

# Erection of Class A1 Retail Food store, 'Food Village',

associated access & car parking, and improvements to

listed cricket pavilion, Lampeter.

# **TRANSPORT ASSESSMENT (PAC Submission)**

Prepared by: Entran Ltd

On behalf of: ALDI Stores Ltd and University of Wales Trinity St David

DATE: November 2021





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# **CONTENTS**

1.	INTRODUCTION	4
2.	SITE LOCATION	6
3.	LOCAL TRANSPORT NETWORK	6
4.	PROPOSED DEVELOPMENT	13
5.	TRANSPORT IMPLEMENTATION STRATEGY	17
6.	DELIVERY AND SERVICING	21
7.	TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT	23
8.	TRANSPORT EFFECTS	28
9.	TRANSPORT IMPROVEMENTS	31
10.	SUMMARY AND CONCLUSIONS	32

10. SUMMARY AND CONCLUSIONS

# **TABLES**

- 3.1 Assumed Base Traffic Growth Factors
- 4.1 Consented Parking Provision at Other ALDI Stores
- 5.1 Indicative Staff Mode Share Targets
- 5.2 Summary of Travel Plan Measures
- 7.1 ALDI Vehicle Trip Generation
- 7.2 Proposed ALDI Person Trip Generation
- 8.1 Site Access / Pontfaen Rd Junction Assessment

### **FIGURES**

- 2.1 Strategic Site Location
- 2.2 Local Context
- 3.1 **Existing Site Access**
- 3.2 Active Travel Map for Local Area
- 3.3 Walking Isochrones
- 3.4 Local Cycle Routes
- 3.5 **Existing Bus Routes**
- 3.6 Personal Injury Accidents
- 3.7 ATC Count Locations
- 3.8 2021 Observed Base Flows
- 3.9 2022 Baseline Traffic Flows
- 3.10 2027 Baseline Traffic Flows
- 4.1 **Proposed Site Layout**
- 4.2 NewMotion EVCP Cover Design
- 7.1 **Development Primary New Traffic Distribution**
- 7.2 **Development Primary New Trips**
- 7.3 **Development Secondary Pass-by Trips**
- 7.4 **Development Secondary Diverted Trips**



- 7.5 Development Total Traffic Assignment
- 7.6 2022 Opening Year Base + Development
- 7.7 2027 Future Year Base + Development
- 8.1 Parking Accumulation

# **APPENDICES**

- A Pre-application Response
- B Traffic Survey Data
- C Architects' Plans and Swept Path Analysis
- D TRICS Outputs
- E PICADY Outputs



# 1. INTRODUCTION

# <u>Overview</u>

- 1.1. This Transport Assessment (TA) has been prepared by Entran Ltd to detail and assess transport matters associated with the proposed erection of Class A1 Retail Food store, erection of 'Food Village', associated access & car parking, and improvements to the listed cricket pavilion at Pontfaen Road, Lampeter.
- 1.2. The retail proposal comprises:
  - Primary vehicle and pedestrian access from Pontfaen Road;
  - 1,921 sqm GFA ALDI Foodstore with 118 parking spaces (7 No. Parent and Child, 5No. Disabled, 2 No. Click and Collect, 4No. EV expandable to 24 No) and 8 cycle spaces;
  - Offsite highway infrastructure as part of the build process to enhance non-motorised user access to the site and connectivity to the town centre and surrounding area to support Active Travel Wales.
- 1.3. In terms of the 'food village' element of the proposal will consist of 3 small pod style units focusing on local produce and skills with a strong link to the University and an opportunity to trade alongside Aldi. It is expected that these units will generally be open normal working hours and weekends, with sporadic vehicle related trips and servicing by LGV's and/or cars. 25 separate parking spaces adjacent to Aldi are provided although a high degree of linked trips is expected. Clearly for such a proposal it is quite hard to quantify any impact that it might have as the final use is not clearly defined and will develop over time.
- 1.4. The pavilion whist being refurbished will continue to be mainly an evening (training) and weekend (training and matches) facility and will therefore not impact peak hour traffic. The pavilion benefits from 12 existing car parking spaces with a further 10 overflow spaces also being provided.
- 1.5. This TA has sought to reference both National and Local Policy and Plan Documents including:
  - Planning Policy Wales (ed.11, 2021)
  - TAN 18: Transport
  - Active Travel Wales Design Guidance (2014)
  - Ceredigion Local Development Plan (LDP).
  - Ceredigion County Council Parking Standards SPG
  - Transport Assessment SPG
  - Welsh Transport Appraisal Guidance (WeITAG).
- 1.6. The formal planning pre-application (PAC) response with relevant information can be found at **Appendix A**.

#### Structure of Report

- 1.7. This report provides details of the traffic and transportation issues associated with the development proposals and addresses the following:
  - The Existing Site and Surrounding Area
  - Development Proposals
  - Delivery and Servicing
  - Sustainable Travel by all Modes
  - Trip generation, distribution and assignment
  - Highway Impact



- Parking accumulations
- Road safety
- Summary and Conclusions



# 2. SITE LOCATION

2.1. The application site is located 500m west of Lampeter centre to the south of Pontfaen Road, Lampeter, in the County of Ceredigion. The strategic site location is illustrated in **Figure 2.1** with the local context shown in **Figure 2.2** below.



Figure 2.1 - Strategic Site Location

Figure 2.2 - Local Context





# 3. LOCAL TRANSPORT NETWORK

# Site Access

3.1. The site currently takes vehicle and pedestrian access from Pontfaen Road via an existing gated access located almost opposite the priority junction to Ffynon Bedr. The existing site access arrangement is illustrated below in **Figure 3.1**.

Figure 3.1 – Existing Site Access



### Local Highway Network

- 3.2. The site is bounded to the north by A475 Pontfaen Road, which is a single carriageway road approximately 9m wide in the vicinity of the site frontage. This highway includes footways to both sides, is street lit and subject to a 30mph speed limit. Pontfaen Road provides access to the town centre to the east and local towns and villages to the west.
- 3.3. The A475 connects to Llanwenog, Rhydowen and Newcastle Emlyn to the west. To the east the A475 connects to the A482 at a mini-roundabout junction located in the town centre. The A482 to Aberaeron to the north and the A40 to the south at Llanwrda.

### Sustainability audit

3.4. Initial pedestrian, cycle and public transport audits have been carried out for the area surrounding the site to include an analysis of the current facilities for journeys by modes other than the private car.

#### Active Travel Wales

- 3.5. Active Travel Wales Design Guidance (2014) sets out the procedures and processes to meet the goals of the Active Travel Wales Act 2013. The aim is to make active travel (e.g. walking and cycling) the most attractive option for most shorter journeys, and to leave the car behind where suitable to do so. The Act requires local authorities to produce active travel maps and deliver continuous year on year improvements in active travel routes and facilities.
- 3.6. The existing travel map for walking and cycling has been produced for Lampeter which is summarised below in **Figure 3.2** and highlights the range of current active travel routes in the local area. This is explored in context to existing facilities surrounding the site.





Source: Ceridigion County Council

- 3.7. Figure 3.2 illustrates a number of integrated network walking routes in the town together with a cycle route through the centre of the town. The site is located in proximity to these existing routes.
- 3.8. The UK Design Manual for Roads and Bridges (DMRB) TD 91/05 "Provision for Non-Motorised Users" states in paragraph 2.3 that "walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles. Walking and rambling can also be undertaken as a leisure activity, often over longer distances".
- 3.9. Acceptable walking distances will vary considerably depending on various factors such as fitness and land topography; however, guidelines by the Institution of Highways and Transportation (IHT) state the acceptability of distances in metres to various attractions, are as follows:
  - Desirable : 500m
  - Acceptable : 1,000m (12-13 mins)
  - Preferred Maximum : 2,000m



- 3.10. Manual for Streets usefully adds 'The propensity to walk is influenced not only by distance, but also by the quality of the walking experience. A 20-minute walk alongside a busy highway can seem endless, yet in a rich and stimulating street, such as in a town centre, it can pass without noticing. Residential areas can offer a pleasant walking experience if good quality landscaping, gardens or interesting architecture are present' (MfS, Para 6.3.1).
- 3.11. TD 91/05 states in paragraph 2.11 that "cycling is used for accessing a variety of different destinations, including educational facilities, shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances. As well as being a mode of transport in its own right, cycling frequently forms part of a journey in combination with cars and public transport".
- 3.12. Local Transport Note (LTN) 2/08 Cycle Infrastructure Design details in paragraph 1.5 "Typical cycle trip distances". In common with other modes, many utility cycle journeys are less than three miles, although, for commuter journeys a trip distance of over five miles is not uncommon. Novice and occasional leisure cyclists cycle longer distances where the cycle ride is the primary purpose of their journey. A round trip on a way-marked leisure route could easily involve distances of 20-30 miles. Experienced cyclists will often be prepared to cycle longer distances for whatever journey purpose".
- 3.13. Design Guidance: Active Travel (Wales) Act 2013 deals with the needs of cyclists at section 4.8 and considers amongst other things Factors Affecting Cycling Effort. Section 6 deals with Designing for Walking and Cycling.
- 3.14. The key objectives of national and local policy is minimising the need to travel, reducing the proportion of journeys made by private car by making the use of public transport, making walking and cycling more attractive, influencing the location and layout/links between development to maximise the use and value of existing and planned sustainable transport investment. The goal is to make cycling and walking a realistic choice for a range of journeys encouraging access for all age groups and abilities.

# Walking and Cycling

3.15. Within a walk distance of 2.0km, the site is accessible to the entirety of the town on foot via footways along all local roads, providing a continuous link between the site and the local area. **Figure 3.3** provides an illustration of the extent of the surrounding urban area most which is located within a comfortable 1,000m walk. There are 7,066 residents located within a 2km catchment area.



### Figure 3.3 – Walking Isochrones

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- 3.16. There is good permeability of footway links through the local area with a network of footpaths and footways adjacent to the site linking to residential areas and the town centre. A good proportion of travel to and from an ALDI store is often made on foot therefore this would provide a good environment to aid connected journeys by this mode of travel.
- 3.17. The footways alongside Pontfaen Road provide a good standard of provision however one notable barrier is the lack of a formal crossing point in the vicinity of the site.
- 3.18. The existing provision for cyclists in the local area is reasonable and commensurate with a small town in a rural area. There is an existing on road cycle route passing the site on Ponfaen Road which then routes along Peterwell Terrace a short distance to the east of the site, linking to New St and to the A482. This forms part of NCN Route No. 82 which links Cardigan / Newcastle Emlyn to Lampeter towards Aberystwyth. **Figure 3.4** illustrates.



#### Figure 3.4 - Local Cycle Routes

©OpenStreetMap contributors

3.19. This review of facilities and routes has identified that there are no major obstacles to customers or staff walking or cycling to and from the site other than a potential severance across Pontfaen Road.

#### Public Transport

3.20. Existing bus services in the local area are limited to the T1 (two hourly) and 585 (two hourly). The closest bus stop is located on Ponfaen Road opposite the Black Lion in the town centre, about 300 metres or 4 minutes' walk from the site. Figure 3.5 illustrates the bus routes in the town.



### Figure 3.5 – Existing Bus Routes



3.21. There are no local railway stations in the area. The nearest station is located in Llandovery.

# <u>Summary</u>

3.22. It is evident that opportunities exist to travel to and from the site by foot, by bike, but with more limited options to use local public transport. This should be a good site to promote sustainable travel and reduce reliance on the private car.

#### Road Safety

3.23. Personal injury accident data for the local area has been obtained from www.crashmap.co.uk. **Figure 3.6** illustrates the accidents recorded in the local area over a five-year period 2016 to 2020.



# Figure 3.6 – Personal Injury Accidents

<sup>©</sup> Googlemaps /Crashmap



3.24. The data indicates that within proximity of the site there have been no personal injury accidents over a five-year period. Further way from the site there have only been 4 PIA's, of which all were slight in severity. On average there have been less than one accident per year. A review of the accident detail therefore identifies no blackspots or common causes relating to highway deficiencies.

# Existing Traffic Flows

3.25. In order to inform this application, two Automatic Traffic Counts were undertaken on Pontfaen Road in October 2021. The location of each count is illustrated in **Figure 3.7** below.

# Figure 3.7 – ATC Count Locations



3.26. The survey collected data between 12<sup>th</sup> and 18<sup>th</sup> October and included vehicle classification as well as speeds. The average 7-day recorded speeds were as follows:

West of proposed site access

- 85th percentile speeds westbound = 38.0 mph
- 85th percentile speeds eastbound = 32.8 mph

East of proposed site access

- 85th percentile speeds westbound = 31.0 mph
- 85th percentile speeds eastbound = 29.2 mph
- 3.27. A summary of the recorded traffic flows for the weekday AM, PM and Saturday peaks is provided in **Figure 3.8**. The figures in red are inclusive numbers of HGV. The traffic flows on Pontfaen Road are shown to be fairly modest at peak times. Full count details are attached at **Appendix B**.

# Figure 3.8 - 2021 Observed Base Flows



Future Traffic Flows

3.28. The expected traffic flows in the proposed opening year of the development of 2022, and a future year of 2027 can be derived using TEMPro, for the local MSOA Ceredigion 008. The growth factors applied to the base observed traffic are set out in **Table 3.1**.



# Table 3.1 – Assumed Base Traffic Growth Factors

Peak	2021-2022	2021-2027
AM Peak	1.0075	1.0434
PM Peak	1.0074	1.0429
Sat Peak	1.0083	1.0476

3.29. The base traffic for a 2022 Opening Year is illustrated in **Figure 3.9**. The base traffic for 2027 Future Year is illustrated in **Figure 3.10**.

