

Devonshire Place, Port Talbot

Transport Statement

Client: Tarbed Limited

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REPORT DETAILS

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1. INTRODUCTION

1.1 Background

- 1.1.1 Apex Transport Planning Ltd has been commissioned to produce a Transport Statement (TS) to support a planning application for a proposed residential development on the former Dyffryn Lower Comprehensive School, Devonshire Place, Port Talbot.
- 1.1.2 The proposals are for a redevelopment of the site for 43 new residential dwellings in a mix of one, two and three bedroom houses and apartments. The vehicular access would be obtained from the north of the site via a new priority junction onto York Place.
- 1.1.3 As the site has an existing educational use, it is a brownfield site and has historically generated vehicle movements onto the surrounding highway network. As such, the vehicles generated by the proposals would be unlikely to have a material impact on the operation of the highway during network peak hours. On this basis, a TS is considered an appropriate report to accompany the application.
- 1.1.4 The TS considers the impacts of the proposals in relation to transport including the site connectivity, parking provision and access arrangements, road safety and vehicle trip generation. It has been produced to inform Neath Port Talbot County Borough Council (NPTCBC) of the highways and transport implications of the proposals.

1.2 Scope of Report

- 1.2.1 The scope of work has considered policies and advice set out in Future Wales, Planning Policy Wales 11 (PPW11), Technical Advice Note 18: Transport (TAN18), the Active Travel Act (Wales – 2013), the NPTCBC Local Development Plan (LDP) and Parking Standards Supplementary Planning Guidance (SPG), as well as considering our previous experience of other similar sites.
- 1.2.2 The TS has been structured to include the following:
- A description of the existing conditions including, site location, highway network, road safety analysis and existing travel behaviour in the surrounding area
 - Consideration of planning context, the existing site use and trip generation characteristics
 - Overview of highway network and vehicular connections to the site as well as on-street parking restrictions
 - Review of the connectivity of the site by sustainable modes including walking, cycling and public transport
 - Description of the development proposals, demonstrating safe and appropriate access by all modes, car and cycle parking and servicing and delivery arrangements
 - Forecast vehicle trip generation in the peak hours and consideration of change in vehicle generation from the existing site use
 - Consideration of the impact of the proposals on the local highway network

2. EXISTING CONDITIONS

2.1 Site Location, Use and Access

- 2.1.1 The site is situated in Port Talbot, approximately 1km south of Port Talbot Town Centre and 400m to the south east of Port Talbot Parkway Rail Station. The site is predominantly bounded by residential dwellings and is part of a wider residential and mixed-use area. Directly to the northwest of the site is Central Junior School which is located adjacent to Broad Street.
- 2.1.2 The site was previously occupied by Dyffryn Lower Comprehensive School, and has a number of access points onto the surrounding streets, albeit these were mainly used for pedestrians. As such, vehicles associated with the site were likely to have parked on the surrounding streets.
- 2.1.3 The indicative location of the site in its local context is provided in Figure 2-1.

Figure 2-1: Indicative Site Location



Source: Google Maps

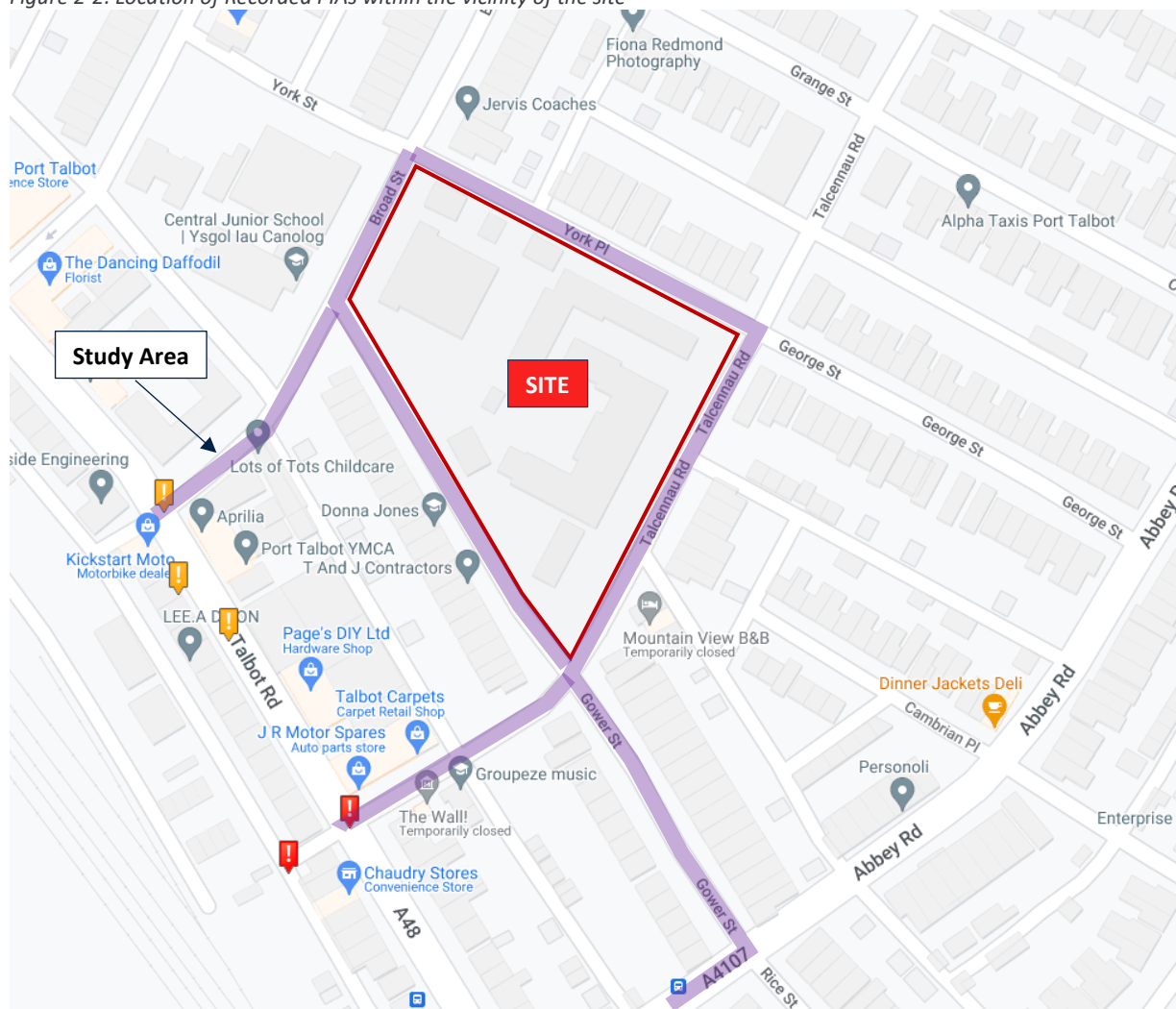
2.2 Local Highway Network

- 2.2.1 All streets surrounding the site are single carriageway residential roads with on-street parking occurring on both sides and all are subject to 20mph speed limits and have streetlighting and footways on each side.
- 2.2.2 York Place runs adjacent to the northern boundary of the site and has a number of terraced houses along its north side. There are no parking restrictions so there is informal on-street parking on both sides of the carriageway. It is c. 8.3m wide and as such of sufficient width for vehicles to park both sides and still enable two cars to pass (4.1m based on Manual for Streets).
- 2.2.3 York Place links to Broad Street and Talcennau Road at either end which connect York Place to Talbot Road (A48). These streets have some parking restrictions relating to the existing school zig zag markings and Talcennau Road has informal parking bays marked on either side.
- 2.2.4 The A48 provides a key route through Port Talbot and connects to the M4 at Junction 41 to the north and Junction 38 to the south.

2.3 Road Safety

- 2.3.1 Personal Injury Accident (PIA) data has been obtained from road safety data published annually by the Department for Transport (DfT). The statistics provide PIA data which has been recorded using the STATS19 accident reporting form. The most recently available five-year dataset, prior to the Covid-19 pandemic (therefore covering a period with 'typical' movements), is between 1st January 2015 and 31st December 2019. The review has also considered data from 2020, as well as provisional data from the first six months of 2021. A total of 6.5 years of data has therefore been reviewed.
- 2.3.2 The study area considered within the analysis covers the local highway network within the vicinity of the site connecting to the A48 and routes to the nearest bus stops, as shown in Figure 2-2.

Figure 2-2: Location of Recorded PIAs within the vicinity of the site



Source: Crashmap.co.uk

- 2.3.3 Over the 6.5 year period, two PIAs occurred within the study area. One of these was a slight injury accident and one was a serious injury accident. There were no fatal injury accidents during this period.
- 2.3.4 None of the incidents involved a pedestrian and there were no PIAs along the roads immediately adjacent to the site including on York Place. No PIAs occurred on the route to the closest bus stop on Abbey Road.
- 2.3.5 The serious PIA occurred at the Talcennau Road / Talbot Road junction and involved a collision between a car and a cyclist. There were no further cyclist incidents within the area, therefore this does not suggest this is a pattern of incidents which would be exacerbated by movements from the development.
- 2.3.6 The PIAs occurred in different locations on the network and there were no clusters of four or more PIAs in a single location.
- 2.3.7 Although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or an issue with the geometry of the highway that would be exacerbated by the development proposals, particularly given the existing site use has historically generated movements on the network.

2.4 Existing Travel Behaviour and Car Ownership

Modal Share

- 2.4.1 The site is located within output area W00005049 in Neath Port Talbot. Table 2-1 shows how the existing residents of this area currently travel to work, as well as providing a comparison with the entire of NPTCBC as obtained from 2011 Census data.

Table 2-1: Journey to Work Mode Split (Census 2011)

Mode	Neath Port Talbot	OA W00005049
Public Transport	5%	8%
Car Driver	75%	65%
Motorcycle	1%	1%
Car Passenger	8%	7%
Bicycle	1%	2%
On Foot	8%	17%
Other	1%	1%
Total	100%	100%

- 2.4.2 The census data shows that 65% of residents living in the surrounding area and commuting to work travel as a car driver, with 17% walking, 8% travelling by public transport, 7% as a car passenger and 2% cycling.
- 2.4.3 The output area in which the site is situated has higher levels of public transport, cycling and walking than the overall NPTCBC area, demonstrating that there is a greater potential for residents of the site to travel by sustainable modes.
- 2.4.4 These statistics have been adjusted to exclude working from home. If this was included, c.4% of residents currently in work, do so from home rather than commuting (in output area W00005049), with c. 7% doing this across NPTCBC. These levels are likely to have significantly increased since 2011. This demonstrates that there is further potential for car use to be constrained to and from the site.
- 2.4.5 Travelling to work is only one journey purpose during peak hours from a residential site. A significant proportion of journeys will also be for education, leisure, and retail purposes and these are likely to have higher levels of sustainable travel, particularly given the local primary school, retail and leisure opportunities are situated within suitable walking distances via appropriate routes (as shown in Section 3).
- 2.4.6 On this basis, Table 2-1 demonstrates that there is good potential for sustainable travel, particularly walking and public transport, to be made to and from the site and a significant number of these movements already occur in this area (and without evidence of a specific safety issue).

