

REPORT

Transport Feasibility Report

Keir Hardie Way, Barking, London, IG11 9NU

Client: Be First (Regeneration) Limited

Reference: PC1903-RHD-ZZ-XX-RP-R-0004

Status: 0.1/Final

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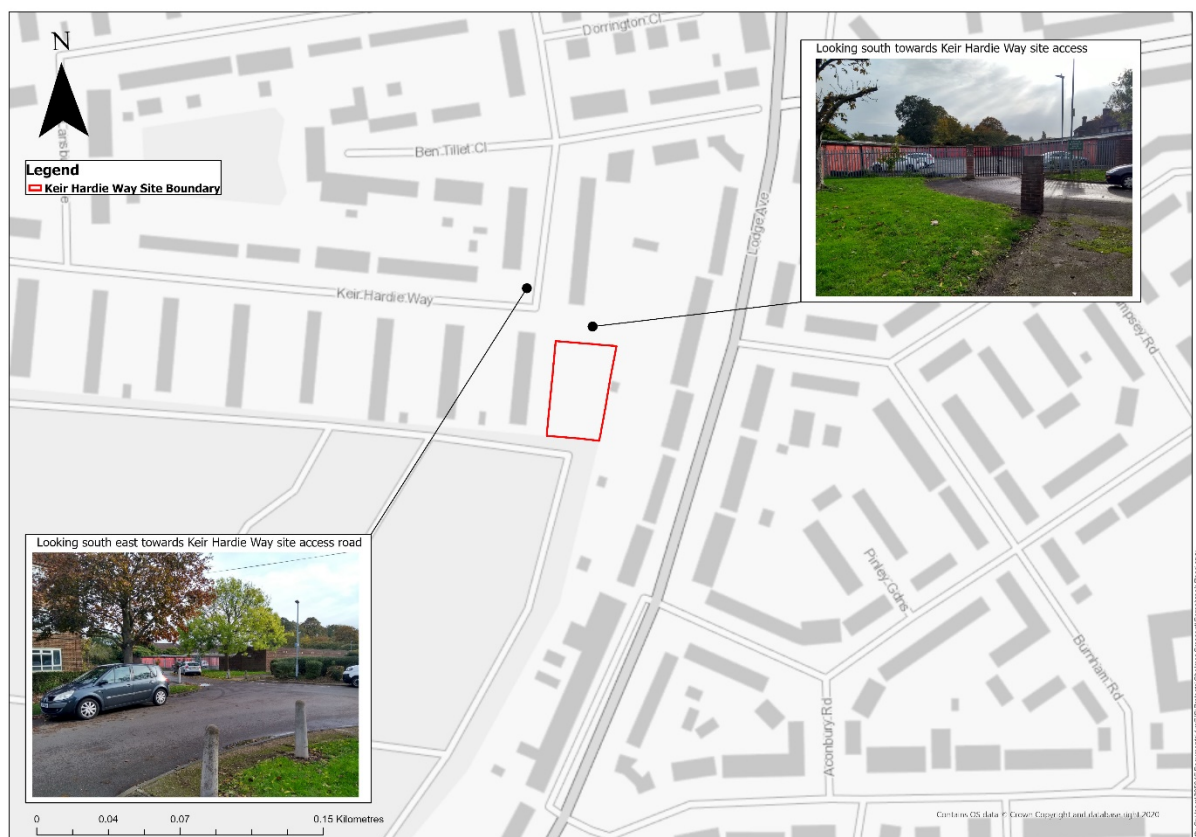
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1 Introduction

1.1 Overview

- 1.1.1 Royal HaskoningDHV (RHDHV) has been appointed by Be First (Regeneration) Limited (the 'Client') to provide transport consultancy services and to prepare a Transport Feasibility Report and Site Access and Highways Assessment (SAHA) to support the Client's plans to promote development of a site at Keir Hardie Way, Barking, London, IG11 9NU (the 'site').
- 1.1.2 The site is one of a number of small surplus sites that are considered to be hard to develop but could present an opportunity to provide new housing by either small developers/ builders, housing associations or community housing organisations. The purpose of this report is to provide a recommendation associated with site access and in doing so reduce the risks associated with any future planning application.
- 1.1.3 The site is situated on Keir Hardie Way, within a predominately residential area, west of the A1153 and to the east of Upney Lane. The site is located approximately 1km north of the A13 and 700m east of Upney Underground station. A site location plan is provided in **Insert 1.1** and within **Appendix A**.

Insert 1.1: Site Location Plan



- 1.1.4 The study is based on the assumption that the proposals seek the development of approximately 0.129 hectares to residential units (Use Class C3) within the site boundary depicted within the site boundary depicted in **Insert 1.1**. The site is currently occupied by garage/storage units and a car park.
- 1.1.5 At the time of writing, no formal consultation with London Borough of Barking and Dagenham (LBBD) has been undertaken at the time this report was drafted. As a result, information contained within this report is subject to further consultation from LBBD.