#### Figure 3.9 – 2022 Baseline Traffic Flows



22 231 0 0

(1700-1800)

29

0

Saturday Peak 2022 Baseline



A475

#### Figure 3.10 – 2027 Baseline Traffic Flows

AM Peak Weekday 2027 Baseline (0800-0900)





Saturday Peak 2027 Baseline (1700-1800)





# 4. PROPOSED DEVELOPMENT

### **Development Composition**

- 4.1. As specified in section 1, the proposed development comprises comprises:
  - Primary vehicle and pedestrian access from Pontfaen Road;
  - 1,921 sqm GFA ALDI Foodstore with 118 parking spaces (7 No. Parent and Child, 5 No. Disabled, 2 No. Click and Collect, 4No. EV expandable to 24 No) and 8 cycle spaces;
  - Erection of Food Village pods (3 no.); and
  - Offsite highway infrastructure as part of the build process to enhance non-motorised user access to the site and connectivity to the town centre and surrounding area to support Active Travel Wales. This proposal is outside the redline and as part of this PAC process is expected to form part of any future S278 in this form and location, or similar
- 4.2. Cycle parking is to be provided on site including 8 customer cycle parking spaces under shelter. Staff cycle parking would be provided internal to the warehouse. The constituent design components of the proposed development layout are discussed in more detail below
- 4.3. In terms of the 'food village' element of the proposal will consist of 3 small pod style units focusing on local produce and skills with a strong link to the University and an opportunity to trade alongside Aldi. It is expected that these units will generally be open normal working hours and weekends, with sporadic vehicle related trips and servicing by LGV's and/or cars. 25 separate parking spaces adjacent to Aldi are provided although a high degree of linked trips is expected. Clearly for such a proposal it is quite hard to quantify any impact that it might have as the final use is not clearly defined and will develop over time.
- 4.4. The pavilion whist being refurbished will continue to be mainly an evening (training) and weekend (training and matches) facility and will therefore not impact peak hour traffic. The pavilion benefits from 12 existing car parking spaces with a further 10 overflow spaces also being provided.

#### Development Layout

4.5. A plan extract of the current proposed development layout is illustrated in **Figure 4.1** and included as



architect's plans at **Appendix C** including HGV swept path tracking plots.



# Figure 4.1 – Proposed Site Layout

### <u>Access</u>

- 4.6. As shown above in Figure 4.1, the proposed site access would be formed from Pontfaen Road, at a location approximately 80 metres west of the current site access. Dropped kerbs and tactile paving crossing points at the entrance would be included as part of the design layout.
- 4.7. The existing access would be converted to a shared pedestrian and cycle access into the site.
- 4.8. The proposed access would include pedestrian footway on the eastern side leading to the main store entrance with crossing points marked on the car park. Pedestrians would also enjoy a segregated access running through the site directly to the pavilion, as well as a new foot connection in the southeast corner of the site linking to the leisure centre.
- 4.9. In addition to this there would be a footway adjacent to the vehicle access and two further points of pedestrian access close to the foodstore. This would provide a contiguous link to all existing footways and improve the public realm for trips on foot.
- 4.10. The proposed site access would include suitable bellmouth radii to allow access for HGV servicing vehicles. Shared use of the main access for servicing is a commonly used format at consented ALDI developments in South Wales and further afield. Further details of servicing are provided in the following sections.
- 4.11. The site access visibility envelope would be in compliance with local design standards and accord compliant visibility splays for a 30mph zone.

#### Internal Layout

- 4.12. The site layout would aim to provides good permeability for pedestrians to the foodstore and to the adjacent existing sport and recreational uses which are to be enhanced.
- 4.13. The ALDI store would include circulating areas for parking designed in accordance with normal design standards and commensurate with the known needs for an operational ALDI store. Parking bays would be set perpendicular with a minimum reversing (or aisle width) of 6m.
- 4.14. Pedestrian footways with uncontrolled crossing facilities including dropped kerbs and tactile paving (as required) would be provided at the main access road leading into the site and also at the other



locations shown on Figure 4.1. This would permit direct access to the customer entrance located at the northwest corner of the proposed building.

- 4.15. Within the ALDI car park, a shared surface would operate inside a low-speed environment as is common at supermarket sites.
- 4.16. The internal layout of the site facilitates access and egress for service vehicles from the ALDI service dock that will be able to be undertaken in a forward gear. As per ALDI's standard operational requirements, servicing is provided to the rear of the building. Further details are in Section 6.

Parking

- 4.17. According to the Council's parking SPD (2015), the site is defined as being located in an urban service centre located within Parking Zone 4 and the usual standard which would apply for parking spaces is 1 per 20sqm GFA, with 6% provision for disabled spaces, 2 bicycle stands per 500sqm and 5% provision for motorcycles together with 3 commercial vehicle spaces. Based on this standard, 96 car spaces would be required.
- 4.18. The proposed scheme includes for 118 spaces, 5 disabled spaces, 8 cycle spaces and 1 commercial space. The customer car parking spaces would include 2 No. click and collect, 7 No. Parent and Child, 4 No. Electric Vehicle Charging Points with provision for 20 additional spaces.
- 4.19. Whilst the number of vehicle spaces is slightly above the guidance levels with a parking ratio of 1:16 sqm, the proposed level of parking is commensurate with ALDI known operational needs and is very similar to the parking levels provided at several other consented ALDI stores. **Table 4.1** summarises.

Store	GFA	Parking	Ratio	
Ferry Rd, Cardiff	1486	116	1:13	
Spytty Rd, Newport	1623	102	1:16	
Caerphilly Rd, Cardiff	1803	122	1:15	
Gabalfa	1882	126	1:15	
Mon Bank, Newport	1802	112	1:16	

### Table 4.1 - Consented Parking Provision at Other ALDI Stores

- 4.20. The above evidence illustrates the level of parking provision proposed by ALDI is at a similar level to that previously and recently considered acceptable by other LHA's in Wales. The proposed 118 customer spaces are not much greater in real terms than the SPG parking standards.
- 4.21. The floorspace of the proposed development is also quite close to the 2,000 sqm threshold whereby the standard abruptly changes from 1:20 sqm to 1:14 sqm, creating an artificial stepped increase from 100 spaces to 143 spaces, over the course of 1 sqm.
- 4.22. There is a clear need for a sensible, balanced and pragmatic approach to parking provision to ensure adequate parking provision for this development. The aim has to be both to prevent over-provision and encourage non-car trips, but also to avoid too little parking, because in a very practical sense this could easily lead to overspill onto Pontfaen Road and a subsequent issue for the LHA to resolve. Food retail stores by their very nature can generate large bulky bags of essential shopping and not all trips can be realistically undertaken by means other than the private motor car.
- 4.23. Based on extensive local experience at other ALDI stores in Wales, the proposed parking would ensure adequate provision and is considered to be appropriate and commensurate with both trading and operational requirements to help efficient operation of the car park given turnover and to prevent overspill onto adjacent roads. The following sections provide a check on parking accumulations.
- 4.24. Cycle parking would be located in proximity of the main entrance to the ALDI store in a step free and convenient location close to the main entrance and Pontfaen Road using 4 sheffield type stands. Cycle parking for ALDI is normally provided at the front of the store in an easy to locate and convenient



position. Staff cycle parking would be provided integral to the warehousing areas, as per other stores. More details are provided in the Travel Plan.

- 4.25. It is noted that ALDI seek to encourage travel by cycle whenever possible and in this regard will, through their Travel Plan, review the occupation of cycle stands and, if necessary and justified, introduce additional shoppers cycle parking facilities.
- 4.26. In terms of EV parking: 4 live EVCPs would be provided with passive provision for 20 future EVCPs. The first two EVCP bays would be designed as accessible bays. In order to highlight that they are EVCPs the white lining of these bays will be changed to blue. The NewMotion EVCP design is shown in **Figure 4.2**.



#### Figure 4.2 – NewMotion EVCP cover design



# 5. TRANSPORT IMPLEMENTATION STRATEGY – ALDI ONLY

- 5.1. As stated in the introduction, this TA has been developed to seek to influence modes of travel to the proposed redevelopment rather than merely predicting travel patterns and providing mitigation.
- 5.2. The aim of the Transport Implementation Strategy (TIS) for ALDI (as operation of food village and pavilion is under third party control) is to set out the measures the development proposal will support to provide travel choice and support the objectives of the Local Plan and in this regard presents:

### Target Modal Split

5.3. The revised target mode split for the TIS for journeys to and from the development proposal is summarised in Table 5.1. The initial values are simply taken from the 2011 Census data for Travel to Work for the local Workplace zone and are subject to refinements as more becomes known. The only target is car driver, with the targets for individual sustainable travel modes indications only of what one might expect the approximate split of journeys to be, but not specific targets in their own right. (i.e. all non-car driver modes of travel are 'sustainable travel modes').

Mode of Travel	Expected Initial Modal Split	bected Initial 2-year Modal dal Split Split Target	
Car Driver	79%	73%	67%
Car Passenger, Cycle, Walk, Bus	21%	27%	33%

#### Table 5.1 – Indicative Staff Mode Share Targets

5.4. Provided the overall contribution of sustainable travel modes helps deliver the car driver target, variations from the targets for sustainable travel modes is acceptable. Indeed, in some instances it is hoped they are exceeded.

### TIS Measures

- 5.5. The TIS aims to make the inevitable step change shift in overall travel mode across the area easier and quicker, providing travel choice for all. A Travel Plan should include the provision of up-to-date information about public transport services, timetables, and opportunities for car sharing (e.g. via a car share website).
- 5.6. The measures within the TIS, which are set out in the ALDI Staff Travel Plan, aimed at providing this travel choice include (In addition, all employees will receive details of the TP upon commencement of employment and a copy of the TP will be kept in the staff room).

### Measures and Actions

- 5.7. The Travel Plan Co-ordinator will ensure that the Travel Plan is implemented; operating efficiently and that all the measures for encouraging sustainable travel are in place. Responsibilities include:
  - Promoting and encouraging travel modes other than the car, including providing information to staff via a notice board in the staff room, which will be checked every three months. Travel options will also be discussed at staff meetings;
  - Ensuring that all information relating to public transport, cycling, walking and car sharing is displayed on staff notice boards and is kept accurate and up to date, as well as discussing the TP at staff meetings to continually encourage use of alternative modes than the private car;
  - Ensuring that all information relating to public transport, cycling, walking are available to customers via availability of bus timetables etc, on the packing shelf at the front of the store and that the provided information is kept accurate and up to date;



- Promoting car sharing during both the staff interview and induction process as well as ongoing reminders from the TPC;
- Identify employee travel habits through staff surveys;
- Monitoring and reviewing the Travel Plan as set out in the TP;
- Training / induction of staff to cover Travel Plan and travel options;
- Ensuring the needs of the less mobile is incorporated in the Plan; and
- Coordinate and monitor the TP, update as required and liaise with external bodies and other relevant developers (in discussion with Ceridigion CC) in accordance with the contents of this TP.
- 5.8. The measures developed on site shall be largely based on the outcomes of the initial travel survey. Some measures are essential in meeting with current standards, for example the quantity of cycle and car parking provision, other measures will be unique to the site.
- 5.9. As such the following sections are intended to give an overview of the potential measures that could be implemented by the Travel Plan Co-ordinator if the travel survey highlights them as being appropriate.

#### **TP Measures**

- 5.10. Due to the changing characteristics of the development over time it would be ineffective for the TP to specify TP measures or funding for measures that may not be required, Nevertheless, funding will be made available for the implementation of measures should the need arise through the monitoring process.
- 5.11. In this regard therefore, required measures must be determined by reference to travel surveys and importantly, an understanding of the factors that would motivate staff to alter their travel behaviour. The programme of surveys and monitoring therefore not only needs to identify travel behaviour but also attitudes to travel and key motivators for change.
- 5.12. Notwithstanding this, the TP's measures are divided into sub-categories:
  - Hard measures these are infrastructure provision or improvements;
  - Soft measures these are management measure, incentives, marketing initiatives etc;
  - Secured measures these are measures that will be implemented; and
  - Failsafe measures these are an 'arsenal' of measures available to the TP Coordinator to be chosen according to survey feedback so that resources can be targeted towards those measures found to be most effective.
- 5.13. The following tables describe both secure and failsafe measures per mode. Secure measures are those that will be adopted prior to recruitment of staff or as part of the build process, with the failsafe measures being those that could be introduced should the need arise.
- 5.14. In addition, all employees will receive details of the TP upon commencement of employment and a copy of the TP will be kept in the staff room.