Car Ownership

- 2.4.7 The 2011 Census data has been reviewed for the average car ownership in the area in output area W00005049 within which the site is situated. This shows an average of 0.91 cars per household in the output area and that 74% of households owned one car or less. This compares within an average of 1.15 cars per household across NPTCBC and 68% owning one car or less.
- 2.4.8 Based on this data, it is considered that potential future residents would be likely to own one car or less and sustainable modes would provide realistic and attractive alternatives and these are currently being used by existing residents.

3. SUSTAINABLE CONNECTIVITY

3.1 Introduction

- 3.1.1 This section describes the opportunities to make everyday trips by non-car modes. It considers the likelihood of trips being made on foot, by cycle, bus, and rail. The site location is demonstrated to be consistent with the aims of TAN18 and in accordance with sustainable transport policies in Future Wales, PPW11 and the LDP.

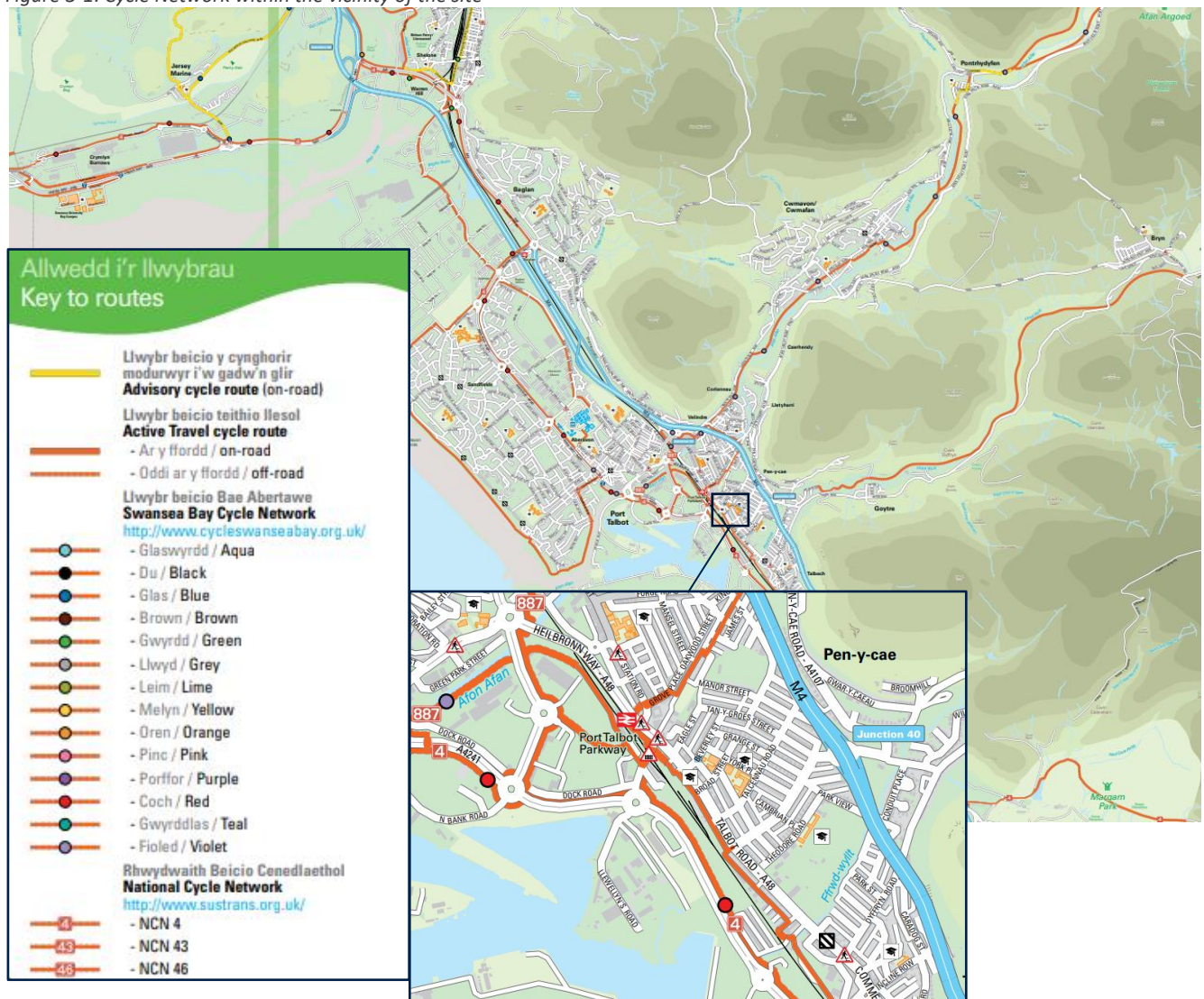
3.2 Walking and Cycling

- 3.2.1 Walking and cycling (collectively known as active travel) are the most important modes of travel at a local level and offer the greatest potential to replace short car journeys.
- 3.2.2 The site is well situated to benefit from existing walking and cycling routes. Suitable footways and crossings are provided throughout the local area, as would be expected within an existing and established urban area and for a site which has an existing school use. The majority of streets within the vicinity of the site have footways on one or both sides of the carriageway, providing links between the site and the surrounding facilities.
- 3.2.3 The routes include footways along York Place, Talcennau Road, Devonshire Place and Broad Street which all bound the site. There is continuous pedestrian infrastructure connecting to the closest bus stop along Abbey Road, as well as to the closest school to the west of the site and local shops within the vicinity of the site.
- 3.2.4 At the Devonshire Place / Talcennau Road there are dropped kerbs and tactile paving which can be accessed from the site via the pedestrian access on Talcennau Road. This provides suitable crossing points for pedestrians to access Gower Street which routes to the closest bus stop.
- 3.2.5 All surrounding streets on the key pedestrian routes have street lighting along their length and the routes and crossings surrounding the site are considered to be of good quality. The local area appropriately accommodates existing pedestrian and cycling movements, including for pupils travelling to school, and the infrastructure would be attractive to potential future residents who wish to walk to and from the site.

Cycle Routes

- 3.2.6 The site is located in close proximity to several cycling routes as indicated on the Neath Port Talbot Cycling map, which has been reproduced in Figure 3-1.

Figure 3-1: Cycle Network within the vicinity of the site



Source: Neath Port Talbot Council

- 3.2.7 Within the vicinity of the site there is the purple cycle route, red cycle route and National Cycle Network (NCN) Route 4.
- 3.2.8 The NCN 4 route runs along a lightly trafficked or traffic free route for significant lengths broadly adjacent to the A48. This provides connections from the site to Margam and runs south through Margam Park.
- 3.2.9 The purple cycle route links to Pontrhydyfen, Cynonville, Duffryn, and Abercragan from Port Talbot centre in a northeast direction.
- 3.2.10 The red cycle route runs from Margam to Baglan and provides a connection to other cycle routes north of the site including the orange cycle route, the green advisory cycle route, and the blue advisory cycle route.
- 3.2.11 These routes provide a good quality of cycling access for potential future residents of the site and can be accessed within a short distance via Talcannau Road or Broad Street then crossing the A48.

3.3 Distances to Facilities

3.3.1 There are a number of publications which suggest guidance for appropriate and acceptable walking and cycling distances to facilities. For reference, these have been summarised as follows.

- Welsh Government - Active Travel (Wales) Act 2013: Within the Active Travel Act Design Guidance it is stated within paragraph 4.1.4 that *“walking as a mode of travel predominates for journeys of less than two miles whilst cycling is more convenient for longer journeys, typically of up to five miles for regular journeys”*. This equates to distances for walking of up to 3.2km and cycling of up to 8km.
- Department for Transport (DfT) – Manual for Streets (2007): MfS states that *‘walkable neighbourhoods’* are typically characterised by having a range of facilities within 10 minutes walking distance (c. 800 metres). MfS also acknowledges that this is not an upper limit and references previous planning policy guidance in that it is generally acknowledged that walking offers the greatest potential to replace short car trips, particularly under 2km.
- CIHT (2015) – Planning for Walking: In relation to shorter trips in particular, (section 2.1) states that across Britain about *‘80% of journeys shorter than 1 mile (1.6km) are made wholly on foot’*.
- CIHT - Guidelines for Providing for Journeys on Foot (2000): suggests preferred maximum distances for commuting journeys are up to 2km.
- DfT – LTN1/20 Cycle Infrastructure Design (paragraph 2.2.2) – states that *“Two out of every three personal trips are less than five miles in length, an achievable distance to cycle for most people”* (c.8km).

3.3.2 As such, based on guidance, it is considered that suitable walking distances are up to 3.2km but journeys within 2km have a greater potential to be made on foot. A 2km distance equates to around a 25-minute walk travelling at 3mph (4.8kph). A 3.2km distance equates to around a 40-minute walk. Sites with a range of facilities within 800 metres are considered to be within a *‘walkable neighbourhood’* and would be highly sustainable locations.

3.3.3 It is considered that journeys of up to 8km are within a suitable cycling distance. A cycling journey of 8km would equate to approximately a 25-minute travel time.

3.3.4 To demonstrate the site’s connectivity, facilities within appropriate distances which are accessed via suitable and established routes have been summarised in Table 3-1. The location of the facilities in the context of the site are shown in Figure 3-2. These facilities have been summarised based on approximate travel distances from the site access via appropriate routes, not straight-line distances.

