

Transport Statement

Date: 28 July 2020

Project: St John Street, Manchester

Title: Transport Statement

1. Purpose

- 1.1 SK has been appointed to review the transport and highway implications of redeveloping a site off St John Street in Manchester city centre to provide three dwellings. The proposed site layout is attached as Appendix A.
- 1.2 The assessment has been undertaken in line with standard appraisal methods and in line with NPPF and PPG. The assessment is also in line with the following guidance:
 - MCC (2012) Manchester's Local Development Framework: Core Strategy Development Plan
 - MCC (2017) Manchester Residential Quality Guidance
 - MCC (2019) Draft Zero Carbon Framework 2020-2038
 - MCC (2019) Revised City Centre Transport Strategy
 - TfGM (2013) Transport for Sustainable Developments: A Guide for Developers
 - TfGM (2017) Greater Manchester Transport Strategy 2040
 - DfT (2007) Guidance on Transport Assessment
- 1.3 The scale of the proposal is well beneath that which requires the submission of a formal Transport Assessment; however, this Statement has been prepared to set out the transport characteristics of the site and as a review of the impact of the proposal.

2. Existing Site Characteristics

Site Location

- 2.1 Figure 2.1 shows that the site is located to the southwest of the city centre, south of the A34 Quay Street and west of the A56 Deansgate.
- 2.2 The site is bounded to the north by Artillery Street, to the east by Longworth Street and to the south by St John Street.

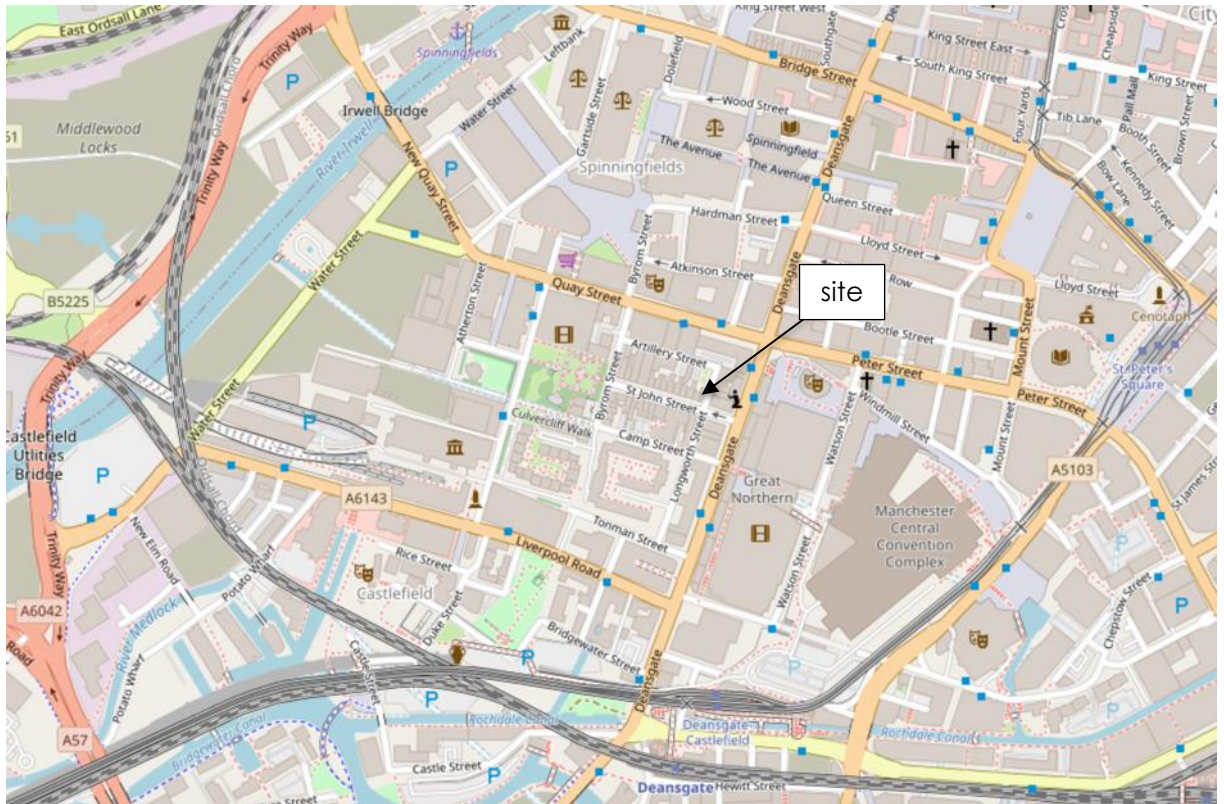


Figure 2.1: Site Location

Existing Site Use

- 2.3 The site is currently occupied by a 512sqm office building that fronts St John Street with pedestrian access on the same frontage. To the rear of the site is a tree area with gated access points on Longworth Street and Artillery Street.
- 2.4 There is a dropped-kerb on Longworth Street, just behind the building, and this is used to access an area of hardstanding that is used to park site vehicles. There is space for two vehicles to park in this area.
- 2.5 The bins are stored at the back of the building and are pulled out for collection from kerbside on Longworth Street on collection day.

Local Highway Network

- 2.6 St John Street is a one-way westbound residential street that routes along the site's southern boundary between the A56 Deansgate and Byrom Street. Generous width footways of above 2m are provided on either carriageway edge and street lighting is present. On the site side of the road, angled perpendicular Pay & Display parking bays are in place. Single yellow line controls are in place on the southern carriageway edge.
- 2.7 On the eastern boundary of the site Longworth Street routes between Artillery Street and Tonman Street. Longworth Street is a narrow two-way route that provides a service access function to the existing units fronting St John Street. Longworth Street provides access to the site's existing parking area and the parking areas to the rear of the adjacent properties. It is also used by vehicles collecting refuse. Double yellow line controls are in place adjacent to the site, with no loading restrictions.
- 2.8 Longworth Street becomes Artillery Street to the north of the site. Artillery Street serves a similar service access function and parking controls (double yellow lines) are in place along its length.

Street Parking Controls

- 2.9 The site sits in Resident Parking Control Zone 2 and parking is restricted to Pay & Display bays that are in operation between 8am and 8pm, Monday to Saturday (2 hour maximum stay duration). 50 resident parking permits are available on application for residents living in Zone 2.
- 2.10 There are 30 Pay & Display parking bays on the northern carriageway edge of St John Street (between Longworth Street and Byrom Street). Parking is controlled on the southern carriageway edge by a single yellow line that restricts parking between 8am and 8pm, Monday to Saturday.
- 2.11 In line with MCC parking policy, the parking charges and time restrictions do not apply to Blue Badge holders. Blue Badge holders can park for free and unlimited duration in the marked bays.

Public Car Parks

- 2.12 The nearest car parks to the site are located at the Great Northern Warehouse and Spinningfields. Table 2.1 shows that there are nearly 2,000 parking spaces within a five minute walk of the site.