Table 5.2 - Summar	y of Travel Plan	Measures
--------------------	------------------	----------

Walki	Walking - Hard measures				
Secu	red	Failsafe			
•	Good on-site lighting; Lockers; New footway across store frontage	<ul> <li>Additional pedestrian signage;</li> </ul>			
Walki	Walking - Soft measures				
Secu	red	Failsafe			
•	Marketing – promoting walking in all written and electronic material - Travel pack	<ul> <li>Personalised Travel Planning.</li> </ul>			
•	Notice board in staff room displaying the above	3			

Cycling - Hard measures			
Secured	Failsafe		
<ul> <li>Good on-site lighting;</li> <li>8 external prominent and covered cycle parking spaces via Sheffield loops–usage to be monitored – via the TP</li> <li>Provision for in-store cycle storage facilities for employees convenient to staff room</li> <li>Implement the Government backed cycle purchase scheme (Aldi standard)</li> </ul>	Additional cycle parking		
Cycling - Soft measures			
Secured	Failsafe		
<ul> <li>Marketing – promoting cycling in all written and electronic material - Travel pack</li> <li>Notice board in staff room displaying</li> </ul>	<ul> <li>Negotiated discount with local bike shop;</li> <li>Personalised travel planning.</li> </ul>		
cycle routes to and from the development			

Public Transport - Soft measures		
Secured	Failsafe	



<ul> <li>Marketing – promoting the use of public transport in all written and electronic material; Travel pack (including bus routes and bus/train timetable info)</li> <li>Travel notice board in staff room displaying bus timetables</li> </ul>	<ul><li>Personalised travel planning;</li><li>Investigate bus discounts for staff</li></ul>

Car Sharing - Hard measures				
Secured	Failsafe			
• Marketing – promoting car sharing in all written and electronic material as well as interview and induction process	<ul> <li>Personalised travel planning</li> </ul>			
Guaranteed ride home (emergency only)				

- 5.15. The Travel Pack (to be agreed with CCC) will contain information on the alternatives to singleoccupancy car use available to staff including;
  - Comprehensive walking and cycling route maps linking the site to local infrastructure including shops, residential areas and bus facilities;
  - Bus maps and timetables as well as leaflets describing the health benefits of cycling and walking;
  - contact details of the Travel Plan Co-ordinator for the site; and
  - Useful resources such as Journey Planner website to enable people to plan their own journeys.
- 5.16. Travel Packs will be issued to all staff as part of their induction process. Staff will also be advised of the Travel Plan and Pack during the interview process.



# 6. DELIVERY AND SERVICING - ALDI ONLT

### ALDI Company Specific Servicing Arrangements

- 6.1. ALDI, as a company, operate the following specific servicing arrangements and working practices.
- 6.2. A store in Lampeter as per Aldi's other nearby stores will be serviced from Aldi's Regional Distribution Centre (RDC) in Cardiff. This RDC currently supplies goods to in excess of 80 stores.
- 6.3. Between 30-50 staff (27 FTE) are employed at each store, comprising a Store Manager, Assistant Store Manager and Store Assistants, although not all staff are present on site at all times.
- 6.4. Delivery routes are planned to minimise distances travelled by each vehicle and maximise efficiency of goods per delivery. This practice is economically prudent for Aldi but also sustainable by virtue of reducing vehicle kilometres travelled. Each vehicle will visit between 1 and 6 stores per trip depending on the nature of the delivery and the geographical location of the stores.
- 6.5. On average each store will have only two deliveries by articulated lorry per day plus a modest number of smaller vehicles delivering locally sourced fresh produce. This compares with an average of 6 to 10 articulated lorries and up to 20 subsidiary vehicles (including HGVs) per day usually associated with the larger supermarkets.
- 6.6. Each store manager will have an allotted time each day by which the main delivery will have taken place. Each driver is furnished with a mobile phone and is able to inform the distribution centre if any delay is likely. However, this is very rare and allocated delivery times are consistently met by the distribution teams.
- 6.7. Delivery practices are identical at each store. Goods delivery is a one-man function carried out by the driver. The vehicle is reversed down the delivery ramp to the loading bay which is fitted with a "dock leveller" to provide a flush ramp from the floor of the lorry to the floor of the storage area.
- 6.8. The driver gains access to the building by means of a "driver's door" located next to the loading bay. The driver opens the roller shutter door from within the building then unloads the goods directly into the storage area. The driver is then responsible for locking the shutter and the side door before leaving. Contact with the store manager is only required where site specific special arrangements dictate.
- 6.9. The daily HGV delivery arrival journey will normally take place outside peak highway network hours as well as peak store trading hours;
  - The standard delivery period is 1/2 hour;
  - Vehicular access to the delivery ramp will be through the car park;
  - Aldi's service vehicles benefit from operational safety improvements including;
  - Rear Cameras;
  - Audible Warning Systems; and
  - Reversing Object Sensors.
- 6.10. ALDI has a long-established approach of ensuring minimal off-site impacts to neighbours and aims to be a responsible neighbour developing good relationships within the community and ensuring any disturbances are kept to a minimum.



#### Site Specific Operational Requirements

- 6.11. Aldi, as a company, operate the following specific servicing arrangements and working practices:
  - The store will normally be served by two HGV's and a number of smaller vehicles per day, which will unload their goods using a dock leveller adjacent to the store building;
  - Access for service vehicles will be from the site access.
  - Turning and reversing manoeuvres undertaken within a dedicated area within the car park;
  - Egress in a forward gear;
  - The daily HGV delivery arrival journey will normally take place outside peak highway network hours; and
  - Any non-staff vehicles remaining anywhere in the car park once the store is closed will be warned/fined and eventually removed.
- 6.12. The swept path of the HGV to and from Pontfaen Rd and the ALDI dock leveller is illustrated in **Appendix C**. The location of the ALDI dock leveller is on the south side of the proposed building.
- 6.13. Commercial refuse collection would be undertaken on site with refuse vehicles able to access the development via the main access road for waste and recycling collection with refuse and recycling bins collected directly and wheeled to the vehicles to minimal carry/transfer distances to each unit. The refuse vehicle would be able to utilise the same HGV turning head area to ensure no long reversing manoeuvres occur on site.



# 7. TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

# Introduction

- 7.1. As described in Chapter 4 of this report, it is proposed to develop this site for an ALDI discount food store of 1,921 sqm GFA, including access with associated parking and servicing facilities.
- 7.2. This section details the expected trip generation of the proposed ALDI store by mode of travel and the expected distribution onto the local transport networks.
- 7.3. As discussed in Section 4, traffic associated with the food pods and pavilion will generally be outside peak highway hours or linked with Aldi therefore have not been considered in this section.

### Vehicle Trip Generation

7.4. In order to determine the potential future vehicular trip generating characteristics of the proposed site, use was made of the standardised TRICS database. The trip generation is summarised below in **Table 7.1** with the TRICS output provided at **Appendix D**.

Peak	Trip Rates			Trip Generation		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
AM Peak	2.443	1.620	4.063	47	31	78
PM Peak	3.772	3.985	7.757	72	77	149
Saturday Peak	6.410	5.973	12.383	123	115	238

#### Table 7.1 – ALDI Vehicle Trip Generation

Source: TRICS

7.5. The proposed development therefore would be expected to generate 78 trips in the weekday AM peak and 149 trips in the weekday PM peak, with 238 on the Saturday peak.

### Proposed Site Multi Modal Trip Generation

7.6. The TRICS database has been interrogated to determine the likely modal split of non-car travel by ALDI customers. **Table 7.2** indicates the scale of trip generation expected.

Peak	Trip Generation					
	Walk	Cycle	Public Transport			
AM Peak	31	2	5			
PM Peak	67	4	13			
Daily	713	35	128			

# Table 7.2 – Proposed ALDI Person Trip Generation

- 7.7. The assessment indicates that there would be 3,359 daily person trips of which 21% would be on foot, 1% by cycle and 4% by public transport.
- 7.8. The majority of NMU trips to the proposed discount foodstore would therefore be made on foot with a much smaller proportion of trips made by public transport and cycling. This follows observed trip behaviour at ALDI discount foodstores.



#### Trip Distribution and Assignment

- 7.9. Whilst the above illustrates the expected trip generation from ALDI, this forms the gross trip generation and makes no allowances for secondary trips already on the local network. An ALDI store will attract trips that are already on the local highway network and take the opportunity of passing the site to use the new opportunities; such trips are known as secondary diverted or pass-by trips.
- 7.10. Therefore, in order to understand the overall impact of the development on the local highway network, it is necessary to clearly identify the actual impact after external factors are considered such as trip types. Typically, new food stores only lead to about 10% completely new traffic, with the remainder forming pass-by and diverted trips (secondary trips) which are already on the local highway network.
- 7.11. The definition of pass-by trips is that which actually passes the site, which in this case is adjacent to A475 Pontfaen Road. Diverted trips are those which make a diversion from their original route; for example, to a competing foodstore.
- 7.12. TRICS research report 14/1 sets out that the standard application of the pass-by and diverted trip proportions in research report 95/2 is not considered so relevant and a site-by-site approach should be used instead.
- 7.13. The quanta of pass by / diverted / linked trips for this store was undertaken using first principles taking into account the location of other stores in proximity to the proposed development.
- 7.14. An assessment methodology set out at section 11 in TRICS paper 14/1. The location type for the proposed store is in a location close an important north/south route into Porthcawl and close to the town centre, therefore the pass-by/diverted percentage is likely to be reasonable.
- 7.15. The number of facilities at the store is more limited as a result of the limited offer. Click and collect is available at ALDI, but the GFA is much less than 4,000 sq.m which might suggest the ALDI store would act more as a convenience store with corresponding higher pass-by levels, however ALDI also contains some comparison elements (20%) and as a result some diverted trips may occur. The proposed development is located in very reasonable proximity to existing residential areas.
- 7.16. Within Lampeter itself there are two other foodstores located to the East and southeast of the site. Therefore, in terms of diverted trips the majority would occur from the East on Pontfaen Road. To ensure a robust assessment, in this regard it is considered that all of the trade draw will be from the east of the site, and none of the existing trips to these stores will be assumed already passing the site.
- 7.17. In terms of the trip type proportions the follows split has been assumed:
  - New Primary Trips 80%
  - Secondary Passby Trips 10%
  - Secondary Diverted Trips 10%
- 7.18. Therefore, for the purposes of the assessment 90% are essentially new trips passing the site which is a high proportion and is likely to be less than this in reality, given the A475 provides a key route in the local area.
- 7.19. The distribution of primary new trips was based on a population-distribution gravity type of model using 2011 population numbers and journey times derived from Google Maps set to the PM peak. Figure 7.1 provides the development primary trip flow distribution which indicates based on the existing population, 81% would arrive from the West and 19% from the East on Pontfaen Road. Figure 7.2 provides the Friday weekday development primary trip assignment.



# Figure 7.1 – Development Primary New Traffic Distribution



21	Ëβ	ime	,T^2	6 dist	st
10	2	4	378	59%	A
60	3	9	162	25%	A/B
37	8	64	32	5%	А
84	8	64	23	4%	В
54	10	100	19	3%	А
89	12	144	11	2%	В
18	12	144	8	1%	А
13	16	256	6	1%	В
	<b>dod</b> 10 60 37 84 54 89 18 13	dod         11         9         10         88         8         8         8         8         8         8         8         9         12         13         16         10         10         10         10         10         10         10         10         10         10         10         11 <td>dod         iii         iiii         iii         iiii         iiii         iiiiii         iiiiiii         iiiiiiii         iiiiiii         iiiiiiiiii         iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii</td> <td>baseline         image baseline         image baselin</td> <td>b         L         L         ID         E         L         L         ID         ID         2         4         378         59%           60         3         9         162         25%         37         8         64         32         5%           84         8         64         23         4%         3%         54         10         100         19         3%           89         12         144         11         2%         18         12         144         8         1%           13         16         256         6         1%         1%         1%         1%</td>	dod         iii         iiii         iii         iiii         iiii         iiiiii         iiiiiii         iiiiiiii         iiiiiii         iiiiiiiiii         iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	baseline         image baselin	b         L         L         ID         E         L         L         ID         ID         2         4         378         59%           60         3         9         162         25%         37         8         64         32         5%           84         8         64         23         4%         3%         54         10         100         19         3%           89         12         144         11         2%         18         12         144         8         1%           13         16         256         6         1%         1%         1%         1%

Average J-Time Set to PM weekday 639.1 <u>100%</u>



8.9



Figure 7.2 – Development Primary New Trips





PM Peak Weekday ALDI Primary Trips (1700-1800)



Saturday Peak ALDI Primary Trips (1100-1200)





7.20. The secondary pass by trip proportion was based on the directional distribution of baseline traffic in each peak. **Figure 7.3** provides the development secondary pass-by assignments.

PM Peak Weekday ALDI Sec. Pass By Trips

#### Figure 7.3 - Development Secondary Pass-by Trips

(1700-1800)

AM Peak Weekday ALDI Sec. Pass By Trips (0800-0900)



Saturday Peak ALDI Sec. Pass By Trips (1100-1200)



7.21. **Figure 7.4** provides the secondary diverted trip distribution.

#### Figure 7.4 - Development Secondary Diverted Trips

AM Peak Weekday ALDI Sec. Diverted Trips (0800-0900)



PM Peak Weekday ALDI Sec. Diverted Trips (1700-1800)



Saturday Peak ALDI Sec. Diverted Trips (1100-1200)



7.22. Figure 7.5 provides the total combined ALDI Trip assignment onto Pontfaen Road.

#### Figure 7.5 - Development Total Traffic Assignment

AM Peak Weekday ALDI Total Trips (0800-0900)



(1700-1800) -3 54 Pontfaen Road 57 24 -4 24

Site

PM Peak Weekday ALDI Sec. Total Trips

Saturday Peak ALDI Sec. Total Trips (1100-1200)





#### Assessment Scenarios

7.23. The site access junction is to be tested for capacity in the Opening Year 2022 as well as the Future Year 2027. **Figure 7.6** provides the 2022 opening year base plus development flows.

# Figure 7.6 - 2022 Opening Year Base + Development



7.24. Figure 7.7 provides the 2027 future year base plus development flows.

#### Figure 7.7 - 2027 Future Year Base + Development





# 8. TRANSPORT EFFECTS

### Introduction

- 8.1. In order to determine the impact on the local highway network from the proposed development, normal practice is to undertake an assessment by comparing the baseline situation to the 'with development' situation.
- 8.2. Where the site has an existing use, the impact is often determined by comparing the net increase in journeys between the existing and proposed uses. In this case the site is currently used as playing fields as part of the University of Wales Trinity St David campus and it is proposed that part of the site would be retained, enhanced and essentially continue to be used in this manner.
- 8.3. The existing use of the playing fields (and any related traffic) during the assessment periods for the ALDI store is expected to be negligible and can be safely ignored for the purposes of this report.
- 8.4. A Junctions 9 (PICADY) traffic model was constructed for the Pontfaen Road site access junction. Geometric measurements were taken from the masterplan layout.
- 8.5. A summary of the operational assessment is provided below.

