

Louisa Street, Openshaw

Transport Statement

220819/SK222314/TS01(-00)

Contents

	Page
1 Introduction	1
2 Existing Situation	1
3 Proposed Development	3
4 Accessibility Impact	4
5 Traffic & Parking Impact	9
6 Conclusions	13

Appendices

- A Site Layout
- B TRICS Output – Existing Site Uses
- C Access Arrangements & Swept Paths
- D Interim Travel Plan
- E TRICS Output – Proposed Site Uses
- F Census Data

Project	Document	Rev	Description	Authorised by	Signed	Date
SK22231	TS01	00	Submission	L Speers	LGS	19/08/2022

1 Introduction

- 1.1 SK has been appointed by Westchurch Homes to prepare a Transport Statement (TS) to accompany a planning application for development of 71 dwellings (29 town houses and 42 apartments) on a site off Louisa Street in Openshaw. The layout is attached as Appendix A.
- 1.2 The TS has been prepared in line with standard appraisal methods and in line with the following guidance:
- Ministry of Housing, Communities & Local Government (2021), National Planning Policy Framework
 - Ministry of Housing, Communities & Local Government (2016), Planning Practice Guidance
 - Transport for Greater Manchester (2018), GM Transport Strategy 2040
 - Transport for Greater Manchester (2020), Electric Vehicle Charging Infrastructure Strategy
 - Transport for Greater Manchester (2013), Transport for Sustainable Communities
 - Manchester City Council (2016), Residential Design Guide
 - Manchester City Council (2012), Local Development Framework: Core Strategy

2 Existing Situation

Site Location

- 2.1 Figure 2.1 shows that the site is located in an established residential area to the north of Ashton Old Road (A635). The site is bounded to the north by existing commercial and residential premises, to the west by the Fallowfield Loop (National Cycle Network Route 60), to the south by parkland, and to the east by Louisa Street.
- 2.2 The site relates well to existing local amenities, including primary schools, open space provision and retail facilities on Ashton Old Road. Access can also be gained bus and train services.

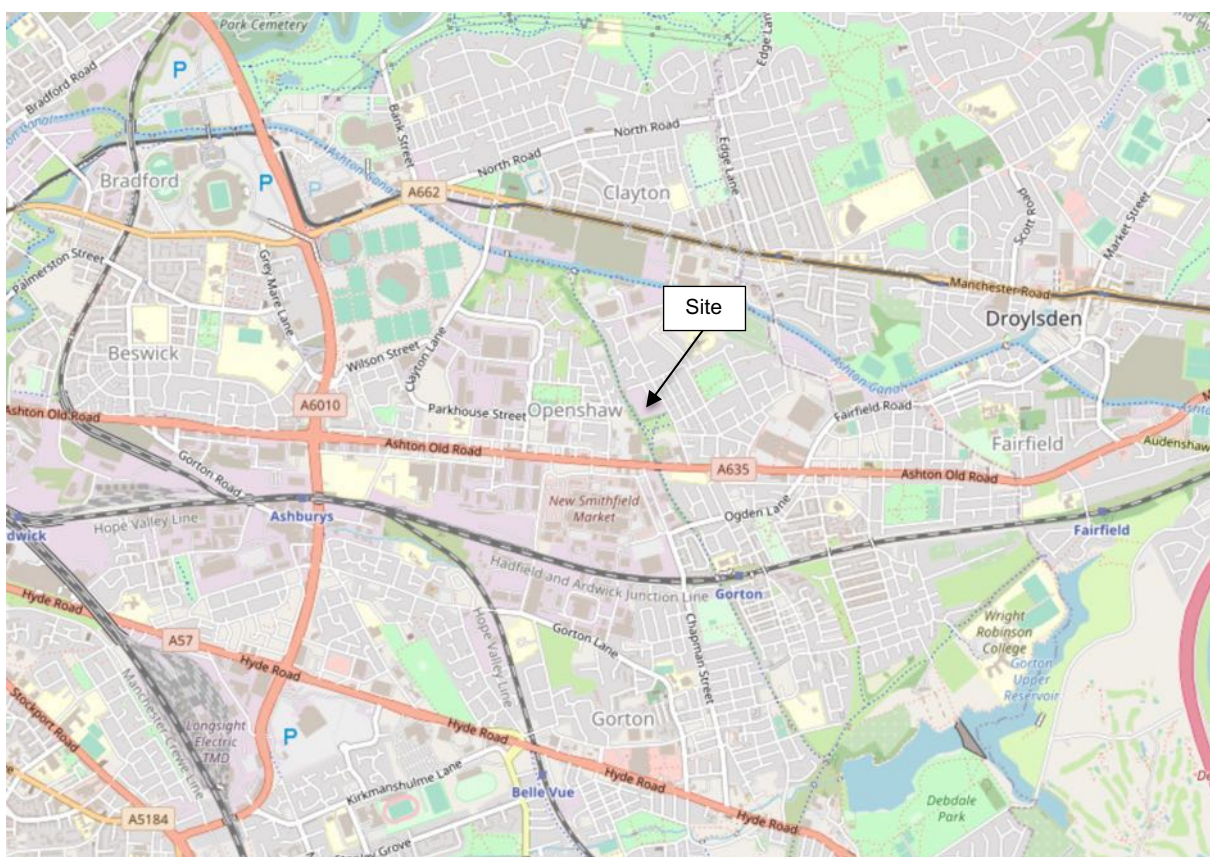


Figure 2.1: Site Location
[source: ISO4]

Existing Site Uses

- 2.3 The site is cleared in part, with some buildings still present and in use. Operators at the site include a furniture retailer / manufacturer, a fence retailer / manufacturer, vehicle storage, a frame retailer, and an auto repair company. The floor area of the existing buildings on site is 1,698sqm.
- 2.4 Vehicle access to the site is currently provided from two locations on Louisa Street and one location on Ferris Street. Ferris Street is gated at its northern end.

Existing Site Traffic

- 2.5 The TRICS database has been used to establish the traffic flows typically associated with the uses on site. For the purposes of the assessment industrial land uses have been used. The TRICS output is attached as Appendix B, with a summary provided in Table 2.1.

	Vehicle Trip Rate (per 100sqm GFA)			Vehicle Trips		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.546	0.221	0.767	9	4	13
PM Peak Hour	0.151	0.346	0.497	3	6	8

Table 2.1: Existing Site Traffic Flows

Local Highway Network

- 2.6 Louisa Street is a residential type of street with street lighting and a 20mph speed limit. The carriageway outside the site is 7m wide with 2m footways on both sides. Along the site frontage single yellow line controls are in place. To the south of the site double yellow line controls are in place on the western side of the road to the junction with Ashton Old Road. There are no parking controls on the western side of the road to the north of the site as far as Sexa Street, and the entire length of the eastern side of the road. Parking activity from local residents and commercial uses is present on street. Dropped kerbs are provided at the side road junctions with Louisa Street southwards towards Ashton Old Road.
- 2.7 To the south of the site Louisa Street provides access to the south to Ashton Old Road via a ghost island junction. A controlled pedestrian crossing is provided on Ashton Old Road to the east of Louisa Street junction.
- 2.8 Ferris Street is a service route that provides access to the northern part of the site, other commercial premises north of the site, and the rear of the residential properties fronting Louisa Street. Ferris Street is gated at the northern end.

Road Safety

- 2.9 The GMTU database has been used to establish accident patterns over the most recent five-year period available.
- 2.10 Figure 2.2 shows that there have been no accidents at the site access junctions during the five-year period assessed. There has been a single accident on Louisa Street (junction with Old Lane). The accident was classified as slight and occurred in 2020. The accident did not involve a pedestrian or cyclist.
- 2.11 The data shows that there are no prevailing road safety issues that will compromise future access to the site.

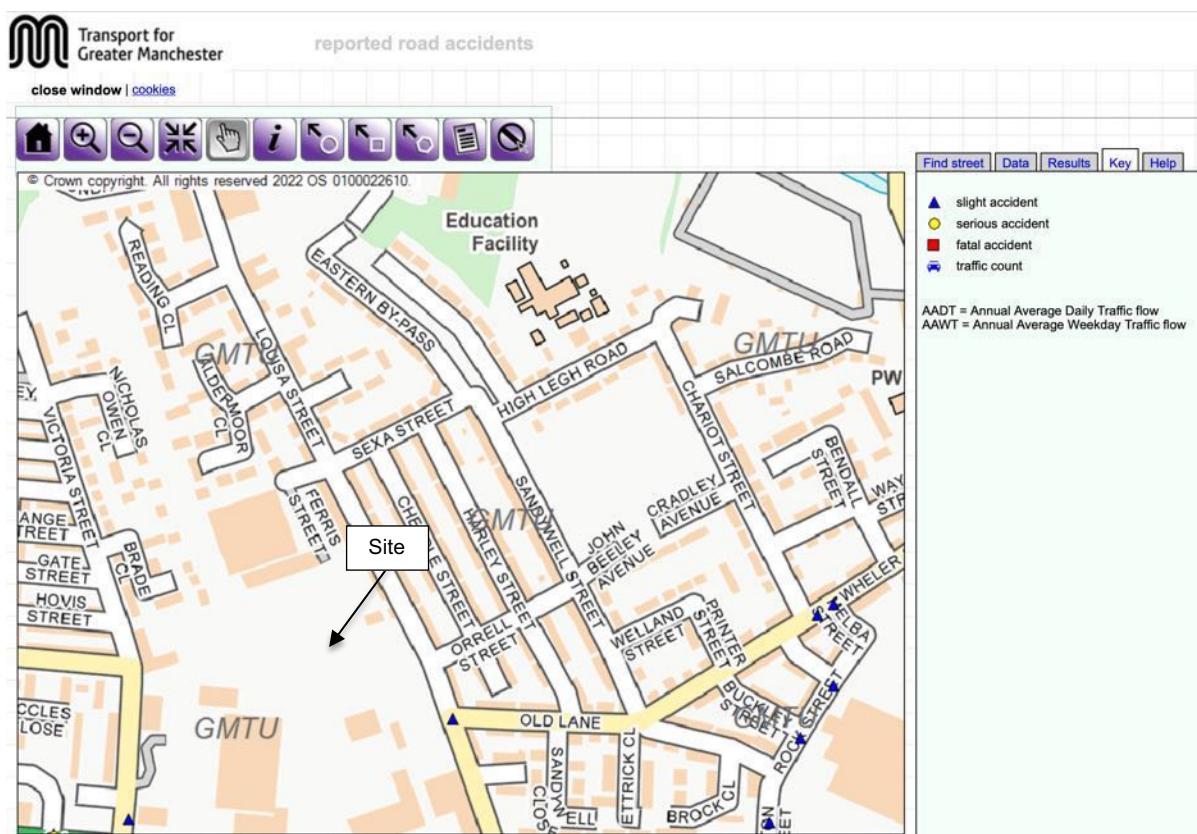


Figure 2.2: Road Safety
[source: GMTU]

3 Proposed Development

- 3.1 The proposal seeks to demolish the existing uses on the site and construct 71 dwellings (29 town houses and 42 apartments) with associated amenity space and parking. The layout is attached as Appendix A.
- 3.2 Vehicle access to the site will be provided from a priority junction on to Louisa Street. The access layout has been designed to achieve visibility splays of 2.4m x 33m and to provide a 5.5m access road width with 2m footways on both sides. Dropped kerbs and tactile paving will also be provided at the junction. A general arrangement layout for the access is attached as Appendix C.
- 3.3 Pedestrian access is provided at the vehicle access junction and also via a segregated pedestrian route through to the park to the south of the site.
- 3.4 Internally, a new section of road will be constructed to adoptable standard incorporating a turning head suitable for service vehicle use. The road is 5.5m wide with 2m footways on both sides. Access will be taken from the adopted section of road to private areas serving parking areas.
- 3.5 Swept path analysis for a refuse collection vehicle to the specification set out in MCC Waste Guidance is attached as Appendix C.
- 3.6 68 parking spaces are provided on site, equating to 140% provision for the town houses and 64% provision for apartments. Disabled parking is provided for the apartments. Appropriate levels of EV parking will be provided with one space per house and 20% provision for the apartments. The appropriateness of the parking level in the context of local area resident requirements and adopted policy is examined in Section 5.
- 3.7 42 cycle parking spaces are provided in a dedicated store for the apartments (100% provision) and sheds are provided in the gardens for the houses to accommodate cycles. Visitor parking is provided externally on site for visitors, in line with advice on short-stay guidance in DfT's LTN 2/20 this will be uncovered Sheffield stands.
- 3.8 Redundant access points on the site boundary will be reinstated and the bounding footway resurfaced as part of the proposals.