Car Park	Distance (m)	Walk Time (mins)	Total Spaces	Disabled Spaces	Contract Parking
Great Northern Warehouse 1	140	2	527	25	Yes
Great Northern Warehouse 2	140	2	721	35	Yes
Spinningfields	450	5	680	35	Yes

Table 2.1: Public Car Parks
[source: NCP 2020]

Road Safety

- 2.13 Accident data for the most recent five year period available has been taken from the GMTU database.

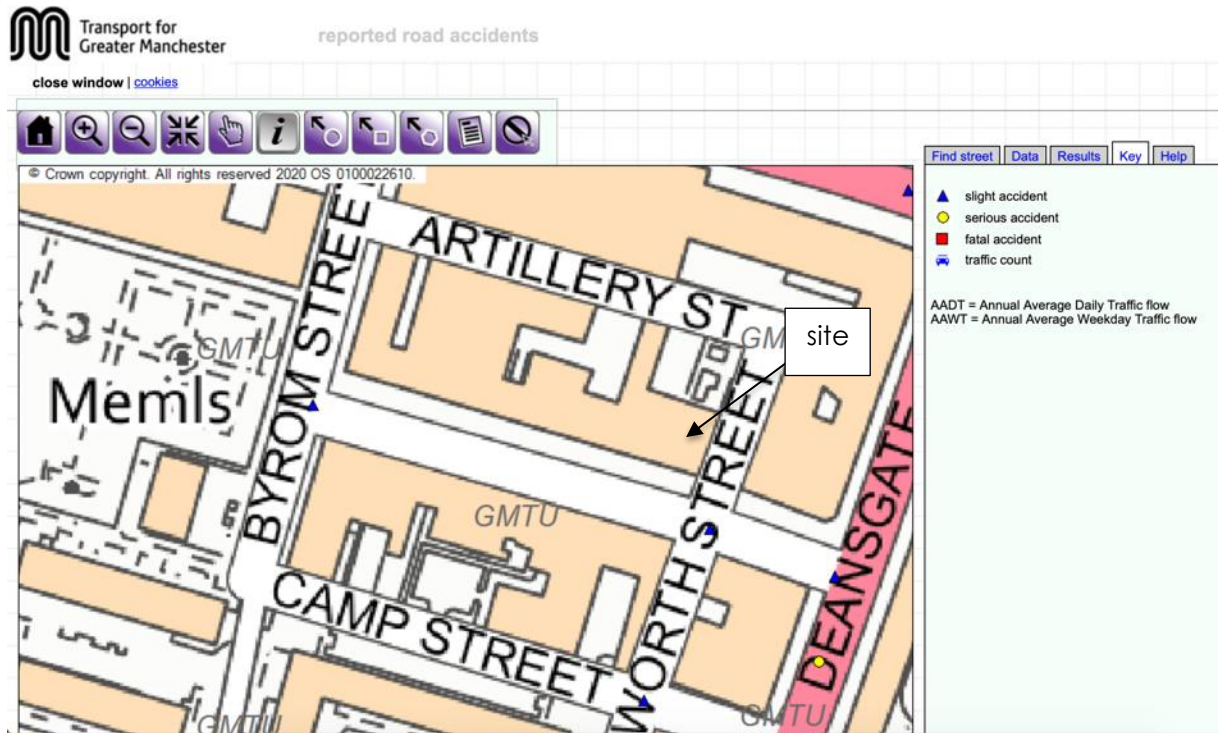


Figure 2.2: Accident Data
[source: GMTU 2020]

- 2.14 Figure 2.2 shows that there have been no accidents on the St John Street, Artillery Street and Longworth Street site frontages during the five year period assessed.
- 2.15 There has been a single accident at the junction of Longworth Street and St John Street. The accident occurred in 2016 and was classified as slight.
- 2.16 There has been a single accident at the junction of St John Street and Byrom Street. The accident occurred in 2017 and was classified as slight.
- 2.17 The accident data shows that there are no accident cluster locations or accident hotspots on routes surrounding the site.

Existing Site Trips

- 2.18 The TRICS database has been used to establish typical traffic flows associated with the B1 office use of the site.
- 2.19 In October 2019 TRICS released a study¹ that examined the impact of regional and locational selection parameters on trip rates. TRICS Good Practice advice had always maintained that users should refrain from deselecting sites by geographical region, despite many Local Highway Authorities supporting this method. The TRICS October 2019 study further emphasises this and states that sites should not be excluded based on region, going on to confirm that the location type is a more important variable than region. The trip rate assessment takes account of this latest guidance by only selecting sites based on location and not deselecting sites based on region, to reflect the site's location in a key centre in a metropolitan area.
- 2.20 Local authorities often, incorrectly, require Greater London sites to be deselected from TRICS analysis as this area is perceived to provide a much better level of accessibility than sites outside the region. To further demonstrate that this is not applicable for the analysis presented in this assessment a review of the Greater London TRICS site included in the analysis has been undertaken.

¹ TRICS (2019), A Comparison of Vehicular Trip Rate Variation by TRICS Regions & Location Types

- 2.21 The Greater London site is located in Wandsworth area of Greater London, outside of the Congestion Charging Zone and with a PTAL of 5. A PTAL of 5 equates to a Greater Manchester Accessibility Level (GMAL) of 7. The site has a GMAL of 8, which is a better accessibility level. Therefore, the inclusion of the Greater London site is appropriate, in this instance.
- 2.22 The TRICS database is attached as Appendix B with a summary provided in Table 2.2.

	Person Trip Rate (per 100sqm)			Total Trips		
	In	Out	Total	In	Out	Total
AM Peak	2.753	0.175	2.928	14	1	15
PM Peak	0.398	2.928	3.326	2	15	17
Daily	31.807	31.536	63.343	163	161	324
	Vehicle Trip Rate (per 100sqm)			Vehicle Trips		
	In	Out	Total	In	Out	Total
AM Peak	1.193	0.175	1.368	6	1	7
PM Peak	0.255	1.161	1.416	1	6	7
Daily	12.475	12.157	24.632	64	62	126
	OGV Trip Rate (per 100sqm)			OGV Trips		
	In	Out	In	Out	In	Out
AM Peak	0.016	0.032	0.048	1	1	2
PM Peak	0	0	0	0	0	0
Daily	0.032	0.032	0.064	1	1	2