Operational Assessment – Site Access Junction

8.6. A summary of the operational assessment for the proposed access junction is summarised in Table
 8.1 below. This model also included for the proposed pedestrian crossing to the east of the access junction. The full model results are included at Appendix D.

Scenario	Arm	Queue	Delay	RFC
	Site Access	0	7	0.06
2022 AIVI Dase + Dev	Pontfaen Rd (RT)	0	5	0.07
	Site Access	0	8	0.17
	Pontfaen Rd (RT)	0	6	0.12
	Site Access	0	9	0.24
2022 SAT base + Dev	Pontfaen Rd (RT)	0	6	0.19
	Site Access	0	7	0.06
2027 AIVI Dase + Dev	Pontfaen Rd (RT)	0	5	0.08
2027 DM Bass I Day	Site Access	0	8	0.17
2027 PIVI Dase + Dev	Pontfaen Rd (RT)	0	6	0.12
2027 SAT Base + Dev	Site Access	0	9	0.24
2027 SAT base + Dev	Pontfaen Rd (RT)	0	6	0.19

# Table 8.1 – Site Access / Pontfaen Rd Junction Assessment

8.7. The results of the capacity assessment of the existing situation reveal that the proposed junction would remain comfortably within capacity in the weekday and Saturday peaks. The highest ratio of flow to capacity (RFC) is <u>0.24</u> which would occur on the site access arm in the Saturday peak. Generally, there would be minimal amounts of queueing on Pontfaen Road either for the right turn into the site or for the proposed pedestrian crossing. The model suggests this situation isn't expected to materially change in the 2022 opening year or 2027 future horizon year.



#### Road Safety

- 8.8. The review of historical accidents in Section 3 revealed a relation to arbitrary human error. The level of accidents over the last five years in the vicinity of the site is negligible, and no accidents were recorded in the vicinity of the existing site access.
- 8.9. The addition of the development traffic is modest in scale and the development is considered unlikely to introduce or lead to any new material road safety issues given the development adds only a minor increase to traffic volumes of up to 1-2 vehicles per minute at peak times. The creation of a controlled pedestrian crossing on Pontfaen Road would also help to reduce vehicle to pedestrian conflict that might otherwise be the case with the increased footfall to the site.

#### Summary

- 8.10. To summarise the impacts of the proposed development as follows:
  - The proposed site access junction onto A475 Pontfaen Road is expected to remain well within
    capacity in the opening and future year with development traffic without leading to any
    capacity or queue issues at the junction. The scale of the development traffic is expected to
    be about one to two vehicles per couple of minutes, which is a low demand;
  - A parking accumulation assessment has demonstrated that the proposed ALDI car park can
    accommodate the expected parking accumulation and movements at the busiest times during
    the week to avoid any overspill parking highway impact onto local areas and attendant
    negative effects
  - The proposed development should not lead to any road safety impacts on the local highway network.
- 8.11. Based on these findings the development proposals are not expected to lead to an unacceptable offsite highways impact on the adjacent transportation network.



# 9. TRANSPORT IMPROVEMENTS

- 9.1. As discussed in Section 4, it is proposed that the proposed development would include additional improvements to transport infrastructure. The following items are identified:
  - A new controlled pedestrian crossing on Pontfaen Road to improve foot access to the development. The integrated network map produced by Ceredigion Council showing the aspirations to improve the active travel routes does not specifically identify a proposed pedestrian crossing, however, this proposed facility would also enhance the existing active travel routes in the town and provide a good addition to the active travel routes to the benefit of the site, town and wider area.
  - The proposed layout of the site would improve footpath connections, including to the existing access in the south-east corner of the site to the leisure centre. This would provide a contiguous link to existing footways and further improve the public realm in the town for trips on foot.
  - Cycle parking would be provided in excess of local authority requirements.



# 10. SUMMARY AND CONCLUSIONS

- 10.1. This Transport Assessment (TA) has been prepared by Entran Ltd to detail and assess transport matters associated with the proposed erection of Class A1 Retail Food store, erection of 'Food Village', associated access & car parking, and improvements to the listed cricket pavilion at Pontfaen Road, Lampeter.
- 10.2. The proposal comprises;
  - Primary vehicle and pedestrian access from Pontfaen Road;
  - 1,921 sqm GFA ALDI Foodstore with 118 parking spaces (7 No. Parent and Child, 5 No. Disabled, 2 No. Click and Collect, 4No. EV expandable to 24 No) and 8 cycle spaces;
  - Erection of Food Village pods (3 no.); and
  - Offsite highway infrastructure as part of the build process to enhance non-motorised user access to the site and connectivity to the town centre and surrounding area to support Active Travel Wales. This proposal is outside the redline and as part of this PAC process is expected to form part of any future S278 in this form and location, or similar
- 10.3. Cycle parking is to be provided on site including 8 customer cycle parking spaces under shelter. Staff cycle parking would be provided internal to the warehouse. The constituent design components of the proposed development layout are discussed in more detail below
- 10.4. In terms of the 'food village' element of the proposal will consist of 3 small pod style units focusing on local produce and skills with a strong link to the University and an opportunity to trade alongside Aldi. It is expected that these units will generally be open normal working hours and weekends, with sporadic vehicle related trips and servicing by LGV's and/or cars. 25 separate parking spaces adjacent to Aldi are provided although a high degree of linked trips is expected. Clearly for such a proposal it is quite hard to quantify any impact that it might have as the final use is not clearly defined and will develop over time.
- 10.5. The pavilion whist being refurbished will continue to be mainly an evening (training) and weekend (training and matches) facility and will therefore not impact peak hour traffic. The pavilion benefits from 12 existing car parking spaces with a further 10 overflow spaces also being provided.
- 10.6. The proposed development would include a primary vehicle and pedestrian access from Pontfaen Road at a location approximately 80 metres west of the current site access. The existing site access from Pontfaen Road in the northeast corner of the site would be closed up to vehicles and enhanced for the development to provide walking and cycling access.
- 10.7. Further point of foot / cycle access would be provided into the site to provide a contiguous link to all existing footways and improve the public realm for trips on foot.
- 10.8. Servicing would be consistent with ALDI's long established methods and the site access will be designed to provide safe and efficient access for turning of service vehicles.
- 10.9. Reasonable and adequate car parking is proposed, commensurate with the needs and expected operation of the development proposal, and the assessment demonstrates avoidance of overspill onto local roads and attendant negative effects. Secure, covered and illuminated cycle parking spaces for the discount food store would be provided;
- 10.10. Offsite highway infrastructure as part of the build process would be included to enhance nonmotorised user access to the site and connectivity to the town centre and surrounding area, to support Active Travel Wales.
- 10.11. Personal injury accident data has been examined on the local highways and there has been no accidents recorded in the vicinity of the site access. The addition of the modest amount of development traffic is considered unlikely to introduce or lead to any new material road safety issues.
- 10.12. The site will include for a Staff Travel Plan and a Transport Implementation Strategy which provides the opportunity to reduce dependence on travel by private car and seeks to influence travel to and



from the site rather than merely assessing its impact.

- 10.13. Trip generation rates from TRICS surveys taken from the previous consented application to form a reasonable and robust analysis of the expected traffic from the ALDI foodstore.
- 10.14. An operational assessment has been undertaken of the proposed site access at expected peak times and this has shown that there should not lead be any issues expected and the development would not lead to significant nor severe effects on the local highway network.

**Conclusion** 

- 10.15. The information presented in this TA Report has been presented to help the local authority review the likely effects on the surrounding transportation network of a proposed revised ALDI foodstore development at Pontfaen Road in Lampeter, Ceridigion.
- 10.16. Based on these findings, the development proposals are not expected to lead to any localised material off-site highways issues on the adjacent transportation network. The provision of the proposed development offers a good opportunity to enhance the local area and should be supported by the local highway authority.
- 10.17. It is therefore concluded that the impact has been fairly and reasonably addressed and there should be no reason for highways related objection to the proposed development.





**Pre-application Response**


#### Russell Hughes-Pickering Swyddog Arweiniol Corfforaethol : Economi ac Adfywio Corporate Lead Officer : Economy and Regeneration

Neuadd Cyngor Ceredigion, Penmorfa, Aberaeron. SA46 0PA www.ceredigion.gov.uk

Mr Dan Templeton,

Email: dan.templeton@planningpotential.co.uk

Dyddiad Date	23/10/2020
Gofynnwch am Please ask for	Rhydian Williams
Llinell uniongyrchol Direct line	01545574104
Fy nghyf My ref	Q200146
Eich cyf Your ref	
Ebost Email	Rhydian.williams2@ceredigion.gov .uk

Dear Mr. Templeton,

# RE: Erection of Class A1 Retail Food store, with associated access & car parking, improvements to existing sports pitch and listed cricket pavilion.

## Pre-application advice enquiry reference no: Q200146.

I refer to the above mentioned pre-application and would provide you with the following comments:

## **Relevant planning History**

No recent relevant planning history on site

## Relevant development plan policies

On the 25th April 2013 the Council resolved to formally adopt the 'Ceredigion Local Development Plan' (LDP). The LDP can be inspected on the website via the following link; https://www.ceredigion.gov.uk/index.cfm?articleid=4761

Hard copies of the LDP are available for viewing at our offices in Penmorfa, Aberaeron, or within community libraries throughout the authority.

The following development plan policies will be considered during the assessment of your proposal.

S01: Sustainable growth

S02: Development in Urban Service Centres

LU12: Employment proposals on non-allocated sites

## LU18: Retail Proposals Countywide

Rydym yn croesawu gohebiaeth yn Gymraeg a Saesneg. Cewch ateb Cymraeg i bob gohebiaeth Gymraeg ac ateb Saesneg i bob gohebiaeth Saesneg. Ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome correspondence in Welsh and English. Correspondence received in Welsh will be answered in Welsh and correspondence in English will be answered in English. Corresponding in Welsh will not involve any delay.

LU19: Retail Proposals in Urban Service Centres

LU22 Community Provision

DM03 Sustainable Travel

DM04 Sustainable Travel Infrastructure as a Material Consideration

DM05 Sustainable Development and Planning Gain

DM06 High Quality Design and Place Making

DM08 Bilingual Signs and Place Names

DM09 Design and Movement

DM10 Design and Landscaping

DM11 Design for Climate Change

DM13 Sustainable drainage systems

DM14 Nature Conservation Ecological Connectivity

DM15 Local Biodiversity Conservation

DM20 Protection of Trees, Hedgerows and Woodlands

#### **Relevant supplementary planning guidance**

The following supplementary planning guidance is relevant for your development and should be considered during the design and planning stage.

Built Environment and Design SPG

Nature Conservation SPG

Ceredigion County Council Parking Standards SPG

Transport Assessment SPG

The above SPG's can be found on the Ceredigion County Council website via the following link: <u>https://www.ceredigion.gov.uk/index.cfm?articleid=21419</u>

#### **Relevant National Planning Policy**

Planning Policy Wales (Edition 10, December 2018)

Technical Advice Note 4: Retail and Commercial

Technical Advice Note 11: Noise

Technical Advice Note 12: Design

Technical Advice Note 16: Sport Recreation and Open Space

Technical Advice Note 18: Transport

Technical Advice Note 23: Economic Development

Technical Advice Note 24: The Historic Environment

#### Initial assessment of the proposal

The application site is positioned within the settlement of Lampeter and the site is currently predominantly greenfield being used as a sports pitch owned by the University. There is a pavilion building on site which is grade II listed. Access onto site is via an access point to the North East onto the adjoining main road. The application site is flat to gently sloping in nature and a stream runs to the western boundary which results in part of the site adjacent to the stream being in a C2 flood zone.

I note from your pre app that you are seeking advice on a proposed new Aldi food store, associated car parking spaces, new access point off Pontfaen Road, small food village, together with the improvement of the existing pavilion building, soft landscaping and a new multi-purpose playing pitch.

As part of the pre app key consultees have been consulted including Highways, Drainage and the planning ecologist and their comments are outlined below. Also the forward planning section have also provided detailed comments on the proposal as following;

#### Policy comments

#### **Economic Benefit**

The wider economic benefit of the proposal and details of the level of job creation resultant from the proposal will be considered in the context of strategic policies S01 and S02.

#### **Retail Impact Assessment**

Whilst the proposed site is within the development boundary for Lampeter, it is outside of the Town Centre Boundary and exceeds 800m2 gross floorspace. Therefore in accordance with criterion 5 of policy LU18, a Retail Impact Assessment is required (See also PPW10 Para 4.3.25-4.3.29). This assessment should address:

- The sequential test (See PPW10, Para 4.3.18 4.3.24)
- Whether the proposal would lead to an oversupply of convenience goods (See criterion 3 of policy LU18)
- The likely impact of the development on existing retail provision within the Service Centre (See criterion 2 of Policy LU18)
- The individual or cumulative impact on the vitality and viability of the existing town centre (See criterion 3 of Policy LU19)

#### **Sequential Test**

In the context of the sequential test, the proposed site is considered to be an edge of centre location. As part of the sequential test, detailed consideration should be provided for a range of alternative sites to include:

- Part of E0501 Land to rear of Gwili Jones Tractors
- Part of E0501 Land adjacent A485 Tregaron Road
- Part of H0505 Council owned open space
- University owned land on Brongest Road
- Re-development of existing Co-op store site
- Re-development of existing Sainsbury's store site

Agree that other than the existing Sainsbury's store, there are no alternative site opportunities within the Town Centre Boundary.