- 3.9 There is not anticipated to be a need for amendment of existing waiting restrictions.
- 3.10 An Interim Travel Plan has been prepared for the planning application that sets out the measures that will be adopted on occupation to support active and sustainable travel. The Interim Travel Plan is attached as Appendix D.
- 3.11 A Construction Management Plan will be prepared for the site prior to construction. This will outline access, road safety and parking arrangements during the construction phase of the development.

4 Accessibility Impact

Access on Foot

- 4.1 Louisa Street is a 20mph road and lit, therefore providing a suitable environment for pedestrians and cyclists. The footways on Louisa Street are 2m wide with dropped kerb provision at side road junctions. Controlled crossings are provided on Ashton Old Road.
- 4.2 Access can also be gained to segregated footpaths to the south of the site that provide access to Route 60 of the National Cycle Network (the Fallowfield Loop). Travelling north of the Fallowfield Loop provides access to the Ashton Canal tow path.
- 4.3 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km. CIHT provides further advice on suitable walking distances these are set out in Table 4.1.

Destination Type	Walk Distance (m)	Walk Time (mins)*
Commuting / Education	2000	25
Local Centre / Local Retail	800	10
Other	1200	15

Table 4.1: CIHT Walk Distances
[source: CIHT]

- 4.4 Figure 4.1 shows that the site is 500m away from Higher Openshaw Community School, Morrisons and Lidl on Ashton Old Road, Openshaw Park, Matalan and Varna Community School. Lime Square Medical Centre, Farmfoods, Lidl, a gym, and other local centre uses on Ashton Old Road are within 800m of the site. The Manchester College, New Smithfield Market, the National Cycling Centre and the centre of Droylsden are within 2km of the site.

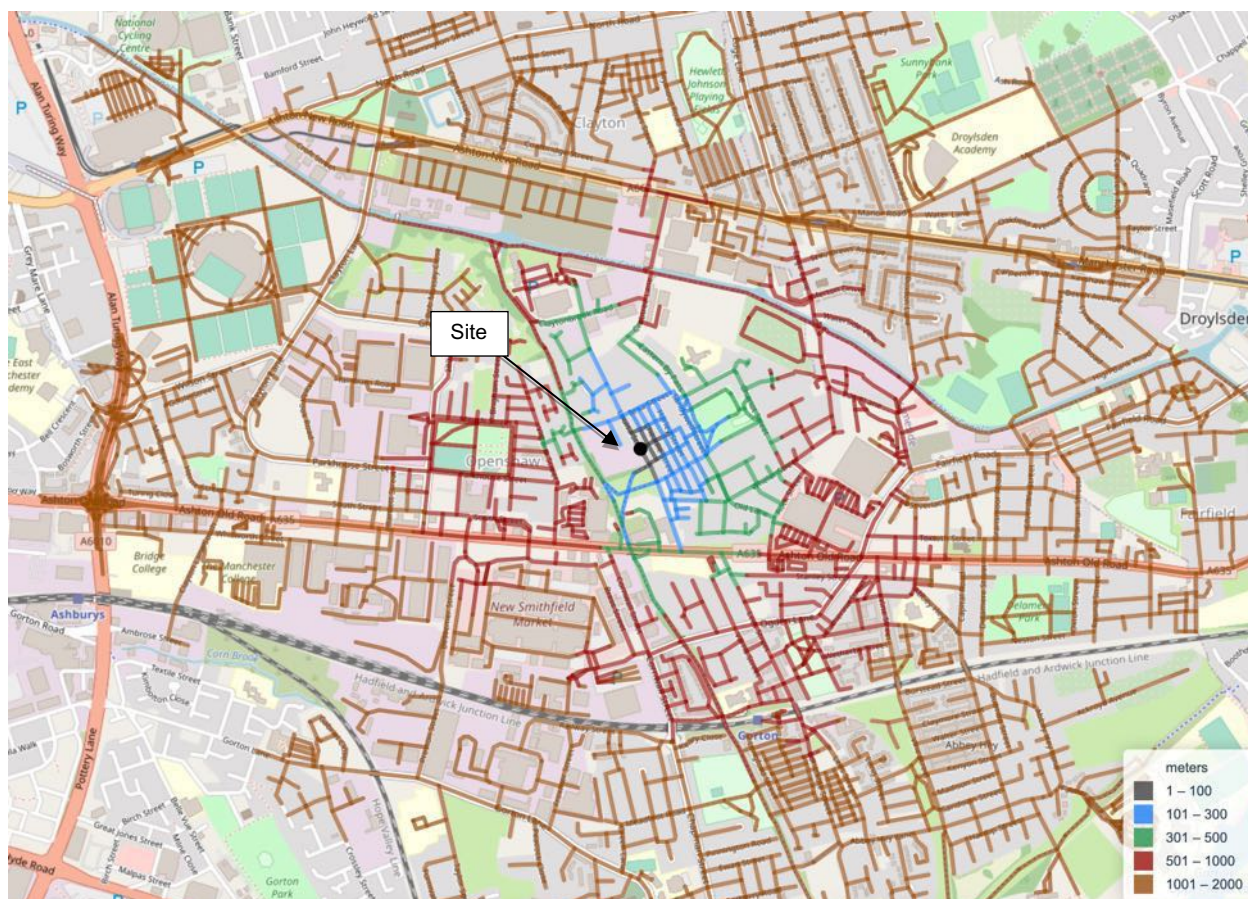


Figure 4.1: 2km Walking Catchment
[source: ISO04]

- 4.5 The assessment shows that the site relates well to local amenities and that there are opportunities to access these using existing infrastructure. The proposal includes the reinstatement of bounding footways, 2m site footways and the provision of tactile paving / dropped kerbs at the site access. The proposal is underpinned by a Travel Plan that sets out measures to support resident trips on foot.

Access by Cycle

- 4.6 Figure 4.2 shows the cycle network serving the site. It shows that the streets surrounding the site are all traffic calmed and provide a good basis for connections to the formal network, including Route 60 (the Fallowfield Loop), the Ashton Canal towpath and routes on Ashton Old Road.

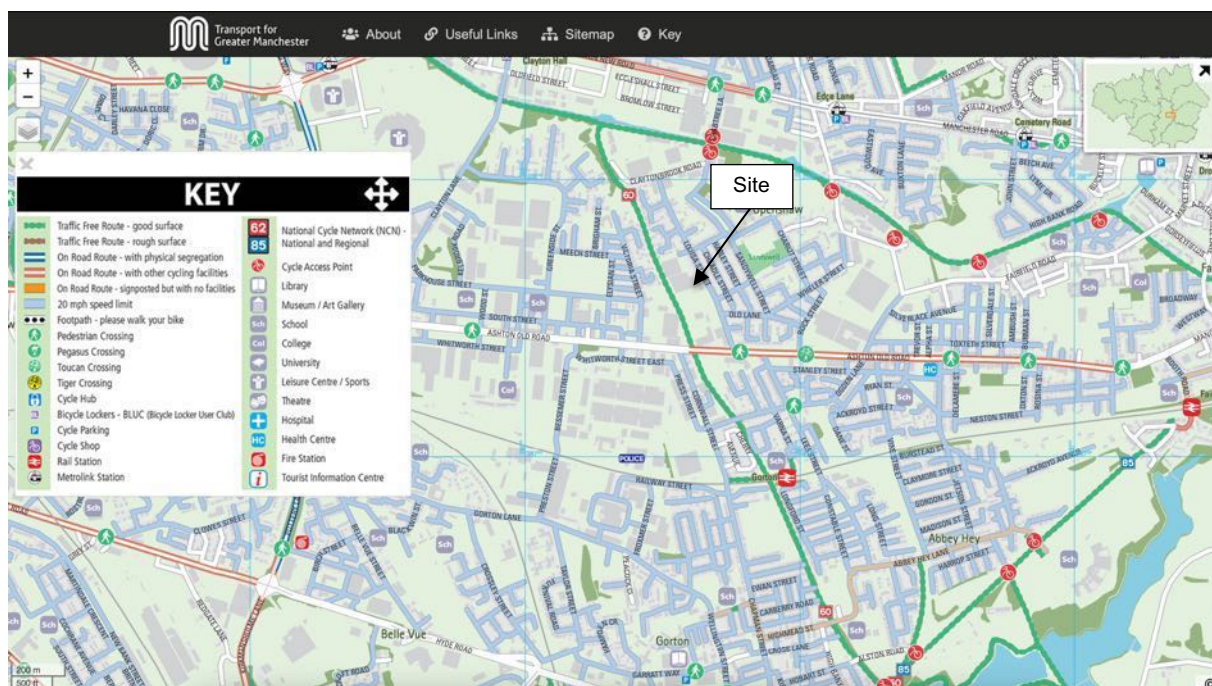


Figure 4.2: Cycle Network
[source: TfGM]

- 4.7 Figure 4.3 shows that the site also relates well to Bee Network scheduled improvements. As part of these the Fallowfield Loop is scheduled for upgrades due to be completed in December 2022. The Fallowfield Loop is a 14km long off-road path used by pedestrians, cyclists and horse riders that runs from Chorlton-cum-Hardy through to Fallowfield to Gorton and Fairfield. The scheduled works include street lighting and improvements to access points to make the route usable for people of all mobility levels throughout the year.

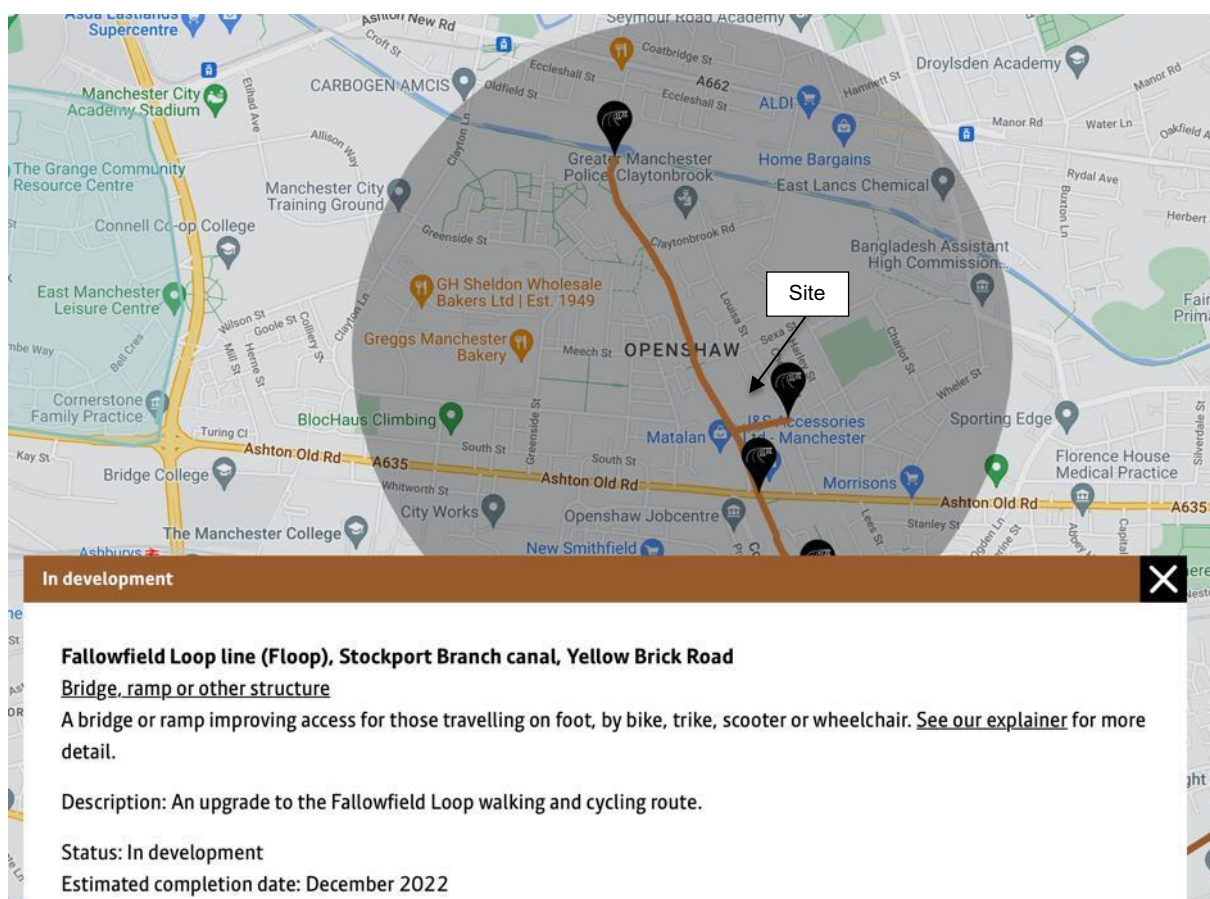


Figure 4.3: Bee Network
 [source: TfGM]

- 4.8 The existing infrastructure surrounding the site creates opportunities for access by bike and access can be gained a short cycle from the site to key amenity areas. The proposal includes appropriate levels of cycle parking and the Travel Plan includes measures to support resident cycle trips.