Table 2.2: Existing Site Trips

3. Development Proposal

- 3.1 The planning application seeks to redevelop the site to provide three dwellings. The proposed layout is attached as Appendix A.
- 3.2 Two dwellings will be provided through the conversion and extension of the existing office building. Pedestrian access to both dwellings will be provided from St John Street. One of the dwellings will have a parking space accessed from a shuttered arrangement on Longworth Street, broadly located where the existing parking area access is. The parking space includes an area for bins and bikes to be stored. The second dwelling will have no dedicated parking space but will have a bin and bike store area accessed off Longworth Street.
- 3.3 At the rear of the site a new dwelling will be constructed. Pedestrian access to the dwelling will be provided from Artillery Street. A parking area is also provided with access off Artillery Street. A bin and bike store is also provided with an access off Longworth Street.
- 3.4 The footways on the Artillery Street and Longworth Street frontage are currently 1.1m and 1m wide respectively on the site frontages. The proposed development will set back the building line on Artillery Street such that the available width will be increased to a minimum of 1.2m increasing to 1.8m at the corner with Longworth Street. The building line on Longworth Street is set back slightly within the site but this does not appreciably increase the available width.
- 3.5 The accesses to the individual garages on both frontages are set back further into the site, by an additional 0.4m on Artillery Street and by a considerably larger 1.8m on Longworth Street. There are existing vehicle accesses to driveway style parking areas on both frontages. In both cases these give directly onto the existing footways with planting up to the edge of the site, hard up against the edges of the entrance points. In the case of the existing Longworth Street driveway this is in a similar location to that proposed for the garage. The existing driveway space on Artillery Street is close to the bend with Longworth Street and the proposed garage has been moved as far from the bend as is possible within the site.

- 3.6 The proposed garage entrances are essentially comparable with the existing driveway spaces within the site but feature an appreciable increase in effective footway width and a move away from the bend in the case of the Artillery Street frontage, both of which are an enhancement over the existing situation. In the case of the Longworth Street garage entrance this is more similar to the existing arrangement, but the garage door has been set back considerably further into the site (1.8m from the back of footway).
- 3.7 Similar arrangements exist throughout the city centre and feature in recently consented residential development proposals, an example of which is shown below (application ref.108469/FO/2015/N1). As described above the proposals for garage entrances on both Artillery Street and Longworth Street feature additional space allowances that compare favourably with the scheme shown below.