1.2 Report Structure

- 1.2.1 Following this introduction, the report is structured as follows:
- **Section 2** provides an overview of the existing site, including the site's accessibility by non-car modes of travel.
 - **Section 3** provides prospective trip generation to the site. provides the potential trip generation of the site based on a future residential development.
 - **Section 4** provides a summary and recommendations, as well as outlines requirements for additional documents based on the size of the site proposed

2 Existing site

2.1 Overview

- 2.1.1 The Kier Hardie site is a plot of land to the south east of Keir Hardie Way, a residential cul-de-sac with vehicular access from Upney Lane to the west. The site currently contains a car park and garages is located within a residential area located 2 kilometres (km) east of Barking town centre. The site is bound by Rippleside Cemetery to the south and by residential properties fronting A1153 Lodge Avenue to the east. The site is outside the London Riverside Opportunity Area.

2.2 Public Transport Accessibility

- 2.2.1 This section will examine the potential to access the site via sustainable transport modes.
- 2.2.2 Upney railway station is located approximately 700m to the west of the site and is the site's closest railway station. Upney railway station provides access to London Underground District and Hammersmith and City services.
- 2.2.3 The closest bus stops to the site are located approximately 300m and 450m to the west of bus stop H, K and L, located along the A1153 and Woodward Road. These bus stops serve routes 62 and 368 services that provide links between Barking and Chadwell Heath.

2.3 Public Transport Accessibility Level (PTAL)

- 2.3.1 The Public Transport Accessibility Level (PTAL) methodology has been adopted by the GLA and TfL as a means of quantifying and comparing accessibility by public transport for a given site. It takes into account the time taken to access the public transport network, including:
- The walk time to various public transport services;
 - The average waiting time for each service; and,
 - The reliability of each service.
- 2.3.2 The methodology is based on a walking speed of 4.8km/h and considers Underground and rail stations within a 12-minute walk (960m) and bus stops within an 8-minute walk (640m), with the PTAL assessment being undertaken using the AM peak hour operating patterns of existing public transport services.
- 2.3.3 An Equivalent Doorstep Frequency (EDF) is calculated for each of the public transport services accessible from the site based on the criteria described above. These individual EDF values are then weighted to provide an accessibility index (AI) value for each service accessible from the Site. The sum of the AI's for each mode are then aggregated to provide a single measure of accessibility.
- 2.3.4 The total AI value is then compared against the PTAL bands given in **Table 2.1**. A summary of the assessment is provided in **Appendix B**.

Table 2.1: PTAL Banding

PTAL Score	Range of Index (AI)	Description
1a	0.01-2.50	Very Poor
1b	2.51-5.00	Very Poor
2	5.01-10.00	Poor
3	10.01-15.00	Moderate
4	15.01-20.00	Good
5	20.01-25.00	Very Good
6a	25.01-40.00	Excellent
6b	>40.01	Excellent

2.3.5 The site has a published Public Transport Accessibility Level (PTAL) of 1b, which indicates a 'very poor' level of public transport accessibility and indicates that residential development is likely to require some car parking provision.

2.3.6 It should be noted however that PTAL methodology assumes cut-off points at which a public transport node is no longer considered accessible. The PTAL calculation omits the bus services along the A1153 Lodge Avenue from the calculation. Inclusion of the 62 and 368 bus services increases the PTAL AI from 4.41 to 9.02. As a result, the site would increase from a PTAL 1b to being to PTAL 2, close to PTAL 3.

2.4 Walking and Cycling

2.4.1 Footways are between 1.75m and 1.95m wide and provided on both flanks of Keir Hardie Way. The existing access to the site has a 1.95m footway to the east of the carriageway. The streets immediately surrounding the site are residential in nature with low volumes of traffic, and footways are provided with street lighting.

2.4.1 An accessibility context plan is attached within **Appendix C**.

2.4.2 Keir Hardie Way is located approximately 500m to the west of Upney Lane which has advisory cycle lanes. This route provides connection to Barking town centre to the west.

2.4.3 The site is also located approximately 1km to the north of National Cycle Route (NCR) 13, which provides a direct route from the site to Tower Bridge in the west, and Grays to the east.

2.5 Local Highway Network

2.5.1 Keir Hardie Way is a residential cul-de-sac connecting to Upney Lane in the west. The site is bound by Rippleside Cemetery to the south and by the A1153 to the east. The footway in the vicinity of the site is 1.75m wide with a 2.4m wide grass verge and has street lights.

2.5.2 The site currently benefits from a short section of access road measuring 5.0m wide and approximately 30m in length. This road provides access to the parking area and garages only. The access road is shown as being outside the demise of the site. It is not known whether this is part of the adopted public highway.

- 2.5.3 The A13, approximately 1km to south of the site, is the part of the strategic road network linking central London with the M25 and the national road network. The A13 passes through east London and south Essex, and is located to the north of the River Thames.

2.6 Highway Safety

- 2.6.1 Accident data for the most recently available five year period (2013-2018) was obtained from TfL, using the London Collision Map (<https://tfl.gov.uk/corporate/safety-and-security/roadsafety/london-collision-map>).
- 2.6.2 The London Collision Map reported that there were no recorded serious or fatal incidents in the area during this period. Based on this investigation, there is not considered to be an undue road safety problem within the vicinity of the site.