Access by Public Transport

- 4.9 The nearest bus stops to the site are located on Ashton Old Road. The nearest bus stops benefit from shelters, seating, and bus boarder facilities. Table 4.2 provides a summary of the bus routes serving the nearest stops.

No.	Route	Weekday (buses per hour / each way)			Weekend (buses per hour / each way)	
		Peak	Day	Evening	Day	Day
171	East Didsbury – Openshaw – Newton Heath	1	1		1	
172	Southern Cemetery – Burnage – Gorton – Newton Heath	1	1	1	1	
219	Ashton – Audenshaw – Manchester	6	6	3	6	6
220 / 221	Stalybridge – Beswick – Manchester	2				

Table 4.2: Existing Bus Services
[source: TfGM]

- 4.10 Table 4.2 shows that there are typically eight buses per hour (each-way) serving the area. These services provide frequency services to a range of destinations across Greater Manchester. Services are available in the evening and at the weekend.
- 4.11 Access can also be gained train services at Gorton train station, a 10-minute walk from the site, and Edge Lane tram station, a 15-minute walk from the site.
- 4.12 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.
- 4.13 The site has a GMAL of 5, which is a good level of accessibility by public transport for a site in a suburban location.

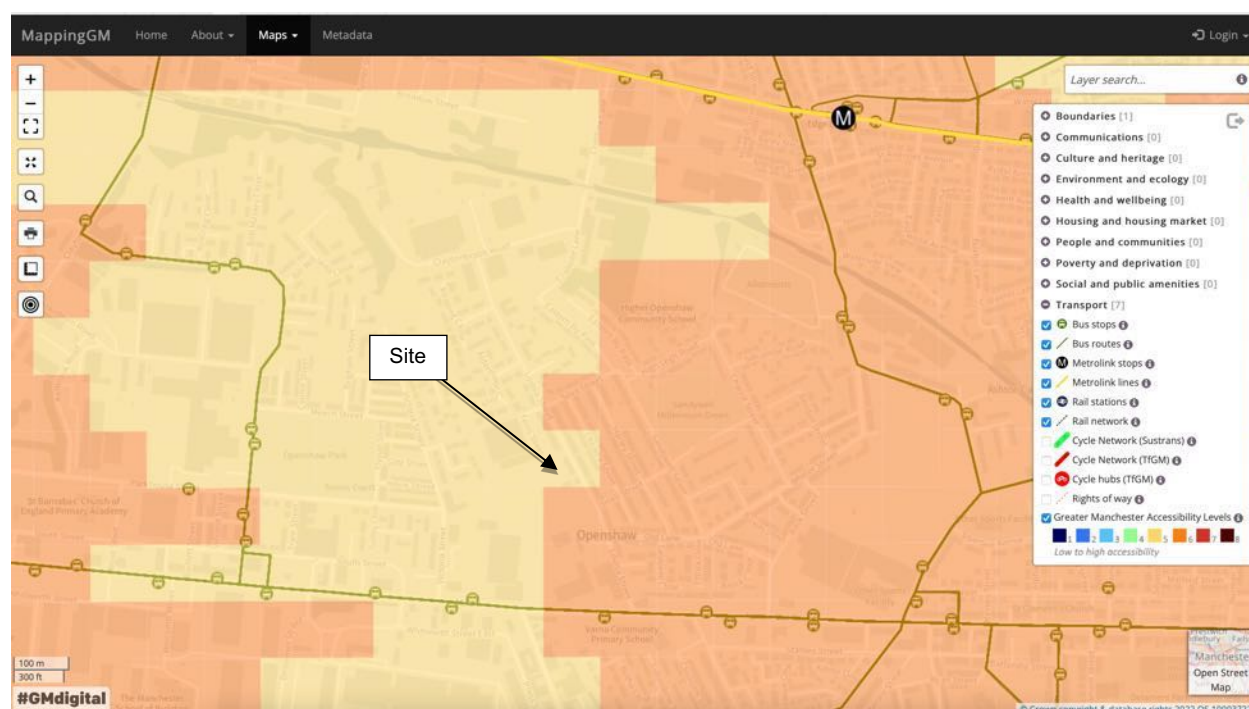


Figure 4.4: GMAL
[source: TfGM]

- 4.14 The assessment shows that the site relates well to frequent bus services that provide connections to local destinations and the wider region.

Summary & Policy Compliance

- 4.15 Evidence and research show that people can and will live active, sustainable, low-carbon lifestyles in developments that are located with easy access to employment, local amenities, and leisure spaces. The assessment shows that the site relates well to numerous amenities and services. The assessment also shows that the existing infrastructure offers opportunities to access these destinations by sustainable modes of travel.
- 4.16 Paragraph 110 of NPPF (2021) supports developments that allow appropriate opportunities to promote sustainable transport modes. The proposal is in line with NPPF policy.

5 Traffic & Parking Impact

Person Trip Generation – Houses

- 5.1 TRICS has been used to allow an understanding of the future trip generating potential of the site. The following parameters have been set:

- Land Use: 03 / Residential / A / Houses Privately Owned selected
- Regions: Greater London, Northern Ireland & Republic of Ireland removed
- Location: Suburban area selected

- 5.2 The TRICS output is attached as Appendix E, with a summary provided in Table 5.1.

	Person Trip Rates (per dwelling)			Total Trips – Houses		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.257	0.991	1.248	7	29	36
PM Peak Hour	0.478	0.339	0.817	14	10	24

Table 5.1: Person Trip Rates & Total Site Trips – Houses
[source: TRICS]

Person Trip Generation – Apartments

- 5.3 TRICS has been used to allow an understanding of the future trip generating potential of the site. The following parameters have been set:

- Land Use: 03 / Residential / C / Flats Privately Owned selected
- Regions: Greater London, Northern Ireland & Republic of Ireland removed
- Location: Suburban area selected

- 5.4 The TRICS output is attached as Appendix E, with a summary provided in Table 5.2.

	Person Trip Rates (per dwelling)			Total Trips – Houses		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.096	0.521	0.617	4	22	26
PM Peak Hour	0.403	0.172	0.575	17	7	24

Table 5.2: Person Trip Rates & Total Site Trips – Houses
[source: TRICS]

Development Mode Share

- 5.5 Census mode share data (Bradford ward) has been used to derive the car driver trips from the site. The Census data is attached as Appendix F with a summary provided in Table 5.3.

Modes	Share
Public Transport	32%
Car Driver	38%
All Other Modes	30%

Table 5.3: Census Data
[source: Nomis]

Vehicle Trip Generation

- 5.6 The car driver mode share has been applied to the total trips to derive the vehicle trips generated by the development.

	Vehicle Trips - Houses		
	In	Out	Total
AM Peak Hour	3	11	14
PM Peak Hour	5	4	9
	Vehicle Trips - Apartments		
	In	Out	Total
AM Peak Hour	2	8	10
PM Peak Hour	6	3	9
	Vehicle Trips - Total Development		
	In	Out	Total
AM Peak Hour	5	19	24
PM Peak Hour	12	7	19

Table 5.4: Development Vehicle Trips

Traffic Impact

- 5.7 Table 5.4 shows that the proposal will not generate a significant level of traffic.
- 5.8 When the development traffic is considered in the context of the existing traffic generation capability of the site it is shown that the net change in traffic is minimal.

	Existing Site Traffic			Proposed Site Traffic			Net Impact		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	9	4	13	5	19	24	-4	+15	+11
PM Peak Hour	3	6	9	12	7	19	+9	+1	+10

Table 5.5: Net Traffic Impact

Parking Impact

- 5.9 MCC does not maintain any parking standards for residential developments and each site is taken on its own merits. The parking requirements for the development have therefore been evaluated using car ownership data for the local area and the accessibility of the site. The car ownership data is attached as Appendix F, with a summary provided in Table 5.6.

Car Ownership	All Accommodation Types	Houses	Apartments
No cars	55%	50%	64%
1 car	37%	40%	31%
2+ cars	8%	10%	5%
Car Ownership Level	54%	61%	41%
Proposed Parking Level	95%	140%	64%

Table 5.6: Car Ownership Data
[source: Nomis]

- 5.10 Table 5.6 shows that, as is generally found, the car ownership level associated with houses is higher than that associated with apartments.
- 5.11 Table 5.6 also shows that the level of parking proposed for both apartments and flats is higher than the car ownership level for the site, meaning that there will be sufficient space on site to meet operational demand and reducing the potential for overspill parking.
- 5.12 A parking accumulation assessment has been undertaken to check that the parking provision fits with the forecast demand level. The forecast demand level is based on comparable TRICS sites and local mode share data. The starting accumulation for the assessment is set as the number of parking spaces proposed.
- 5.13 The accumulation confirms that the level of parking proposed is appropriate for the development.

	Vehicle Trips - Houses			Vehicle Trips - Apartments		
	In	Out	Accumulation	In	Out	Accumulation
07:00-08:00	2	5	38	1	5	23
08:00-09:00	3	11	30	2	8	16
09:00-10:00	3	3	29	3	4	15
10:00-11:00	3	3	29	2	3	14
11:00-12:00	2	3	29	2	3	13
12:00-13:00	3	4	29	3	2	13
13:00-14:00	3	4	28	2	3	13
14:00-15:00	3	3	28	3	3	12
15:00-16:00	8	5	31	4	2	14
16:00-17:00	6	3	34	4	2	16
17:00-18:00	5	4	36	6	3	20
18:00-19:00	5	2	38	5	3	22

Table 5.7: Parking Demand Assessment

Summary & Policy Compliance

- 5.14 Paragraph 111 of NPPF (2021) 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. The impact assessment has been undertaken using established appraisal methods. The assessment shows that the proposal will not generate a significant level of traffic. When compared to the existing use of the site the development will lead to a reduction in traffic.

- 5.15 In line with MCC Core Strategy T2, an assessment has been undertaken to examine the parking requirements for the development. The assessment shows that the proposed parking level will comfortably meet the operational needs at the site without causing negative impacts on resident amenity or road safety.