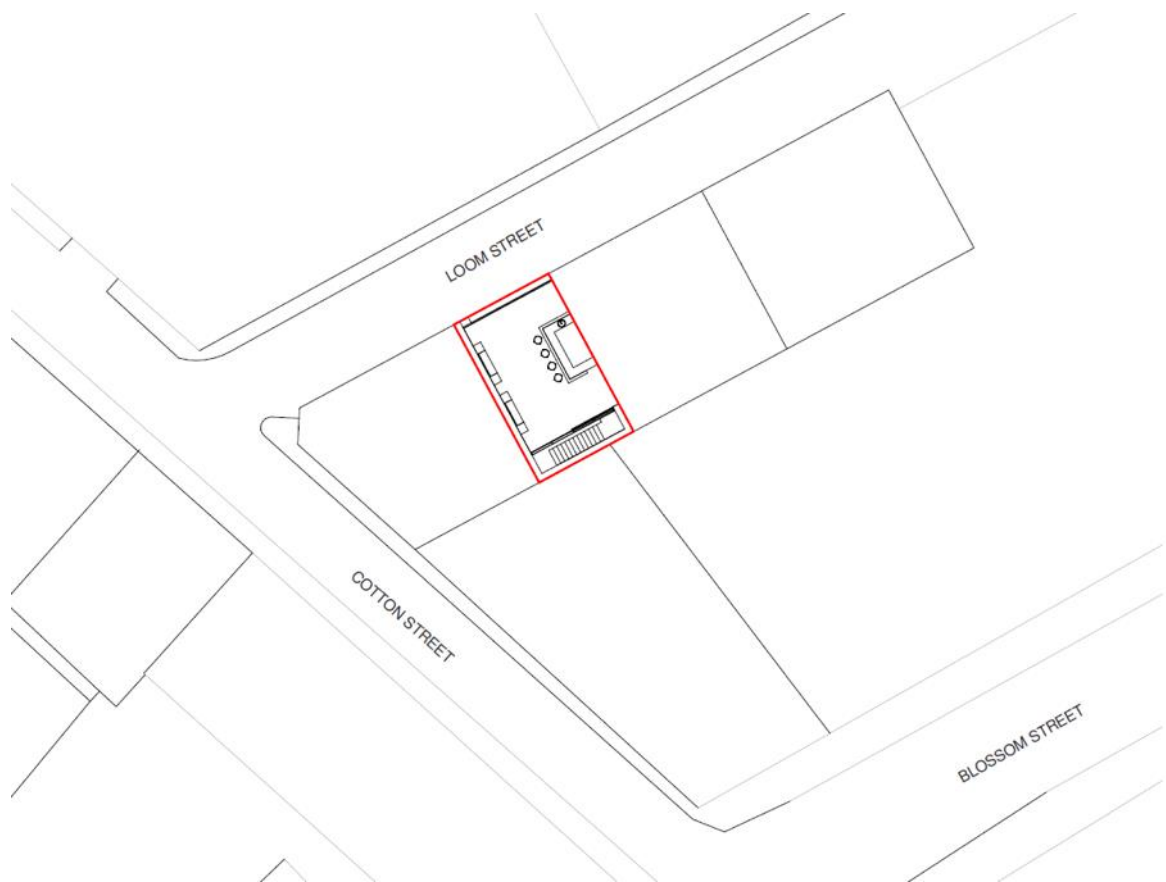


Figure 3.1: Loom Street Development Site

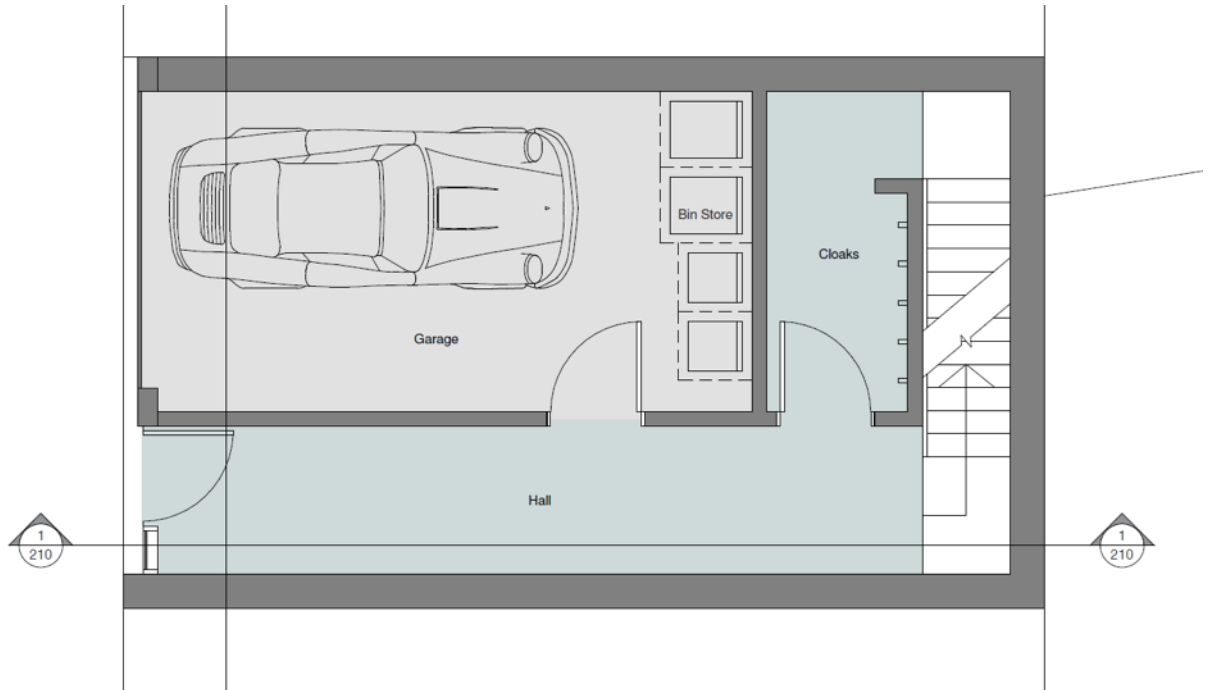


Figure 3.2: Loom Street Garage Layout

- 3.8 The proposal provides two parking spaces (67% provision). The site occupies a highly sustainable location and precedent consented residential schemes across the city centre show that a high proportion of residents live without owning a car. If the resident of the car-free dwelling needs to store a car then they can arrange for parking at one of the public car parks that provide nearly 2,000 spaces nearby or can apply for a street parking permit, if one is available.
- 3.9 In line with MCC policy, Blue Badge Holders are permitted to park for unlimited duration and free in marked parking bays in the city centre. There are 30 parking bays located outside the site on St John Street.
- 3.10 The servicing arrangements for the site are concentrated on Longworth Street in line with current site refuse collection arrangements.

4. Traffic & Parking Impact

Traffic Impact

- 4.1 The TRICS database has been used to assess the future trips associated with the development proposal. The TRICS analysis has been undertaken in line with latest TRICS guidance, as set out in Section 2, and includes appropriately located Greater London sites.
- 4.2 The only Greater London site included in the assessment is in Waltham Forest. The site sits outside the Congestion Charge Zone and has a PTAL of 5. A PTAL of 5 equates to a Greater Manchester Accessibility Level (GMAL) of 7. The site has a GMAL of 8, which is a better accessibility level. Therefore, the inclusion of the Greater London site is appropriate, in this instance.
- 4.3 The TRICS output is attached as Appendix C, with a summary provided below.

	Person Trip Rate (per unit)			Total Trips		
	In	Out	Total	In	Out	Total
AM Peak	0.414	0.954	1.368	1	3	4
PM Peak	0.828	0.471	1.299	2	1	3
Daily	6.236	5.375	11.611	19	16	35
	Vehicle Trip Rate (per unit)			Vehicle Trips		
	In	Out	Total	In	Out	Total
AM Peak	0.161	0.310	0.471	0	1	1
PM Peak	0.310	0.184	0.494	1	1	2
Daily	2.396	2.390	4.786	7	7	14
	OGV Trip Rate ((per unit)			OGV Trips		
	In	Out	In	Out	In	Out
AM Peak	0.034	0.034	0.068	1	1	2
PM Peak	0.011	0.011	0.022	1	1	2
Daily	0.078	0.078	0.156	2	2	4

Table 4.1: Development Trip Generation

- 4.4 Table 4.1 shows that the proposal will generate a negligible amount of traffic in the peak periods and only 14 total vehicle movements across the full day. The level of traffic generated by the proposal is well below DfT significance thresholds and the proposal will not have an impact on highway operation or road safety.
- 4.5 Table 4.2 shows the net change in traffic flows compared the current use of the site as a B1 office.

	Existing			Proposed			Net Impact		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	6	1	7	0	1	1	-6	0	-6
PM Peak Hour	1	6	7	1	1	2	0	-5	-5
Daily	64	62	126	7	7	14	-57	-55	-112

Table 4.2: Net Traffic Impact

- 4.6 Table 4.2 shows that the proposed development will generate significantly less traffic than that associated with the B1 office use of the site.

Servicing Impact

- 4.7 The site already generates delivery and refuse collection movements onto the local highway network and service activity is concentrated on the kerbside on Longworth Street. This is in line with Manual for Streets, which states at paragraph 8.3.28:

'In most situations, it will not be necessary to provide parking spaces specifically for service vehicles, such as delivery vans, which are normally stationary for a relatively short time.'

- 4.8 The site provides dedicated bin storage areas for each unit and these are accessed from Longworth Street. Service activity will continue to be concentrated on Longworth Street in line

with current arrangements. Longworth Street is a road that provides a service function for the properties backing on to it.

- 4.9 Table 4.1 shows that the proposal will be associated with up to four service vehicle movements per day (two in and two out). This is broadly the same as that associated with the existing B1 use of the site. Based on this the proposal will not significantly change service vehicle activity.

Parking Impact

- 4.10 MCC does not maintain any parking standards for city centre development and each site is taken on its own merits. The site occupies a highly sustainable location and evidence from other consented schemes across the city centre supports the fact that a high proportion of residents live without needing to use, or even own, a car. In line with this the parking level for the site is 67%. Parking spaces are provided for two dwellings and one of the dwellings is car-free. In line with prevailing city centre car ownership patterns the car-free dwelling is likely to appeal to residents who do not own a car. However, should this not be the case then parking can be organised by the resident either by applying for a resident street parking permit or by arranging contract parking in a nearby public car park.
- 4.11 The TRICS data has been used to establish the parking demand associated with both the existing and proposed site uses.

	Existing Parking Demand			Future Parking Demand		
	In	Out	Accumulation	In	Out	Accumulation
07:00-08:00	2	0	2	0	1	1
08:00-09:00	6	1	7	0	1	0
09:00-10:00	8	3	12	0	0	0
10:00-11:00	10	8	13	0	0	0
11:00-12:00	8	7	14	0	0	0
12:00-13:00	8	7	14	1	1	0
13:00-14:00	7	7	15	1	0	1
14:00-15:00	7	7	15	1	1	1
15:00-16:00	3	5	12	1	0	2
16:00-17:00	3	7	8	1	1	1
17:00-18:00	1	6	4	1	1	1
18:00-19:00	1	3	2	1	1	1

Table 4.3: Net Parking Impact

- 4.12 Table 4.3 shows that the site is currently associated with a maximum parking demand of 15 vehicles. Of these two can park on site and the remainder will park on street or in nearby public car parks.
- 4.13 The starting occupancy for the proposed development has been set as two vehicles, as this is the number of spaces provided on site. Table 4.3 shows that the proposed development will be associated with a maximum parking demand of two vehicles and will therefore reduce parking demand on surrounding streets and car parks. The level of parking provided at the development is in line with the demand generated.