2.7 Parking and Servicing

- 2.7.1 There are no waiting or loading restriction on Keir Hardie Way. A disabled parking bay is located adjacent to the site access road. Keir Hardie Way is not located within a Controlled Parking Zone (CPZ).
- 2.7.2 A review of census data for the Eastbury ward E36007060, within which the site is located, shows that for houses the average car ownership is 1.04 vehicles per house for owner occupied compared with 0.54 vehicles per dwelling for shared ownership or rented (social or private). For flats the average car ownership is 0.75 vehicles per flat that are owner occupied and 0.45 vehicle per flat that are shared ownership or rented (social or private).
- 2.7.3 Barking and Dagenham Local Plan (2019), Policy DMT 2 states that in areas outside PTAL 5-6 should be designed to provide the minimum necessary parking ('car-lite'), and in line with London Plan (Intend to Publish Version, 2019). As an Outer London PTAL 2 area, maximum parking provision would be up to 1 space per dwelling.
- 2.7.4 In order for meet the requirements for waste collection, a site layout would need to be developed to ensure that waste could be collected by a refuse collection vehicle. A waste store could be located at the northern end of the site so that waste bins could be wheeled to the RCV for emptying. This arrangement would remove the need for refuse vehicles to access the site. The design parameters referred to in Manual for Streets are that residents should not be required to carry waste for a distance greater than 30m. Furthermore a refuse collection vehicle should be able to get to within 25m of the waste storage area.

3 Proposed Development

3.1 Preface

- 3.1.1 A review of similar small sites indicates that a development density of up to 60 dwellings per hectare could be achievable. This 0.129ha site could therefore accommodate circa 8 units, depending on site layout. Parking standards for an 8 unit development would permit a maximum of 8 car parking spaces, based on up to 1 spaces per dwelling. Car parking would require Electric Vehicle Charging Points (EVCP), with 20% of spaces provided with an EVCP point on first site occupation. Passive provision should be provided so that all spaces could be provided with charge points in the future.

3.2 Cycle Parking

- 3.2.1 Other requirements would include provision of secure cycle parking for residents and visitors. For sites of between five and 40 units, a minimum of two visitor or short stay cycle parking would be required. The minimum requirement for long stay cycle parking provision within the Intend to Publish London Plan would be:

- 1 cycle parking spaces for each studio apartments.
- 1.5 cycle parking spaces for each one bed apartments (for 2 persons).
- 2 cycle parking spaces for each other dwellings.

3.3 Waste Storage

- 3.3.1 LBBD guidance is provided in Planning Advice Note 'Waste and Recycling Provision in New and Refurbished Residential Developments'. With regards to waste storage houses would typically have waste storage in two x 140 litre wheeled bins for refuse and garden waste and a 240 litre wheeled bins for recycling. Flatted development would usually have a communal waste store with 1,100 litre Eurobins for refuse and recycling. Two bins (1 x refuse and 1 x recycling) would be required for seven flats, four bins would be required for 13 flats and six bins for 18 flats.
- 3.3.2 With regards to vehicle access for refuse collection, the site would need to be designed for a 10.4m refuse collection vehicles (RCV) to gain access to a point sufficiently close to the bin store. The maximum reversing distance for an RCV would be 15m to a point within 10m of the bin store. The refuse vehicle could reverse in to the site access road from Waterbeach Road to be loaded. This would remove the requirement for a turning head within the site.