## **Retail Need**

Settlement Group Statement 05: Lampeter identifies a need for 352 sqm net of comparison floorspace, 548 sqm net of convenience and 548 sqm net of bulky goods floorspace between 2007 and 2016, although no specific sites are allocated.

Lampeter already has two substantial A1 retail outlets, namely a Sainsbury's within the town centre and Co-op at the southern gateway to the town.

The SOUTH WEST WALES REGIONAL RETAIL STUDY by Carter Jonas, February 2017 is the most up to date evidence in relation to retail needs available. The study states that; *'Lampeter attracts a reasonable proportion of convenience for a centre of its size,'* which indicates that sufficient convenience goods provision already exists within the town.

The study goes on to conclude that; 'There is limited capacity for new convenience floorspace over the study period due to committed retail floorspace,' and that; 'In terms of accommodating growth within the County, the study concluded the following for each centre: Lampeter - need for new retail floorspace in Lampeter is largely influenced by inflow from visitor expenditure, but also from the centre's relatively high student population. As such forecast need for new retail is supported by students and visitor inflow. The Sainsbury's foodstore serves as an important anchor for attracting shoppers and supporting linked trips with other services. The health check assessment identifies the centre 'healthy'. However, vacancies have increased in recent year along with a decline retail offer. In addition, food & drink provision is also currently underrepresented.'

The study recommends a 5 tier retail hierarchy for the region, within which Lampeter is identified as a Level 2 – Primary Town Centre.

The study sets out details of a Convenience Goods Market Share analysis undertaken by NEMS Market Research through a household telephone interview survey. Table 4.1 of the Study identifies Lampeter as zone 12 covering postcodes SA40 9 and SA48 7/8 with a 2016 population forecast of 12,552.

Table 1, Appendix 2 identifies Sainsbury's, Lampeter as having 6.4% market share of Ceredigion's Catchment and 36.2% market share of Zone 12. It also identified the Co-op Lampeter as having 3.5% market share of Ceredigion's Catchment and 21.3% market share of Zone 12. Together, these stores have just shy of 10% (9.9%) of the convenience goods market share for Ceredigion which is considered sufficient for Lampeter given its status as the 3<sup>rd</sup> largest retail centre in Ceredigion.

The quantitative retail needs assessment included within the study shows that between 2016 and 2036, the Convenience goods Capacity (sqm net) for both foodstore and Local supermarket/discounter formats in Ceredigion will decline. Whilst the forecast indicates that there may be minimal floorspace capacity in Lampeter for Foodstore or Local supermarket/Deep Discounter Format later in the study period (27 and 55 sqm net in 2036 – See Tables 11.2 and 11.3), this is outweighed by an overall decline in capacity in the larger centres namely Aberystwyth

and Cardigan and in no way indicates a need for the scale of development proposed being 2,200sqm Convenience Deep Discounter (Aldi). Para 11.6 states; '... The forecasts show that there is no capacity to support new convenience floorspace over the forecast period (2016 to 2036). This is due to the scale of convenience floorspace planned across the County, the estimated turnover of which absorbs all forecast residual expenditure.'

The study also includes a town centre health check for Lampeter which states: 8.10 Lampeter is a university town that also has an important role as the main retailing, administration, educational and business centre for a large rural area within both Ceredigion and Carmarthenshire Counties.

8.11 The centre is focused around the main road junction of A475 and A482 and is generally an attractive and successful centre. It offers a good mix of independent retailers, many of who have been trading in the town for many years and national multiples. There is evidence of some investment and new openings, particularly in the convenience sector. However, vacancies have been increasing and the number of comparison retailers has declined. The food & drink sector is also under-represented.

The evidence outlined above comes from the regional study from 2017. Subsequent to the preparation of the study, there have been further significant changes to retail trends and their impact for high streets with increasing on-line spending and home delivery. The vitality and vibrancy of the high street has been further compromised due to the current Covid 19 pandemic resulting in reduced footfall levels within town centres. The Council therefore intends to update the town centre health checks.

In relation to the Food Village concept for temporary food outlets, incubator units for the sector and future training opportunities, the opportunity is recognised in para 8.11 and 12.46 of the study and would further support the town's popular annual food festival. However, there are concerns that a food village in the proposed location would further detract from the town centre and the study also highlights the recent increase in vacancies.

Para 3.12 of the LDP AMR 2019 stated: 'According to the Welsh Retail Consortium – Springboard Footfall and Vacancy Monitor, Footfall and vacancy rates across Wales have fluctuated significantly over recent years, realising a significant drop in footfall in 2011, which coincided with overall vacancy levels topping 13%. Since then subsequent increases, over and above those experienced throughout the UK have been realised and significant improvement in footfall levels across Wales has been achieved since July 2013. However early 2018 footfall decreases in town centres demonstrated a drop, with February seeing a 2.3% fall on last year's figures, snowy conditions over winter may have contributed to the decline. Signs of continued consumer uncertainty over the economic outlook are reflected in a further 4.8% decline from June 2018 to June 2019.'

The decline in town centre footfall indicates a worrying trend for town centre vitality, and is one which the Covid 19 pandemic is likely to have exacerbated.

The AMR SA Indicator:12a - Encourage a vibrant and diversified economy considers the percentage of premises vacant in the town centres. In 2019 Lampeter has an 8.8% vacancy rate within its town centre. This was slightly below the average shop vacancy rate of 9.7% across all of Ceredigion's Town Centres combined.

The vacancy rate in Lampeter according to the latest survey in February 2020 was 10.5%, however it is likely that this may have increased further since the Covid 19 pandemic hit. With an increasing vacancy rate in Lampeter town centre, it could be argued that investment would be better spent offering a fund for vacant units within the town centre to re-develop and open as food outlets/incubator units.

During the examination of the Ceredigion LDP, the Inspector held a hearing session to consider retail need in Lampeter. At the time in 2012, Sainsbury's challenged the robustness of the CACI 2008 Retail needs study for Lampeter. The CACI study (2008) demonstrated that there was limited capacity for additional convenience, comparison and bulky goods floorspace. In order to independently test the conclusion in relation to convenience goods, NLP were commissioned to conduct Convenience Capacity Sensitivity Testing in Lampeter. The NLP Report, 2012 agreed with the conclusions of the CACI 2008 Report that there was only limited capacity for convenience goods space and that an allocation for such a use would be inappropriate. The Independently appointed Planning inspector also agreed that this evidence was robust and that the Council was justified in their approach by not including a retail allocation within Lampeter in the LDP. The latest study by Carter Jonas 2017 also concludes that the remains limited capacity for convenience goods in Lampeter. Together, these 3 studies amount to a substantial body of evidence that there is very limited need for additional convenience goods floorspace in Lampeter at the present time, and that there is no evidence of need for the 2,200m2 A1 store proposed.

## Loss of open space

Policy LU22 seeks to resist the loss of open space unless alternative provision of at least equivalent local community value can be provided either within or adjoining the settlement. Criterion 2 i. goes on to require that; *'In relation to open space specifically, the alternative should be an enhanced provision which is preferably located within close proximity to the existing provision.'* In addition, criterion 2.ii. states that unless; It can be demonstrated that existing level of community provision is inappropriate or surplus to the community needs of that settlement

The existing open space provision is in the region of 2.14Ha according to the Candidate Site submission CS00138. It forms playing fields owned by the University of Wales Trinity St Davids and together with its boundaries which host a number of Tree Preservation Orders, forms an important green infrastructure asset within the town of Lampeter.

The playing fields have been used for a number of sports including cricket and rugby. Furthermore, discussion with the local member relating to the candidate site proposal indicated that the community through the local soccer club would like to secure use of the field. This indicates that the provision is not surplus to the needs of the community and should therefore be retained for such purposes.

Other than this site, there is no other community accessible playing fields for cricket within Lampeter. Lampeter Rugby Football club has two pitches and there are also school playing fields, however they are reserved for use by the school. Alternative provision should accommodate a range of sports which have historically taken place at this location and for which there is community need to include; Football, Rugby and Cricket. The proposal as presented does not appear to accommodate the sport of cricket.

Furthermore, the recently prepared Green Infrastructure Assessment in para 5.5.4 identifies a key opportunity to protect this green infrastructure asset by seeking to designate is as a 'Village Green' and Local Nature Reserve. This proposal reflects the sites importance for the ecological network within the town and as accessible open space.

The LDP examination hearing session 5 also considered the LDP's failure to allocate the University Playing fields for retail or retail-led mixed use. Reasons for the site being an inappropriate location for allocation include:

- The important recreational facility it offers
- The important nature conservation element found on site.

• Trees located around the edge of this site are under Tree Preservation Orders and are also a UKBAP priority. If development were to occur in this location most, if not all the trees would need to be removed in order to gain the necessary visibility splays, this would not be acceptable.

• Half of the site is located within the C2 flood zone, though it is acknowledged that this would not preclude development.

The papers presented to the hearing session explain that the playing fields are used by Lampeter Town Cricket Club and that Lampeter Rugby Football club had also expressed an interest in using the fields for training purposes. This indicates a historic demand within the community to retain this sports facility.

Policy LU22 requires a report to be submitted with any planning application for the change of use or loss of facility explaining why the loss or change of use is justifiable.

## Impact on the Listed Building and its setting

Whilst the site is outside of the town's conservation area, the playing fields form an important historic element of the built environment in Lampeter, directly linked to the oldest university in Wales and forming part of the university's campus within the town.

Central to the south of the site and to the historic development of the site is the Pavilion which is a grade illi listed building. This building is designated as a listed building; *for its special architectural interest as an ambitious and especially well-preserved early 20<sup>th</sup> Century sports pavilion, important for its special historic interest as an unusual example of this type of building.* The boundary walls and gated entrances to the playing fields are considered to constitute part of the curtilage of the listed building and would be detrimentally impacted upon by the proposal to create an access onto the A475.

Whilst the sensitive repair of the Pavilion building is needed, there are concerns that the ALDI store structure would adversely impact and overwhelm the listed building and its setting. The proposal would significantly change the historic relationship between the pavilion and the playing fields which it serves, as it would no longer offer a central viewing point for sports activity taking place. The scale and height of the proposed Aldi store in such close proximity to the listed building would overshadow its current presence within its curtilage and stature as a grand pavilion serving a valued sports facility.

Future maintenance and repair of the listed building and its curtilage objects and structures (preservation of the boundary walls and gates) should be addressed within a management plan submitted with any future planning application.

## Flooding

Part of the site is within the C2 flood zone due to the Nant Creuddyn running along the western edge of the proposed site. There are concerns that development of this open space could lead to increased surface water run-off which would exacerbate the flooding issue in the area and potentially lead to greater incidences of flooding on the part of the site proposed for a multi-use sports facility. Whilst the multi-use sports facility is not considered a highly vulnerable form of development in accordance with TAN15, and a SUDS/biodiversity area is included within the indicative layout plan, assurances that the overall proposal would not lead to a situation where the community use element of the scheme is compromised due to flooding on a regular basis. SAB approval should be sought prior to planning application stage.

## Other Constraints for consideration

- Afon Teifi Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).
- SLA 7: Teifi Valley
- Tree Preservation Orders Horse chestnut trees

## Planning ecology

There are a number of considerations and constraints that will need to be taken into account with this proposal).

To begin with this development may be subject to an Environmental Impact Assessment under Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

The scope of this should include the following (at a minimum):

- **Preliminary Ecological Appraisal** this must include:
  - → Otter survey of the Nant Creuddyn that runs adjacent to the site, to include survey 100m upstream and downstream of the development area (records within 500m);
  - → Water vole survey of the Nant Creuddyn, to include survey 100m upstream and downstream of the development area (records within 1km);
  - → Assessment of impacts on migrating or breeding fish in relation to noise and vibration from construction and operation of the development (Atlantic salmon, brown trout and eel records within metres of the proposal);
  - $\rightarrow$  Badger survey;
  - $\rightarrow$  Bat survey of the trees and the pavilion building;
  - $\rightarrow$  INNS survey along Nant Creuddyn and on the site;
  - → Survey of hedgerows on site, particularly in relation to removing/translocating to provide the required access/visibility splay;
  - → Mitigation for any identified impacts to protected species/habitats e.g. hedgerow translocation strategy, habitat compensation, reasonable avoidance measures for any identified protected species.
- Habitats Regulations Assessment (under Regulation 63 of the Conservation of Habitats and Species Regulations 2017)
  - $\rightarrow$  Of the Afon Teifi SAC which is hydrologically connected to the site.
  - $\rightarrow$  This will require additional information to be able to complete the assessment such
  - as Pollution Prevention Plan (see below for CEMP)
- Trees:
  - $\rightarrow$  The trees around the development area are subject to TPOs
  - → If any trees are to be removed these will need to be subject to the appropriate arboricultural surveys and be checked for their suitability for roosting bats (as above).
  - → Suitable root protection zones will need to be calculated using the British Standard and measures put in place to protect these both during the construction and operational phase.