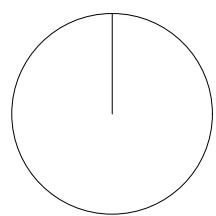
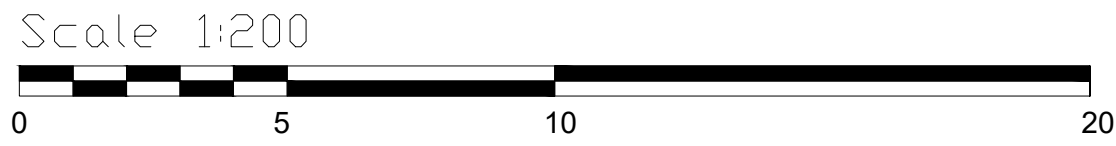
6 Conclusions

- 6.1 SK has been appointed to prepare a TS to accompany a planning application for a residential development off Louisa Street in Openshaw. The TS has been prepared in line with local, regional, and national assessment guidance using standard appraisal methods.
- 6.2 The site is currently cleared in part, with some buildings still present and in use. Operators at the site include a furniture retailer / manufacturer, a fence retailer / manufacturer, vehicle storage, a frame retailer, and an auto repair company.
- 6.3 The proposal will deliver 71 dwellings (29 town houses and 42 apartments) with access provided from a new junction on Louisa Street. The access layout and access road has been designed to appropriate design standards. Pedestrian access is provided at the vehicle access junction and at Ferris Street. Internally, a new section of road will be constructed to adoptable standard incorporating a turning head suitable for service vehicle use. The road is 5.5m wide with 2m footways on both sides. Access will be taken from the adopted section of road to private areas serving parking areas.
- 6.4 The accessibility analysis shows that the site is well located to allow residents to easily access local amenities and services on foot or by cycle. Public transport accessibility is also good with opportunities available to access bus and train services. The site has a GMAL of 5, which is a good level of accessibility for a suburban area.
- 6.5 A road safety assessment has been undertaken, which shows that there have been no accidents in the past five years at the site access junction. Trip generation forecasts have been undertaken for both the existing and proposed uses at the site. This shows that the proposal is associated with a minimal level of traffic activity.
- 6.6 A parking assessment has been undertaken that shows that the proposed parking level fits with local car ownership levels.
- 6.7 It is concluded that the proposed development meets the requirements of local and national policy, and that the residual traffic effects will not be severe, and that the road safety impact of the will not be unacceptable when considered in the context of NPPF. It is also shown that the proposal meets local and national policy requirements in terms of sustainable access.

Appendix A



Proposed Site Plan



Louisa Street, Openshaw

Disclaimer:
Do not scale from this drawing. All dimensions and levels are to be checked on site. All areas are approximate and are for information only.
This drawing is to be read in conjunction with all other relevant documents and all works are to comply with the current Building regulations, British Standards and Codes of Practice etc.
All details of the existing structure are to be verified by others on site prior to any works commencing.
The copyright of this drawing and all works executed from this drawing remain the property of View Associates Ltd. Any 3rd party survey information contained on this drawing is not the responsibility of View Associates Ltd.
This drawing was created from existing information by Worthington Ashworth Jackson Walker – Somerford Farm Park – September 2015.
All dimensions should be checked on site.

Revision:	Description:	Date:	By:

Client:	Westchurch Homes Ltd
Drawing Title:	Proposed Site Plan

Drawing Number:	(PL)001 REV E
Drawn By:	HH
Checked By:	IJ
Stage:	Planning
Date:	15.08.2022
Scale:	1:200 @ A0



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Appendix B

Calculation Reference: AUDIT-443201-220519-0547

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : D - INDUSTRIAL ESTATE

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	1 days
03 SOUTH WEST	
WL WILTSHIRE	1 days
04 EAST ANGLIA	
CA CAMBRIDGESHIRE	1 days
05 EAST MIDLANDS	
DS DERBYSHIRE	1 days
06 WEST MIDLANDS	
WM WEST MIDLANDS	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
SY SOUTH YORKSHIRE	1 days
08 NORTH WEST	
GM GREATER MANCHESTER	1 days
LC LANCASHIRE	1 days
09 NORTH	
TW TYNE & WEAR	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: 1138 to 8310 (units: sqm)
 Range Selected by User: 552 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 21/09/21

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:

Tuesday	5 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	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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	9
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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:

Industrial Zone	3
Development Zone	1
Residential Zone	3
No Sub Category	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:

Not Known 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®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	5 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:

125,001 to 250,000	5 days
250,001 to 500,000	4 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	4 days
1.1 to 1.5	4 days
1.6 to 2.0	1 days

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

Travel Plan:

No 9 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 9 days

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

LIST OF SITES relevant to selection parameters

1	CA-02-D-04	INDUSTRIAL ESTATE	CAMBRIDGESHIRE
	LINCOLN ROAD PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: 4133 sqm Survey date: TUESDAY 02/12/14		Survey Type: MANUAL
2	DS-02-D-02	INDUSTRIAL ESTATE	DERBYSHIRE
	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
3	ES-02-D-07	INDUSTRIAL ESTATE	EAST SUSSEX
	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
4	GM-02-D-07	BUSINESS PARK	GREATER MANCHESTER
	VULCAN STREET OLDHAM		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 4400 sqm Survey date: THURSDAY 22/10/15		Survey Type: MANUAL
5	LC-02-D-06	INDUSTRIAL ESTATE	LANCASHIRE
	SMALLSHAW LANE BURNLEY		
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 7383 sqm Survey date: THURSDAY 29/09/16		Survey Type: MANUAL
6	SY-02-D-04	INDUSTRIAL ESTATE	SOUTH YORKSHIRE
	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
7	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

LIST OF SITES relevant to selection parameters (Cont.)

8	WL-02-D-02	INDUSTRIAL ESTATE	WILTSHIRE
	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
9	WM-02-D-03	INDUSTRIAL ESTATE	WEST MIDLANDS
	JUNCTION ROAD		
	STOURBRIDGE		
	AUDNAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	1138 sqm	
	Survey date: TUESDAY	28/11/17	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
SF-02-D-03	covid survey removed

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

TOTAL 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	2	5817	0.292	2	5817	0.009	2	5817	0.301
06:00 - 07:00	2	5817	0.052	2	5817	0.034	2	5817	0.086
07:00 - 08:00	9	5680	0.344	9	5680	0.110	9	5680	0.454
08:00 - 09:00	9	5680	0.546	9	5680	0.221	9	5680	0.767
09:00 - 10:00	9	5680	0.432	9	5680	0.370	9	5680	0.802
10:00 - 11:00	9	5680	0.342	9	5680	0.360	9	5680	0.702
11:00 - 12:00	9	5680	0.319	9	5680	0.344	9	5680	0.663
12:00 - 13:00	9	5680	0.374	9	5680	0.368	9	5680	0.742
13:00 - 14:00	9	5680	0.340	9	5680	0.362	9	5680	0.702
14:00 - 15:00	9	5680	0.342	9	5680	0.370	9	5680	0.712
15:00 - 16:00	9	5680	0.245	9	5680	0.434	9	5680	0.679
16:00 - 17:00	9	5680	0.198	9	5680	0.358	9	5680	0.556
17:00 - 18:00	9	5680	0.151	9	5680	0.346	9	5680	0.497
18:00 - 19:00	9	5680	0.043	9	5680	0.108	9	5680	0.151
19:00 - 20:00	2	5817	0.026	2	5817	0.112	2	5817	0.138
20:00 - 21:00	2	5817	0.000	2	5817	0.009	2	5817	0.009
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.046			3.915			7.961

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:	1138 - 8310 (units: sqm)
Survey date range:	01/01/14 - 21/09/21
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:	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 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 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

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	2	5817	0.000	2	5817	0.000	2	5817	0.000
06:00 - 07:00	2	5817	0.000	2	5817	0.000	2	5817	0.000
07:00 - 08:00	9	5680	0.018	9	5680	0.012	9	5680	0.030
08:00 - 09:00	9	5680	0.033	9	5680	0.029	9	5680	0.062
09:00 - 10:00	9	5680	0.037	9	5680	0.045	9	5680	0.082
10:00 - 11:00	9	5680	0.031	9	5680	0.037	9	5680	0.068
11:00 - 12:00	9	5680	0.035	9	5680	0.029	9	5680	0.064
12:00 - 13:00	9	5680	0.049	9	5680	0.035	9	5680	0.084
13:00 - 14:00	9	5680	0.022	9	5680	0.025	9	5680	0.047
14:00 - 15:00	9	5680	0.037	9	5680	0.043	9	5680	0.080
15:00 - 16:00	9	5680	0.035	9	5680	0.037	9	5680	0.072
16:00 - 17:00	9	5680	0.016	9	5680	0.018	9	5680	0.034
17:00 - 18:00	9	5680	0.014	9	5680	0.014	9	5680	0.028
18:00 - 19:00	9	5680	0.006	9	5680	0.006	9	5680	0.012
19:00 - 20:00	2	5817	0.000	2	5817	0.000	2	5817	0.000
20:00 - 21:00	2	5817	0.000	2	5817	0.000	2	5817	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.333			0.330			0.663

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



THIS DRAWING MAY BE USED ONLY FOR
THE PURPOSE INTENDED AND ONLY
WRITTEN DIMENSIONS SHALL BE USED

NOTES

Layout subject to detailed design
and confirmation of statutory
undertakers' equipment.

Revision Details	By	Date	Suffix
	Check		
Drawing Number			
SK22231-003			
Louisa Street, Openshaw			
Drawing Title			
Proposed Site Access General Arrangement			
Scale at A3			
1:500			
Drawn	JAT	Approved	LGS
Check	LGS	Date	19.08.22
 SK Transport Planning Ltd Albion Wharf Manchester M1 5LN www.sktransport.co.uk 0161 234 6509			



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NOTES

Vehicle Profile

MCC RCV
Overall Length 11.500m
Overall Width 2.550m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to Lock Time 2.00 sec
Wall to Wall Turning Radius 9.700m

Revision Details	By	Date	Suffix
	Check		

Drawing Number

SK22231-004

Louisa Street, Openshaw

Drawing Title

Swept Path Analysis
MCC Specification Refuse
Collection Vehicle

Scale at A3

1:500

Drawn	Approved
JAT	LGS

Check	Date
LGS	19.08.22

Appendix D

Louisa Street, Openshaw

Interim Travel Plan

220819/SK22231/ITP01(-00)

Contents

	Page
1 Introduction & Background to the Development	1
2 Travel Plan Process, Benefits & Objectives	1
3 Site Location & Highway Network	4
4 Accessibility Audit	5
5 Plan Management	10
6 Measures Toolkit	11
7 Monitoring & Review Mechanisms	14
8 Action Plan	15

Project	Document	Rev	Description	Authorised by	Signed	Date
SK22231	ITP01	00	Draft	L Speers	LGS	19/08/22

1 Introduction & Background to the Development

Background

- 1.1 SK has been appointed by Westchurch Homes to prepare an Interim Travel Plan for a residential development off Louisa Street in Openshaw.
- 1.2 A Transport Statement (TS) has been prepared for the planning application and this should be reviewed for full details of the proposal and its impact.

Development Proposal

- 1.3 The proposal seeks to demolish the existing uses on the site and construct 71 dwellings (29 town houses and 42 apartments) with associated amenity space and parking. The layout is attached as Appendix A of the TS.
- 1.4 Vehicle access to the site will be provided from a priority junction on to Louisa Street. The access layout has been designed to achieve visibility splays of 2.4m x 33m and to provide a 5.5m access road width with 2m footways on both sides. Dropped kerbs and tactile paving will also be provided at the junction. A general arrangement layout for the access is attached as Appendix C of the TS.
- 1.5 Pedestrian access is provided at the vehicle access junction and also via a segregated pedestrian route through to the park to the south of the site.
- 1.6 Internally, a new section of road will be constructed to adoptable standard incorporating a turning head suitable for service vehicle use. The road is 5.5m wide with 2m footways on both sides. Access will be taken from the adopted section of road to private areas serving parking areas.
- 1.7 Swept path analysis for a refuse collection vehicle to the specification set out in MCC Waste Guidance is attached as Appendix C of the TS.
- 1.8 68 parking spaces are provided on site, equating to 140% provision for the town houses and 64% provision for apartments. Disabled parking is provided for the apartments. Appropriate levels of EV parking will be provided with one space per house and 20% provision for the apartments. The appropriateness of the parking level in the context of local area resident requirements and adopted policy is examined in Section 5 of the TS.
- 1.9 42 cycle parking spaces are provided in a dedicated store for the apartments (100% provision) and sheds are provided in the gardens for the houses to accommodate cycles. Visitor parking is provided externally on site for visitors, in line with advice on short-stay guidance in DfT's LTN 2/20 this will be uncovered Sheffield stands.
- 1.10 Redundant access points on the site boundary will be reinstated and the bounding footway resurfaced as part of the proposals.
- 1.11 There is not anticipated to be a need for amendment of existing waiting restrictions.