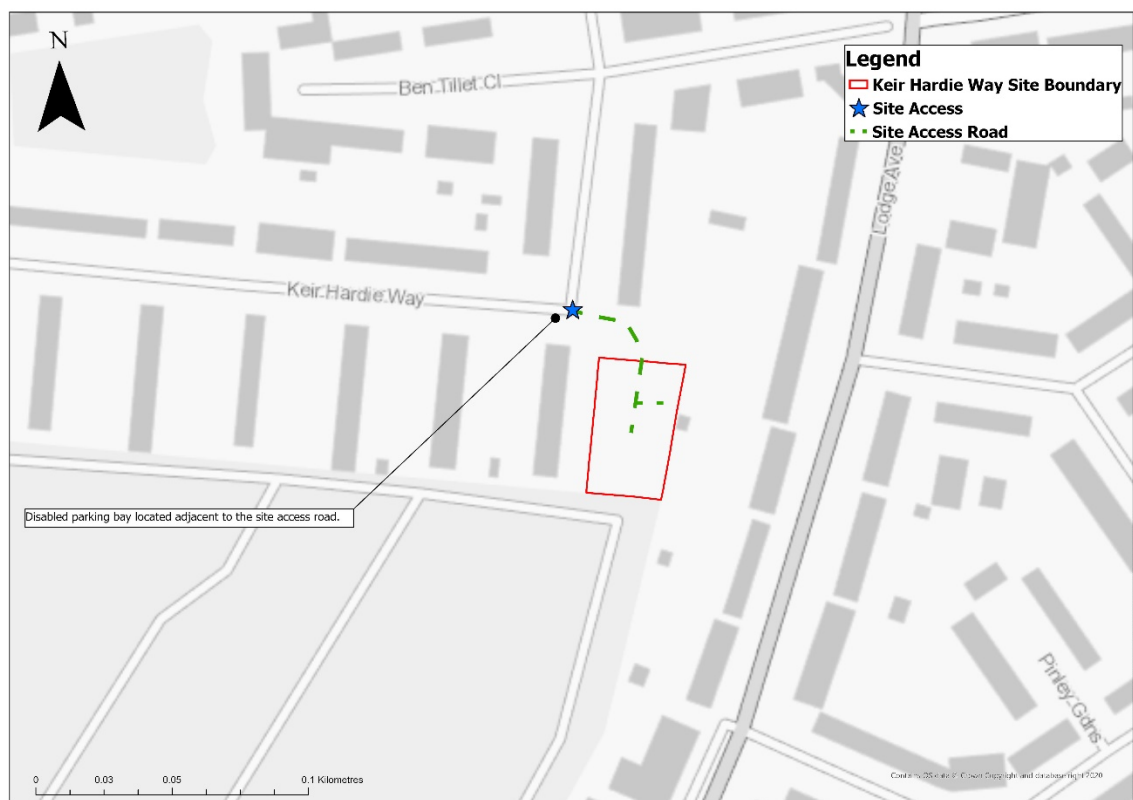
3.4 Fire Access

- 3.4.1 Access by a fire tender to the site should be in accordance with London Fire Brigade Fire Safety Guidance Note GN29. The minimum width of an access would be 3.7m kerb to kerb with a 3.1m minimum at a gate. The dimensions of a fire pump would be 7.9m long by 2.5m wide. The maximum reverse distance is 20m before a turning place would be required. The maximum distance from a pump to the extent of the building would be 45m. A fire tender should be able to within 18m of a fire main, if risers are to be provided on the building.

3.5 Development Access Options

- 3.5.1 The site would be accessed from Keir Hardie Way, via the existing site access road. The site access has a 5.0m wide carriageway and a 1.95m wide footway on the east side of the access. Refuse/ delivery vehicles would reverse into the site access from Kier Hardy Way thus avoiding the requirement to provide a turning head within the site. Refuse/ delivery vehicles would exit the access road in a forward gear. An indicative site access layout is shown in **Insert 3.1**.

Insert 3.1: Development Access Options



- 3.5.2 It is not known whether the existing site access is public highway or a private access. Depending on the site accesses status, the access to the site could remain private or be offered for adoption as a public highway. Adoption as public highway would enable the street to have legally enforceable waiting restrictions to manage maintain access to the site.
- 3.5.3 Within the site the form that car parking provision could take could include:
- Car parking within the curtilage of a dwelling – allocated to the occupier.
 - Communal car parking areas not on the highway – allocated or unallocated to occupiers.

3.5.4 Potential Trip Generation

- 3.5.5 In order to estimate the number of trips, the trip rates for planning application 19/01724/FUL have

be utilised. TRICS sites have been selected from the database which match the following criteria as these are considered to provide similar characteristics to the proposed residential development:

- Residential – Flats Privately Owned;
- TRICS sites located within Greater London;
- Within Edge of Town and Edge of Town Centre locations;
- TRICS sites situated in areas of PTAL level 2-4; and
- TRICS sites surveyed between 2011-2019.

3.5.6 **Table 3.1** summarises proposed vehicle trips over the course of a 12-hour day (07:00-19:00). A copy of TRICS outputs are provided within **Appendix D**.

3.5.7 It has been assumed that 60 residential units could be constructed per hectare.

Table 3.1: Proposed Trip Generation

Mode of Travel	Weekday Morning Peak 0800-0900		Weekday Evening Peak 1700-1800		Weekday Daily Trips 0700-1900	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicles	0	1	0	0	9	8
Cyclists	0	0	1	0	1	0
Pedestrians	0	1	1	0	6	6
Public Transport	0	1	1	0	6	6
Total	1	3	2	1	21	20

3.5.8 **Table 3.1** indicates that the proposed development is likely to generate approximately 41 two-way trips over the course of a 12-hour day. It is anticipated that there would be four trips in the AM peak and three trips in the PM peak associated with the site.