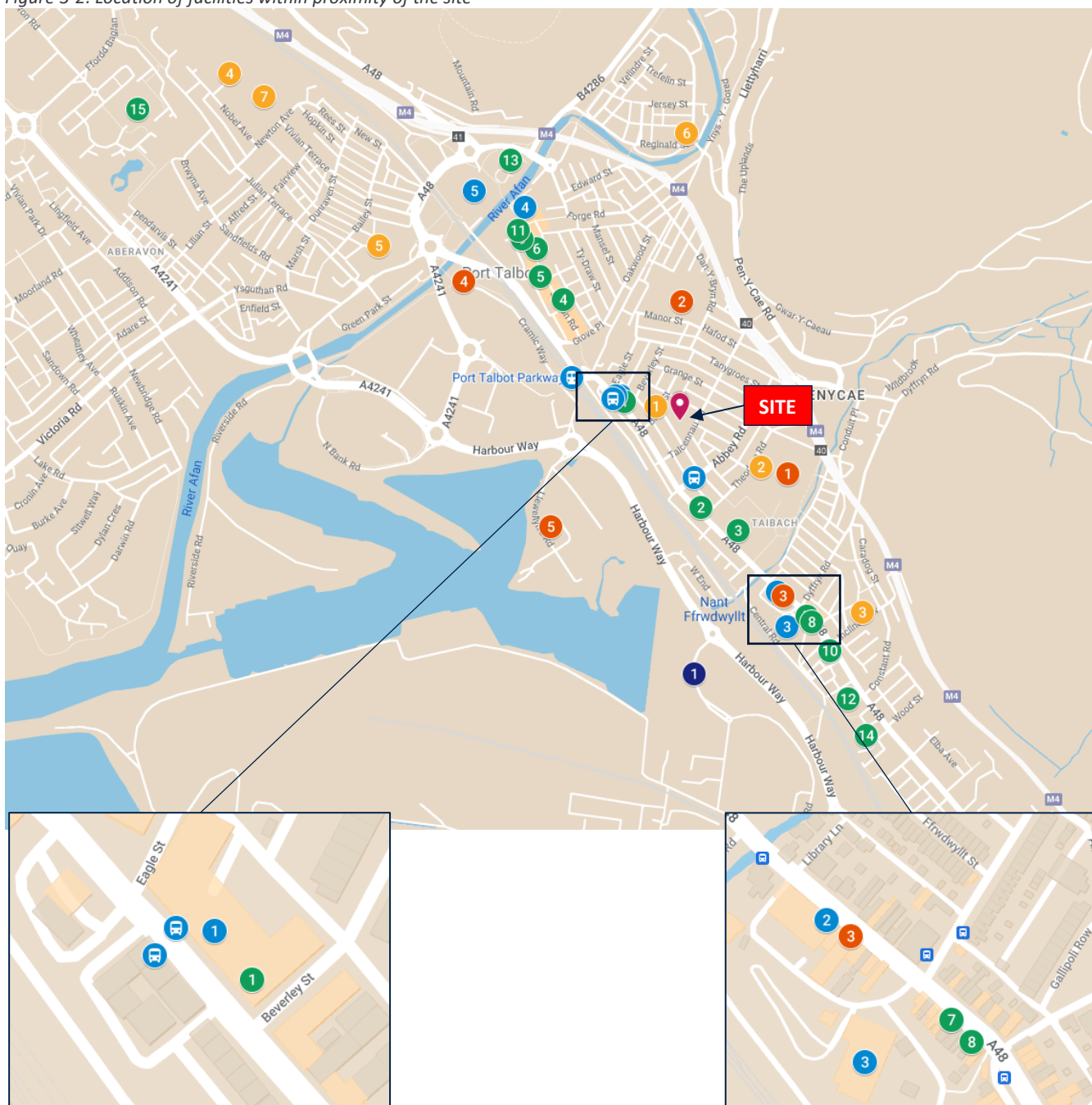
Table 3-1: Proximity of the site to local facilities and services

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Community Facilities				
①	Cash Machine	200	3	1
②	Talbot Road Dental Practice	360	5	1
③	St Theodore’s Church, Port Talbot	490	6	2
④	HSBC Bank	620	8	2
⑤	Nationwide Building Society	730	9	2
⑥	Halifax	800	10	3
⑦	India’s Hair & Beauty	800	10	3
⑧	Post Office	840	11	3
⑨	Lloyds Bank	850	11	3
⑩	Taibach Pharmacy	960	12	3
⑪	Well Port Talbot - Station Road	880	11	3
⑫	Mount Surgery	1100	14	3

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
13	Princess Royal Theatre	1190	15	4
14	Canolfan Cymunedol Taibach Community Centre	1270	16	4
15	Neath Port Talbot Hospital	2650	33	8
Public Transport				
	Gower Street	160	2	1
	Plaza	260	3	1
	The Legion	260	3	1
	Port Talbot Parkway	400	5	1
Retail				
1	SPAR	250	3	1
2	Filco Supermarket	710	9	2
3	ALDI	800	10	3
4	Tesco Superstore	920	12	3
5	Aberafan Shopping Centre	1050	13	3
Education				
1	Central Junior School Ysgol Iau Canolog	50	1	0
2	Central Infants School	390	5	1
3	Eastern Primary School Ysgol Gynradd Dwyrain	1090	14	3
4	St Joseph's Junior School	1130	14	4
5	Saint Joseph's Catholic Infant School	1400	18	4
6	Velindre Community School	1830	23	6
7	St Joseph's R C Comprehensive School	2000	25	6
Leisure				
1	Talbot Memorial Park	450	6	1
2	Aberavon Rugby Football Club	470	6	1
3	Warehouse Fitness	740	9	2
4	Be Awesome Fitness	1400	18	4
5	Port Talbot Watersports and Jet Ski Lake	2280	29	7
Employment				
1	Employment area	1780	22	6

* Based on walking speeds of 80 metres per minute and Cycling Speeds of 320 metres per minute

Figure 3-2: Location of facilities within proximity of the site



Source: Google Maps

Note: Numbers and colours correlate to Table 3-1

- 3.3.5 Table 3-1 and Figure 3-2 show there are a significant number and range of facilities and services situated within comfortable walking and cycling distances which can be accessed via suitable active travel routes. All facilities are within Welsh Government guidance walking and cycling distances, with numerous facilities within a 'walkable neighbourhood' distance. This demonstrates the highly sustainable location of the site.
- 3.3.6 Within an 800m walk, residents would be able to access shops, schools, hairdressers, a post office, a park, a gym, bank, and restaurants as well as the closest bus stops. This is a significant number of facilities within less than a 10-minute walk, which can be utilised for everyday needs purposes. As such, the site is situated in a 'walkable neighbourhood' consistent with the guidance in MfS and is therefore considered to be situated in a highly sustainable location.

3.3.7 There is also a large employment location and numerous other facilities within appropriate walking or cycling distance. This includes a number of larger food store facilities including Tesco, ALDI and the Aberafan Shopping Centre (which includes Iceland and various stores), as well as other leisure and education facilities.

3.3.8 The site is situated in a highly sustainable location, as would be expected for a site in an existing and established residential area. This will encourage walking and cycling and reduce the reliance on the private car, consistent with relevant policies and guidance, including sustainable transport policies in Future Wales, PPW11 and TAN18.

3.4 Public Transport

Bus

3.4.1 The closest bus stops to the site are located on Abbey Road (A4107) and Talbot Road (A48) within a 160m walk (2 minutes). These bus stops are Gower Street (on Abbey Road) which is serviced by the 66, and the X3 Cymru Clipper, and Abbey Road (on Talbot Road) serviced by the 66, 82, 87, 901, the X1 Cymru Clipper, and the X3 Cymru Clipper.

3.4.2 An additional service is provided at Plaza bus stop on Talbot Road approximately 260m from the site which is the 83B linking to Blaengwynfi and Cymmer. This bus stop benefits from bus cage markings, raised kerb, bus flag, shelter, and seating.

3.4.3 Abbey Road benefits from a bus flag, bus cage markings, and raised kerbs for accessible boarding. Gower Street bus stop has a shelter (westbound) and a bus flag (eastbound).

3.4.4 These combined services provide a high frequency of buses connecting to Swansea, Bridgend, Margam, Maesteg, and Neath. A summary of the services is set out in Table 3-2.

Table 3-2: Local Bus Services

Route No.	Route	Frequency				
		Mon-Fri Peak Hours	Mon-Fri Daytime	Mon-Fri Evening	Sat	Sun
66 (Gower Street)	Ridgway Coaches Goytre Road before Cemetery – Aberavon	1 service (08:16)	Every 2 hours (09:42 – 13:42)	No service	Same as Mon - Fri	No service
83B (Plaza)	First South & West Wales Blaengwynfi – Cymmer	1 service (08:12)	No service	No service	No service	No service
87 (Abbey Road)	First South & West Wales Neath – Margam	Morning 1 service (08:46) Evening - every 20 mins	Every 20 mins (08:46 to 19:05)	Until 19:04	Every 30 mins from 08:56 to 18:58	No service
901 (Abbey Road)	First South & West Wales Margam – Orchard Street	1 service (07:56)	No service	No service	No service	No service
82 (Abbey Road)	First South & West Wales Margam – Sandfields	1 service (07:53)	No service	No service	No service	No service
X1 (Plaza)	First South & West Wales Swansea – Bridgend	Every 30 mins	Every 30 mins (06:36 to 19:17)	Until 19:17	Same as Mon - Fri	Hourly (10:27 to 18:27)
X3 (Gower Street)	First South & West Wales Port Talbot – Maesteg	Hourly	Hourly (07:53 to 19:05)	Until 19:05	Same as Mon - Fri	No service

- 3.4.5 During morning peak hours there are around 8 services per hour, or one service every 7-8 minutes, on average. During evening peaks there are around 6 services per hour, or one service every 10 minutes, on average.
- 3.4.6 Services also extend across the weekend, enabling access to buses seven days a week ensuring these are a viable and realistic alternative to the car for residents. Saturday bus services run from 06:36 to 19:17, and Sunday bus services run from 10:27 to 18:27.
- 3.4.7 Potential future residents of the site can access frequent bus services, linking to a variety of destinations including local and more regional locations. The bus services from closest to the site provide a feasible and attractive option for work related journeys. They can also be used to access destinations for leisure, retail and education purposes.
- 3.4.8 Given the extent and proximity of numerous bus routes, the site has excellent accessibility by bus which offers a realistic travel option for potential future residents of the site. This will assist in minimising the vehicle trip generation from the site and reduce the need for residents to own a car.

Rail

- 3.4.9 The closest rail station is Port Talbot Parkway which is located approximately a 400m walk northeast of the site. This can be accessed within a 5-minute walk or 1 minute cycle. Port Talbot Parkway Rail Station has cycle parking spaces, which enables journeys to be made from the site by cycle and then rail, with a cycle parked at the station, albeit walking and then travelling by rail will be an attractive form of travel.
- 3.4.10 Trains departing from Port Talbot Parkway are operated by Transport for Wales and Great Western Railway, and provide connections to London Paddington, Cardiff Central, Swansea, Manchester Piccadilly and Carmarthen.
- 3.4.11 There is a journey time of c.20 minutes for journeys to Swansea and c.35 minutes to Cardiff Central. There are approximately five trains per hour departing from Port Talbot Parkway.
- 3.4.12 As such, it is feasible and attractive to use the rail services for commuting purposes, particularly to Swansea and Cardiff, although rail is also likely to be attractive for other journey purposes such as leisure, retail, or business journeys. A combined walk/cycle and rail journey has excellent potential for replacing car journeys and further reducing the requirement for owning or travelling by car.

3.5 Summary

- 3.5.1 The site is situated in a highly sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services and employment within appropriate distances via good quality routes, reducing the need to own a car. In this regard, the site location is consistent with the sustainable transport policies in PPW11 (in particular paras 4.1.10 – 4.1.17).
- 3.5.2 The site also has excellent public transport links, which provide a suitable, attractive and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to own a car. It will also benefit and attract residents that would prefer to travel by public transport.
- 3.5.3 Potential future residents would have a realistic choice of modes of travel for all journey purposes. This will minimise the impact of the development and reduce the parking demand on the site.

- 3.5.4 The site location will encourage and promote sustainable travel behaviour, be attractive to residents who do not own a car or have low car ownership and is fully in accordance with transport policies in TAN18, PPW11 and Future Wales.