2 Travel Plan Process, Benefits & Objectives

Travel Plan Process

- 2.1 A Travel Plan is a tool for managing access to a site that sets out a management strategy that seeks to promote sustainable travel choices and reduce single occupancy car use to achieve stated objectives. It should contain a package of measures designed to meet the objective to reduce single-occupancy car use generated from the site by supporting sustainable modes of transport, where practicable.
- 2.2 A Travel Plan should include a mixture of site infrastructure measures and marketing measures to assist the plan to meet defined objectives. Within a Travel Plan there is a need to set objectives, targets and indicators, the purpose of which is to monitor change and review policies overtime to allow it to meet the needs of the users of a site.

- 2.3 In line with NPPF, the measures adopted in a Travel Plan should be commensurate with the scale of impact from the development and should acknowledge the infrastructure and contributions to be delivered as part of the development, and also the type and use of the development.
- 2.4 The preparation of an Interim Travel Plan is the first stage of the process and is typically prepared as part of a planning application. The Interim sets out recommendations for the full Travel Plan to be prepared on occupation of the development. The Interim Travel Plan outlines the existing sustainable transport routes that can be used to access the site, the proposed site infrastructure measures, and management and policy measures for adoption upon occupation of the site to promote use of existing infrastructure. The Interim Travel Plan also sets out measures that will be used to manage and monitor the Plan over time.
- 2.5 The Travel Plan draws on the following guidance and best practice:
- Ministry of Housing, Communities & Local Government (2019), National Planning Policy Framework
 - Ministry of Housing, Communities & Local Government (2016), Planning Practice Guidance
 - MCC (2012) Manchester's Local Development Framework: Core Strategy Development Plan
 - Transport for Greater Manchester (2013), Transport for Sustainable Communities
 - Transport for Greater Manchester (2017), Greater Manchester Transport Strategy 2040
 - Department for Transport (2007), Guidance on Transport Assessment
 - Department for Transport (2020), Decarbonising Transport: Setting the Challenge
 - Department for Transport (2008), Delivering Travel Plans through the Planning Process
 - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places

Travel Plan Pyramid

- 2.6 The Department of Transport (DfT) states that it is helpful to:
- ‘... view the Travel Plan as a pyramid of measures and actions, some of which may form the foundations of the Travel Plan and part of which will be outcomes from the Transport Assessment.’
- 2.7 The DfT pyramid (shown in Figure 2.1) views the Travel Plan process as a series of considerations that is constructed from the ground up, with each new layer building on the last within the context of objectives sought.



Figure 2.1: Travel Plan Pyramid
[source: DfT 2009]

- 2.8 At the bottom of the pyramid is the location of the site and characteristics of access to the site by all modes of travel. This is set out in Section 3 and 4 of the Plan.
- 2.9 At the next level the physical aspects of the proposed development are set out to allow acknowledgement of that some Travel Plan measures are built-in to the layout to influence travel. These measures include pedestrian access arrangements, parking level, and cycle parking proposals that will be delivered to serve a development. This information is as set out above in Section 1 and also in Section 6.
- 2.10 The remaining levels outline the management, promotion and *soft* measures that are to be adopted as part of the travel plan to reinforce the site location, infrastructure proposals and access opportunities. DfT research has consistently demonstrated that investment in *soft* or SMART travel planning measures, when coupled with marketing interventions, can have a very real impact upon influencing travel behaviour. These are set out in Sections 5 and 6 of the Plan.
- 2.11 Section 7 sets out the monitoring plan which details how and when the travel plan will be reviewed. This includes how and when surveys will be undertaken, and the targets that will be set to meet the stated objectives.
- 2.12 Section 8 provides a summary of the actions identified in the Travel Plan along with timescales for implementation.

Travel Plan Benefits

- 2.13 Travel plans result in a variety of health, financial, environmental and site operation benefits, which are set out below.
- 2.14 Reduced levels of single occupancy car use can lead to an improvement in air quality both surrounding the site and across the wider area. In addition, increases in active travel have very

real impact on peoples' health as moderate physical activity can help prevent obesity, mental health issues, cancer, high blood pressure and cardiovascular disease.

- 2.15 The financial benefits of Travel Plans include personal cost savings from using more cost-effective modes of travel and indirect and wider cost savings relating to reduced illness and reduced accident rates.
- 2.16 The environmental benefits of Travel Plans include reduced carbon emissions and air quality issues.
- 2.17 Travel Plans also bring societal benefits including a happier and healthier community, and more social interaction.

Travel Plan Objectives

- 2.18 The main objectives of a Travel Plan are to reduce the environmental effects of transport associated with developments and raise awareness of sustainable means of access. In this instance, the main objective of the Travel Plan is to outline a realistic strategy that allows residents to travel by sustainable modes and to reduce single occupancy car use.
- 2.19 A secondary objective of the Travel Plan is to outline an Action Plan for the site that clearly defines the strategy and monitoring measures to be adopted to meet the defined objectives of the Plan. To this end, the Plan seeks:
 - To support site users to make informed travel choices
 - To set out a suitable monitoring and management structure

3 Site Location & Local Highway Network

Site Location & Existing Operation

- 3.1 Figure 3.1 shows that the site is located in an established residential area to the north of Ashton Old Road (A635). The site is bounded to the north by existing commercial and residential premises, to the west by the Fallowfield Loop (National Cycle Network Route 60), to the south by parkland, and to the east by Louisa Street.
- 3.2 The site relates well to existing local amenities, including primary schools, open space provision and retail facilities on Ashton Old Road. Access can also be gained bus and train services.
- 3.3 The site is cleared in part, with some buildings still present and in use. Operators at the site include a furniture retailer / manufacturer, a fence retailer / manufacturer, vehicle storage, a frame retailer, and an auto repair company. The floor area of the existing buildings on site is 1,698sqm.
- 3.4 Vehicle access to the site is currently provided from two locations on Louisa Street and one location on Ferris Street. Ferris Street is gated at its northern end.

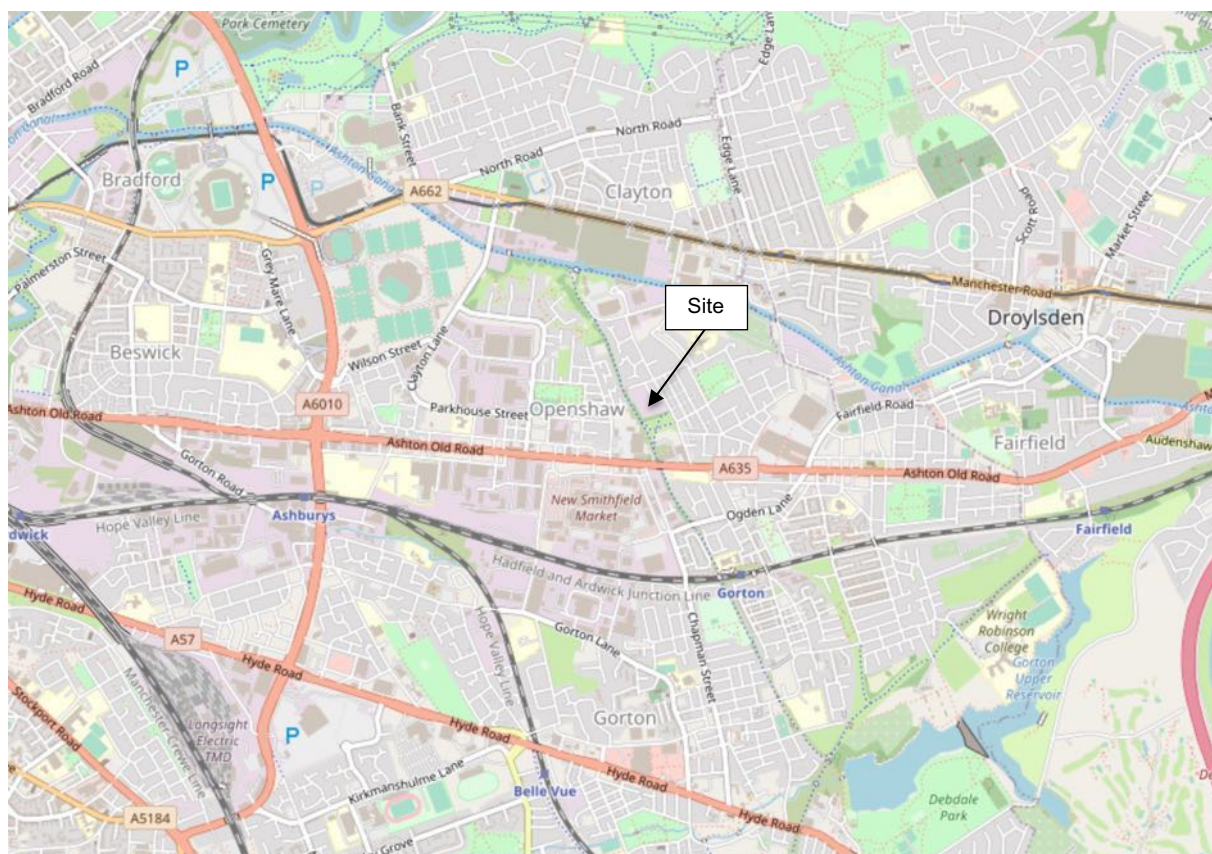


Figure 3.1: Site Location
[source: ISO4]

Local Highway Network

- 3.5 Louisa Street is a residential type of street with street lighting and a 20mph speed limit. The carriageway outside the site is 7m wide with 2m footways on both sides. Along the site frontage single yellow line controls are in place. To the south of the site double yellow line controls are in place on the western side of the road to the junction with Ashton Old Road. There are no parking controls on the western side of the road to the north of the site as far as Sexa Street, and the entire length of the eastern side of the road. Parking activity from local residents and commercial uses is present on street. Dropped kerbs are provided at the side road junctions with Louisa Street southwards towards Ashton Old Road.
- 3.6 To the south of the site Louisa Street provides access to the south to Ashton Old Road via a ghost island junction. A controlled pedestrian crossing is provided on Ashton Old Road to the east of Louisa Street junction.
- 3.7 Ferris Street is a service route that provides access to the northern part of the site, other commercial premises north of the site, and the rear of the residential properties fronting Louisa Street. Ferris Street is gated at the northern end.
- 3.8 Details of road safety characteristic are provided in Section 2 of the TS.

4 Accessibility Audit

Pedestrian Access

- 4.1 Louisa Street is a 20mph road and lit, therefore providing a suitable environment for pedestrians and cyclists. The footways on Louisa Street are 2m wide with dropped kerb provision at side road junctions. Controlled crossings are provided on Ashton Old Road.
- 4.2 Access can also be gained to segregated footpaths to the south of the site that provide access to Route 60 of the National Cycle Network (the Fallowfield Loop). Travelling north of the Fallowfield Loop provides access to the Ashton Canal tow path.

- 4.3 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km. CIHT provides further advice on suitable walking distances these are set out in Table 4.1.

Destination Type	Walk Distance (m)	Walk Time (mins)*
Commuting / Education	2000	25
Local Centre / Local Retail	800	10
Other	1200	15

Table 4.1: CIHT Walk Distances
[source: CIHT]

- 4.4 Figure 4.1 shows that the site is 500m away from Higher Openshaw Community School, Morrisons and Lidl on Ashton Old Road, Openshaw Park, Matalan and Varna Community School. Lime Square Medical Centre, Farmfoods, Lidl, a gym, and other local centre uses on Ashton Old Road are within 800m of the site. The Manchester College, New Smithfield Market, the National Cycling Centre and the centre of Droylsden are within 2km of the site.

