge of Town Residential Zone

Total No of Dwellings: 41

Survey date: WEDNESDAY 11/05/22 Survey Type: MANUAL

48 SC-03-A-08 MI XED HOUSES **SURREY**

REIGATE ROAD

HORLEY

Edge of Town Residential Zone

Total No of Dwellings: 790

Survey date: WEDNESDAY 04/05/22 Survey Type: MANUAL

SF-03-A-05 **DETACHED HOUSES** SUFFOLK

VALE LANE

BURY ST EDMUNDS

Edge of Town Residential Zone

Total No of Dwellings: 18

Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

SF-03-A-10 TERRACED & SEMI-DETACHED SUFFOLK

LOVETOFTS DRIVE

IPSWICH WHITEHOUSE Edge of Town Residential Zone

Total No of Dwellings: 149

Survey date: TUESDAY 22/06/21 Survey Type: MANUAL

SH-03-A-06 **BUNGALOWS** SHROPSHI ŘE 51

ELLESMERE ROAD **SHREWSBURY**

> Edge of Town Residential Zone

Total No of Dwellings: 16

Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

52 SM-03-A-01 **DETACHED & SEMI SOMERSET**

WEMBDON ROAD **BRIDGWATER** NORTHFIELD Edge of Town Residential Zone

Total No of Dwellings: 33

Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

Monday 07/11/22 Page 11

Licence No: 706706

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

LIST OF SITES relevant to selection parameters (Cont.)

53 **SOUTHAMPTON** SP-03-A-02 MIXED HOUSES & FLATS

BARNFIELD WAY **NEAR SOUTHAMPTON** HEDGE END

Edge of Town Out of Town

Total No of Dwellings: 250

Survey date: TUESDAY 12/10/21 Survey Type: MANUAL

ST-03-A-07 54 DETACHED & SEMI-DETACHED STAFFORDSHI RE **BEACONSIDE**

STAFFORD MARSTON GATE Edge of Town Residential Zone

Total No of Dwellings: 248

Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

55 TI-03-A-01 MIXED HOUSES **TIPPERARY**

BRITTAS ROAD THURLES

Edge of Town Out of Town

Total No of Dwellings: 76

Survey date: THURSDAY 17/06/21 Survey Type: MANUAL

TY-03-A-02 SEMI DETACHED & BUNGALOWS **TYRONE**

SANDHOLES ROAD COOKSTOWN **DERRYLORAN** Edge of Town Industrial Zone

Total No of Dwellings: 101

Survey date: THURSDAY Survey Type: MANUAL 14/03/19 VALE OF GLAMORGAN

VG-03-A-01 SEMI-DETACHED & TERRACED ARTHUR STREET

BARRY

Edge of Town Residential Zone

Total No of Dwellings: 12

Survey date: MONDAY 08/05/17 Survey Type: MANUAL

WA-03-A-04 WATERFORD 58 **DETACHED**

MAYPARK LANE WATERFORD

Edge of Town Residential Zone

Total No of Dwellings: 280

Survey date: TUESDAY 24/06/14 Survey Type: MANUAL

WC-03-A-02 **DETACHED HOUSES** WICKLOW

MARLTON ROAD WICKLOW **FRIARSHILL** Edge of Town Centre

Residential Zone Total No of Dwellings: 45

Survey date: MONDAY 28/05/18 Survey Type: MANUAL

Licence No: 706706

LIST OF SITES relevant to selection parameters (Cont.)

WALTHAM FOREST 60 WF-03-A-02 SEMI DETACHED & TERRACED

PALMERSTON ROAD WALTHAMSTOW

Edge of Town Centre Residential Zone

Total No of Dwellings: 9

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

WARWICKSHIRE WK-03-A-04 **DETACHED HOUSES**

DALEHOUSE LANE KENILWORTH

Edge of Town Residential Zone

Total No of Dwellings:

Survey date: FRIDAY 27/09/19 Survey Type: MANUAL

WM-03-A-05 WEST MÍ DLÁNDS 62 **TERRACED & DETACHED**

COUNDON ROAD COVENTRY

Edge of Town Centre Residential Zone

Total No of Dwellings: 89

Survey date: MONDAY 21/11/16 Survey Type: MANUAL

WS-03-A-04 MIXED HOUSES WEST SUSSEX

HILLS FARM LANE HORSHAM

BROADBRIDGE HEATH

Edge of Town Residential Zone

Total No of Dwellings: 151

Survey Type: MANUAL Survey date: THURSDAY 11/12/14 WEST SUSSEX

WS-03-A-08 MIXED HOUSES

ROUNDSTONE LANE

ANGMERING

Edge of Town Residential Zone

Total No of Dwellings: 180

Survey date: THURSDAY 19/04/18 Survey Type: MANUAL

WS-03-A-11 MIXED HOUSES WEST SUSSEX 65

ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town

Residential Zone

Total No of Dwellings: 918

Survey date: TUESDAY 02/04/19 Survey Type: MANUAL

WEST SUSSEX WS-03-A-13 MIXED HOUSES & FLATS

LITTLEHAMPTON ROAD

WORTHING

WEST DURRINGTON

Edge of Town Residential Zone

Total No of Dwellings: 197

Survey date: WEDNESDAY 23/06/21 Survey Type: MANUAL

WS-03-A-14 MI XED HOUSES WEST SUSSEX

TODDINGTON LANE

LITTLEHAMPTON

WICK

Edge of Town Residential Zone

Total No of Dwellings: 117

> Survey date: WEDNESDAY 20/10/21 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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.70

	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	67	143	0.076	67	143	0.306	67	143	0.382
08:00 - 09:00	67	143	0.148	67	143	0.395	67	143	0.543
09:00 - 10:00	67	143	0.142	67	143	0.172	67	143	0.314
10:00 - 11:00	67	143	0.121	67	143	0.143	67	143	0.264
11:00 - 12:00	67	143	0.131	67	143	0.145	67	143	0.276
12:00 - 13:00	67	143	0.152	67	143	0.154	67	143	0.306
13:00 - 14:00	67	143	0.160	67	143	0.146	67	143	0.306
14:00 - 15:00	67	143	0.164	67	143	0.183	67	143	0.347
15:00 - 16:00	67	143	0.247	67	143	0.167	67	143	0.414
16:00 - 17:00	67	143	0.267	67	143	0.158	67	143	0.425
17:00 - 18:00	67	143	0.350	67	143	0.161	67	143	0.511
18:00 - 19:00	67	143	0.289	67	143	0.156	67	143	0.445
19:00 - 20:00	3	30	0.220	3	30	0.154	3	30	0.374
20:00 - 21:00	3	30	0.264	3	30	0.198	3	30	0.462
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.731			2.638			5.369

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

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

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Parameter summary

Trip rate parameter range selected: 6 - 984 (units:)
Survey date date range: 01/01/14 - 30/06/22

Number of weekdays (Monday-Friday): 67
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 4
Surveys manually removed from selection: 0

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL TAXIS

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	67	143	0.001	67	143	0.002	67	143	0.003
08:00 - 09:00	67	143	0.004	67	143	0.004	67	143	0.008
09:00 - 10:00	67	143	0.003	67	143	0.003	67	143	0.006
10:00 - 11:00	67	143	0.003	67	143	0.002	67	143	0.005
11:00 - 12:00	67	143	0.001	67	143	0.001	67	143	0.002
12:00 - 13:00	67	143	0.002	67	143	0.001	67	143	0.003
13:00 - 14:00	67	143	0.002	67	143	0.001	67	143	0.003
14:00 - 15:00	67	143	0.002	67	143	0.002	67	143	0.004
15:00 - 16:00	67	143	0.005	67	143	0.004	67	143	0.009
16:00 - 17:00	67	143	0.003	67	143	0.003	67	143	0.006
17:00 - 18:00	67	143	0.003	67	143	0.003	67	143	0.006
18:00 - 19:00	67	143	0.002	67	143	0.002	67	143	0.004
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.031			0.028			0.059

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.