4. DEVELOPMENT PROPOSALS

4.1 Overview

4.1.1 The proposals are for a development of 43 new homes with a mix of one, two and three bedroom houses and apartments with internal community gardens and open space. The development would comprise of the following:

- 1 bed apartment – 18 units
- 2 bed apartment – 6 units
- 2 bed house – 8 units
- 3 bed house – 11 units

4.1.2 The proposed site layout is shown in Appendix A.

4.2 Access and Layout

Vehicle Access

4.2.1 Vehicular access will be obtained from a new priority junction access onto York Place. The priority junction would have radii of 5.5m on each side and a carriageway width of 5.5m. The access would also provide footway into the site of 2m in width on both sides for an initial 8m and then a crossing is provided to access the footways on the west side.

4.2.2 Visibility of 2.4m x 25m is provided at the junction, which is in accordance with the requirements in TAN18 for 20mph speeds. Visibility is contained entirely within the adopted highway or within the site boundary and sightlines are available from a 2m height from the junction to a height of 0.6m at the nearside kerb.

4.2.3 The access geometry and visibility splays are shown in Appendix B. Swept path analysis showing a refuse vehicle entering and exiting the site access appropriately is provided within Appendix C.

4.2.4 The site access arrangements are considered safe and suitable to accommodate the movements generated by the proposals.

Pedestrian access

4.2.5 Footways are provided on both sides of the site access from York Place and a suitable crossing provided between the two within the site.

4.2.6 The footways link to other internal footways within the site, as well as a shared space environment which is considered safe and suitable for the movements generated by the proposals.

4.2.7 There are also an additional pedestrian accesses located on Talcennau Road and Broad Street, and two on Devonshire Place, and as such these ensure the site has excellent permeability and connectivity with the surrounding area.

4.2.8 The arrangements are considered safe and suitable for this site which will have a low-speed environment and the design of the site and multiple connections points will encourage walking movements.

4.3 Parking

Car Parking Provision

- 4.3.1 It is proposed to provide 45 car parking spaces within the site for residents. The parking provision on the site provides two spaces for three bedroom units, one space for two bedroom units and 9 unallocated spaces for the 18 one-bedroom apartments.
- 4.3.2 NPTCBC Supplementary Planning Guidance (SPG) (2016) – Parking Standards, sets out the guidance on car parking provision for new developments. The maximum parking standards for residential houses and apartments are 1 space per bedroom with a maximum of 3 spaces per dwelling. In addition, there is a requirement for 1 visitor space per 5 units.
- 4.3.3 Applying the maximum standards to the proposals, would equate to 79 spaces for the dwellings plus 9 spaces for visitors (88 spaces in total). Based on the highly sustainable location of the site, the low level of car ownership in the surrounding area, and to encourage sustainable travel in accordance with PPW11 and Future Wales, this is considered an overly robust level of parking provision to apply to the site.
- 4.3.4 The SPG allows for reductions to be applied to the maximum standards based on both the sustainable location of the site and potential car ownership levels. Within paragraph 3.2.1 it states, *“flexibility within the standards allows local circumstances to be taken into account.”*
- 4.3.5 Note 5 below the residential standards table in the SPG also states *“For developments where clear evidence has been supplied that car ownership levels will be lower than average, a more flexible approach to numbers of parking spaces may be taken.”*
- 4.3.6 To consider a reduction in parking, there is a sustainability calculation criteria set out in Appendix F of the SPG, which allows a reduction in the number of spaces per dwelling, dependent on the sustainable score. A sustainability points calculation has therefore been undertaken using the guidance and based on the analysis presented in Section 3 of this report. The resultant calculations and sustainability points score for the site have been summarised in Table 4-1.

Table 4-1: Parking Sustainability Points Calculation

Sustainability Criteria	Maximum Walking Distance	Single Sustainability Points	Notes	Points
Local Facilities				
Local facilities include a food store, post office, health facility, school etc. Access to two of these within the same walking distance will score single points, whereas access to more than two of these will double the points score.	200m	3	Central Junior School	
	400m	2	Talbot Road Dental practice, SPAR, Central Infants School	4
	800m	1	Filco supermarket, ALDI, HSBC bank, Nationwide Building Society, Halifax, Talbot memorial park, Aberavon Rugby Football Club, Warehouse Fitness	
Public Transport				
Access to bus stop or railway station	300m	3	Gower street, Abbey Road, Plaza bus stops	3
	400m	2	Port Talbot Parkway	
	800m	1		
Cycle Route				
Access to a cycle route	200m	1	NCN 4 adjacent to Talbot Road (A48)	1
Frequency of Public Transport				
Bus or rail service within 800m walking distance which operates consistently between 7am and 7 pm. Deduct one point for service which does not extend to these times.	5 minutes	3	Bus 66, 87, X1, X3 have combined 6-7 bus per hour Port Talbot Parkway has on average 5 services per hour This equates to 11-12 services an hour or 1 service every c.5 minutes, on average. Most services run between 7am and 7pm	
	20 minutes	2	Bus 87 runs every 20 minutes from 08:46 to 19:05	2
	30 minutes	1	Bus X1 runs every 30 minutes from 06:36 to 19:17	
Total				10

- 4.3.7 As shown in Table 4-1 the site location scores 10 sustainability points which equates to an allowable reduction of up to 2 spaces per dwelling for a residential use. If this were fully applied to the site, this would equate to only two parking spaces being required across the entire site.
- 4.3.8 As such, the proposed level of 45 residential parking spaces is considered appropriate and in line with the NPTCBC parking standards, being below the maximum level but not applying the full potential reduction. This recognises the sustainable location of the site whilst minimising the potential for overspill parking.
- 4.3.9 In accordance with Note 5 of the residential parking standards, 2011 Census data for car ownership has also been reviewed for the surrounding area and this is set out in Section 2. This shows that in the immediate surrounding area there is a low level of ownership at 0.91 cars per house and 40% of households do not own a car. As such, it is considered appropriate to provide parking which equates to 1.05 spaces per household for the entire development (not including visitor parking).
- 4.3.10 There is also significant availability for on-street for car parking within the vicinity of the site immediately adjacent to the site boundary on all sides. It is considered appropriate for the significant majority of visitor demand to be accommodated on-street, including within the site itself. The use of on-street parking is recognised within MfS as the most efficient use of space and appropriate for accommodating car parking, where this is possible.
- 4.3.11 In paragraph 8.3.13 of MfS it states *“It is recommended that, in most circumstances, at least some parking demand in residential... areas is met with well-designed on-street parking.”*
- 4.3.12 Paragraph 8.3.15 then continues on to state that: *“In planning for expected levels of car ownership it is not always necessary to provide parking on site [i.e. in off-street parking bays]. In some cases it may be*

appropriate to cater for... anticipated demand on-street. This could be the case, for example... where a low car-ownership development is proposed.”

- 4.3.13 MfS also states that on-street parking is the most efficient and flexible use of space, and within paragraph 8.3.2 suggests that residential parking policies should take account of: *“Expected levels of car ownership, the importance of promoting good design and the need to use land efficiently.”*
- 4.3.14 MfS also provides a comparison of the efficiency of different types of parking for new developments. This confirms that on-street parking is the most efficient use of space.
- 4.3.15 In addition, visitors can park within the residents spaces on-site, where these are not being used. Given the sustainable location of the site, it is also well connected for visitors to travel by walking, cycling and public transport.
- 4.3.16 The parking is considered to be in accordance with the Welsh Government overarching planning policy *Future Wales: The National Plan 2040* which states on page 86 that *“Planning authorities should promote car-free and low car developments in accessible locations.”*
- 4.3.17 Policy 12 also states that *“Planning authorities must act to reduce levels of car parking in urban areas, including supporting car free developments in accessible locations and developments with car parking spaces that allow them to be converted to other uses over time.”*
- 4.3.18 The proposed parking provision, given the highly sustainable location, is fully in accordance with the aspirations and policies of the Welsh Government for encouraging active travel and public transport use. The connectivity of the site by sustainable modes of travel and relevant Welsh Government sustainable transport planning policies are set out in Section 3.

Car Parking Layout

- 4.3.19 All parking spaces within the site would have dimensions of 2.6m x 4.8m with at least a 6m aisle width to allow for manoeuvring, in line with the SPG. Driveways provide an additional 1.2m adjacent to the space to enable access to rear gardens or buildings, where needed. Vehicles can manoeuvre into and out of the spaces appropriately, as shown within the swept path analysis in Appendix C.

Cycle Parking

- 4.3.20 The SPG sets out the cycle parking standards in Appendix D of the SPG. For residential apartments, there is a requirement for 1 stand per 5 bedrooms. The apartments have a total of 30 bedrooms and as such, this would equate to a minimum provision of 6 stands. This has been provided in secure and covered cycle parking shelters in two locations.
- 4.3.21 The houses will be provided with parking within the curtilage of each individual dwelling, in line with guidance.

4.4 Servicing and Emergency Access

- 4.4.1 Servicing would mainly relate to refuse collection which would be undertaken internally within the site. Swept path analysis has been undertaken using a refuse vehicle with dimensions provided by NPTCBC. Swept paths in Appendix C show refuse vehicles are able to safely stop within 25m of all bin storage locations on the site and can manoeuvre appropriately. A refuse vehicle can enter and exit the site in forward gear.

- 4.4.2 MfS states Building Regulations on refuse collection distances in that waste collection vehicles should be able to get within 25 metres of the storage points. The arrangements are in line with Building Regulations (and MfS) and considered safe and appropriate.
- 4.4.3 A fire tender will also be able to get within 45 metres of all properties and turn within the site, if needed. As such, the layout is appropriate for access by emergency vehicles.

5. TRIP GENERATION AND TRAFFIC IMPACTS

5.1 Introduction

- 5.1.1 This section sets out the forecast trip generation of the proposed development and the estimated vehicle generation from the existing school use. The existing and proposed uses have then been compared.
- 5.1.2 The vehicle trip generation has been undertaken using the Trip Rate Information Computer System (TRICS). The TRICS database predicts the likely numbers of arrivals and departures by utilising surveys of existing sites. The database has been analysed for sites with similar characteristics in terms of use, scale, location and accessibility. Trip rates have been obtained and applied to estimate trip generation during network peak hours and over a daily period.

5.2 Existing Vehicle Trip Generation

- 5.2.1 The existing site has a primary school use and for the purposes of trip generation estimates, it has been estimated that the school had 485 pupils, based on the capacity of the adjacent Central Infant / Junior School which is a comparable (albeit smaller) size.
- 5.2.2 The following search criteria have been applied in TRICS to obtain surveys of similar uses:
- 04 – Education/A – Primary Education
 - Located in England, Scotland and Wales (excluding London)
 - Surveys from Monday to Friday
 - Sites with between 250-550 pupils
 - Edge of Town Centre, Suburban Area, Neighbourhood Centre locations (sites then chosen where similar locations for parking and surrounding area)
 - Vehicle surveys carried out since 2010
 - Removed surveys that were undertaken during COVID-19 restrictions
 - Removed sites with high levels of parking
 - Removed sites with non-comparable parking
- 5.2.3 The above search criteria resulted in the identification of 6 similar sites. The estimated vehicle trip rates per pupil and trip generation for the existing site use are set out in Table 5-1. The full TRICS reports are included within Appendix D.