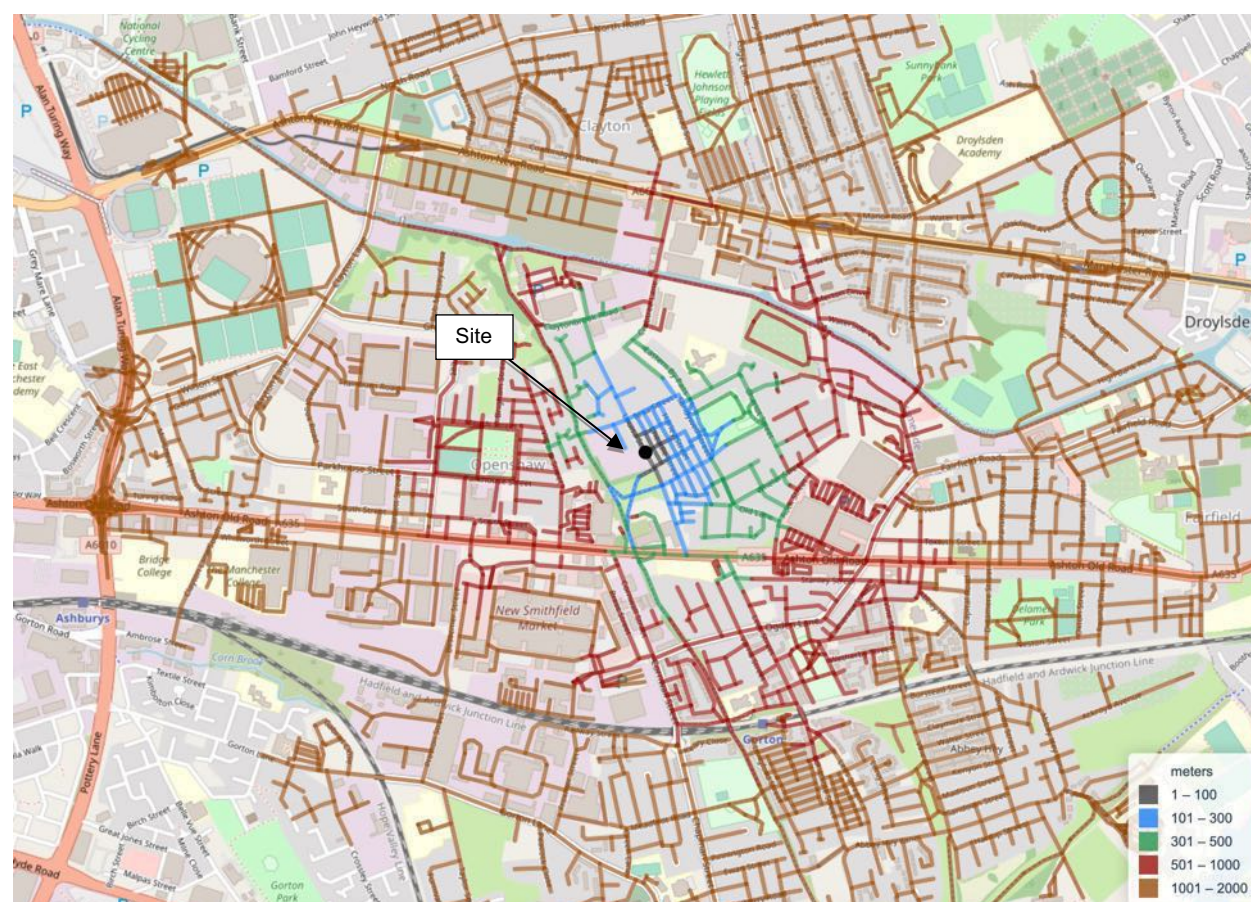


Figure 4.1: 2km Walking Catchment
[source: ISO04]

Cycle Access

- 4.5 Figure 4.2 shows the cycle network serving the site. It shows that the streets surrounding the site are all traffic calmed and provide a good basis for connections to the formal network, including Route 60 (the Fallowfield Loop), the Ashton Canal towpath and routes on Ashton Old Road.

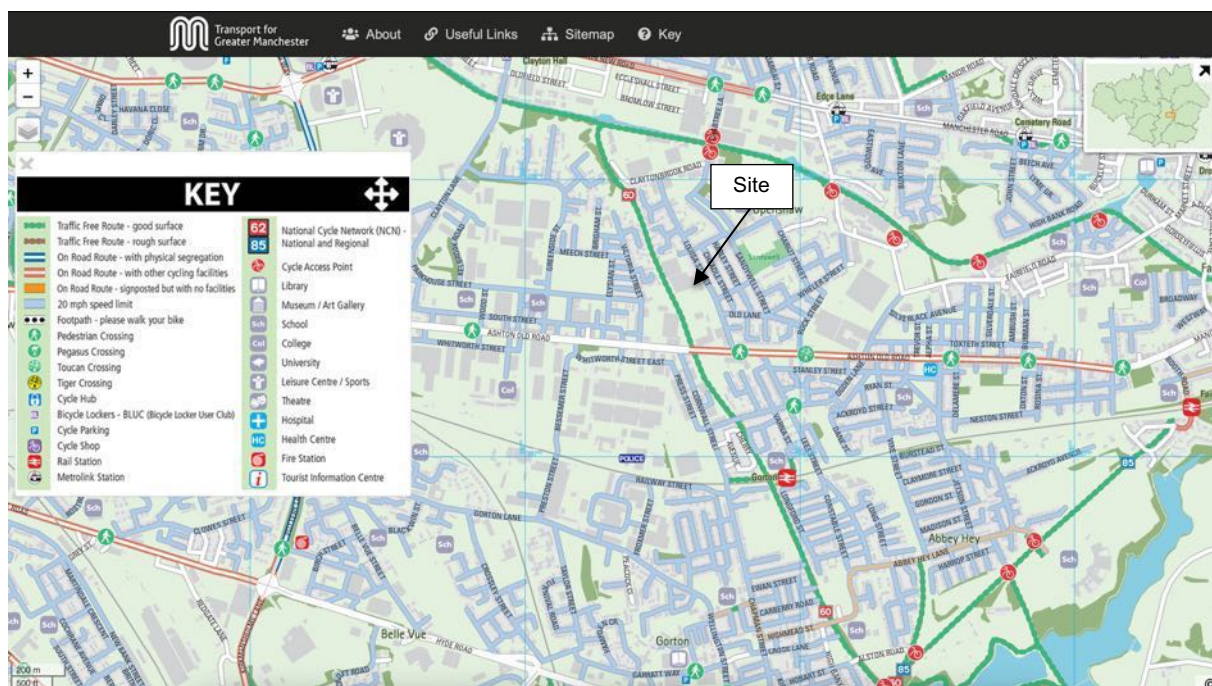


Figure 4.2: Cycle Network
[source: TfGM]

- 4.6 Figure 4.3 shows that the site also relates well to Bee Network scheduled improvements. As part of these the Fallowfield Loop is scheduled for upgrades due to be completed in December 2022. The Fallowfield Loop is a 14km long off-road path used by pedestrians, cyclists and horse riders that runs from Chorlton-cum-Hardy through to Fallowfield to Gorton and Fairfield. The scheduled works include street lighting and improvements to access points to make the route usable for people of all mobility levels throughout the year.

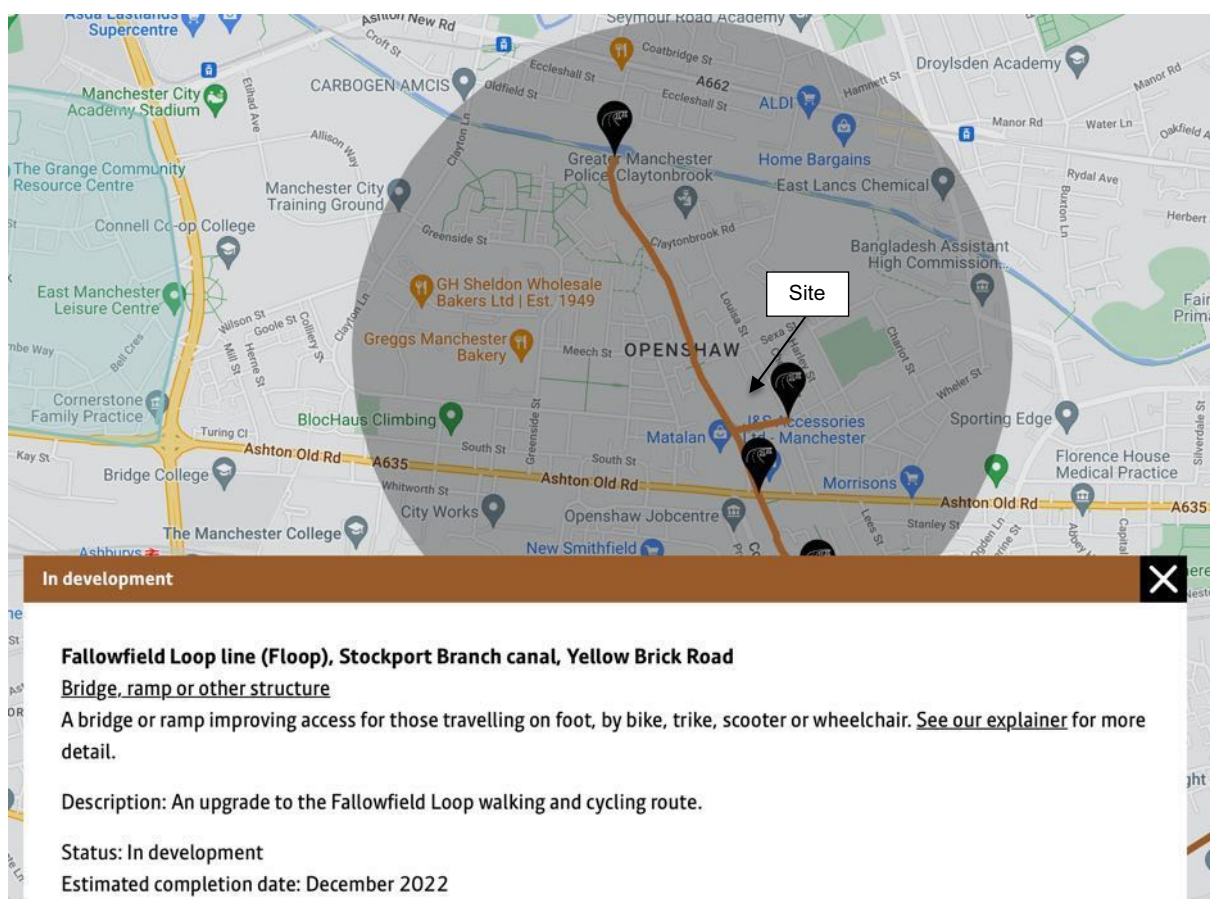


Figure 4.3: Bee Network
 [source: TfGM]

Public Transport Access

- 4.7 The nearest bus stops to the site are located on Ashton Old Road. The nearest bus stops benefit from shelters, seating, and bus boarder facilities. Table 4.2 provides a summary of the bus routes serving the nearest stops.

No.	Route	Weekday (buses per hour / each way)			Weekend (buses per hour / each way)	
		Peak	Day	Evening	Day	Day
171	East Didsbury – Openshaw – Newton Heath	1	1		1	
172	Southern Cemetery – Burnage – Gorton – Newton Heath	1	1	1	1	
219	Ashton – Audenshaw – Manchester	6	6	3	6	6
220 / 221	Stalybridge – Beswick – Manchester	2				

Table 4.2: Existing Bus Services
 [source: TfGM]

- 4.8 Table 4.2 shows that there are typically eight buses per hour (each-way) serving the area. These services provide frequency services to a range of destinations across Greater Manchester. Services are available in the evening and at the weekend.

- 4.9 Access can also be gained train services at Gorton train station, a 10-minute walk from the site, and Edge Lane tram station, a 15-minute walk from the site.
- 4.10 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.
- 4.11 The TS shows that the site has a GMAL of 5, which is a good level of accessibility by public transport for a site in a suburban location.