Licence No: 706706

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

MULTI-MODAL OGVS

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	67	143	0.002	67	143	0.002	67	143	0.004
08:00 - 09:00	67	143	0.003	67	143	0.002	67	143	0.005
09:00 - 10:00	67	143	0.003	67	143	0.002	67	143	0.005
10:00 - 11:00	67	143	0.003	67	143	0.002	67	143	0.005
11:00 - 12:00	67	143	0.003	67	143	0.003	67	143	0.006
12:00 - 13:00	67	143	0.002	67	143	0.002	67	143	0.004
13:00 - 14:00	67	143	0.003	67	143	0.001	67	143	0.004
14:00 - 15:00	67	143	0.002	67	143	0.002	67	143	0.004
15:00 - 16:00	67	143	0.002	67	143	0.003	67	143	0.005
16:00 - 17:00	67	143	0.001	67	143	0.001	67	143	0.002
17:00 - 18:00	67	143	0.002	67	143	0.001	67	143	0.003
18:00 - 19:00	67	143	0.001	67	143	0.001	67	143	0.002
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 0.027 0.022 0.								0.049	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL PSVS

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	67	143	0.001	67	143	0.000	67	143	0.001
08:00 - 09:00	67	143	0.001	67	143	0.001	67	143	0.002
09:00 - 10:00	67	143	0.000	67	143	0.000	67	143	0.000
10:00 - 11:00	67	143	0.000	67	143	0.000	67	143	0.000
11:00 - 12:00	67	143	0.000	67	143	0.000	67	143	0.000
12:00 - 13:00	67	143	0.000	67	143	0.000	67	143	0.000
13:00 - 14:00	67	143	0.000	67	143	0.000	67	143	0.000
14:00 - 15:00	67	143	0.001	67	143	0.001	67	143	0.002
15:00 - 16:00	67	143	0.001	67	143	0.001	67	143	0.002
16:00 - 17:00	67	143	0.001	67	143	0.001	67	143	0.002
17:00 - 18:00	67	143	0.000	67	143	0.000	67	143	0.000
18:00 - 19:00	67	143	0.000	67	143	0.000	67	143	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.004			0.009

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.

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

MULTI-MODAL 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	67	143	0.004	67	143	0.008	67	143	0.012	
08:00 - 09:00	67	143	0.004	67	143	0.015	67	143	0.019	
09:00 - 10:00	67	143	0.002	67	143	0.003	67	143	0.005	
10:00 - 11:00	67	143	0.002	67	143	0.003	67	143	0.005	
11:00 - 12:00	67	143	0.002	67	143	0.003	67	143	0.005	
12:00 - 13:00	67	143	0.003	67	143	0.003	67	143	0.006	
13:00 - 14:00	67	143	0.003	67	143	0.002	67	143	0.005	
14:00 - 15:00	67	143	0.003	67	143	0.004	67	143	0.007	
15:00 - 16:00	67	143	0.009	67	143	0.005	67	143	0.014	
16:00 - 17:00	67	143	0.010	67	143	0.005	67	143	0.015	
17:00 - 18:00	67	143	0.011	67	143	0.006	67	143	0.017	
18:00 - 19:00	67	143	0.007	67	143	0.005	67	143	0.012	
19:00 - 20:00	3	30	0.022	3	30	0.000	3	30	0.022	
20:00 - 21:00	3	30	0.011	3	30	0.000	3	30	0.011	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.093			0.062			0.155	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL VEHICLE OCCUPANTS