Table 5-1: Existing Site Use: Primary education – Vehicle Trip Generation

Time Period	Trip Rates (per pupil)			Trip Generation (485 pupils)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.274	0.196	0.470	133	95	228
PM Peak (17:00-18:00)	0.014	0.021	0.035	7	10	17
12 Hour (07:00-19:00)	0.781	0.785	1.566	379	381	760

- 5.2.4 Based on the average trip rates for the comparable sites, the existing site use is estimated to generate approximately 228 two-way vehicle movements in the AM network peak hour and 17 two-way vehicle movements in the PM network peak hour. Over a 12 hour period, the existing use is estimated to have 760 two-way movements.

5.3 Proposed Vehicle Trip Generation

- 5.3.1 The trip generation for the proposed residential use has considered private dwellings, for robustness. Applying the private housing trip rates is the most robust generation for the proposals.

5.3.2 The following search criteria have been applied in TRICS to obtain surveys of similar uses:

- 03 – Residential/A – Houses privately owned
- Located in England and Wales (excluding London)
- Surveys from Monday to Friday
- Sites with 6 -100 dwellings
- Edge of Town Centre, Suburban Area, Neighbourhood Centre locations (for robustness, given this site is on the edge of a town centre)
- Vehicle surveys carried out since 2010
- Removed sites with less than 1,000 population within 1 mile
- Removed surveys undertaken during COVID-19 restrictions
- Removed sites which consisted of detached houses only
- Removed sites which consisted of bungalows

5.3.3 The above search criteria resulted in the identification of 27 similar sites. The forecast vehicle trip rates per household and trip generation for the proposed site use are set out in Table 5-2. The full TRICS reports are included within Appendix E.

Table 5-2: Proposed Residential Development - Vehicle Trip Generation

Time Period	Trip Rates (per unit)			Trip Generation (43 units)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.135	0.376	0.511	6	16	22
PM Peak (17:00-18:00)	0.350	0.165	0.515	15	7	22
12 Hour (07:00-19:00)	2.137	2.242	4.379	92	96	188

5.3.4 Table 5-2 demonstrates that the proposed development is forecast to generate 22 two-way vehicular movements during the AM peak (0800 – 0900) and PM peak (1700 – 1800) hours. Over a 12 hour period, the proposed development is forecast to generate 184 two-way vehicle movements.

5.4 Net Change and Impacts

5.4.1 Based on the trip generation analysis, the forecast net change in vehicle generation resulting from the proposed redevelopment of the existing school use for a residential use is set out in Table 5-3.

Table 5-3: Net Change in Vehicle Generation

Time Period	Existing School			Proposed Residential Use			Net Change		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
AM Peak (08:00-09:00)	133	95	228	6	16	22	-127	-79	-206
PM Peak (17:00-18:00)	7	10	17	15	7	22	8	-3	5
12 Hour (07:00-19:00)	379	381	760	92	96	188	-287	-285	-572

5.4.2 The TRICS analysis shows that the proposals are forecast to have significantly lower vehicle movements in the AM peak and a similar number of vehicle movements in the PM peak. Over a 12 hour period, there is forecast to be a significant reduction of 572 vehicle movements.

5.4.3 As such, the proposals would not have an unacceptable impact on road safety or a material impact on highway capacity. It is also not anticipated that the proposals would have a material impact on parking stress on the surrounding streets.

6. SUMMARY AND CONCLUSIONS

6.1 Summary

- 6.1.1 This Transport Statement (TS) has been provided in support of a planning application for a proposed residential development on the former Dyffryn Lower Comprehensive School, Devonshire Place, Port Talbot.
- 6.1.2 This report has been prepared to provide the necessary information for the Local Highway and Planning Authorities to consider the merits of the proposals in terms of location, connectivity, highway safety, parking, access and the impact on the local highway network.
- 6.1.3 The proposals are for a redevelopment of the site for 43 new residential dwellings in a mix of one, two and three bedroom houses and apartments. The vehicular access would be obtained from the north of the site via a new priority junction onto York Place.
- 6.1.4 The site is situated in a highly sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services, educational and employment locations within appropriate distances via good quality routes, reducing the need to own a car.
- 6.1.5 The site also has excellent public transport links, which provide a suitable, attractive and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to own a car. It will also benefit and attract residents that would prefer to travel by public transport.
- 6.1.6 It is proposed to provide 45 car parking spaces within the site for residents. The parking provision on the site provides two spaces for three bedroom units, one space for two bedroom units and 9 unallocated spaces for the 18 one-bedroom apartments.
- 6.1.7 The parking provision is consistent with the NPTCBC Standards allowing for a reduction against maximum levels in accordance with the sustainable criteria calculation.
- 6.1.8 There is also significant availability for on-street for car parking within the vicinity of the site immediately adjacent to the site boundary on all sides. It is considered appropriate for the significant majority of visitor demand to be accommodated on-street. The use of on-street parking is recognised within MfS as the most efficient use of space and appropriate for accommodating car parking, where this is possible. In addition, visitors can park within the residents spaces on-site, where these are not being used. Given the sustainable location of the site, it is also well connected for visitors to travel by walking, cycling and public transport.
- 6.1.9 Obtained road safety data does not indicate an existing safety issue which would be exacerbated by the proposals and no evidence of a safety issue on key pedestrian routes.
- 6.1.10 The site has an existing school use which has historically generated vehicle movements on the network and car parking demand on the surrounding streets. Trip generation analysis has shown that the proposed residential use would generate significantly less vehicle movements during the AM peak period and a similar level of movements in the PM peak hour in comparison with the existing school use. As such, the proposals would not have a material impact on the operation of the highway.

6.2 Conclusions

- 6.2.1 The site location will encourage and promote sustainable travel behaviour, attract residents who choose not to own a car or have low car ownership and is fully in accordance with transport policies in Future Wales, PPW11, and TAN18.
- 6.2.2 Data does not indicate a road safety issue which would be exacerbated by the proposals. The development would not have an unacceptable impact on road safety and the access arrangements and pedestrian routes will provide safe and suitable access for the proposed residential use.
- 6.2.3 The proposed parking provision is fully in accordance with the objectives for encouraging sustainable travel and reducing car use as set out in PPW11 and Future Wales.
- 6.2.4 The proposals will not have a material impact on the operation of the highway network and no mitigation is required.
- 6.2.5 The analysis presented within this TS allows the highway authority to provide a positive recommendation on the planning application.

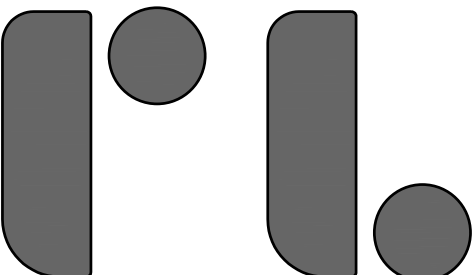
Appendix A Proposed Site Layout Plan



Accommodation Schedule							
Unit code	Type	Number	Percentage %	Floor area (sqm)	(sqft)	Total coverage (sqm)	(sqft)
1B2P Flat (Common Access)	1B	18	42	51.8	558	932	10,036
2B3P Flat (Walk Up - GF)	2B	1	2	59.9	645	60	645
2B3P Flat (Walk Up - FF)	2B	1	2	69.2	745	69	745
2B3P Flat Type 2 (Walk Up-GF)	2B	2	5	61.0	656	122	1,312
2B3P Flat Type 2 (Walk Up-FF)	2B	2	5	69.8	751	140	1,502
2B4P House	2B	8	19	84.4	908	675	7,268
3B5P House	3B	6	14	94.0	1,012	564	6,071
3B5P House T2	3B	4	9	95.8	1,031	383	4,125
3B5P House (Existing Building)	3B	1	2	98.3	1,058	98	1,058
Total		43	100			2,562	27,579
				Net Developable (ha)	Net Developable (acres)	Site Coverage (sqft per acre)	
				0.525	1.298	21,247	

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rev.	date	description
A	28/11/22	New substation moved
B	05/12/22	Boundary amended
C	06/12/22	Minor amendments
D	08/12/22	Minor amendments



Roberts Limbrick
project

Residential Development
Devonshire Place
Port Talbot

client
Linc Cymru

drawing
Proposed Site Plan

status
PLANNING

ROBERTS LIMBRICK LTD

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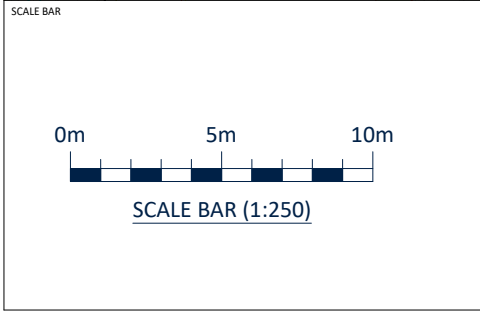
date
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author
EP

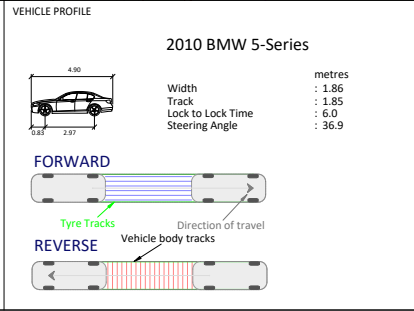
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Appendix B Access Layout and Visibility Splays



- NOTES
1. General Arrangement drawing suitable for planning purposes only. This drawing is not suitable for construction.
 2. The content of this drawing is subject to detailed design considerations such as ground conditions, drainage and utilities.
 3. Drawing is based on OS mapping data and the proposed site layout plan. Ordnance Survey, (c) Crown Copyright 2021. All rights reserved. Licence number 100022432
 4. Please do not scale from this drawing



REVISIONS (CONTINUED)