5 Travel Plan Management

Travel Plan Co-ordinator

- 5.1 An effective Travel Plan needs a clear hierarchy of responsibility. The applicant has been closely involved in the development of the Interim Plan and is committed to its successful implementation on completion of the development.
- 5.2 The applicant (Westchurch Homes), or their successor in title, will continue to have a regular overseeing role in the progress of the Plan and is committed to funding the resources required for its implementation.
- 5.3 Travel Plan Co-ordinators play an important role in developing, implementing, and managing Travel Plans. The Travel Plan Co-ordinator for the site will be identified prior to occupation of the development and contact details provided to MCC.
- 5.4 The Co-ordinator will form the main point of contact for the local authority and residents. The Co-ordinator will also be responsible for raising awareness and marketing the Travel Plan and surveying its effectiveness and assessing this against the stated objectives and targets.
- 5.5 In summary, the Travel Plan Co-ordinator's main responsibilities are:
 - Implementing the Plan measures
 - Providing a point of contact for residents, the local community and MCC
 - Publicising and raising awareness of local and national initiatives
 - Preparing and issuing the travel packs
 - Providing periodic updates to residents on changes to local services and facilities
 - Monitoring and surveying travel patterns
 - Periodic reporting to MCC

Future Management & Handover Arrangements

- 5.6 Should the interest in the site be sold, the responsibility for the Travel Plan implementation will transfer to the successor in title. If this should be the case, then full contact details of the new site operator and the new Travel Plan Co-ordinator will be provided to MCC in a timely manner to allow the Travel Plan to continue uninterrupted at the site.

6 Measures Toolkit

Promotion & Marketing Measures

- 6.1 Good communication is a vital component of the Travel Plan to ensure that residents are fully aware of the options available to them. Research undertaken by DfT shows that promotion and marketing of Travel Plan's is one of the most important measures in encouraging people to travel sustainably and actively.
- 6.2 The Travel Plan Co-ordinator will be responsible for marketing and promoting the Travel Plan. The following measures will be used to promote and market the Travel Plan:
 1. Preparation and issue of travel packs for each household
 2. Promotion of local authority / local area travel campaigns / networks
- 6.3 Copies of the Travel Plan will be made available to residents on request.

Travel Packs

- 6.4 Travel packs and noticeboards are an important means of disseminating information and making sure that residents are aware of the travel choices available to them when they move into their new home. The travel packs will be made available in the sales office and a copy provided to each resident when they move into their home.
- 6.5 The travel packs will include the following information:
1. Travel Plan Co-ordinator contact details
 2. Information on journey planning software
 3. Information on cycle and walking routes
 4. Information on bus / tram / train routes and frequencies
 5. Details of current MCC / TfGM initiatives
 6. Links to further information, including cycle providers and home delivery services

Journey Planning Software Promotion

- 6.6 Residents will be encouraged via the travel pack to familiarise themselves with the journey planning websites and phone apps promoted by TfGM. The [MyTfGM](http://my.tfgm.com/)¹ website now directs users to the [Trip Go](https://tripgo.com)² journey planning software.
- 6.7 Other mode specific journey planning software is also be promoted, and these are set out in the relevant sections below.

Travel Plan Benefits

- 6.8 The Travel Plan Co-ordinator will also be responsible for making residents aware of the many benefits for travelling more sustainably (as set out below).
1. Improve health and wellbeing
 2. Save money
 3. Reduce traffic congestion
 4. Increase physical activity and fitness
 5. Improve air quality
 6. Reduce carbon emissions
 7. Meet new people

Information Dissemination

- 6.9 Residents will be asked to supply an email address that can be used by the Travel Plan Co-ordinator to disseminate and circulate progress updates, travel information, service changes and new initiatives.

Measures to Encourage Walking

- 6.10 Walking is the cheapest and most sustainable mode of travel. Most people of reasonable health will be able to incorporate some walking as part of a daily journey and this can have very real impacts on the health and wellbeing of the individual.
- 6.11 Section 4 of the Travel Plan shows that the site is well located for walking trips to local amenities and services close by. The proposal includes appropriate pedestrian access arrangements and footways through the site.
- 6.12 The Travel Plan Co-ordinator will be responsible for raising awareness of the health benefits of walking using the travel pack and regular Travel Plan email updates.

¹ <http://my.tfgm.com/>

² <https://tripgo.com>

- 6.13 Information on local walking routes will be provided in the travel pack. The travel pack will also include details of on-line and phone app journey planning software that is available from [TfGM](http://www.tfgm.com/)³. In addition, website links are provided to the [GMWalking](https://gmwalking.co.uk)⁴ website which provides resources on routes and local walking groups.
- 6.14 The NHS Active 10 tracker app to set daily goals for journeys so that users can set challenges. Bigger challenge with the Coach to 5km phone app. Both are available from this [NHS website](https://www.nhs.uk/better-health/get-active/)⁵.

Measures to Encourage Cycling

- 6.15 Cycling is an excellent mode of travel which is healthier, cheaper, and more enjoyable than driving. Cycling has the following benefits:
1. Builds physical strength and develops healthy bones and muscles
 2. Lowering blood pressure and reducing the risk of heart attacks, strokes and diabetes
 3. A moderate cycle ride burns 400 calories per hour and is a great way to control weight
- 6.16 The site is well located to allow access to the Greater Manchester Cycle Network and the Bee Network. The proposal includes a secure cycle store for the apartments and storage for the houses.
- 6.17 Information on local cycling routes will be provided in the travel pack. The travel pack will also include details of on-line and phone app cycle maps and journey planning software that is available from TfGM. In addition, the travel pack will also include website links to [Sustrans](http://www.sustrans.org.uk/)⁶, who provide information on local and national routes, and [Cycling UK](http://www.cyclinguk.org/)⁷, who provide information on local cycling groups, cycle tips and routes.
- 6.18 TfGM offer [free cycle training and maintenance](https://tfgm.com/cycling/training)⁸ sessions for adults for beginners and experienced cyclists and provides safety tips and advice on the [TfGM](https://tfgm.com/cycling)⁹ website. Details of regular cycle events, such the Summer Cycle Camp, Let's Ride Pop-Up and Let's Ride Manchester are provided on the [TfGM](https://tfgm.com/cycling)¹⁰ website. TfGM offer a cycle newsletter service is frequently updated with new route information and activities.
- 6.19 The Travel Plan Co-ordinator will promote events to encourage increased cycling such as competitions such as [Love to Ride](https://www.lovetoride.net/gm)¹¹ to encourage new cycling journeys. As part of this bike riders log their mileage online, which contributes to a business leader board and gives riders the chance to win prizes.

Public Transport Measures

- 6.20 Section 4 shows that there are opportunities to access the site by public transport.
- 6.21 The travel pack will include information on the location of the nearest public transport nodes and a summary of bus and train services available.
- 6.22 The travel pack will include information relating to website bus service information available on TfGM, including timetables and ticket prices. The [MyTfGM](http://my.tfgm.com/)¹² website now directs users to the [Trip Go](http://tripgo.com)¹³ journey planning software.
- 6.23 The Travel Plan Co-ordinator will be responsible for regularly reviewing the TfGM database to check for service changes and any new public transport initiatives.

³ <http://www.tfgm.com/>

⁴ <https://gmwalking.co.uk>

⁵ <https://www.nhs.uk/better-health/get-active/>

⁶ www.sustrans.org.uk/

⁷ www.cyclinguk.org/

⁸ <https://tfgm.com/cycling/training>

⁹ <https://tfgm.com/>

¹⁰ <https://tfgm.com/cycling>

¹¹ <https://www.lovetoride.net/gm>

¹² <http://my.tfgm.com/>

¹³ <https://tripgo.com>

Efficient Vehicle Use

- 6.24 The TS shows that the level of parking is appropriate to the location of the site. Appropriate provision is made for accessible and EV spaces.
- 6.25 The travel pack will include information on on-line food retail facilities that serve the area, such as [Sainsburys](https://www.sainsburys.co.uk/)¹⁴, [Tesco](http://www.tesco.com/)¹⁵ and [Ocado](http://www.ocado.com/)¹⁶.

7 Monitoring & Review Mechanisms

Baseline Travel Patterns

- 7.1 In the absence of the first travel surveys, the baseline mode share from the TS has been used. The TS utilises historic Census mode share data, this is replicated in Table 7.1.

Modes	Share
Public Transport	32%
Car Driver	38%
All Other Sustainable Modes (including car passenger)	30%

Table 7.1: Census Mode Share

Data Collection & Analysis

- 7.2 Monitoring resident travel patterns is an important tool in measuring the progress of the Travel Plan and success of the Plan in terms of meeting the declared objectives and targets.
- 7.3 Initial travel surveys will be undertaken within six months of first occupation.
- 7.4 The surveys will gather the following information:
1. Usual mode of travel for all residents in the household
 2. Household car and cycle ownership
 3. Reasons for mode choice
 4. Initiatives that would encourage a change in mode
 5. Travel Plan awareness
- 7.5 The results from the first survey will be used to set the targets for the Travel Plan and to update the measures, if required. The updated Travel Plan will be submitted to MCC within nine months of first occupation of the development.
- 7.6 Following the first survey, monitoring surveys will be undertaken periodically.

Targets

- 7.7 Travel Plans should always include targets against which the success of the Plan can be monitored and assessed over time. Targets should be ambitious yet realistic. There are two main types of targets that are applicable to Travel Plans: action targets and quantitative targets.
- 7.8 Action-based targets are based on the Travel Plan reaching set milestones or indicators. Action targets include the commitment to deliver a package of measures to help promote and encourage sustainable travel. The following action/milestone targets have been set for this stage in the Plan:
- Appoint the Travel Plan Co-ordinator prior to occupation
 - Prepare and distribute the travel packs
 - Undertake travel surveys within six months of occupation

¹⁴ <https://www.sainsburys.co.uk/>

¹⁵ <http://www.tesco.com/>

¹⁶ <http://www.ocado.com/>

- 7.9 Further action-based targets and milestones will be identified when the monitoring reports are prepared following the travel surveys.
- 7.10 Following the first surveys, quantitative targets will be set for the Travel Plan based on the stated objectives to encourage sustainable trip making and reduce single occupancy car use. The targets will be reviewed regularly as part of the monitoring plan.
- 7.11 Quantitative targets also provide a useful indicator against which the performance of the Travel Plan can be assessed. The targets are required to be SMART (Site-specific, Measurable, Achievable, Realistic and Timed). An interim SMART target has been set for the first five years of the Travel Plan. This target will be updated following the first travel survey:
- Reduce single occupancy private car use by 5%
- 7.12 Complete SMART targets will be set following the first travel surveys and these will be issued to MCC in the updated Travel Plan within six months of occupation.

Monitoring Plan Summary

- 7.13 Table 7.2 sets out the monitoring mechanisms that will be used to review the performance of the Travel Plan.

Exercise	Key Information	Frequency	Responsibility
Issue of Travel Packs	Dissemination of travel information and travel survey to residents	On occupation and with regular updates to information	Travel Plan Co-ordinator
First resident survey	Data to be used to allow appropriate targets to be set	Within 6 months of occupation	Travel Plan Co-ordinator
Updated Travel Plan	Baseline surveys to be included to allow measurement of objectives and to enable targets to be set	Within 9 months of occupation	Travel Plan Co-ordinator
Monitoring survey	Data to be used to establish progress of the Plan and review success of measures	Periodically	Travel Plan Co-ordinator
Preparation of Monitoring Report	Set out mode share, targets and any changes to the Plan	3 months after each survey period	Travel Plan Co-ordinator

Table 7.2: Monitoring Plan

8 Action Plan & Timescales

- 8.1 Table 8.1 also provides initial timescales for each measure using the following time periods:
- Quick Wins (Q) – to be undertaken prior to or on occupation
 - Ongoing (O) – on-going elements which may be regularly undertaken throughout the Plan's life
- 8.2 The Action Plan will be firmed up when the full Travel Plan is prepared.