4 Summary and Recommendations

4.1 Summary

- 4.1.1 This Transport Feasibility Report and Site Access and Highways Assessment has been prepared by Royal HaskoningDHV (RHDHV) on behalf of Be First (Regeneration) Limited to consider the baseline transport conditions associated with development at Kier Hardie Way, Barking.
- 4.1.2 Whilst in terms of accessibility to public transport, the site's PTAL rating has been calculated as 2, which is considered to be a relatively low score, it is noted that the site is located within walking distance of Upney Underground station on the District Line.
- 4.1.3 The site is well located in terms of access to local facilities and services.
- 4.1.4 A review of collision data in the area over the last five years has not identified any existing trends or factors that would be materially worsened by development at this location.
- 4.1.5 In terms of development potential the 0.129ha site would be able to provide circa 8 dwellings dependent on the size of dwellings required. As the site is in an Outer London area with a PTAL rating of 2 the maximum level of car parking would be 1 spaces per dwelling.
- 4.1.6 The site is not located within a Controlled Parking Zone.
- 4.1.7 The existing vehicular access between Kier Hardy Way and the site is 5.0m wide, with a 1.95m wide footway on the east side of the access. This would be suitable to provide access to the development site. It is not known whether this access is public highway and so the status of the access should be determined.
- 4.1.8 The site would be able to be serviced by refuse collection vehicles and fire pumps. Other delivery and servicing would be undertaken by light goods vehicles/ vans.
- 4.1.9 The site would be able to accommodate sufficient cycle parking to comply with the minimum requirements of the New London Plan.
- 4.1.10 As the site would result in a negligible number of vehicle trips it is considered that the proposals would not therefore impact on the operation of the adjacent highway network. The scale of development proposed is unlikely to adversely impact on public transport service capacity.
- 4.1.11 This report has considered the baseline transport conditions with development at Keir Hardie Way. The key transport related issues associated with development of the site are summarised in **Table 4.1**.

Table 4.1: Summary of Key Transport Risks

Risk Level	Issue	Comment
Low	Highway impact of development	Vehicle trip generation per dwelling is predicted to be low.
Low	Low PTAL Level	The PTAL calculation omits two bus services from along the A1153, which are within 500m of the site. The inclusion of these bus services increases the site to a PTAL 2, close to PTAL 3.
Low	Highway Safety	No serious or fatal PIC were recorded between 2013-2018 in vicinity of the site.

4.2 Recommendations

- 4.2.1 The site is in an appropriate location for a small residential development and such a development could be considered to be sustainable in transport terms.
- 4.2.2 The extent of the highway boundary and the area of site ownership would need to be determined to confirm there are no third party land interests that could affect access to the site.
- 4.2.3 Vehicle parking surveys may be required to assess the impact of the scheme on any displacement of the existing car parking from within the site. The application would need to demonstrate that any additional car parking resulting from the development could be accommodated within the site and so worsen parking on the local highway network.
- 4.2.4 The following documentation would be required to support a planning application for residential development on the site:
- Highways Statement