Rev	Date	Description	By	App
PO1	23/06/22	First Issue.	SD	DC

REVISIONS

Rev	Date	Description	By	App
PO1	23/06/22	First Issue.	SD	DC

Apex
TRANSPORT PLANNING

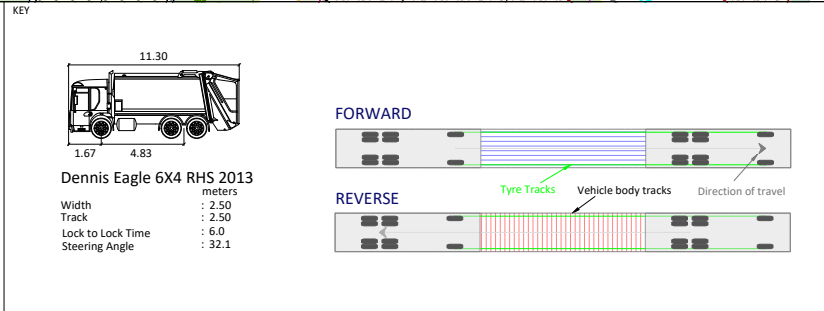
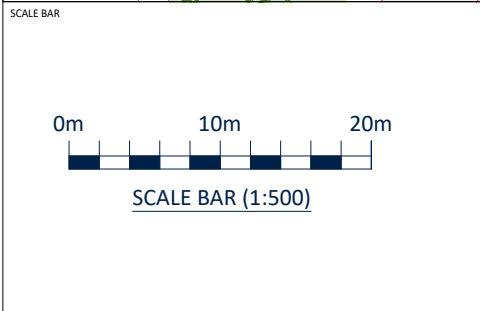
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CLIENT
LINC CYMRU

PROJECT
DEVONSHIRE PLACE, PORT TALBOT

TITLE ACCESS VISIBILITY SPLAYS AND LARGE CAR SWEPT PATHS	
PROJECT NO. C22-004	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C22004-ATP-DR-TP-002	

Appendix C Swept Path Analysis



REVISIONS (CONTINUED)

Rev	Date	Description	By	App
P04	23/06/22	Revised Frame	SD	DC
P03	01/06/22	Revised swept path	SD	DC
P02	31/05/22	Revised refuse vehicle size	SD	DC
P01	24/05/22	First Issue:	SD	DC

REVISIONS

Rev	Date	Description	By	App
P04	23/06/22	Revised Frame	SD	DC
P03	01/06/22	Revised swept path	SD	DC
P02	31/05/22	Revised refuse vehicle size	SD	DC
P01	24/05/22	First Issue:	SD	DC

Apex
TRANSPORT PLANNING

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CLIENT
LINC CYMRU

PROJECT
DEVONSHIRE PLACE

TITLE SWEPT PATH ANALYSIS		
PROJECT NO. C22-004		SCALE @ A3 1:500
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. C22004-ATP-DR-TP-001		

Appendix D TRICS Outputs – Existing School Use

Apex Transport Planning Ltd Park Place Cardiff

Licence No: 502501

Filtering Summary

Land Use	04/A	EDUCATION/PRIMARY
Selected Trip Rate Calculation Parameter Range	250-550	PUPILS
Actual Trip Rate Calculation Parameter Range	260-449	PUPILS
Date Range	Minimum: 01/01/10	Maximum: 25/11/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	2
	Tuesday	1
	Wednesday	1
	Thursday	1
	Friday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	3
	Neighbourhood Centre (PPS6 Local Centre)	3
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	10,001 to 15,000	1
	25,001 to 50,000	3
	50,001 to 100,000	1
Population <5 Mile ranges selected	75,001 to 100,000	1
	125,001 to 250,000	1
	250,001 to 500,000	3
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	5
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	6

Calculation Reference: AUDIT-502501-220628-0606

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION

Category : A - PRIMARY

TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	2 days
11	SCOTLAND	
	DU DUNDEE CITY	1 days
	FI FIFE	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: Number of pupils
 Actual Range: 260 to 449 (units:)
 Range Selected by User: 250 to 550 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 25/11/19

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	6 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)	3
Neighbourhood Centre (PPS6 Local Centre)	3

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

Selected Location Sub Categories:

Residential Zone	4
Village	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

F1(a) 6 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	1 days
10,001 to 15,000	1 days
25,001 to 50,000	3 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:

75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	3 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

No PTAL Present	6 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	DU-04-A-01	PRIMARY SCHOOL	DUNDEE CITY
	FALKLAND CRESCENT		
	DUNDEE		
	BROUGHTY FERRY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	412	
	Survey date: MONDAY	21/05/12	Survey Type: MANUAL
2	FI-04-A-01	PRIMARY SCHOOL	FIFE
	NORTHBANK ROAD		
	NEAR DUNFERMLINE		
	CAIRNEYHILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of pupils:	285	
	Survey date: WEDNESDAY	27/05/15	Survey Type: MANUAL
3	LC-04-A-06	PRIMARY SCHOOL	LANCASHIRE
	SEVERN ROAD		
	BLACKPOOL		
	SOUTH SHORE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of pupils:	449	
	Survey date: TUESDAY	27/09/16	Survey Type: MANUAL
4	TW-04-A-01	PRIMARY SCHOOL	TYNE & WEAR
	GLYNWOOD GARDENS		
	GATESHEAD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	260	
	Survey date: MONDAY	07/10/13	Survey Type: MANUAL
5	TW-04-A-02	PRIMARY SCHOOL	TYNE & WEAR
	KELLS LANE		
	GATESHEAD		
	LOW FELL		
	Neighbourhood Centre (PPS6 Local Centre)		
	No Sub Category		
	Total Number of pupils:	416	
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL
6	WY-04-A-01	PRIMARY SCHOOL	WEST YORKSHIRE
	SHAKESPEARE AVENUE		
	LEEDS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	370	
	Survey date: THURSDAY	19/09/13	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CW-04-A-03	parking not comparable
LN-04-A-01	location not comparable
NR-04-A-03	parking not comparable
SC-04-A-01	location not comparable
SM-04-A-01	location not comparable
WR-04-A-02	parking not comparable

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

TOTAL VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	6	365	0.044	6	365	0.011	6	365	0.055
08:00 - 09:00	6	365	0.274	6	365	0.196	6	365	0.470
09:00 - 10:00	6	365	0.044	6	365	0.078	6	365	0.122
10:00 - 11:00	6	365	0.017	6	365	0.017	6	365	0.034
11:00 - 12:00	6	365	0.024	6	365	0.019	6	365	0.043
12:00 - 13:00	6	365	0.017	6	365	0.019	6	365	0.036
13:00 - 14:00	6	365	0.013	6	365	0.023	6	365	0.036
14:00 - 15:00	6	365	0.076	6	365	0.023	6	365	0.099
15:00 - 16:00	6	365	0.203	6	365	0.244	6	365	0.447
16:00 - 17:00	6	365	0.050	6	365	0.109	6	365	0.159
17:00 - 18:00	6	365	0.014	6	365	0.021	6	365	0.035
18:00 - 19:00	6	365	0.005	6	365	0.025	6	365	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.781			0.785			1.566

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:	260 - 449 (units:)
Survey date range:	01/01/10 - 25/11/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	6

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.

Apex Transport Planning Ltd Park Place Cardiff

Licence No: 502501

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

TAXIS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	6	365	0.000	6	365	0.000	6	365	0.000
08:00 - 09:00	6	365	0.002	6	365	0.002	6	365	0.004
09:00 - 10:00	6	365	0.000	6	365	0.000	6	365	0.000
10:00 - 11:00	6	365	0.000	6	365	0.000	6	365	0.000
11:00 - 12:00	6	365	0.000	6	365	0.000	6	365	0.000
12:00 - 13:00	6	365	0.000	6	365	0.000	6	365	0.000
13:00 - 14:00	6	365	0.000	6	365	0.000	6	365	0.000
14:00 - 15:00	6	365	0.000	6	365	0.000	6	365	0.000
15:00 - 16:00	6	365	0.001	6	365	0.001	6	365	0.002
16:00 - 17:00	6	365	0.000	6	365	0.000	6	365	0.000
17:00 - 18:00	6	365	0.000	6	365	0.000	6	365	0.000
18:00 - 19:00	6	365	0.000	6	365	0.000	6	365	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

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

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.

Apex Transport Planning Ltd Park Place Cardiff

Licence No: 502501

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

OGVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	6	365	0.000	6	365	0.000	6	365	0.000
08:00 - 09:00	6	365	0.000	6	365	0.000	6	365	0.000
09:00 - 10:00	6	365	0.001	6	365	0.000	6	365	0.001
10:00 - 11:00	6	365	0.000	6	365	0.000	6	365	0.000
11:00 - 12:00	6	365	0.000	6	365	0.000	6	365	0.000
12:00 - 13:00	6	365	0.000	6	365	0.000	6	365	0.000
13:00 - 14:00	6	365	0.000	6	365	0.000	6	365	0.000
14:00 - 15:00	6	365	0.000	6	365	0.000	6	365	0.000
15:00 - 16:00	6	365	0.000	6	365	0.000	6	365	0.000
16:00 - 17:00	6	365	0.000	6	365	0.000	6	365	0.000
17:00 - 18:00	6	365	0.000	6	365	0.000	6	365	0.000
18:00 - 19:00	6	365	0.000	6	365	0.000	6	365	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.000			0.001

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

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.

Apex Transport Planning Ltd Park Place Cardiff

Licence No: 502501

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

PSVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	6	365	0.000	6	365	0.000	6	365	0.000
08:00 - 09:00	6	365	0.001	6	365	0.001	6	365	0.002
09:00 - 10:00	6	365	0.000	6	365	0.000	6	365	0.000
10:00 - 11:00	6	365	0.000	6	365	0.000	6	365	0.000
11:00 - 12:00	6	365	0.000	6	365	0.000	6	365	0.000
12:00 - 13:00	6	365	0.000	6	365	0.000	6	365	0.000
13:00 - 14:00	6	365	0.000	6	365	0.000	6	365	0.000
14:00 - 15:00	6	365	0.000	6	365	0.000	6	365	0.000
15:00 - 16:00	6	365	0.000	6	365	0.001	6	365	0.001
16:00 - 17:00	6	365	0.000	6	365	0.000	6	365	0.000
17:00 - 18:00	6	365	0.000	6	365	0.000	6	365	0.000
18:00 - 19:00	6	365	0.000	6	365	0.000	6	365	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.002			0.003

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

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 04 - EDUCATION/A - PRIMARY

CYCLISTS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	6	365	0.001	6	365	0.000	6	365	0.001
08:00 - 09:00	6	365	0.014	6	365	0.003	6	365	0.017
09:00 - 10:00	6	365	0.001	6	365	0.002	6	365	0.003
10:00 - 11:00	6	365	0.000	6	365	0.000	6	365	0.000
11:00 - 12:00	6	365	0.000	6	365	0.000	6	365	0.000
12:00 - 13:00	6	365	0.000	6	365	0.000	6	365	0.000
13:00 - 14:00	6	365	0.000	6	365	0.000	6	365	0.000
14:00 - 15:00	6	365	0.001	6	365	0.000	6	365	0.001
15:00 - 16:00	6	365	0.004	6	365	0.010	6	365	0.014
16:00 - 17:00	6	365	0.000	6	365	0.004	6	365	0.004
17:00 - 18:00	6	365	0.000	6	365	0.002	6	365	0.002
18:00 - 19:00	6	365	0.000	6	365	0.000	6	365	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

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 E TRICS Outputs – Proposed Residential Use