Additionally the following will be required:

- Construction Environmental Management Plan this can encompass any mitigation required, as identified from the PEA and other surveys (see final point below) Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details;
  - → A description of the construction methods to be used, details of materials to be used, and how construction waste generated will be managed;
  - → Construction programme/timetable including estimated duration of construction activities and details of restrictions to be applied;
  - → Traffic Management: details of site deliveries, plant to be used on site, provision of wheel wash facilities (see pollution prevention and biosecurity risk assessment below);
  - → Details of measures to minimise nuisance including noise and vibration from excavation activities, dust control, and control of artificial light spillage;
  - $\rightarrow$  Method(s) for site clearance;
  - $\rightarrow$  Method(s) for managing site construction drainage;

- → Pollution prevention plan following the Guidance for Pollution Prevention (GPP), including appropriately sized containment and stand-off distances between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain;
- → Pollution incident response plan following GPP 21 including details of emergency spill procedures and incident response plan.
- → Details of soil management methods including topsoil removal, storage and amelioration for re-use (methods should follow BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces);
- → Details of hedgerow protection following BS5837:2012 Trees in relation to design, demolition and construction. Recommendations;
- → Biosecurity Risk Assessment for INNS including methods for management of any known to be present or where there is potential for introduction to the site (e.g. accidental via contaminated machinery, especially tracked vehicles);
- → Details for managing the biodiversity interest at the site including avoidance and mitigation measures, pre-commencement of works survey schedule, maintenance and enhancement for protected species and habitats; role of ECoW to monitor and provide guidance for compliance with approved plans, the EMP and appropriate environmental regulations.
- Lighting plan of the development once it is in operation to include locations, levels, lightspill, timing. No lighting should be directed towards any habitats on site.
- Landscaping, ecological enhancements and management plan to fulfil the Section 6 Environment (Wales) Act 2016 Biodiversity Duty This should include at a minimum:

This should include at a minimum:

- → Native tree and shrub planting, planting for pollinators across the development areas. This must include species lists, planting plans, numbers, planting sizes etc.
- $\rightarrow$  Green roof to replace area lost for bat foraging and enhancements for pollinators;
- → Management plan for wildlife friendly management of green spaces. To include methods, management schedule and who is responsible for implementing this plan;
- → Bat roosting provision and bird roosting provision could be incorporated into the structures of the food village buildings or the cricket pavillion;
- → Improvement of the river corridor for wildlife and how this will be protected from the effects of the development including people;
- → Better linkage of SUDs/Biodiversity area with the habitats on site/adjacent to the site that are to be retained e.g. the Nant Creuddyn and the tree lines – leaving buffer strips and connectivity strips;
- → Amphibian hibernaculae and habitat piles to support amphibians using the SuDS wetlands on site;
- → Green infrastructure connections with the wider landscape e.g. joining up walking routes, habitat creation to improve habitat connectivity

## <u>Highways</u>

I acknowledge receipt of the pre-application submission and highlight the relevant policies and guidance applicable.

## Policy Context

Ceredigion Local Development Plan (LDP) 2007 - 2022: Policies:

DM03 Sustainable Travel, A Transport Assessment should be provided at the thresholds set out in Supplementary Planning Guidance (SPG).

DM04 Sustainable Travel as a Material Consideration

DM05 Sustainable Development and Planning Gain.

DM06: High Quality Design and Placemaking, which inter-alia requires that – Development should have full regard, and positively contribute to the context of its location and surroundings. Development should reflect a clear understanding of design principles, the local physical, social, economic and environmental context.

And that the development should –

5. Provide a safe environment by ensuring that the design of buildings and associated routes and open spaces consider safety principles;

Manual for Streets.

Supplementary Planning Guidance (SPG) Ceredigion County Council Parking Standards. *Parking provision for all modes of transport should be in* 

Technical Advice Note (TAN 18): Transport (2007).

Technical Advice Note (TAN) 12: Design (2014)

Design Guidance - Active Travel (Wales) Act 2013

Welsh Transport Appraisal Guidance (WelTAG).

#### Appraisal

The highway and transportation appraisal of the submission has regard to the highway network serving the site, access(es) with the public highway and internal parking and turning arrangements. Planning Policy Wales TAN 18 states that decisions should take into account whether safe and suitable access to a site can be achieved; and LDP Policy DM06 which inter alia requires new development to provide a safe environment by ensuring that the design of buildings and associated access routes implement fundamental safety principles. Policies DM03 and DM04 and DM05 consider Sustainable Travel. The Active Travel Act, and the Well Being Act place a duty on the Authority to consider connectivity.

The submission provides insufficient information to enable the proposal to be appraised. There is a requirement for a Transport Assessment to enable the proposal to be fully appraised. Where the TA reveals the need for a Transport Implementation Strategy this will need to be secured through a planning obligation.

The site layout plan should include dimensions of carriageway /footway width, junction visibility envelopes in both the horizontal and vertical plane and car parking provision. Visibility splays for emerging vehicles and forward visibility are crucial to provide drivers and pedestrian with the time to make decisions and take appropriate actions in reducing the risk of conflicts.

The development shall provide adequate space and facilities within the development site to reduce the risk of vehicles parking or backing up into the highway. This should include a system of free flow traffic management of vehicles within the site. Access by cycle and foot should be planned to avoid conflict areas with motorised vehicles with good visibility for users throughout.

## Land Drainage

The information provides not enough evidence to the LPA that the proposed development can be sustainable drained. The following additional information should be provided:

- how roof water from the Aldi discount food store will be dealt with (Green Roof/Rain Water Harvesting would be possible with overflow to swales and into SuDS/Biodiversity area?) – source control/site control/regional control
- surface water from the 115 customer parking area (surface water disposal via permeable surface/swales into SuDS/Biodiversity area?) source control/site control/regional control
- Site access road from Pontfaen Road (surface water disposal via permeable surface or discharge into swales alongside the access road with overflow into SuDS/Biodiversity area ?) –site control/regional control
- Small food village (roof water into raingardens with overflow into SuDS/Biodiversity area) source control/site control/regional control
- Food village parking surface water disposal via grass protection mesh/gravel path way acceptable as drained as natural as possible

The soil is classified as freely draining slightly acid loamy soils and is therefore suitable for infiltration devices.

The surface water system for the site need to be calculated for a 1 in 100 year storm event, 6 hours storm event, 30% climate change and 10% urban creep.

The SuDS/Biodiversity area should not be used as an end-of pipe solution to discharge surface water. The implementation of the SuDS Management Train is essential. All surface water has to be dealt onside and the proposed SuDS Biodiversity area should not be used as an end-of-pipe solution but as the regional control.

An overview how surface water will be dealt with via a drainage strategy implementing the information requested above would be welcomed.

SuDS Approval will be required. No development can commence until approval has been granted by the SuDS Approval Body (SAB) as well as planning. It is therefore recommended that the applicant contact the SAB as soon as possible to discuss the SuDS Application. Further information can be found on Ceredigion County Council's website <u>http://www.ceredigion.gov.uk/resident/planning-building-control-and-sustainable-drainage-bodysab/sustainable-drainage-approval-body-sab/</u>.

## Other considerations and requirements

## Layout and Design

There is insufficient information and detail on the submitted plans to enable any detailed comments on layout and design. From the masterplan provided I am concerned regarding the lack of pedestrian access onto site and the single width carriageway which seems to serve the pavilion, sports parking and food village parking which would also conflict with highway policy.

In regards to proposed materials, an effort should be made to use materials which are typically found in the area in order to deliver high quality design and place making in line with policy DM06 of the LDP. May I also suggest that any external signs are bilingual.

PAC report

The proposed development is deemed to fall within the definition of major development and as such a pre-application consultation document (PAC) must be submitted as part of any valid planning application. Guidance on PAC can be found on the Welsh Government website.

#### Scoping opinion

This development may be subject to an Environmental Impact Assessment under Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 and as such you may want to submit a formal scoping opinion to inform the scope of the required Environmental Assessment.

#### Listed building and extent of curtilage

A key consideration in any application submitted on site is the effect the development will have on both the setting of the listed building and directly on the fabric of the listed building and any features which relate to it and are deemed to fall within its curtilage. To distinguish what elements of the application site fall within the curtilage of the listed pavilion, consideration has been given to relevant case law, one of the most relevant in this case being;

Attorney General ex rel Sutcliffe v Calderdale MBC, 1982,

LJ Stephenson established three tests to determine curtilage listing:

- 1. Physical layout;
- 2. Ownership, historic and current; and
- 3. Use or function, historic and current.

I have broadly considered the tests and my comments are as follows;

- 1. The playing field related directly to the sports pavilion, with the pavilion benefiting from a central position overlooking the whole field. The gates adjacent to the main road and hedgerow with stone bank form an integral part of the curtilage of the site.
- 2. It is my understanding that the university has owned both the playing fields and pavilion since its erection.
- 3. The use of the pavilion and playing fields are directly related as one directly serves the other.

Careful consideration will be required to clearly set out the curtilage of the listed building and what features relate to the listing. If it is deemed that who whole playing field including access gates and boundary hedge/wall is within the curtilage, then listed building consent will be required for any works which seek to change these features.

However, if it is the case that it is clearly demonstrated that these features (access gates and boundary hedge/wall etc.) are not within the curtilage of the listed building, listed building consent will therefore not be required for the proposed works (if not directly related to the pavilion) but in line with section 66(1) of the Listed Building and Conservation Area Act 1990, special regard will need to be given to the desirability of preserving the building or its setting, or any feature of historic interest which it possesses. This will need to be detailed in any full planning application and relevant supporting statements submitted.

Should you wish to proceed with a planning application, full planning permission and listed building consent will be required for the for the proposed development. The items listed below will need to be submitted as part of a full planning application and listed building consent.

- Full planning application form and listed building consent.
- Location plan 1:2500, 1:1250 scale with land in ownership outlined in blue and development area outlined in red.
- Existing and Proposed Block plan 1:200 scale with land in ownership outlined in blue and development area outlined in red.
- Proposed Elevations, Plans & Sections. (Scale 1:100 or 1:50)
- Proposed floor plans. (Scale 1:100 or 1:50)
- Proposed site sections and finished floor and site levels (Scale 1:50 or 1:100) (Unless confirmation there is no change)
- Existing and Proposed Roof Plans (Scale 1:50 or 1:100)
- Landscaping Scheme
- Retail impact assessment
- Heritage impact statement
- Ecological report and additional info as advise above
- Lighting plan
- Drainage strategy/report
- Planning statement
- Transport statement
- Environmental Assessment EIA
- Additional information as advise above
- The up to date fee schedule can be found on the planning section of the authorities website.

#### Conclusion

Having considered the information provided in this pre app in detail, based on the information held by the authority as outlined in the policy comments above, it would seem that the policy principle of retail development on site does not meet the current policy framework and recent studies point to a refusal. It is acknowledged that the proposed development would bring significant inward investment to the town during construction, however it is deemed that the lack of need for such a large retail premises would be to the detriment to existing retail premises within the town.

Furthermore the impact of the development on the setting of the listed building, impact on key features within the curtilage of the listed building, loss of TPO trees, and the loss of a significant portion of the sports fields also weighs heavily against the development. I also question whether the remaining part of the sports field as indicated for investment in your pre app would be compromised by flooding being partly positioned in a c2 flood zone.

It is also deemed that the type of businesses which would be interested in the food village premises would be better served locating in existing vacant retail and commercial units within the town centre. This would help sustain the town centre as a vibrant place to shop and socialise. The location of these units would benefit from limited footfall and passing trade being located to the rear of the Aldi store near the delivery bay, and as such I question whether the location is suitable for such a proposal.

May I remind you that the content of this letter is made without prejudice to any future application.

For further information regarding planning policies please follow this link:

Policy link: <u>http://www.ceredigion.gov.uk/ldp</u>

If further guidance is required in regards to this pre app please get in contact by phone or email.

Yours sincerely,

Mr. Rhydian Williams Swyddog Rheoli Datblygu Development Management Officer Ar ran Swyddog Arweiniol Corfforaethol: Economi ac Adfywio On behalf of the Corporate Lead Officer: Economy and Regeneration