Policy Compliance

- 4.14 Paragraph 109 of NPPF (2019) states that developments should only be prevented on highways grounds if there would be an unacceptable impact on highway safety or where residual cumulative impacts would be severe.
- 4.15 The assessment shows that the proposal is associated with a negligible level of traffic and parking demand. It is also shown that large vehicle movements will be broadly the same as those associated with the existing use of the site.

5. Accessibility Analysis

Walking & Cycling Access

- 5.1 The site sits in the city centre and is served by a comprehensive network of walking routes that are typical of its urban setting. St John Street benefits from generous width footways that provide a connection to routes on Deansgate and Byrom Street. The footway on the Longworth Street and Artillery Street site frontages are 1.1m and 1m respectively, which while narrower than the footways provided in surrounding areas fit with the service category and historic nature of the routes and the low level of pedestrian traffic using them. The proposal will not significantly alter the level of pedestrians requiring use of these routes, when compared to the site's existing uses.
- 5.2 Access to one of the dwellings is provided from the rear of the site on Artillery Street. This is again not dissimilar to the existing access arrangements to the tree area on the site and the proposal will therefore not significantly alter the pedestrian access requirements. Notwithstanding this, the proposal will increase the footway width on Artillery Street frontages to a minimum of 1.4m increasing to 1.8m at the corner with Longworth Street. This provides a material betterment when compared to the existing situation.
- 5.3 Overall the development will result in a reduction in pedestrian trips accessing the site, when compared to the existing B1 office use.
- 5.4 Figure 5.1 shows the Greater Manchester Cycle Network serving the site.

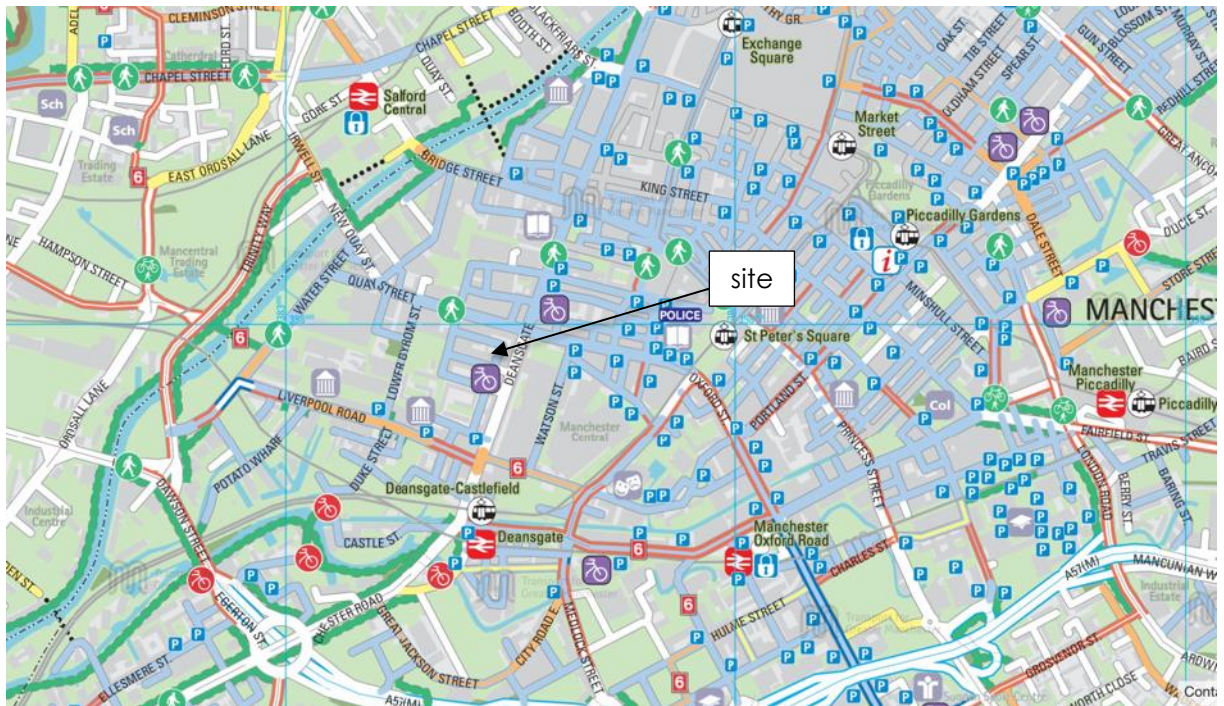


Figure 5.1: GM Cycle Network
[source: TfGM 2020]

- 5.5 Figure 5.1 shows that road surrounding the site are identified as low-trafficked routes that are suitable for cycling. These roads link to the wider city centre network and also provide linkages to routes that connect to areas outside the city centre, including Route 6 of the National Cycle Network.
- 5.6 The proposal includes space for storing bikes within covered and secure locations in each dwelling.
- 5.7 The existing cycle and pedestrian routes provide a good means of accessing surrounding areas of the city and the proposal will reduce pedestrian and cycle trips when compared to the existing use of the site.

Public Transport Access

- 5.8 The site is located in the city centre and benefits from easy access to numerous public transport services.
- 5.9 The nearest bus stops to the site are located on Quay Street and Deansgate. Access can also be gained to Shudehill Interchange and Piccadilly Gardens Interchange in a 20 and 15 minute walk, respectively. The site also relates well to the Free Bus Routes 1, 2 and 3 from Deansgate, Lower Byrom Street and Quay Street. The Free Bus provides frequent bus services that connect to key destinations and public transport interchanges across the city centre.
- 5.10 The nearest tram stops to the site are located at St Peters Square and Deansgate-Castlefield, both of which are five minute walk from the site. The tram network provides frequent services across Greater Manchester.
- 5.11 The nearest train station to the site is located at Deansgate-Castlefield, Salford Central and Oxford Road, which are five minutes, 11 minutes and 12 minute walks from the site.
- 5.12 A GMAL calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM. This tool measures accessibility by public transport of a point of interest and provides a score between 1 and 8, where 1 is a low level of accessibility and 8 is the highest level of accessibility.