Apex Transport Planning Ltd Park Place Cardiff

Licence No: 502501

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-100 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-98 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 19/11/21
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	
Days of the week selected	Monday	8
	Tuesday	7
	Wednesday	4
	Thursday	4
	Friday	4
Main Location Types selected	Edge of Town Centre	6
	Suburban Area (PPS6 Out of Centre)	17
	Neighbourhood Centre (PPS6 Local Centre)	4
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	4
	5,001 to 10,000	6
	10,001 to 15,000	5
	15,001 to 20,000	3
	20,001 to 25,000	1
	25,001 to 50,000	8
Population <5 Mile ranges selected	5,001 to 25,000	4
	25,001 to 50,000	1
	50,001 to 75,000	2
	75,001 to 100,000	6
	125,001 to 250,000	7
	250,001 to 500,000	7
Car Ownership <5 Mile ranges selected	0.6 to 1.0	11
	1.1 to 1.5	16
PTAL Rating	No PTAL Present	27

Calculation Reference: AUDIT-502501-220331-0356

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	2 days
	SM SOMERSET	2 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	4 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	PS POWYS	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: 6 to 98 (units:)
 Range Selected by User: 6 to 100 (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: 01/01/10 to 19/11/21

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

Selected survey days:

Monday	8 days
Tuesday	7 days
Wednesday	4 days
Thursday	4 days
Friday	4 days

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

Selected survey types:

Manual count	27 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	17
Neighbourhood Centre (PPS6 Local Centre)	4

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	23
Village	3
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3 27 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	6 days
10,001 to 15,000	5 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	8 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	4 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	6 days
125,001 to 250,000	7 days
250,001 to 500,000	7 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	11 days
1.1 to 1.5	16 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	4 days
No	23 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	27 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

Site(1):	CB-03-A-05	Site area:	1.51 hect
Development Name:	DETACHED/TERRACED HOUSING	No of Dwellings:	50
Location:	PENRITH	Housing density:	40
Postcode:	CA11 9HS	Total Bedrooms:	163
Main Location Type:	Edge of Town Centre	Survey Date:	21/06/16
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	117
Site(2):	DH-03-A-01	Site area:	0.90 hect
Development Name:	SEMI DETACHED	No of Dwellings:	50
Location:	BISHOP AUCKLAND	Housing density:	94
Postcode:	DL14 6RH	Total Bedrooms:	150
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/03/17
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	87
Site(3):	DV-03-A-01	Site area:	1.25 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	37
Location:	TORQUAY	Housing density:	53
Postcode:	TQ1 3HR	Total Bedrooms:	111
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	103
Site(4):	DV-03-A-03	Site area:	2.02 hect
Development Name:	TERRACED & SEMI DETACHED	No of Dwellings:	70
Location:	HONITON	Housing density:	50
Postcode:	EX14 2DF	Total Bedrooms:	208
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	116
Site(5):	HC-03-A-23	Site area:	1.40 hect
Development Name:	HOUSES & FLATS	No of Dwellings:	62
Location:	LIPHOOK	Housing density:	46
Postcode:	GU30 7TG	Total Bedrooms:	205
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	19/11/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	136
Site(6):	KC-03-A-03	Site area:	1.38 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	51
Location:	ASHFORD	Housing density:	66
Postcode:	TN24 0FR	Total Bedrooms:	157
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/07/16
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	110
Site(7):	LC-03-A-30	Site area:	0.80 hect
Development Name:	SEMI-DETACHED	No of Dwellings:	24
Location:	BLACKPOOL	Housing density:	30
Postcode:	FY4 2DF	Total Bedrooms:	72
Main Location Type:	Edge of Town Centre	Survey Date:	14/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	40
Site(8):	LN-03-A-03	Site area:	0.77 hect
Development Name:	SEMI DETACHED	No of Dwellings:	22
Location:	LINCOLN	Housing density:	29
Postcode:	LN6 7PL	Total Bedrooms:	58
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	24
Site(9):	MS-03-A-03	Site area:	0.50 hect
Development Name:	DETACHED	No of Dwellings:	15
Location:	LIVERPOOL	Housing density:	38
Postcode:	L17 5BT	Total Bedrooms:	60
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	45

LIST OF SITES relevant to selection parameters (Cont.)

Site(10):	NF-03-A-02	Site area:	2.20 hect
Development Name:	HOUSES & FLATS	No of Dwellings:	98
Location:	NORWICH	Housing density:	52
Postcode:	NR5 8QS	Total Bedrooms:	279
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	220
Site(11):	NF-03-A-27	Site area:	3.69 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	93
Location:	NEAR NORWICH	Housing density:	29
Postcode:	NR13 4TN	Total Bedrooms:	282
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	16/09/21
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	248
Site(12):	NY-03-A-08	Site area:	0.15 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	21
Location:	YORK	Housing density:	175
Postcode:	YO10 3EJ	Total Bedrooms:	54
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	24
Site(13):	NY-03-A-09	Site area:	3.30 hect
Development Name:	MIXED HOUSING	No of Dwellings:	52
Location:	NORTHALLERTON	Housing density:	18
Postcode:	DL6 1BQ	Total Bedrooms:	152
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	135
Site(14):	NY-03-A-12	Site area:	0.82 hect
Development Name:	TOWN HOUSES	No of Dwellings:	47
Location:	NORTHALLERTON	Housing density:	68
Postcode:	DL7 8EY	Total Bedrooms:	122
Main Location Type:	Edge of Town Centre	Survey Date:	27/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	78
Site(15):	NY-03-A-13	Site area:	0.30 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	10
Location:	CATTERICK GARRISON	Housing density:	33
Postcode:	DL9 4SB	Total Bedrooms:	32
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	10/05/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	19
Site(16):	PS-03-A-01	Site area:	1.12 hect
Development Name:	MIXED HOUSES	No of Dwellings:	16
Location:	WELSHPOOL	Housing density:	15
Postcode:	SY21 7DT	Total Bedrooms:	49
Main Location Type:	Edge of Town Centre	Survey Date:	11/05/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	26
Site(17):	SF-03-A-07	Site area:	3.70 hect
Development Name:	MIXED HOUSES	No of Dwellings:	73
Location:	IPSWICH	Housing density:	33
Postcode:	IP3 8XL	Total Bedrooms:	215
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	09/05/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	169
Site(18):	SM-03-A-02	Site area:	2.87 hect
Development Name:	MIXED HOUSES	No of Dwellings:	42
Location:	NEAR TAUNTON	Housing density:	27
Postcode:	TA3 5FG	Total Bedrooms:	160
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	142

LIST OF SITES relevant to selection parameters (Cont.)

Site(19):	SM-03-A-03	Site area:	2.65 hect
Development Name:	MIXED HOUSES	No of Dwellings:	41
Location:	NEAR TAUNTON	Housing density:	42
Postcode:	TA3 5FB	Total Bedrooms:	137
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	118
Site(20):	ST-03-A-06	Site area:	0.37 hect
Development Name:	SEMI-DET. & TERRACED	No of Dwellings:	17
Location:	WOLVERHAMPTON	Housing density:	65
Postcode:	WV2 4NH	Total Bedrooms:	51
Main Location Type:	Edge of Town Centre	Survey Date:	09/05/14
Sub-Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	19
Site(21):	SY-03-A-01	Site area:	1.73 hect
Development Name:	SEMI DETACHED HOUSES	No of Dwellings:	54
Location:	DONCASTER	Housing density:	34
Postcode:	DN5 9TD	Total Bedrooms:	162
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	61
Site(22):	TW-03-A-02	Site area:	0.55 hect
Development Name:	SEMI-DETACHED	No of Dwellings:	16
Location:	GATESHEAD	Housing density:	34
Postcode:	NE8 4SQ	Total Bedrooms:	52
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	07/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	38
Site(23):	WK-03-A-01	Site area:	0.10 hect
Development Name:	TERRACED/SEMI/DET.	No of Dwellings:	6
Location:	LEAMINGTON SPA	Housing density:	
Postcode:	CV32 5XJ	Total Bedrooms:	24
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	12
Site(24):	WL-03-A-02	Site area:	1.16 hect
Development Name:	SEMI DETACHED	No of Dwellings:	27
Location:	SWINDON	Housing density:	25
Postcode:	SN2 7HT	Total Bedrooms:	91
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	122
Site(25):	WM-03-A-04	Site area:	1.10 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	39
Location:	COVENTRY	Housing density:	43
Postcode:	CV5 6DZ	Total Bedrooms:	111
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	21/11/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	45
Site(26):	WM-03-A-05	Site area:	2.00 hect
Development Name:	TERRACED & DETACHED	No of Dwellings:	89
Location:	COVENTRY	Housing density:	56
Postcode:	CV1 4PY	Total Bedrooms:	269
Main Location Type:	Edge of Town Centre	Survey Date:	21/11/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	100
Site(27):	WS-03-A-05	Site area:	1.61 hect
Development Name:	TERRACED & FLATS	No of Dwellings:	48
Location:	SHOREHAM BY SEA	Housing density:	50
Postcode:	BN43 6TQ	Total Bedrooms:	129
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/04/12
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	132

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CA-03-A-04	detached
CA-03-A-05	detached
CA-03-A-07	Covid
CH-03-A-08	detached
CH-03-A-11	Town house
CH-03-A-12	Covid
ES-03-A-06	Covid
KC-03-A-05	detached
LE-03-A-02	detached
LN-03-A-04	detached
NF-03-A-01	bungalow
PS-03-A-02	detached
SF-03-A-04	detached
WS-03-A-07	bungalow

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

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.86

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	27	43	0.080	27	43	0.291	27	43	0.371
08:00 - 09:00	27	43	0.135	27	43	0.376	27	43	0.511
09:00 - 10:00	27	43	0.139	27	43	0.168	27	43	0.307
10:00 - 11:00	27	43	0.111	27	43	0.124	27	43	0.235
11:00 - 12:00	27	43	0.126	27	43	0.139	27	43	0.265
12:00 - 13:00	27	43	0.162	27	43	0.148	27	43	0.310
13:00 - 14:00	27	43	0.156	27	43	0.162	27	43	0.318
14:00 - 15:00	27	43	0.146	27	43	0.186	27	43	0.332
15:00 - 16:00	27	43	0.218	27	43	0.164	27	43	0.382
16:00 - 17:00	27	43	0.272	27	43	0.166	27	43	0.438
17:00 - 18:00	27	43	0.350	27	43	0.165	27	43	0.515
18:00 - 19:00	27	43	0.242	27	43	0.153	27	43	0.395
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.137			2.242			4.379

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

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

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Parameter summary

Trip rate parameter range selected:	6 - 98 (units:)
Survey date range:	01/01/10 - 19/11/21
Number of weekdays (Monday-Friday):	27
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
Surveys manually removed from selection:	14