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	67	143	0.092	67	143	0.424	67	143	0.516	
08:00 - 09:00	67	143	0.181	67	143	0.648	67	143	0.829	
09:00 - 10:00	67	143	0.177	67	143	0.241	67	143	0.418	
10:00 - 11:00	67	143	0.157	67	143	0.199	67	143	0.356	
11:00 - 12:00	67	143	0.176	67	143	0.197	67	143	0.373	
12:00 - 13:00	67	143	0.201	67	143	0.205	67	143	0.406	
13:00 - 14:00	67	143	0.215	67	143	0.198	67	143	0.413	
14:00 - 15:00	67	143	0.228	67	143	0.240	67	143	0.468	
15:00 - 16:00	67	143	0.414	67	143	0.231	67	143	0.645	
16:00 - 17:00	67	143	0.423	67	143	0.223	67	143	0.646	
17:00 - 18:00	67	143	0.502	67	143	0.227	67	143	0.729	
18:00 - 19:00	67	143	0.415	67	143	0.229	67	143	0.644	
19:00 - 20:00	3	30	0.253	3	30	0.187	3	30	0.440	
20:00 - 21:00	3	30	0.330	3	30	0.231	3	30	0.561	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			3.764			3.680			7.444	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL PEDESTRIANS
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	67	143	0.016	67	143	0.042	67	143	0.058	
08:00 - 09:00	67	143	0.031	67	143	0.101	67	143	0.132	
09:00 - 10:00	67	143	0.029	67	143	0.033	67	143	0.062	
10:00 - 11:00	67	143	0.024	67	143	0.031	67	143	0.055	
11:00 - 12:00	67	143	0.026	67	143	0.028	67	143	0.054	
12:00 - 13:00	67	143	0.024	67	143	0.026	67	143	0.050	
13:00 - 14:00	67	143	0.030	67	143	0.027	67	143	0.057	
14:00 - 15:00	67	143	0.034	67	143	0.032	67	143	0.066	
15:00 - 16:00	67	143	0.080	67	143	0.043	67	143	0.123	
16:00 - 17:00	67	143	0.059	67	143	0.029	67	143	0.088	
17:00 - 18:00	67	143	0.052	67	143	0.035	67	143	0.087	
18:00 - 19:00	67	143	0.043	67	143	0.041	67	143	0.084	
19:00 - 20:00	3	30	0.264	3	30	0.187	3	30	0.451	
20:00 - 21:00	3	30	0.132	3	30	0.099	3	30	0.231	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.844			0.754			1.598	

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.

Licence No: 706706

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED MULTI - MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		Į	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	67	143	0.001	67	143	0.016	67	143	0.017	
08:00 - 09:00	67	143	0.002	67	143	0.027	67	143	0.029	
09:00 - 10:00	67	143	0.003	67	143	0.008	67	143	0.011	
10:00 - 11:00	67	143	0.004	67	143	0.006	67	143	0.010	
11:00 - 12:00	67	143	0.004	67	143	0.008	67	143	0.012	
12:00 - 13:00	67	143	0.004	67	143	0.004	67	143	0.008	
13:00 - 14:00	67	143	0.005	67	143	0.005	67	143	0.010	
14:00 - 15:00	67	143	0.007	67	143	0.005	67	143	0.012	
15:00 - 16:00	67	143	0.018	67	143	0.006	67	143	0.024	
16:00 - 17:00	67	143	0.020	67	143	0.003	67	143	0.023	
17:00 - 18:00	67	143	0.015	67	143	0.003	67	143	0.018	
18:00 - 19:00	67	143	0.010	67	143	0.003	67	143	0.013	
19:00 - 20:00	3	30	0.022	3	30	0.033	3	30	0.055	
20:00 - 21:00	3	30	0.022	3	30	0.000	3	30	0.022	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.137			0.127			0.264	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	3	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	67	143	0.001	67	143	0.006	67	143	0.007	
08:00 - 09:00	67	143	0.000	67	143	0.007	67	143	0.007	
09:00 - 10:00	67	143	0.000	67	143	0.002	67	143	0.002	
10:00 - 11:00	67	143	0.000	67	143	0.001	67	143	0.001	
11:00 - 12:00	67	143	0.000	67	143	0.001	67	143	0.001	
12:00 - 13:00	67	143	0.001	67	143	0.001	67	143	0.002	
13:00 - 14:00	67	143	0.001	67	143	0.001	67	143	0.002	
14:00 - 15:00	67	143	0.001	67	143	0.000	67	143	0.001	
15:00 - 16:00	67	143	0.002	67	143	0.001	67	143	0.003	
16:00 - 17:00	67	143	0.003	67	143	0.000	67	143	0.003	
17:00 - 18:00	67	143	0.005	67	143	0.000	67	143	0.005	
18:00 - 19:00	67	143	0.006	67	143	0.001	67	143	0.007	
19:00 - 20:00	3	30	0.088	3	30	0.000	3	30	0.088	
20:00 - 21:00	3	30	0.055	3	30	0.000	3	30	0.055	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.163			0.021			0.184	

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.