Appendix A – Site Location Plan



Legend

Keir Hardie Way Site Boundary

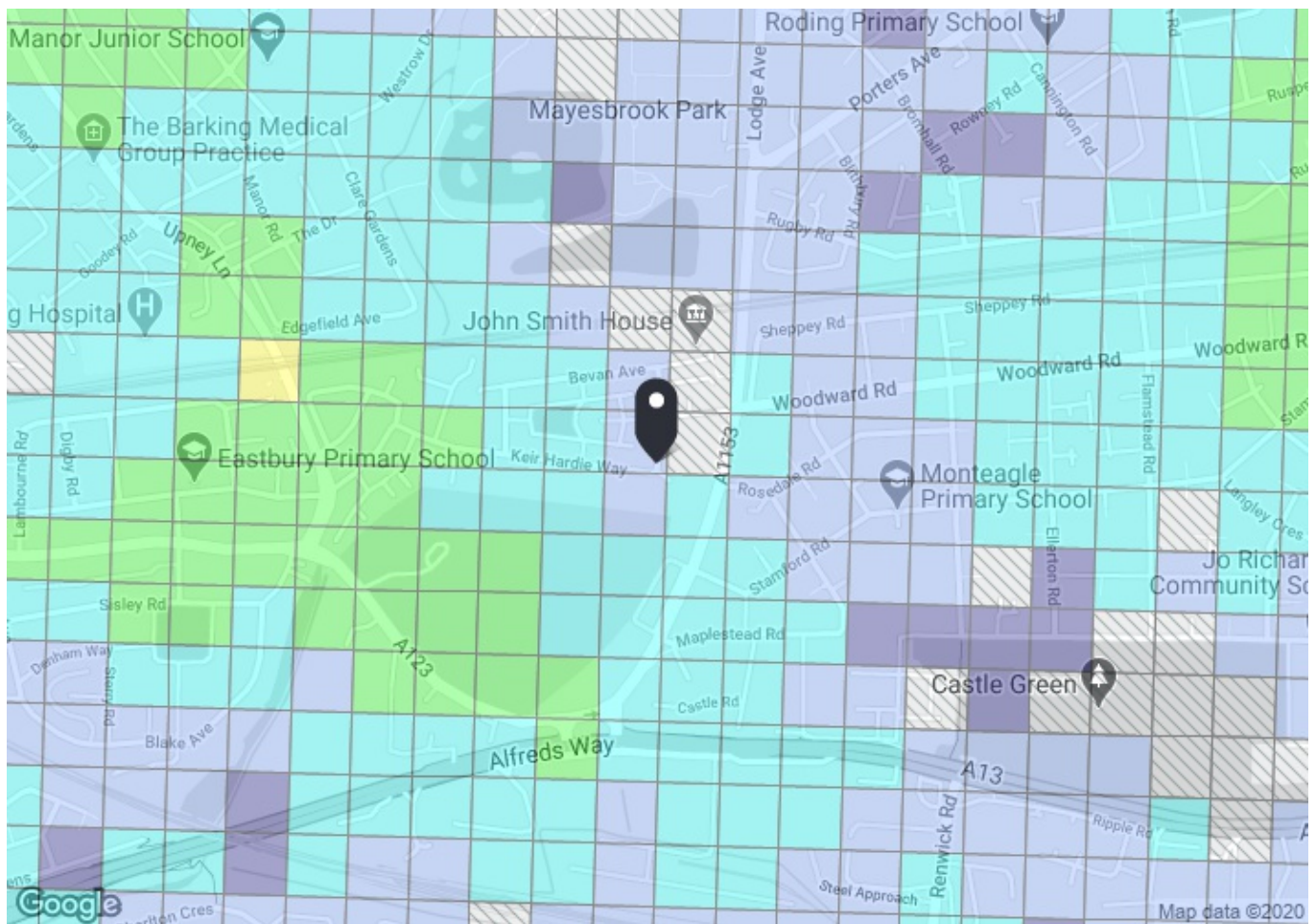
Site Access

Site Access Road

Disabled parking bay located adjacent to the site access road.



Appendix B – PTAL Report



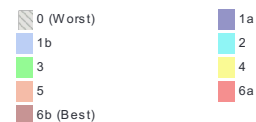
PTAL output for Base Year 1b

Keir Hardie Way
Keir Hardie Way Barking IG11 9NU, UK
Easting: 546482, Northing: 184105

Grid Cell: 99469

Report generated: 28/10/2020

Map key - PTAL



Map layers

 PTAL (cell size: 100m)

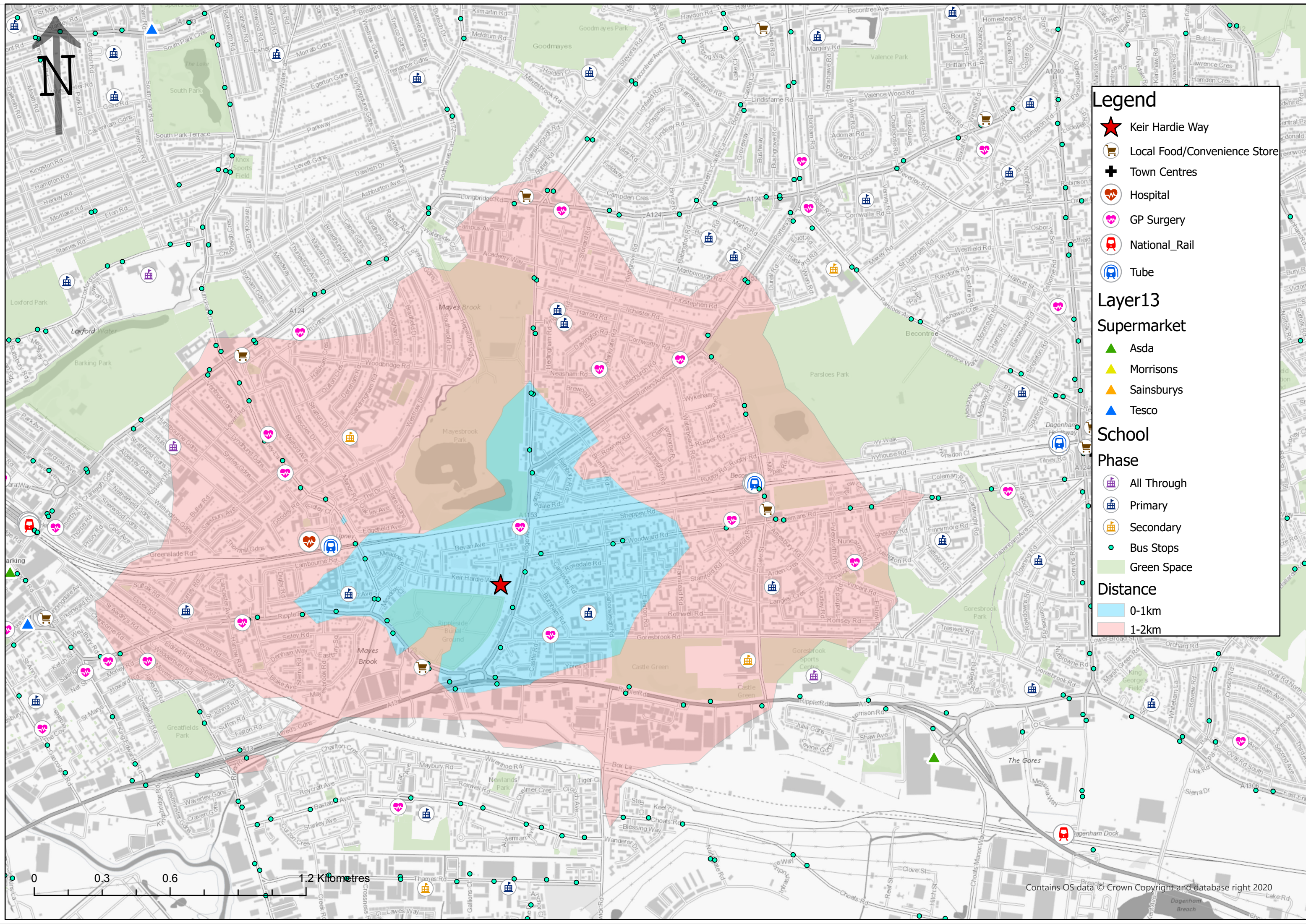
Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
LUL	Upney	'Upminster-EalingBwy'	842.52	5	10.53	6.75	17.28	1.74	0.5	0.87
LUL	Upney	'Upminster-Richmond'	842.52	6	10.53	5.75	16.28	1.84	1	1.84
LUL	Upney	'Richmond-DagEast'	842.52	0.67	10.53	45.53	56.06	0.54	0.5	0.27
LUL	Upney	'Wimbledon-Upminster'	842.52	4	10.53	8.25	18.78	1.6	0.5	0.8
LUL	Upney	'Wimbledon-DagEast'	842.52	1	10.53	30.75	41.28	0.73	0.5	0.36
LUL	Upney	'DagEast-EalingBwy'	842.52	0.67	10.53	45.53	56.06	0.54	0.5	0.27
Total Grid Cell AI:										4.41