Traffic Survey Data

#### Lampeter ATC, A475 (Eastern Site)

Direction	Westbound		HGV am pm	<b>124</b> 144	avg 25 29	5	1	5	Direction: I	Eastbound		HGV am pm	<b>176</b> 145	avg 35 29	5	2	2	Direction:	Total Flow						
Hour	Tue	Wed	Thu	Fri	Sat	Sun	Mon	5-Day 7-Day	Hour	Tue	Wed	Thu	Fri	Sat	Sun	Mon	5-Day 7-Day	Hour	Tue	Wed	Thu	Fri	Sat	Sun	Mon
Beginning	0012	0013	0614	UCCIS	00016	Utti	00018	Ave. Ave.	Beginning	00012	0013	0014	Uct 15	0016	UCCIT	000 18	Ave. Ave.	Beginning	00012	0413	00014	UCC 15	00016	00017	00118
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06:00	36	29	31	36	18	7	30	32 27	06:00	37	33	58	42	25	16	57	45 38	06:00	73	62	89	78	43	23	87
07:00	112	113	107	89	44	17	91	102 82	07:00	169	134	123	124	47	24	115	133 105	07:00	281	247	230	213	91	41	206
08:00	146	180	178	193	83	28	176	175 141	08:00	285	304	285	298	101	34	299	294 229	08:00	431	484	463	491	184	62	475
09:00	141	139	132	160	159	46	111	137 127	09:00	160	145	194	198	178	82	146	169 158	09:00	301	284	326	358	337	128	257
10:00	126	150	158	140	1/4	110	137	144 144	10:00	157	190	191	201	191	143	153	1/8 1/5	10:00	283	350	349	341	365	253	290
12:00	145	154	198	173	167	139	145	166 162	12:00	149	103	163	1/5	125	141	144	157 147	12:00	292	297	361	346	459	280	200
13:00	151	138	168	198	153	120	154	162 155	13:00	145	138	152	205	130	100	129	154 143	13:00	296	276	320	403	283	220	283
14:00	166	157	169	184	138	109	156	166 154	14:00	186	157	206	201	141	117	168	184 168	14:00	352	314	375	385	279	226	324
15:00	296	256	277	296	148	111	270	279 236	15:00	204	212	212	215	113	102	216	212 182	15:00	500	468	489	511	261	213	486
16:00	240	229	248	262	141	91	235	243 207	16:00	183	156	214	185	132	97	176	183 163	16:00	423	385	462	447	273	188	411
17:00	208	190	207	222	160	94	184	202 181	17:00	200	210	195	202	138	81	155	192 169	17:00	408	400	402	424	298	175	339
18:00	133	144	158	146	127	74	121	140 129	18:00	128	164	138	158	122	64	119	141 128	18:00	261	308	296	304	249	138	240
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21:00	26	4/	40	35	30	19	30	36 32	21:00	21	26	30	18	29	23	21	23 24	21:00	4/	/3	70	53	59	42	51
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12H(7-19)	2008	2007	2167	2239	1724	1073	1942	2073 1880	12H(7-19)	2115	2120	2270	2340	1648	1103	1966	2162 1937	12H(7-19)	4123	4127	4437	4579	3372	2176	3908
16H(6-22)	2229	2245	2415	2500	1887	1180	2128	2303 2083	16H(6-22)	2282	2314	2492	2536	1822	1222	2160	2357 2118	16H(6-22)	4511	4559	4907	5036	3709	2402	4288
18H(6-24)	2246	2274	2440	2528	1917	1194	2145	2327 2106	18H(6-24)	2295	2336	2506	2576	1855	1241	2174	2377 2140	18H(6-24)	4541	4610	4946	5104	3772	2435	4319
24H(0-24)	2279	2298	2475	2559	1943	1220	2172	2357 2135	24H(0-24)	2316	2354	2530	2600	1884	1263	2203	2401 2164	24H(0-24)	4595	4652	5005	5159	3827	2483	4375
	00.00	00.00	00.00	00.00	44.00	44.00	00.00	00.00.44.00		00.00	00.00		00.00	44.00	40.00	00.00	00.00.00.00		00.00			00.00	44.00	11.00	00.00
AM Peak	08:00	08:00	08:00	08:00	11:00	11:00	08:00	08:00 11:00	AM Peak	08:00	08:00	08:00	08:00	11:00	10:00	08:00	08:00 08:00	AM Peak	08:00	08:00	08:00	08:00	11:00	11:00	08:00
	146	180	178	193	230	139	176	1/5 164		285	304	285	298	229	143	299	294 229		431	484	463	491	459	280	475
PM Peak	15:00	15:00	15:00	15:00	12:00	12:00	15:00	15:00 15:00	PM Peak	15:00	15:00	16:00	15:00	14:00	12:00	15:00	15:00 15:00	PM Peak	15:00	15:00	15:00	15:00	17:00	12:00	15-00
Cok	296	256	277	296	167	134	270	279 236	Cak	204	212	214	215	141	118	216	212 182	Cak	500	468	489	511	298	252	486

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5-Day 7-Day Ave. Ave.

4235 3817 4660 4202 4704 4247 4757 4299

08:00 08:00 469 370 15:00 15:00 491 418

#### Lampeter ATC, A475 (Western Site)

Direction: Westbound

Direction: Eastbound

L:00

2:00

3:00

4:00 5:00

5:00

7:00

8:00

:00

0:00

1:00

2:00

3:00

4:00

5:00

6:00

7:00

18:00

9:00

0:00

21:00 22:00

3:00

7-19

6-24

0-24

Poal 08:00

Tue Oct 12

0

1

4

6

6

19 5

1829

1989 1998 2017 6-22

282

15:00

Wed Oct 13

0

2

7

- 4

1820

1990 2010

2026

08:00

283

15:00

177

Thu Oct 14

3

54 122

288

171

169

171

142 135

167

80

39

23

2024

2220 2233

2253

08:00

288

15:00

199

Fri Oct 15

1

43

44 17 20

12

2027

2216 2248

2269

08:00

300

15:00

199

Sat Oct 16

1

4

9

22 17

1431

1592 1618

1646

11:00

173

16:00

125

Sun Oct 17

2

14

22

30

57

42

28

17 11

1018

1119

1135

1154

10:00

131

14:00

109

Mon Oct 18

3

8

14

54 101 284

162 158

176 146 112 186 153 155 162

99 64 37

19 12 21 12 20

1705

1879 1893

1920

08:00

284

15:00

176

5-Day 7-Da

Ave Av

123 287

146 154 139

139 14

130 12

130 122

120 110

72 40 69

22

15

14

139

13

13

1881 169

209

185

187 207

8:00 08:00

5:00 15:0

Direction:	Total	Flov
------------	-------	------

Hour

eginnii 00:00 01:00 02:00

03:00

04:00

05:00

06:00 07:00

08:00

09:00 10:00

11:00 12:00 13:00

14:00

15:00 16:00 17:00

18:00 19:00

20:00 21:00 22:00

23:00

Total

2H(7-19

6H(6-23

8H(6-2

4H(0-)

08:00

411

15:00

433

08:00

440

15:00

408



08:00

461

15:00

465

11:00

378

12:00

278

10:00

245

12:00

229

08:00

15:00

418

443

08:00 08:00

440 344

15:00 432 15:00 371

08:00

445

15:00

436

Hour	Tue	Wed	Thu	Fri	Sat	Sun	Mon	5-Day	7-Day
Beginning	Oct 12	Oct 13	Oct 14	Oct 15	Oct 16	Oct 17	Oct 18	Ave.	Ave.
00:00	6	2	5	5	7	7	3	4	5
01:00	2	0	3	3	5	2	1	2	2
02:00	0	3	1	1	1	2	1	1	1
03:00	2	2	3	4	3	3	3	3	3
04:00	7	3	6	4	3	6	0	4	4
05:00	15	14	15	13	6	3	20	15	12
06:00	32	30	30	34	17	7	31	31	26
07:00	103	103	103	77	39	16	79	93	74
08:00	129	157	157	161	62	28	159	153	122
09:00	107	115	124	139	107	38	100	117	104
10:00	106	127	135	121	148	114	108	119	123
11:00	118	121	160	149	205	119	148	139	146
12:00	130	141	172	146	161	125	122	142	142
13:00	128	135	149	168	136	106	130	142	136
14:00	148	140	160	168	117	105	140	151	140
15:00	255	231	237	266	142	91	242	246	209
16:00	211	204	222	232	118	94	202	214	183
17:00	193	162	190	205	137	70	164	183	160
18:00	118	122	142	136	115	62	110	126	115
19:00	93	88	105	117	71	38	81	97	85
20:00	49	57	59	59	36	31	43	53	48
21:00	24	44	37	34	28	19	29	34	31
22:00	14	14	20	18	14	11	12	16	15
23:00	3	13	7	14	11	1	2	8	7
Total									
2H(7-19)	1746	1758	1951	1968	1487	968	1704	1825	1655
6H(6-22)	1944	1977	2182	2212	1639	1063	1888	2041	1844
8H(6-24)	1961	2004	2209	2244	1664	1075	1902	2064	1866
4H(0-24)	1993	2028	2242	2274	1689	1098	1930	2093	1893
AM Peak	08:00	08:00	11:00	08:00	11:00	11:00	08:00	08:00	11:00
	129	157	160	161	205	119	159	153	146
M Peak	15:00	15:00	15:00	15:00	12:00	12:00	15:00	15:00	15:00
	255	231	237	266	161	125	242	246	209

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# **Appendix C**

Architects' Plans and Swept Path Analysis

## 10000 PONTFAEN ROAD DRAWING LEGEND Asphalt (/ Application Boundary TM TM Denotes tarmac finish h Stone Bank (1.0m) BP Denotes block paving CC Denotes concrete surface finish CS Denotes concrete paving slab finish Denotes landscaped area with misc SL planting within application area GT Denotes ACO GroundGuard ground reinforcement grid tiles filled with gravel Denotes rolled hoggin self-binding RH gravel TKR — Timber knee rail TPR — Timber post and rail fence (1.2m high) CBF ——— Close boarded fence (1.8m high) PF — Paladin fence (2.4m high) HDB Heavy duty bollards New stainless steel anti ram bollards LC Lighting Column Denotes Click & Collect spaces Electric vehicle charging point GT Provision for future electric vehicle charging point +00.00 Existing Levels +00.00 Proposed Levels PROPOSED ALDI PARKING: 118 no. 100no. Standard spaces 7no. P&C spaces 5no. Disabled spaces 4no. EVCP spaces (+20 future spaces) 2no. Click & Collect spaces GT FOOD VILLAGE PARKING: 25 no. PAVILION PARKING: 22no. 12no. Exisitng spaces 10no. Overflow DRAWING BASED ON TOPOGRAPHICAL SURVEY UNDERTAKEN BY BERRY GEOMATIC SURVEYS, DRAWING NUMBER 46/20, DATED 01/07/20. GT NOTES Aldi totem sign subject to separate advertising consent application. m 2 loading bay 3 Pedestrian access via opening in boundary wall 4 New site access 5 Existing gates to playing field to be retained for pedestrian and cycle access 6 'Click & Collect' parking spaces 7 4 no. Sheffield cycle hoops 8 Proposed bin store 9 External plant

10 New pedestrian link through south-east boundary linking to school and leisure facilities



## Key Plan - NTS

Ν

EF

50 M

SS

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Entran Ltd Chapel Pill Lane Bristol		Licence No: 337901
Filtering Summary		
Land Use	01/C	RETAIL/DISCOUNT FOOD STORES
Selected Trip Rate Calculation Parameter Range	900-2635 sqm GFA	
Actual Trip Rate Calculation Parameter Range	1485-2568 sqm GFA	
Date Range	Minimum: 01/01/13	Maximum: 21/10/20
Parking Spaces Range	All Surveys Included	
Days of the week selected	Saturday	10
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town Neighbourhood Centre (PPS6 Local Centre)	4 3 3
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 25,001 to 50,000 50,001 to 100,000	2 1 3 2 2
Population <5 Mile ranges selected	5,001 to 25,000 50,001 to 75,000 75,001 to 100,000 125,001 to 250,000 250,001 to 500,000 500,001 or More	1 1 1 2 2 3
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0 1.1 to 1.5	2 3 5
PTAL Rating	No PTAL Present 2 Poor	9 1

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Entran Ltd	Chapel Pill Lane	Bristol		Licence No: 337901
TRI	P RATE CALCULAT	TION SELECTION PARAM	IETERS:	
Land	Use : 01 - RE	TAIL		
Cate	gory : C - DIS	COUNT FOOD STORES		
MU	LII-MODAL IC	DIAL VEHICLES		
Sele	cted regions and ar	reas.		
01	GREATER LOND	ON		
0.1	WF WALTHAM	FOREST	1 days	
03	SOUTH WEST		5	
	SM SOMERSE	Т	1 days	
05	EAST MIDLAND	S		
	LN LINCOLNS	HIRE	2 days	
	NT NOTTINGH	AMSHIRE	1 days	
06	WEST MIDLAND	)S		
	WM WEST MID	DLANDS	2 days	
	WO WORCEST	ERSHIRE	1 days	
10	WALES			

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

#### Primary Filtering selection:

CARDIFF

WICKLOW

CF

LEINSTER WC WIC

14

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

1 days

1 days

Include all surveys

Gross floor area
1485 to 2568 (units: sqm)
900 to 2635 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision: Selection by:

Date Range: 01/01/13 to 21/10/20

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.

10 days

<u>Selected survey days:</u> Saturday

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

<u>Selected survey types:</u>	
Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:	
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	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:	
Industrial Zone	
Development Zone	
Residential Zone	
Retail Zone	
High Street	
No Sub Category	

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.