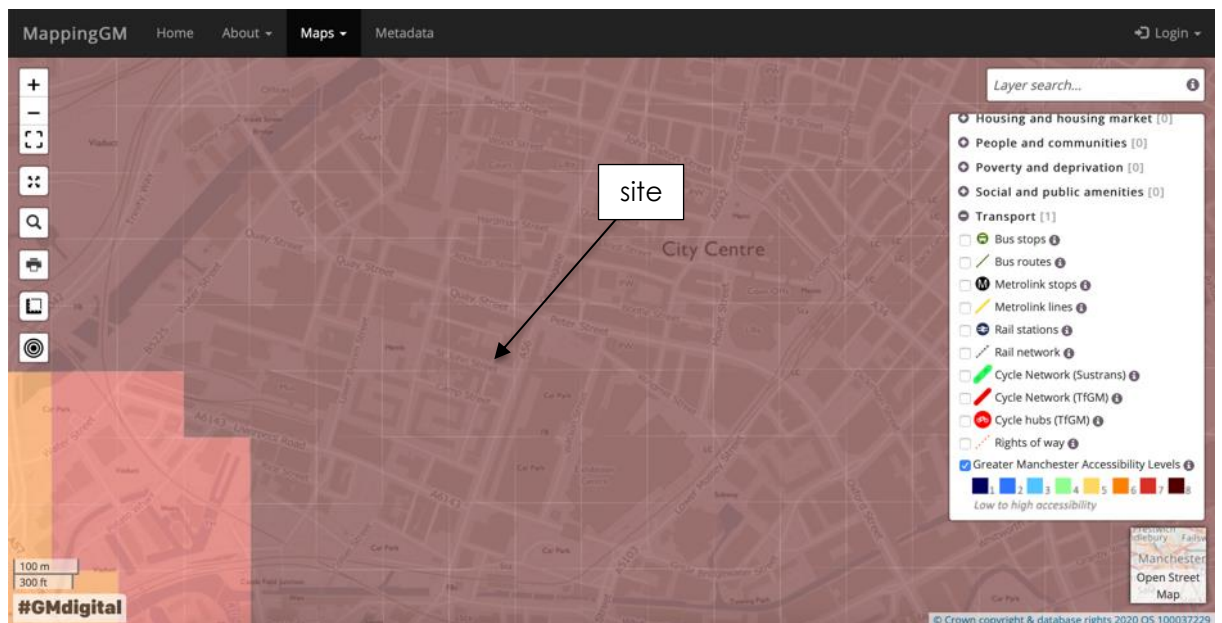


Figure 5.2: GMAL Calculation
[source: TfGM 2020]

- 5.13 Figure 5.2 shows that the site has a GMAL of 8, which is the highest level of accessibility in Greater Manchester.

Policy Compliance

- 5.14 Paragraph 92 of NPPF (2019) states that plan making should ensure an integrated approach to considering the location of housing, economic uses and community facilities and services. This is further supported by paragraph 104, which supports a mix of uses across an area to minimise the number and length of journeys needed.
- 5.15 The site is located within the city centre and has an excellent level of accessibility. The existing infrastructure provides numerous opportunities for sustainable and active travel. The proposal will reduce the number of sustainable trips when compared to the existing B1 office use. Notwithstanding this, the proposal includes cycle parking and increased footway widths on the Longworth Street and Artillery Street frontages.

6. Conclusions

- 6.1 SK has been appointed to review the transport, parking and highways implications of redeveloping a site off St John Street in Manchester city centre to provide three dwellings.
- 6.2 The site's current use is a B1 office, with parking for two vehicles and service activity concentrated on Longworth Street.
- 6.3 The assessment shows that the site well located to provide opportunities for access on foot, bike or public transport. The site has the highest GMAL level in Greater Manchester. The proposal will reduce the number of pedestrian and cycle trips currently associated with the B1 office use. The proposal includes suitable provision for bike storage and also will increase the width of existing footways on Artillery Street frontage.
- 6.4 Road safety patterns have been reviewed and there are no accident hotspots that will impact on access to the site. It is shown that the proposal will result in a significant reduction in vehicle trips and will therefore not have an effect on highway operation. The assessment also shows that the site currently generates parking demand on to surrounding streets and car parks, and that this will demand will significantly reduce as a result of the development.
- 6.5 Vehicle access to the one of the parking areas will be provided from broadly the same location as the existing site access on Longworth Street and a second will be created on Artillery Street.
- 6.6 The proposal will retain existing service access arrangements and will not significantly change large vehicle movements generated by the site or the location of this activity. Bin stores are provided for each dwelling.
- 6.7 The proposal is shown to meet relevant local and national policy requirements.

Appendix A



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Rev	Description	Date	By
P1	Issued for Planning	04.08.20	JB

Client
Owner

Project
St John Street

Title
Proposed Ground Floor Site Plan

Status

Project number	Date
1084	07/22/20
Drawn by	Checked by
JB	Checker
Scale	Revision
1 : 100@A1	P1

Drawing No.
1084-TGA-ZZ-ZZ-DR-A-0203

Appendix B

Calculation Reference: AUDIT-443201-200723-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	WH WANDSWORTH	1 days
02	SOUTH EAST	
	SO SLOUGH	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	MG MONAGHAN	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: Gross floor area
Actual Range: 320 to 1990 (units: sqm)
Range Selected by User: 178 to 2000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 25/09/19

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
Wednesday	1 days
Thursday	3 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	5
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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:

Built-Up Zone	3
High Street	2

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:

B1	5 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
25,001 to 50,000	2 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
125,001 to 250,000	1 days
250,001 to 500,000	2 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	3 days
1.1 to 1.5	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	4 days

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

PTAL Rating:

No PTAL Present	4 days
5 Very Good	1 days

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

LIST OF SITES relevant to selection parameters

1	MG-02-A-01 MARKET STREET MONAGHAN	MOTOR TAX OFFICE MONAGHAN	MONAGHAN
	Town Centre High Street Total Gross floor area: 400 sqm Survey date: WEDNESDAY 11/09/13		Survey Type: MANUAL
2	SO-02-A-01 HIGH STREET SLOUGH	COUNCIL OFFICES SLOUGH	SLOUGH
	Town Centre High Street Total Gross floor area: 1800 sqm Survey date: THURSDAY 27/02/14		Survey Type: MANUAL
3	TW-02-A-07 MULGRAVE TERRACE GATESHEAD	OFFICES GATESHEAD	TYNE & WEAR
	Town Centre Built-Up Zone Total Gross floor area: 2090 sqm Survey date: MONDAY 13/06/16		Survey Type: MANUAL
4	WH-02-A-02 BATTERSEA PARK ROAD BATTERSEA	OFFICES BATTERSEA	WANDSWORTH
	Town Centre Built-Up Zone Total Gross floor area: 1215 sqm Survey date: THURSDAY 10/05/12		Survey Type: MANUAL
5	WK-02-A-01 WARWICK ROAD COVENTRY	OFFICES COVENTRY	WARWICKSHIRE
	Town Centre Built-Up Zone Total Gross floor area: 960 sqm Survey date: THURSDAY 17/10/13		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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CI-02-A-03	Within congestion zone

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL VEHICLES
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	0.414	5	1257	0.080	5	1257	0.494
08:00 - 09:00	5	1257	1.193	5	1257	0.175	5	1257	1.368
09:00 - 10:00	5	1257	1.575	5	1257	0.589	5	1257	2.164
10:00 - 11:00	5	1257	1.909	5	1257	1.655	5	1257	3.564
11:00 - 12:00	5	1257	1.591	5	1257	1.464	5	1257	3.055
12:00 - 13:00	5	1257	1.512	5	1257	1.432	5	1257	2.944
13:00 - 14:00	5	1257	1.400	5	1257	1.337	5	1257	2.737
14:00 - 15:00	5	1257	1.321	5	1257	1.321	5	1257	2.642
15:00 - 16:00	5	1257	0.573	5	1257	1.066	5	1257	1.639
16:00 - 17:00	5	1257	0.605	5	1257	1.352	5	1257	1.957
17:00 - 18:00	5	1257	0.255	5	1257	1.161	5	1257	1.416
18:00 - 19:00	5	1257	0.127	5	1257	0.525	5	1257	0.652
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			12.475			12.157			24.632