Appendix C – Walk Accessibility Catchment Plans



Legend

- ★ Keir Hardie Way
- 🛒 Local Food/Convenience Store
- ✚ Town Centres
- 🏥 Hospital
- 🏠 GP Surgery
- 🚆 National_Rail
- 🚇 Tube

Layer13

Supermarket

- ▲ Asda
- ▲ Morrisons
- ▲ Sainsburys
- ▲ Tesco

School

Phase

- 🏫 All Through
- 🏫 Primary
- 🏫 Secondary
- Bus Stops
- 🌳 Green Space

Distance

- 0-1km
- 1-2km

Appendix D – TRICS Outputs

TRICS 7.6.3

Trip Rate Paramet Number of dwellings

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

Calculation Factor: 1 DWELLS

Count Type: VEHICLES

Time Range	No. Days	ARRIVALS		No. Days	DEPARTURES		TOTALS		
		Ave. DWELLS	Trip Rate		Ave. DWELLS	Trip Rate	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	7	192	0.036	7	192	0.106	7	192	0.142
08:00-09:00	7	192	0.028	7	192	0.111	7	192	0.138
09:00-10:00	7	192	0.045	7	192	0.052	7	192	0.097
10:00-11:00	7	192	0.045	7	192	0.055	7	192	0.1
11:00-12:00	7	192	0.039	7	192	0.062	7	192	0.101
12:00-13:00	7	192	0.049	7	192	0.047	7	192	0.096
13:00-14:00	7	192	0.06	7	192	0.068	7	192	0.128
14:00-15:00	7	192	0.045	7	192	0.049	7	192	0.094
15:00-16:00	7	192	0.076	7	192	0.059	7	192	0.135
16:00-17:00	7	192	0.095	7	192	0.064	7	192	0.159
17:00-18:00	7	192	0.118	7	192	0.077	7	192	0.195
18:00-19:00	7	192	0.121	7	192	0.065	7	192	0.186
19:00-20:00	5	164	0.112	5	164	0.067	5	164	0.179
20:00-21:00	5	164	0.107	5	164	0.062	5	164	0.169
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.976			0.943			1.919

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

Calculation Factor: 1 DWELLS

Count Type: CYCLISTS

Time Range	No. Days	ARRIVALS			No. Days	DEPARTURES			TOTALS	
		Ave. DWELLS	Trip Rate			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	7	192	0.002		7	192	0.007	7	192	0.009
08:00-09:00	7	192	0.003		7	192	0.013	7	192	0.016
09:00-10:00	7	192	0.003		7	192	0.006	7	192	0.009
10:00-11:00	7	192	0.001		7	192	0.003	7	192	0.004
11:00-12:00	7	192	0.001		7	192	0.001	7	192	0.002
12:00-13:00	7	192	0.001		7	192	0.002	7	192	0.003
13:00-14:00	7	192	0.007		7	192	0.005	7	192	0.012
14:00-15:00	7	192	0.001		7	192	0.005	7	192	0.006
15:00-16:00	7	192	0.004		7	192	0.002	7	192	0.006
16:00-17:00	7	192	0.006		7	192	0.001	7	192	0.007
17:00-18:00	7	192	0.009		7	192	0.003	7	192	0.012
18:00-19:00	7	192	0.004		7	192	0.003	7	192	0.007
19:00-20:00	5	164	0.011		5	164	0.001	5	164	0.012
20:00-21:00	5	164	0.004		5	164	0	5	164	0.004
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.057				0.052			0.109