Licence No: 706706

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

MULTI-MODAL COACH PASSENGERS 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	67	143	0.000	67	143	0.000	67	143	0.000
08:00 - 09:00	67	143	0.000	67	143	0.002	67	143	0.002
09:00 - 10:00	67	143	0.000	67	143	0.000	67	143	0.000
10:00 - 11:00	67	143	0.000	67	143	0.000	67	143	0.000
11:00 - 12:00	67	143	0.000	67	143	0.000	67	143	0.000
12:00 - 13:00	67	143	0.000	67	143	0.000	67	143	0.000
13:00 - 14:00	67	143	0.000	67	143	0.000	67	143	0.000
14:00 - 15:00	67	143	0.000	67	143	0.000	67	143	0.000
15:00 - 16:00	67	143	0.001	67	143	0.000	67	143	0.001
16:00 - 17:00	67	143	0.000	67	143	0.000	67	143	0.000
17:00 - 18:00	67	143	0.000	67	143	0.000	67	143	0.000
18:00 - 19:00	67	143	0.000	67	143	0.000	67	143	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00				`					
22:00 - 23:00									
23:00 - 24:00					•		•		
Total Rates:			0.001			0.002			0.003

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL PUBLIC TRANSPORT USERS

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	67	143	0.001	67	143	0.023	67	143	0.024
08:00 - 09:00	67	143	0.002	67	143	0.036	67	143	0.038
09:00 - 10:00	67	143	0.003	67	143	0.010	67	143	0.013
10:00 - 11:00	67	143	0.004	67	143	0.006	67	143	0.010
11:00 - 12:00	67	143	0.004	67	143	0.009	67	143	0.013
12:00 - 13:00	67	143	0.005	67	143	0.006	67	143	0.011
13:00 - 14:00	67	143	0.006	67	143	0.005	67	143	0.011
14:00 - 15:00	67	143	0.008	67	143	0.005	67	143	0.013
15:00 - 16:00	67	143	0.021	67	143	0.007	67	143	0.028
16:00 - 17:00	67	143	0.023	67	143	0.003	67	143	0.026
17:00 - 18:00	67	143	0.020	67	143	0.003	67	143	0.023
18:00 - 19:00	67	143	0.016	67	143	0.004	67	143	0.020
19:00 - 20:00	3	30	0.110	3	30	0.033	3	30	0.143
20:00 - 21:00	3	30	0.077	3	30	0.000	3	30	0.077
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.300			0.150			0.450

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

Licence No: 706706

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

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.70

		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	67	143	0.112	67	143	0.497	67	143	0.609
08:00 - 09:00	67	143	0.218	67	143	0.799	67	143	1.017
09:00 - 10:00	67	143	0.212	67	143	0.287	67	143	0.499
10:00 - 11:00	67	143	0.187	67	143	0.240	67	143	0.427
11:00 - 12:00	67	143	0.208	67	143	0.237	67	143	0.445
12:00 - 13:00	67	143	0.233	67	143	0.240	67	143	0.473
13:00 - 14:00	67	143	0.254	67	143	0.232	67	143	0.486
14:00 - 15:00	67	143	0.274	67	143	0.281	67	143	0.555
15:00 - 16:00	67	143	0.525	67	143	0.286	67	143	0.811
16:00 - 17:00	67	143	0.515	67	143	0.261	67	143	0.776
17:00 - 18:00	67	143	0.585	67	143	0.270	67	143	0.855
18:00 - 19:00	67	143	0.480	67	143	0.279	67	143	0.759
19:00 - 20:00	3	30	0.648	3	30	0.407	3	30	1.055
20:00 - 21:00	3	30	0.549	3	30	0.330	3	30	0.879
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.000			4.646			9.646

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		I	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	67	143	0.060	67	143	0.274	67	143	0.334	
08:00 - 09:00	67	143	0.123	67	143	0.360	67	143	0.483	
09:00 - 10:00	67	143	0.118	67	143	0.150	67	143	0.268	
10:00 - 11:00	67	143	0.097	67	143	0.119	67	143	0.216	
11:00 - 12:00	67	143	0.110	67	143	0.121	67	143	0.231	
12:00 - 13:00	67	143	0.130	67	143	0.132	67	143	0.262	
13:00 - 14:00	67	143	0.136	67	143	0.125	67	143	0.261	
14:00 - 15:00	67	143	0.144	67	143	0.161	67	143	0.305	
15:00 - 16:00	67	143	0.220	67	143	0.140	67	143	0.360	
16:00 - 17:00	67	143	0.239	67	143	0.137	67	143	0.376	
17:00 - 18:00	67	143	0.314	67	143	0.144	67	143	0.458	
18:00 - 19:00	67	143	0.268	67	143	0.142	67	143	0.410	
19:00 - 20:00	3	30	0.187	3	30	0.132	3	30	0.319	
20:00 - 21:00	3	30	0.242	3	30	0.187	3	30	0.429	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			2.388			2.324			4.712	

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.