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

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

MULTI-MODAL TAXIS

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	27	43	0.002	27	43	0.003	27	43	0.005
08:00 - 09:00	27	43	0.008	27	43	0.008	27	43	0.016
09:00 - 10:00	27	43	0.006	27	43	0.003	27	43	0.009
10:00 - 11:00	27	43	0.003	27	43	0.004	27	43	0.007
11:00 - 12:00	27	43	0.003	27	43	0.004	27	43	0.007
12:00 - 13:00	27	43	0.001	27	43	0.001	27	43	0.002
13:00 - 14:00	27	43	0.004	27	43	0.003	27	43	0.007
14:00 - 15:00	27	43	0.003	27	43	0.003	27	43	0.006
15:00 - 16:00	27	43	0.006	27	43	0.007	27	43	0.013
16:00 - 17:00	27	43	0.002	27	43	0.004	27	43	0.006
17:00 - 18:00	27	43	0.004	27	43	0.002	27	43	0.006
18:00 - 19:00	27	43	0.004	27	43	0.005	27	43	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.047			0.093

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 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	27	43	0.003	27	43	0.002	27	43	0.005
08:00 - 09:00	27	43	0.004	27	43	0.003	27	43	0.007
09:00 - 10:00	27	43	0.004	27	43	0.004	27	43	0.008
10:00 - 11:00	27	43	0.000	27	43	0.002	27	43	0.002
11:00 - 12:00	27	43	0.004	27	43	0.002	27	43	0.006
12:00 - 13:00	27	43	0.000	27	43	0.001	27	43	0.001
13:00 - 14:00	27	43	0.003	27	43	0.002	27	43	0.005
14:00 - 15:00	27	43	0.002	27	43	0.002	27	43	0.004
15:00 - 16:00	27	43	0.001	27	43	0.003	27	43	0.004
16:00 - 17:00	27	43	0.000	27	43	0.001	27	43	0.001
17:00 - 18:00	27	43	0.002	27	43	0.002	27	43	0.004
18:00 - 19:00	27	43	0.000	27	43	0.000	27	43	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.024			0.047

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 PSVS

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	27	43	0.001	27	43	0.001	27	43	0.002
08:00 - 09:00	27	43	0.002	27	43	0.002	27	43	0.004
09:00 - 10:00	27	43	0.000	27	43	0.000	27	43	0.000
10:00 - 11:00	27	43	0.000	27	43	0.000	27	43	0.000
11:00 - 12:00	27	43	0.000	27	43	0.000	27	43	0.000
12:00 - 13:00	27	43	0.000	27	43	0.000	27	43	0.000
13:00 - 14:00	27	43	0.000	27	43	0.000	27	43	0.000
14:00 - 15:00	27	43	0.001	27	43	0.001	27	43	0.002
15:00 - 16:00	27	43	0.003	27	43	0.003	27	43	0.006
16:00 - 17:00	27	43	0.001	27	43	0.001	27	43	0.002
17:00 - 18:00	27	43	0.001	27	43	0.001	27	43	0.002
18:00 - 19:00	27	43	0.000	27	43	0.000	27	43	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/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	43	0.005	27	43	0.022	27	43	0.027
08:00 - 09:00	27	43	0.003	27	43	0.027	27	43	0.030
09:00 - 10:00	27	43	0.001	27	43	0.010	27	43	0.011
10:00 - 11:00	27	43	0.006	27	43	0.004	27	43	0.010
11:00 - 12:00	27	43	0.004	27	43	0.004	27	43	0.008
12:00 - 13:00	27	43	0.008	27	43	0.003	27	43	0.011
13:00 - 14:00	27	43	0.004	27	43	0.001	27	43	0.005
14:00 - 15:00	27	43	0.005	27	43	0.006	27	43	0.011
15:00 - 16:00	27	43	0.026	27	43	0.005	27	43	0.031
16:00 - 17:00	27	43	0.017	27	43	0.007	27	43	0.024
17:00 - 18:00	27	43	0.023	27	43	0.014	27	43	0.037
18:00 - 19:00	27	43	0.011	27	43	0.009	27	43	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.113			0.112			0.225

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 VEHICLE OCCUPANTS

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	27	43	0.097	27	43	0.362	27	43	0.459
08:00 - 09:00	27	43	0.162	27	43	0.523	27	43	0.685
09:00 - 10:00	27	43	0.159	27	43	0.211	27	43	0.370
10:00 - 11:00	27	43	0.143	27	43	0.158	27	43	0.301
11:00 - 12:00	27	43	0.144	27	43	0.173	27	43	0.317
12:00 - 13:00	27	43	0.204	27	43	0.193	27	43	0.397
13:00 - 14:00	27	43	0.195	27	43	0.209	27	43	0.404
14:00 - 15:00	27	43	0.185	27	43	0.229	27	43	0.414
15:00 - 16:00	27	43	0.354	27	43	0.211	27	43	0.565
16:00 - 17:00	27	43	0.382	27	43	0.231	27	43	0.613
17:00 - 18:00	27	43	0.481	27	43	0.223	27	43	0.704
18:00 - 19:00	27	43	0.326	27	43	0.222	27	43	0.548
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.832			2.945			5.777

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

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

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	43	0.020	27	43	0.089	27	43	0.109
08:00 - 09:00	27	43	0.064	27	43	0.221	27	43	0.285
09:00 - 10:00	27	43	0.074	27	43	0.069	27	43	0.143
10:00 - 11:00	27	43	0.036	27	43	0.071	27	43	0.107
11:00 - 12:00	27	43	0.064	27	43	0.055	27	43	0.119
12:00 - 13:00	27	43	0.062	27	43	0.054	27	43	0.116
13:00 - 14:00	27	43	0.055	27	43	0.068	27	43	0.123
14:00 - 15:00	27	43	0.054	27	43	0.048	27	43	0.102
15:00 - 16:00	27	43	0.174	27	43	0.097	27	43	0.271
16:00 - 17:00	27	43	0.097	27	43	0.051	27	43	0.148
17:00 - 18:00	27	43	0.108	27	43	0.060	27	43	0.168
18:00 - 19:00	27	43	0.063	27	43	0.048	27	43	0.111
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.871			0.931			1.802

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 BUS/TRAM PASSENGERS

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	27	43	0.004	27	43	0.022	27	43	0.026
08:00 - 09:00	27	43	0.002	27	43	0.032	27	43	0.034
09:00 - 10:00	27	43	0.005	27	43	0.017	27	43	0.022
10:00 - 11:00	27	43	0.014	27	43	0.009	27	43	0.023
11:00 - 12:00	27	43	0.009	27	43	0.009	27	43	0.018
12:00 - 13:00	27	43	0.013	27	43	0.014	27	43	0.027
13:00 - 14:00	27	43	0.009	27	43	0.003	27	43	0.012
14:00 - 15:00	27	43	0.009	27	43	0.009	27	43	0.018
15:00 - 16:00	27	43	0.020	27	43	0.010	27	43	0.030
16:00 - 17:00	27	43	0.015	27	43	0.003	27	43	0.018
17:00 - 18:00	27	43	0.018	27	43	0.005	27	43	0.023
18:00 - 19:00	27	43	0.017	27	43	0.000	27	43	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.135			0.133			0.268

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 RAIL PASSENGERS

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	27	43	0.000	27	43	0.016	27	43	0.016
08:00 - 09:00	27	43	0.000	27	43	0.014	27	43	0.014
09:00 - 10:00	27	43	0.000	27	43	0.003	27	43	0.003
10:00 - 11:00	27	43	0.000	27	43	0.001	27	43	0.001
11:00 - 12:00	27	43	0.000	27	43	0.001	27	43	0.001
12:00 - 13:00	27	43	0.001	27	43	0.002	27	43	0.003
13:00 - 14:00	27	43	0.000	27	43	0.000	27	43	0.000
14:00 - 15:00	27	43	0.001	27	43	0.001	27	43	0.002
15:00 - 16:00	27	43	0.000	27	43	0.000	27	43	0.000
16:00 - 17:00	27	43	0.003	27	43	0.000	27	43	0.003
17:00 - 18:00	27	43	0.015	27	43	0.001	27	43	0.016
18:00 - 19:00	27	43	0.015	27	43	0.000	27	43	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.039			0.074

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 COACH PASSENGERS

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	27	43	0.000	27	43	0.001	27	43	0.001
08:00 - 09:00	27	43	0.000	27	43	0.002	27	43	0.002
09:00 - 10:00	27	43	0.000	27	43	0.000	27	43	0.000
10:00 - 11:00	27	43	0.000	27	43	0.000	27	43	0.000
11:00 - 12:00	27	43	0.000	27	43	0.000	27	43	0.000
12:00 - 13:00	27	43	0.000	27	43	0.000	27	43	0.000
13:00 - 14:00	27	43	0.000	27	43	0.000	27	43	0.000
14:00 - 15:00	27	43	0.001	27	43	0.000	27	43	0.001
15:00 - 16:00	27	43	0.005	27	43	0.003	27	43	0.008
16:00 - 17:00	27	43	0.000	27	43	0.000	27	43	0.000
17:00 - 18:00	27	43	0.003	27	43	0.003	27	43	0.006
18:00 - 19:00	27	43	0.000	27	43	0.000	27	43	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/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	43	0.004	27	43	0.039	27	43	0.043
08:00 - 09:00	27	43	0.002	27	43	0.047	27	43	0.049
09:00 - 10:00	27	43	0.005	27	43	0.021	27	43	0.026
10:00 - 11:00	27	43	0.014	27	43	0.010	27	43	0.024
11:00 - 12:00	27	43	0.009	27	43	0.010	27	43	0.019
12:00 - 13:00	27	43	0.014	27	43	0.015	27	43	0.029
13:00 - 14:00	27	43	0.009	27	43	0.003	27	43	0.012
14:00 - 15:00	27	43	0.010	27	43	0.010	27	43	0.020
15:00 - 16:00	27	43	0.025	27	43	0.014	27	43	0.039
16:00 - 17:00	27	43	0.018	27	43	0.003	27	43	0.021
17:00 - 18:00	27	43	0.036	27	43	0.009	27	43	0.045
18:00 - 19:00	27	43	0.032	27	43	0.000	27	43	0.032
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.178			0.181			0.359

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): 1.86

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	27	43	0.126	27	43	0.512	27	43	0.638
08:00 - 09:00	27	43	0.232	27	43	0.819	27	43	1.051
09:00 - 10:00	27	43	0.239	27	43	0.311	27	43	0.550
10:00 - 11:00	27	43	0.198	27	43	0.244	27	43	0.442
11:00 - 12:00	27	43	0.221	27	43	0.242	27	43	0.463
12:00 - 13:00	27	43	0.287	27	43	0.266	27	43	0.553
13:00 - 14:00	27	43	0.262	27	43	0.281	27	43	0.543
14:00 - 15:00	27	43	0.255	27	43	0.293	27	43	0.548
15:00 - 16:00	27	43	0.579	27	43	0.327	27	43	0.906
16:00 - 17:00	27	43	0.515	27	43	0.291	27	43	0.806
17:00 - 18:00	27	43	0.648	27	43	0.306	27	43	0.954
18:00 - 19:00	27	43	0.432	27	43	0.279	27	43	0.711
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.994			4.171			8.165

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.