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:	320 - 1990 (units: sqm)
Survey date date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL OGVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	0.016	5	1257	0.000	5	1257	0.016
08:00 - 09:00	5	1257	0.016	5	1257	0.032	5	1257	0.048
09:00 - 10:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
10:00 - 11:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
11:00 - 12:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
12:00 - 13:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
13:00 - 14:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
14:00 - 15:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
15:00 - 16:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
16:00 - 17:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
17:00 - 18:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
18:00 - 19:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.032			0.064

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	0.080	5	1257	0.000	5	1257	0.080
08:00 - 09:00	5	1257	0.080	5	1257	0.000	5	1257	0.080
09:00 - 10:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
10:00 - 11:00	5	1257	0.048	5	1257	0.048	5	1257	0.096
11:00 - 12:00	5	1257	0.000	5	1257	0.000	5	1257	0.000
12:00 - 13:00	5	1257	0.016	5	1257	0.032	5	1257	0.048
13:00 - 14:00	5	1257	0.048	5	1257	0.016	5	1257	0.064
14:00 - 15:00	5	1257	0.032	5	1257	0.048	5	1257	0.080
15:00 - 16:00	5	1257	0.016	5	1257	0.048	5	1257	0.064
16:00 - 17:00	5	1257	0.032	5	1257	0.032	5	1257	0.064
17:00 - 18:00	5	1257	0.000	5	1257	0.064	5	1257	0.064
18:00 - 19:00	5	1257	0.000	5	1257	0.064	5	1257	0.064
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.352			0.352			0.704

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	0.175	5	1257	0.032	5	1257	0.207
08:00 - 09:00	5	1257	0.493	5	1257	0.095	5	1257	0.588
09:00 - 10:00	5	1257	0.636	5	1257	0.207	5	1257	0.843
10:00 - 11:00	5	1257	1.734	5	1257	1.225	5	1257	2.959
11:00 - 12:00	5	1257	1.384	5	1257	2.084	5	1257	3.468
12:00 - 13:00	5	1257	2.259	5	1257	2.991	5	1257	5.250
13:00 - 14:00	5	1257	2.689	5	1257	2.180	5	1257	4.869
14:00 - 15:00	5	1257	1.782	5	1257	1.655	5	1257	3.437
15:00 - 16:00	5	1257	1.305	5	1257	1.177	5	1257	2.482
16:00 - 17:00	5	1257	0.700	5	1257	1.257	5	1257	1.957
17:00 - 18:00	5	1257	0.159	5	1257	0.557	5	1257	0.716
18:00 - 19:00	5	1257	0.000	5	1257	0.239	5	1257	0.239
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	13.316			13.699			27.015		

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.

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	0.382	5	1257	0.000	5	1257	0.382
08:00 - 09:00	5	1257	0.859	5	1257	0.000	5	1257	0.859
09:00 - 10:00	5	1257	0.493	5	1257	0.000	5	1257	0.493
10:00 - 11:00	5	1257	0.477	5	1257	0.318	5	1257	0.795
11:00 - 12:00	5	1257	0.541	5	1257	0.589	5	1257	1.130
12:00 - 13:00	5	1257	0.382	5	1257	0.461	5	1257	0.843
13:00 - 14:00	5	1257	0.270	5	1257	0.398	5	1257	0.668
14:00 - 15:00	5	1257	0.557	5	1257	0.366	5	1257	0.923
15:00 - 16:00	5	1257	0.207	5	1257	0.414	5	1257	0.621
16:00 - 17:00	5	1257	0.095	5	1257	0.493	5	1257	0.588
17:00 - 18:00	5	1257	0.000	5	1257	0.843	5	1257	0.843
18:00 - 19:00	5	1257	0.000	5	1257	0.382	5	1257	0.382
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		4.263			4.264			8.527	

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	1257	1.130	5	1257	0.127	5	1257	1.257
08:00 - 09:00	5	1257	2.753	5	1257	0.175	5	1257	2.928
09:00 - 10:00	5	1257	2.880	5	1257	0.732	5	1257	3.612
10:00 - 11:00	5	1257	4.264	5	1257	3.007	5	1257	7.271
11:00 - 12:00	5	1257	3.835	5	1257	4.232	5	1257	8.067
12:00 - 13:00	5	1257	4.471	5	1257	5.219	5	1257	9.690
13:00 - 14:00	5	1257	4.598	5	1257	4.105	5	1257	8.703
14:00 - 15:00	5	1257	3.803	5	1257	3.532	5	1257	7.335
15:00 - 16:00	5	1257	2.243	5	1257	2.896	5	1257	5.139
16:00 - 17:00	5	1257	1.368	5	1257	3.278	5	1257	4.646
17:00 - 18:00	5	1257	0.398	5	1257	2.928	5	1257	3.326
18:00 - 19:00	5	1257	0.064	5	1257	1.305	5	1257	1.369
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			31.807			31.536			63.343

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.

Appendix C

Calculation Reference: AUDIT-443201-200723-0709

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	WF WALTHAM FOREST	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
10	WALES	
	PS POWYS	1 days
12	CONNAUGHT	
	GA GALWAY	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: 9 to 24 (units:)
 Range Selected by User: 4 to 25 (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: 01/01/12 to 06/06/19

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
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	5
---------------------	---

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

Selected Location Sub Categories:

Residential Zone	4
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3

5 days

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

Population within 1 mile:

1,001 to 5,000

1 days

5,001 to 10,000

2 days

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:

5,001 to 25,000

2 days

250,001 to 500,000

2 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

2 days

1.1 to 1.5

3 days

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

Travel Plan:

No

5 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

5 Very Good

1 days

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

LIST OF SITES relevant to selection parameters

1	GA-03-A-04	SEMI DET. & BUNGALOWS	GALWAY
	R347 CAHEROYN ROAD		
	ATHENRY		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	21	
	Survey date: TUESDAY	09/10/12	Survey Type: MANUAL
2	LC-03-A-30	SEMI-DETACHED	LANCASHIRE
	WATSON ROAD		
	BLACKPOOL		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: FRIDAY	14/06/13	Survey Type: MANUAL
3	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
4	ST-03-A-06	SEMI-DET. & TERRACED	STAFFORDSHIRE
	STANFORD ROAD		
	WOLVERHAMPTON		
	BLAKENHALL		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	17	
	Survey date: FRIDAY	09/05/14	Survey Type: MANUAL
5	WF-03-A-02	SEMI DETACHED & TERRACED	WALTHAM FOREST
	PALMERSTON ROAD		
	WALTHAMSTOW		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	9	
	Survey date: THURSDAY	06/06/19	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 VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.126	5	17	0.253	5	17	0.379
08:00 - 09:00	5	17	0.161	5	17	0.310	5	17	0.471
09:00 - 10:00	5	17	0.138	5	17	0.115	5	17	0.253
10:00 - 11:00	5	17	0.092	5	17	0.149	5	17	0.241
11:00 - 12:00	5	17	0.115	5	17	0.161	5	17	0.276
12:00 - 13:00	5	17	0.195	5	17	0.230	5	17	0.425
13:00 - 14:00	5	17	0.218	5	17	0.149	5	17	0.367
14:00 - 15:00	5	17	0.218	5	17	0.287	5	17	0.505
15:00 - 16:00	5	17	0.230	5	17	0.138	5	17	0.368
16:00 - 17:00	5	17	0.218	5	17	0.184	5	17	0.402
17:00 - 18:00	5	17	0.310	5	17	0.184	5	17	0.494
18:00 - 19:00	5	17	0.264	5	17	0.230	5	17	0.494
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.396			2.390			4.786

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:	9 - 24 (units:)
Survey date range:	01/01/12 - 06/06/19
Number of weekdays (Monday-Friday):	5
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.011	5	17	0.011	5	17	0.022
08:00 - 09:00	5	17	0.034	5	17	0.034	5	17	0.068
09:00 - 10:00	5	17	0.011	5	17	0.000	5	17	0.011
10:00 - 11:00	5	17	0.000	5	17	0.011	5	17	0.011
11:00 - 12:00	5	17	0.000	5	17	0.000	5	17	0.000
12:00 - 13:00	5	17	0.000	5	17	0.000	5	17	0.000
13:00 - 14:00	5	17	0.011	5	17	0.011	5	17	0.022
14:00 - 15:00	5	17	0.000	5	17	0.000	5	17	0.000
15:00 - 16:00	5	17	0.000	5	17	0.000	5	17	0.000
16:00 - 17:00	5	17	0.000	5	17	0.000	5	17	0.000
17:00 - 18:00	5	17	0.011	5	17	0.011	5	17	0.022
18:00 - 19:00	5	17	0.000	5	17	0.000	5	17	0.000
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.078			0.078			0.156

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.000	5	17	0.000	5	17	0.000
08:00 - 09:00	5	17	0.011	5	17	0.046	5	17	0.057
09:00 - 10:00	5	17	0.000	5	17	0.000	5	17	0.000
10:00 - 11:00	5	17	0.011	5	17	0.034	5	17	0.045
11:00 - 12:00	5	17	0.000	5	17	0.000	5	17	0.000
12:00 - 13:00	5	17	0.023	5	17	0.000	5	17	0.023
13:00 - 14:00	5	17	0.011	5	17	0.000	5	17	0.011
14:00 - 15:00	5	17	0.011	5	17	0.000	5	17	0.011
15:00 - 16:00	5	17	0.000	5	17	0.000	5	17	0.000
16:00 - 17:00	5	17	0.000	5	17	0.011	5	17	0.011
17:00 - 18:00	5	17	0.046	5	17	0.023	5	17	0.069
18:00 - 19:00	5	17	0.023	5	17	0.023	5	17	0.046
19:00 - 20:00	1	9	0.111	1	9	0.000	1	9	0.111
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.247			0.137			0.384

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.057	5	17	0.069	5	17	0.126
08:00 - 09:00	5	17	0.115	5	17	0.230	5	17	0.345
09:00 - 10:00	5	17	0.057	5	17	0.103	5	17	0.160
10:00 - 11:00	5	17	0.080	5	17	0.103	5	17	0.183
11:00 - 12:00	5	17	0.103	5	17	0.115	5	17	0.218
12:00 - 13:00	5	17	0.046	5	17	0.092	5	17	0.138
13:00 - 14:00	5	17	0.195	5	17	0.218	5	17	0.413
14:00 - 15:00	5	17	0.149	5	17	0.138	5	17	0.287
15:00 - 16:00	5	17	0.172	5	17	0.080	5	17	0.252
16:00 - 17:00	5	17	0.092	5	17	0.103	5	17	0.195
17:00 - 18:00	5	17	0.299	5	17	0.218	5	17	0.517
18:00 - 19:00	5	17	0.172	5	17	0.138	5	17	0.310
19:00 - 20:00	1	9	0.000	1	9	0.111	1	9	0.111
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.648			1.718			3.366

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.

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.000	5	17	0.046	5	17	0.046
08:00 - 09:00	5	17	0.000	5	17	0.115	5	17	0.115
09:00 - 10:00	5	17	0.011	5	17	0.092	5	17	0.103
10:00 - 11:00	5	17	0.011	5	17	0.011	5	17	0.022
11:00 - 12:00	5	17	0.000	5	17	0.011	5	17	0.011
12:00 - 13:00	5	17	0.011	5	17	0.000	5	17	0.011
13:00 - 14:00	5	17	0.034	5	17	0.023	5	17	0.057
14:00 - 15:00	5	17	0.000	5	17	0.000	5	17	0.000
15:00 - 16:00	5	17	0.069	5	17	0.011	5	17	0.080
16:00 - 17:00	5	17	0.046	5	17	0.023	5	17	0.069
17:00 - 18:00	5	17	0.057	5	17	0.023	5	17	0.080
18:00 - 19:00	5	17	0.046	5	17	0.000	5	17	0.046
19:00 - 20:00	1	9	0.333	1	9	0.000	1	9	0.333
20:00 - 21:00	1	9	0.444	1	9	0.000	1	9	0.444
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.062			0.355			1.417

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	17	0.195	5	17	0.402	5	17	0.597
08:00 - 09:00	5	17	0.414	5	17	0.954	5	17	1.368
09:00 - 10:00	5	17	0.241	5	17	0.379	5	17	0.620
10:00 - 11:00	5	17	0.195	5	17	0.333	5	17	0.528
11:00 - 12:00	5	17	0.230	5	17	0.345	5	17	0.575
12:00 - 13:00	5	17	0.356	5	17	0.368	5	17	0.724
13:00 - 14:00	5	17	0.494	5	17	0.391	5	17	0.885
14:00 - 15:00	5	17	0.494	5	17	0.506	5	17	1.000
15:00 - 16:00	5	17	0.632	5	17	0.253	5	17	0.885
16:00 - 17:00	5	17	0.471	5	17	0.391	5	17	0.862
17:00 - 18:00	5	17	0.828	5	17	0.471	5	17	1.299
18:00 - 19:00	5	17	0.575	5	17	0.471	5	17	1.046
19:00 - 20:00	1	9	0.444	1	9	0.111	1	9	0.555
20:00 - 21:00	1	9	0.667	1	9	0.000	1	9	0.667
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.236			5.375			11.611

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.