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL LGVS

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	67	143	0.012	67	143	0.026	67	143	0.038
08:00 - 09:00	67	143	0.017	67	143	0.024	67	143	0.041
09:00 - 10:00	67	143	0.017	67	143	0.017	67	143	0.034
10:00 - 11:00	67	143	0.018	67	143	0.019	67	143	0.037
11:00 - 12:00	67	143	0.016	67	143	0.018	67	143	0.034
12:00 - 13:00	67	143	0.018	67	143	0.017	67	143	0.035
13:00 - 14:00	67	143	0.018	67	143	0.018	67	143	0.036
14:00 - 15:00	67	143	0.015	67	143	0.016	67	143	0.031
15:00 - 16:00	67	143	0.017	67	143	0.018	67	143	0.035
16:00 - 17:00	67	143	0.021	67	143	0.015	67	143	0.036
17:00 - 18:00	67	143	0.029	67	143	0.012	67	143	0.041
18:00 - 19:00	67	143	0.016	67	143	0.010	67	143	0.026
19:00 - 20:00	3	30	0.022	3	30	0.011	3	30	0.033
20:00 - 21:00	3	30	0.000	3	30	0.011	3	30	0.011
21:00 - 22:00									
22:00 - 23:00									-
23:00 - 24:00									
Total Rates:			0.236			0.232			0.468

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

PETER BRETT ASSSOCIATES LLP VICTORIA SQUARE BIRMINGHAM

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

MULTI-MODAL MOTOR CYCLES
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	67	143	0.000	67	143	0.002	67	143	0.002
08:00 - 09:00	67	143	0.000	67	143	0.003	67	143	0.003
09:00 - 10:00	67	143	0.000	67	143	0.000	67	143	0.000
10:00 - 11:00	67	143	0.001	67	143	0.001	67	143	0.002
11:00 - 12:00	67	143	0.001	67	143	0.001	67	143	0.002
12:00 - 13:00	67	143	0.001	67	143	0.001	67	143	0.002
13:00 - 14:00	67	143	0.001	67	143	0.001	67	143	0.002
14:00 - 15:00	67	143	0.001	67	143	0.002	67	143	0.003
15:00 - 16:00	67	143	0.002	67	143	0.001	67	143	0.003
16:00 - 17:00	67	143	0.002	67	143	0.001	67	143	0.003
17:00 - 18:00	67	143	0.003	67	143	0.001	67	143	0.004
18:00 - 19:00	67	143	0.002	67	143	0.001	67	143	0.003
19:00 - 20:00	3	30	0.011	3	30	0.011	3	30	0.022
20:00 - 21:00	3	30	0.022	3	30	0.000	3	30	0.022
21:00 - 22:00									·
22:00 - 23:00									
23:00 - 24:00					•		•		·
Total Rates:			0.047			0.026			0.073

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.

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

MULTI-MODAL Scooters
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	67	143	0.000	67	143	0.000	67	143	0.000
08:00 - 09:00	67	143	0.000	67	143	0.001	67	143	0.001
09:00 - 10:00	67	143	0.000	67	143	0.000	67	143	0.000
10:00 - 11:00	67	143	0.000	67	143	0.000	67	143	0.000
11:00 - 12:00	67	143	0.000	67	143	0.000	67	143	0.000
12:00 - 13:00	67	143	0.000	67	143	0.000	67	143	0.000
13:00 - 14:00	67	143	0.000	67	143	0.000	67	143	0.000
14:00 - 15:00	67	143	0.000	67	143	0.000	67	143	0.000
15:00 - 16:00	67	143	0.001	67	143	0.000	67	143	0.001
16:00 - 17:00	67	143	0.000	67	143	0.000	67	143	0.000
17:00 - 18:00	67	143	0.000	67	143	0.000	67	143	0.000
18:00 - 19:00	67	143	0.000	67	143	0.000	67	143	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 0.001 0.001									

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.