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

Calculation Factor: 1 DWELLS

Count Type: PEDESTRIANS

Time Range	No. Days	ARRIVALS			DEPARTURES			TOTALS	
		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	7	192	0.021	7	192	0.048	7	192	0.069
08:00-09:00	7	192	0.034	7	192	0.109	7	192	0.143
09:00-10:00	7	192	0.042	7	192	0.043	7	192	0.085
10:00-11:00	7	192	0.022	7	192	0.046	7	192	0.068
11:00-12:00	7	192	0.034	7	192	0.038	7	192	0.072
12:00-13:00	7	192	0.055	7	192	0.036	7	192	0.091
13:00-14:00	7	192	0.039	7	192	0.033	7	192	0.072
14:00-15:00	7	192	0.039	7	192	0.036	7	192	0.075
15:00-16:00	7	192	0.073	7	192	0.038	7	192	0.111
16:00-17:00	7	192	0.043	7	192	0.036	7	192	0.079
17:00-18:00	7	192	0.059	7	192	0.039	7	192	0.098
18:00-19:00	7	192	0.051	7	192	0.044	7	192	0.095
19:00-20:00	5	164	0.083	5	164	0.061	5	164	0.144
20:00-21:00	5	164	0.065	5	164	0.056	5	164	0.121
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.66			0.663			1.323

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

Calculation Factor: 1 DWELLS

Count Type: PUBLIC TRANSPORT USERS

Time Range	No. Days	ARRIVALS		No. Days	DEPARTURES		TOTALS		
		Ave. DWELLS	Trip Rate		Ave. DWELLS	Trip Rate	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	7	192	0.006	7	192	0.12	7	192	0.126
08:00-09:00	7	192	0.013	7	192	0.147	7	192	0.16
09:00-10:00	7	192	0.025	7	192	0.045	7	192	0.07
10:00-11:00	7	192	0.011	7	192	0.027	7	192	0.038
11:00-12:00	7	192	0.013	7	192	0.032	7	192	0.045
12:00-13:00	7	192	0.028	7	192	0.033	7	192	0.061
13:00-14:00	7	192	0.016	7	192	0.042	7	192	0.058
14:00-15:00	7	192	0.033	7	192	0.032	7	192	0.065
15:00-16:00	7	192	0.039	7	192	0.032	7	192	0.071
16:00-17:00	7	192	0.047	7	192	0.022	7	192	0.069
17:00-18:00	7	192	0.071	7	192	0.018	7	192	0.089
18:00-19:00	7	192	0.112	7	192	0.019	7	192	0.131
19:00-20:00	5	164	0.14	5	164	0.021	5	164	0.161
20:00-21:00	5	164	0.077	5	164	0.022	5	164	0.099
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			0.631			0.612			1.243

Units

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Vehicles

Time Range	ARRIVALS		DEPARTURES		TOTALS	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
07:00-08:00	0.036	0	0.106	1	0.142	1
08:00-09:00	0.028	0	0.11	1	0.138	1
09:00-10:00	0.045	0	0.052	0	0.097	1
10:00-11:00	0.045	0	0.055	0	0.1	1
11:00-12:00	0.039	0	0.062	1	0.101	1
12:00-13:00	0.049	0	0.047	0	0.096	1
13:00-14:00	0.06	1	0.068	1	0.128	1
14:00-15:00	0.045	0	0.049	0	0.094	1
15:00-16:00	0.076	1	0.059	1	0.135	1
16:00-17:00	0.095	1	0.064	1	0.159	1
17:00-18:00	0.118	1	0.077	1	0.195	2
18:00-19:00	0.121	1	0.065	1	0.186	2
Daily Trip Rates:	0.976	9	0.943	8	1.919	17

Cyclists

Time Range	ARRIVALS		DEPARTURES		TOTALS	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
07:00-08:00	0.002	0	0.007	0	0.009	0
08:00-09:00	0.003	0	0.013	0	0.016	0
09:00-10:00	0.003	0	0.006	0	0.009	0
10:00-11:00	0.001	0	0.003	0	0.004	0
11:00-12:00	0.001	0	0.001	0	0.002	0
12:00-13:00	0.001	0	0.002	0	0.003	0
13:00-14:00	0.007	0	0.005	0	0.012	0
14:00-15:00	0.001	0	0.005	0	0.006	0
15:00-16:00	0.004	0	0.002	0	0.006	0
16:00-17:00	0.006	0	0.001	0	0.007	0
17:00-18:00	0.009	0	0.003	0	0.012	0
18:00-19:00	0.004	0	0.003	0	0.007	0
Daily Trip Rates:	0.057	1	0.052	0	0.109	1

Pedestrians

Time Range	ARRIVALS		DEPARTURES		TOTALS	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
07:00-08:00	0.021	0	0.048	0	0.069	1
08:00-09:00	0.034	0	0.109	1	0.143	1
09:00-10:00	0.042	0	0.043	0	0.085	1
10:00-11:00	0.022	0	0.046	0	0.068	1
11:00-12:00	0.034	0	0.038	0	0.072	1
12:00-13:00	0.055	0	0.036	0	0.091	1
13:00-14:00	0.039	0	0.033	0	0.072	1
14:00-15:00	0.039	0	0.036	0	0.075	1
15:00-16:00	0.073	1	0.038	0	0.111	1
16:00-17:00	0.043	0	0.036	0	0.079	1
17:00-18:00	0.059	1	0.039	0	0.098	1
18:00-19:00	0.051	0	0.044	0	0.095	1
Trip Rates:	0.66	6	0.663	6	1.323	12