Element	Measure	Category	Timescale	Responsibility
Marketing	Prepare travel packs	Q	Prior to occupation	Travel Plan Co-ordinator
	Issue travel packs	Q	Prior to occupation	Travel Plan Co-ordinator
	Prepare travel noticeboard	Q	As required	Travel Plan Co-ordinator
	Promote Local & National Campaigns	O	As required	Travel Plan Co-ordinator
Walking / Cycling / Public Transport	Provide public realm / pedestrian access measures	Q	Prior to occupation	Developer
	Provide cycle storage	Q	Prior to occupation	Developer
	Distribute details of journey planning resources	O	On occupation	Travel Plan Co-ordinator
	Check for service changes	O	Annually	Travel Plan Co-ordinator
Vehicles	Provide reduced car parking level, and disabled and EV parking	Q	Prior to occupation	Developer
	Distribute details of local on-line food retailers	O	On occupation	Travel Plan Co-ordinator
	Promotion of Enterprise Car Club	O	On occupation	Travel Plan Co-ordinator

Table 8.1: Initial Action Plan

Appendix E

Calculation Reference: AUDIT-443201-220519-0549

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVSSelected regions and areas:

03	SOUTH WEST	
	DC DORSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	NT NOTTINGHAMSHIRE	2 days
08	NORTH WEST	
	MS MERSEYSIDE	2 days
09	NORTH	
	CB CUMBRIA	1 days
11	SCOTLAND	
	EB CITY OF EDINBURGH	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 184 (units:)
 Range Selected by User: 6 to 184 (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 15/10/21

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:

Monday	3 days
Tuesday	4 days
Wednesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	11 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:

Suburban Area (PPS6 Out of Centre)	11
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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:

Development Zone	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:

C3 11 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:

1,001 to 5,000	2 days
10,001 to 15,000	2 days
20,001 to 25,000	5 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:

25,001 to 50,000	1 days
50,001 to 75,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	4 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	6 days

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

Travel Plan:

No 11 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 11 days

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

LIST OF SITES relevant to selection parameters

1	CA-03-C-03 CROMWELL ROAD CAMBRIDGE	BLOCKS OF FLATS		CAMBRIDGESHIRE
	Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings:		82	
	Survey date: MONDAY		18/09/17	Survey Type: MANUAL
2	CB-03-C-03 LOUND STREET KENDAL	FLATS & BUNGALOWS		CUMBRIA
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		33	
	Survey date: MONDAY		09/06/14	Survey Type: MANUAL
3	DC-03-C-02 PALM COURT WEYMOUTH SPA ROAD	FLATS IN BLOCKS		DORSET
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		14	
	Survey date: FRIDAY		28/03/14	Survey Type: MANUAL
4	DS-03-C-03 CAESAR STREET DERBY	BLOCKS OF FLATS		DERBYSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		30	
	Survey date: WEDNESDAY		25/09/19	Survey Type: MANUAL
5	EB-03-C-01 MYRESIDE ROAD EDINBURGH CRAIGLOCKHART	BLOCKS OF FLATS		CITY OF EDINBURGH
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		32	
	Survey date: TUESDAY		26/05/15	Survey Type: MANUAL
6	MS-03-C-02 SOUTH FERRY QUAY LIVERPOOL BRUNSWICK DOCK	BLOCKS OF FLATS		MERSEYSIDE
	Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:		184	
	Survey date: TUESDAY		13/11/18	Survey Type: MANUAL
7	MS-03-C-03 MARINERS WHARF LIVERPOOL QUEENS DOCK	BLOCK OF FLATS		MERSEYSIDE
	Suburban Area (PPS6 Out of Centre) Development Zone Total No of Dwellings:		9	
	Survey date: TUESDAY		13/11/18	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	NF-03-C-02	MIXED FLATS & HOUSES	NORFOLK
	HALL ROAD		
	NORWICH		
	LAKENHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	82	
	Survey date: MONDAY	18/11/19	Survey Type: MANUAL
9	NT-03-C-01	HOUSES (SPLIT INTO FLATS)	NOTTINGHAMSHIRE
	LAWRENCE WAY		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	56	
	Survey date: TUESDAY	08/11/16	Survey Type: MANUAL
10	NT-03-C-02	HOUSES (SPLIT INTO FLATS)	NOTTINGHAMSHIRE
	CASTLE MARINA ROAD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	135	
	Survey date: WEDNESDAY	09/11/16	Survey Type: MANUAL
11	SF-03-C-03	BLOCKS OF FLATS	SUFFOLK
	TOLLGATE LANE		
	BURY ST EDMUNDS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	30	
	Survey date: WEDNESDAY	03/12/14	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/C - FLATS 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	11	62	0.000	11	62	0.001	11	62	0.001
08:00 - 09:00	11	62	0.001	11	62	0.001	11	62	0.002
09:00 - 10:00	11	62	0.001	11	62	0.001	11	62	0.002
10:00 - 11:00	11	62	0.000	11	62	0.000	11	62	0.000
11:00 - 12:00	11	62	0.000	11	62	0.000	11	62	0.000
12:00 - 13:00	11	62	0.003	11	62	0.003	11	62	0.006
13:00 - 14:00	11	62	0.000	11	62	0.000	11	62	0.000
14:00 - 15:00	11	62	0.001	11	62	0.001	11	62	0.002
15:00 - 16:00	11	62	0.000	11	62	0.000	11	62	0.000
16:00 - 17:00	11	62	0.003	11	62	0.001	11	62	0.004
17:00 - 18:00	11	62	0.000	11	62	0.001	11	62	0.001
18:00 - 19:00	11	62	0.000	11	62	0.000	11	62	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.009			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.

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/C - FLATS 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): 2.21

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	11	62	0.083	11	62	0.328	11	62	0.411
08:00 - 09:00	11	62	0.096	11	62	0.521	11	62	0.617
09:00 - 10:00	11	62	0.169	11	62	0.271	11	62	0.440
10:00 - 11:00	11	62	0.125	11	62	0.186	11	62	0.311
11:00 - 12:00	11	62	0.138	11	62	0.176	11	62	0.314
12:00 - 13:00	11	62	0.162	11	62	0.148	11	62	0.310
13:00 - 14:00	11	62	0.115	11	62	0.160	11	62	0.275
14:00 - 15:00	11	62	0.166	11	62	0.189	11	62	0.355
15:00 - 16:00	11	62	0.258	11	62	0.134	11	62	0.392
16:00 - 17:00	11	62	0.266	11	62	0.138	11	62	0.404
17:00 - 18:00	11	62	0.403	11	62	0.172	11	62	0.575
18:00 - 19:00	11	62	0.320	11	62	0.175	11	62	0.495
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.301			2.598			4.899

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.

Calculation Reference: AUDIT-443201-220519-0513

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVSSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
10	WALES	
	PS POWYS	1 days
11	SCOTLAND	
	HI HIGHLAND	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: 10 to 40 (units:)
 Range Selected by User: 6 to 40 (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 18/10/21

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:

Monday	2 days
Wednesday	3 days
Thursday	3 days

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

Selected survey types:

Manual count	8 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:

Suburban Area (PPS6 Out of Centre)	8
------------------------------------	---

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	8
------------------	---

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 8 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:

5,001 to 10,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	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
25,001 to 50,000	1 days
50,001 to 75,000	3 days
125,001 to 250,000	3 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	7 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	6 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	8 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	CA-03-A-05	DETACHED HOUSES	CAMBRIDGESHIRE
	EASTFIELD ROAD		
	PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	17/10/16	Survey Type: MANUAL
2	CH-03-A-11	TOWN HOUSES	CHESHIRE
	LONDON ROAD		
	NORTHWICH		
	LEFTWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	24	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL
3	DV-03-A-01	TERRACED HOUSES	DEVON
	BRONSHILL ROAD		
	TORQUAY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	37	
	Survey date: WEDNESDAY	30/09/15	Survey Type: MANUAL
4	HC-03-A-17	HOUSES & FLATS	HAMPSHIRE
	CANADA WAY		
	LIPHOOK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	36	
	Survey date: THURSDAY	12/11/15	Survey Type: MANUAL
5	HI-03-A-14	SEMI-DETACHED & TERRACED	HIGHLAND
	KING BRUDE ROAD		
	INVERNESS		
	SCORGUIE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: WEDNESDAY	23/03/16	Survey Type: MANUAL
6	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD		
	CATTERICK GARRISON		
	OLD HOSPITAL COMPOUND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	10	
	Survey date: WEDNESDAY	10/05/17	Survey Type: MANUAL
7	PS-03-A-02	DETACHED/SEMI-DETACHED	POWYS
	GUNROG ROAD		
	WELSHPOOL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	11/05/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	WL-03-A-02	SEMI DETACHED	WILTSHIRE
	HEADLANDS GROVE		
	SWINDON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	27	
	Survey date: THURSDAY	22/09/16	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 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	8	29	0.000	8	29	0.000	8	29	0.000
08:00 - 09:00	8	29	0.013	8	29	0.013	8	29	0.026
09:00 - 10:00	8	29	0.009	8	29	0.009	8	29	0.018
10:00 - 11:00	8	29	0.004	8	29	0.004	8	29	0.008
11:00 - 12:00	8	29	0.004	8	29	0.000	8	29	0.004
12:00 - 13:00	8	29	0.000	8	29	0.004	8	29	0.004
13:00 - 14:00	8	29	0.004	8	29	0.004	8	29	0.008
14:00 - 15:00	8	29	0.000	8	29	0.000	8	29	0.000
15:00 - 16:00	8	29	0.000	8	29	0.000	8	29	0.000
16:00 - 17:00	8	29	0.000	8	29	0.000	8	29	0.000
17:00 - 18:00	8	29	0.000	8	29	0.000	8	29	0.000
18:00 - 19:00	8	29	0.000	8	29	0.000	8	29	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.034			0.068

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

Total People to Total Vehicles ratio (all time periods and directions): 1.73

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	8	29	0.217	8	29	0.491	8	29	0.708
08:00 - 09:00	8	29	0.257	8	29	0.991	8	29	1.248
09:00 - 10:00	8	29	0.248	8	29	0.265	8	29	0.513
10:00 - 11:00	8	29	0.257	8	29	0.265	8	29	0.522
11:00 - 12:00	8	29	0.213	8	29	0.235	8	29	0.448
12:00 - 13:00	8	29	0.317	8	29	0.326	8	29	0.643
13:00 - 14:00	8	29	0.252	8	29	0.343	8	29	0.595
14:00 - 15:00	8	29	0.317	8	29	0.287	8	29	0.604
15:00 - 16:00	8	29	0.704	8	29	0.417	8	29	1.121
16:00 - 17:00	8	29	0.578	8	29	0.304	8	29	0.882
17:00 - 18:00	8	29	0.478	8	29	0.339	8	29	0.817
18:00 - 19:00	8	29	0.409	8	29	0.226	8	29	0.635
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.247			4.489			8.736

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 F

LC4415EW - Accommodation type by car or van availability by number of usual residents aged 17 or over in household
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LC4415EW - Accommodation type by car or van availability by number of usual residents aged 17 or over in household
ONS Crown Copyright Reserved [from Nomis on 27 April 2022]

population All households
units Persons
date 2011
area type 2011 wards
area name E05000690 : Bradford
no of usual residents in household All categories: Number of usual residents aged 17 or over in household

Cars or Vans	All categories: Accommodation type	Whole house or bungalow	Flat, maisonette, apartment, caravan or other mobile or temporary structure	All	House	Flat
All categories: Car or van available	7,039	4,579	2,460			
No cars or vans in household	3,845	2,268	1,577	55%	50%	64%
1 car or van in household	2,600	1,837	763	37%	40%	31%
2 or more cars or vans in household	594	474	120	8%	10%	5%
			Car Ownership	54%	61%	41%

LC7401EW - Method of travel to work (2001 specification)
ONS Crown Copyright Reserved [from Nomis on 27 April 2022]

population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
area type 2011 wards
area name E05000690 : Bradford

Method of travel to work (2001 specification)	All categories: Car or van availability	%
All Modes	6,257	
Public Transport	1,991	32%
Car Driver	2,375	38%
All Other	1,891	30%