Entran Ltd Chapel Pill Lane Bristol

Secondary Filtering selection:

#### <u>Use Class:</u> E(a)

50,001 to 100,000

10 days

2 days 1 days 3 days 2 days

2 days

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

Population within 500m Range:
All Surveys Included
Population within 1 mile:
5,001 to 10,000
10,001 to 15,000
15,001 to 20,000
25 001 to 50 000

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

1 days
1 days
1 days
2 days
2 days
3 days

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

2 days
3 days
5 days

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

Petrol filling station:	
Included in the survey count	0 days
Excluded from count or no filling station	10 davs

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

<u>Travel Plan:</u>	
Not Known	1 days
Yes	1 days
No	8 days

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

PTAL Rating:	
No PTAL Present	9 days
2 Poor	1 davs

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

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
1157	OF SITES relevant	to selection parame	otars		
<u></u>	U JILJ TELEVAIN		<u>1675</u>		
1	CF-01-C-01	LIDL		CARDIFF	
	EAST TYNDALL ST	TREET			
	CARDIFF				
	Suburban Area (P	PS6 Out of Centre)			
	Development Zon	е			
	I otal Gross floor a	area:	2568 sqm	SURVAY TUDA: MANUA	
2	LN-01-C-02	LIDL	01/0//1/	LINCOLNSHIRE	
	DIXON STREET				
	Suburban Area (P	PS6 Out of Centre)			
	No Sub Category	,			
	Total Gross floor a	area:	2233 sqm		
3	<i>Survey da</i>	IE: SATURDAY	28/10/17	SURVEY TYPE: MANUAL	
5	NEWARK ROAD	ALD1			
	LINCOLN				
	BRACEBRIDGE Suburban Area (P	PS6 Out of Centre)			
	High Street	1 So Out of centre)			
	Total Gross floor a	area:	1485 sqm		
4	Survey da	te: SATURDAY	28/10/17	Survey Type: MANUAL	
4	CHAPEL LANE	LIDL		NOTTINGHAMSHIRE	
	BINGHAM				
	Edge of Town				
	Total Gross floor a	area:	2440 sqm		
_	Survey da	te: SATURDAY	16/07/16	Survey Type: MANUAL	
5	SM-01-C-01 SEAWARD WAY	LIDL		SOMERSEI	
	MINEHEAD				
	Edge of Town				
	Total Gross floor a	area:	2247 sgm		
	Survey da	te: SATURDAY	24/06/17	Survey Type: MANUAL	
6	WC-01-C-01			WICKLOW	
	BRAY	L			
	Suburban Area (P	PS6 Out of Centre)			
	Total Gross floor a	area:	1672 sqm		
	Survey da	te: SATURDAY	05/10/19	Survey Type: MANUAL	
7	WF-01-C-01	ALDI		WALTHAM FOREST	
	LEYTON				
	HATCH LANE				
	Neighbourhood Ce	entre (PPS6 Local Ce	entre)		
	Total Gross floor	area:	2099 sam		
	Survey da	te: SATURDAY	07/03/20	Survey Type: MANUAL	
	-				

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Entran Ltd	Chapel Pill Lane	Bristol				Licence	No: 337901
<u></u>	OF SITES relevant	<u>to selection paral</u>	<u>meters (Cont.</u>	2			
8	WM-01-C-01 MACKADOWN LAN	LI DL NE			WEST MIDLANDS		
	BIRMINGHAM						
	KITT'S GREEN		<b>a</b>				
	Neighbourhood Ce No Sub Category	entre (PPS6 Local	Centre)				
	Total Gross floor a	area:	20	35 sqm			
	Survey da	te: SATURDAY	C	9/07/16	Survey Type: MANUAL		
9	WM-01-C-02	LIDL			WEST MIDLANDS		
	HIGH STREET						
	WEST BROMWICH	4					
	GUNS VILLAGE		Control				
	Neignbournood Ce	entre (PPS6 Local	Centre)				
	Total Gross floor a	aroa	20	25 sam			
	Survey da	area. hte <sup>,</sup> SATHRDAY	20	<i>19/07/16</i>	Survey Type' MANI IAI		
10	WO-01-C-01	LIDL	U		WORCESTERSHIRE		
	BLACKPOLE ROAD	)					
	WORCESTER						
	BRICKFIELDS						
	Edge of Town						
	Retail Zone						
	Total Gross floor a	area:	24	17 sqm			
	Survey da	te: SATURDAY	1	6/07/16	Survey Type: MANUAL		

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

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

Bristol

Chapel Pill Lane

Entran Ltd

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.514	9	2184	0.137	9	2184	0.651	
08:00 - 09:00	10	2133	2.621	10	2133	1.692	10	2133	4.313	
09:00 - 10:00	10	2133	3.882	10	2133	3.211	10	2133	7.093	
10:00 - 11:00	10	2133	5.162	10	2133	4.627	10	2133	9.789	
11:00 - 12:00	10	2133	6.484	10	2133	6.048	10	2133	12.532	
12:00 - 13:00	10	2133	6.001	10	2133	6.713	10	2133	12.714	
13:00 - 14:00	10	2133	5.977	10	2133	5.658	10	2133	11.635	
14:00 - 15:00	10	2133	5.401	10	2133	5.504	10	2133	10.905	
15:00 - 16:00	10	2133	5.452	10	2133	5.616	10	2133	11.068	
16:00 - 17:00	10	2133	5.246	10	2133	5.476	10	2133	10.722	
17:00 - 18:00	10	2133	4.552	10	2133	4.627	10	2133	9.179	
18:00 - 19:00	10	2133	3.408	10	2133	3.863	10	2133	7.271	
19:00 - 20:00	10	2133	2.457	10	2133	2.996	10	2133	5.453	
20:00 - 21:00	10	2133	1.463	10	2133	1.753	10	2133	3.216	
21:00 - 22:00	10	2133	0.713	10	2133	1.125	10	2133	1.838	
22:00 - 23:00	9	2184	0.076	9	2184	0.300	9	2184	0.376	
23:00 - 24:00										
Total Rates:			59.409			59.346			118.755	

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:	1485 - 2568 (units: sqm)
Survey date date range:	01/01/13 - 21/10/20
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	10
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI -MODAL TAXIS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

Bristol

Chapel Pill Lane

Entran Ltd

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.010	9	2184	0.010	9	2184	0.020	
08:00 - 09:00	10	2133	0.028	10	2133	0.023	10	2133	0.051	
09:00 - 10:00	10	2133	0.033	10	2133	0.033	10	2133	0.066	
10:00 - 11:00	10	2133	0.066	10	2133	0.056	10	2133	0.122	
11:00 - 12:00	10	2133	0.103	10	2133	0.084	10	2133	0.187	
12:00 - 13:00	10	2133	0.098	10	2133	0.113	10	2133	0.211	
13:00 - 14:00	10	2133	0.084	10	2133	0.070	10	2133	0.154	
14:00 - 15:00	10	2133	0.075	10	2133	0.070	10	2133	0.145	
15:00 - 16:00	10	2133	0.084	10	2133	0.094	10	2133	0.178	
16:00 - 17:00	10	2133	0.066	10	2133	0.070	10	2133	0.136	
17:00 - 18:00	10	2133	0.061	10	2133	0.066	10	2133	0.127	
18:00 - 19:00	10	2133	0.052	10	2133	0.056	10	2133	0.108	
19:00 - 20:00	10	2133	0.042	10	2133	0.052	10	2133	0.094	
20:00 - 21:00	10	2133	0.038	10	2133	0.038	10	2133	0.076	
21:00 - 22:00	10	2133	0.023	10	2133	0.028	10	2133	0.051	
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000	
23:00 - 24:00										
Total Rates:			0.863			0.863			1.726	

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI -MODAL OGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.015	9	2184	0.010	9	2184	0.025	
08:00 - 09:00	10	2133	0.014	10	2133	0.019	10	2133	0.033	
09:00 - 10:00	10	2133	0.019	10	2133	0.014	10	2133	0.033	
10:00 - 11:00	10	2133	0.005	10	2133	0.009	10	2133	0.014	
11:00 - 12:00	10	2133	0.005	10	2133	0.005	10	2133	0.010	
12:00 - 13:00	10	2133	0.009	10	2133	0.009	10	2133	0.018	
13:00 - 14:00	10	2133	0.009	10	2133	0.000	10	2133	0.009	
14:00 - 15:00	10	2133	0.014	10	2133	0.019	10	2133	0.033	
15:00 - 16:00	10	2133	0.014	10	2133	0.014	10	2133	0.028	
16:00 - 17:00	10	2133	0.005	10	2133	0.005	10	2133	0.010	
17:00 - 18:00	10	2133	0.000	10	2133	0.005	10	2133	0.005	
18:00 - 19:00	10	2133	0.005	10	2133	0.000	10	2133	0.005	
19:00 - 20:00	10	2133	0.014	10	2133	0.014	10	2133	0.028	
20:00 - 21:00	10	2133	0.014	10	2133	0.014	10	2133	0.028	
21:00 - 22:00	10	2133	0.000	10	2133	0.009	10	2133	0.009	
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000	
23:00 - 24:00										
Total Rates:			0.142			0.146			0.288	

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL PSVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.000	9	2184	0.000	9	2184	0.000	
08:00 - 09:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
09:00 - 10:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
10:00 - 11:00	10	2133	0.005	10	2133	0.000	10	2133	0.005	
11:00 - 12:00	10	2133	0.000	10	2133	0.005	10	2133	0.005	
12:00 - 13:00	10	2133	0.005	10	2133	0.000	10	2133	0.005	
13:00 - 14:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
14:00 - 15:00	10	2133	0.000	10	2133	0.005	10	2133	0.005	
15:00 - 16:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
16:00 - 17:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
17:00 - 18:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
18:00 - 19:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
19:00 - 20:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
20:00 - 21:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
21:00 - 22:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000	
23:00 - 24:00										
Total Rates:			0.010			0.010			0.020	

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL CYCLISTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.025	9	2184	0.000	9	2184	0.025	
08:00 - 09:00	10	2133	0.080	10	2133	0.056	10	2133	0.136	
09:00 - 10:00	10	2133	0.108	10	2133	0.098	10	2133	0.206	
10:00 - 11:00	10	2133	0.150	10	2133	0.103	10	2133	0.253	
11:00 - 12:00	10	2133	0.131	10	2133	0.113	10	2133	0.244	
12:00 - 13:00	10	2133	0.122	10	2133	0.103	10	2133	0.225	
13:00 - 14:00	10	2133	0.141	10	2133	0.117	10	2133	0.258	
14:00 - 15:00	10	2133	0.103	10	2133	0.145	10	2133	0.248	
15:00 - 16:00	10	2133	0.103	10	2133	0.075	10	2133	0.178	
16:00 - 17:00	10	2133	0.113	10	2133	0.141	10	2133	0.254	
17:00 - 18:00	10	2133	0.070	10	2133	0.103	10	2133	0.173	
18:00 - 19:00	10	2133	0.094	10	2133	0.108	10	2133	0.202	
19:00 - 20:00	10	2133	0.089	10	2133	0.089	10	2133	0.178	
20:00 - 21:00	10	2133	0.066	10	2133	0.084	10	2133	0.150	
21:00 - 22:00	10	2133	0.023	10	2133	0.056	10	2133	0.079	
22:00 - 23:00	9	2184	0.000	9	2184	0.010	9	2184	0.010	
23:00 - 24:00										
Total Rates:			1.418			1.401			2.819	

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL VEHICLE OCCUPANTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.794	9	2184	0.168	9	2184	0.962
08:00 - 09:00	10	2133	4.130	10	2133	2.602	10	2133	6.732
09:00 - 10:00	10	2133	6.165	10	2133	5.115	10	2133	11.280
10:00 - 11:00	10	2133	8.504	10	2133	7.454	10	2133	15.958
11:00 - 12:00	10	2133	10.665	10	2133	9.831	10	2133	20.496
12:00 - 13:00	10	2133	10.164	10	2133	11.490	10	2133	21.654
13:00 - 14:00	10	2133	10.693	10	2133	9.910	10	2133	20.603
14:00 - 15:00	10	2133	9.521	10	2133	9.732	10	2133	19.253
15:00 - 16:00	10	2133	9.662	10	2133	10.018	10	2133	19.680
16:00 - 17:00	10	2133	9.118	10	2133	9.545	10	2133	18.663
17:00 - 18:00	10	2133	7.716	10	2133	7.909	10	2133	15.625
18:00 - 19:00	10	2133	5.551	10	2133	6.380	10	2133	11.931
19:00 - 20:00	10	2133	4.097	10	2133	5.072	10	2133	9.169
20:00 - 21:00	10	2133	2.236	10	2133	2.817	10	2133	5.053
21:00 - 22:00	10	2133	1.097	10	2133	1.781	10	2133	2.878
22:00 - 23:00	9	2184	0.102	9	2184	0.382	9	2184	0.484
23:00 - 24:00									
Total Rates:			100.206			200.421			

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL PEDESTRIANS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.097	9	2184	0.056	9	2184	0.153
08:00 - 09:00	10	2133	0.792	10	2133	0.502	10	2133	1.294
09:00 - 10:00	10	2133	0.966	10	2133	0.914	10	2133	1.880
10:00 - 11:00	10	2133	1.627	10	2133	1.285	10	2133	2.912
11:00 - 12:00	10	2133	1.510	10	2133	1.524	10	2133	3.034
12:00 - 13:00	10	2133	2.142	10	2133	1.931	10	2133	4.073
13:00 - 14:00	10	2133	2.307	10	2133	2.185	10	2133	4.492
14:00 - 15:00	10	2133	2.213	10	2133	2.382	10	2133	4.595
15:00 - 16:00	10	2133	1.856	10	2133	2.166	10	2133	4.022
16:00 - 17:00	10	2133	1.814	10	2133	1.880	10	2133	3.694
17:00 - 18:00	10	2133	1.988	10	2133	1.758	10	2133	3.746
18:00 - 19:00	10	2133	1.777	10	2133	1.631	10	2133	3.408
19:00 - 20:00	10	2133	1.111	10	2133	1.369	10	2133	2.480
20:00 - 21:00	10	2133	0.984	10	2133	1.186	10	2133	2.170
21:00 - 22:00	10	2133	0.530	10	2133	0.675	10	2133	1.205
22:00 - 23:00	9	2184	0.066	9	2184	0.163	9	2184	0.229
23:00 - 24:00									
Total Rates:			21.780			21.607			43.387

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL BUS/TRAM PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.031	9	2184	0.010	9	2184	0.041
08:00 - 09:00	10	2133	0.258	10	2133	0.117	10	2133	0.375
09:00 - 10:00	10	2133	0.333	10	2133	0.272	10	2133	0.605
10:00 - 11:00	10	2133	0.445	10	2133	0.356	10	2133	0.801
11:00 - 12:00	10	2133	0.413	10	2133	0.413	10	2133	0.826
12:00 - 13:00	10	2133	0.366	10	2133	0.422	10	2133	0.788
13:00 - 14:00	10	2133	0.459	10	2133	0.389	10	2133	0.848
14:00 - 15:00	10	2133	0.441	10	2133	0.389	10	2133	0.830
15:00 - 16:00	10	2133	0.366	10	2133	0.366	10	2133	0.732
16:00 - 17:00	10	2133	0.291	10	2133	0.333	10	2133	0.624
17:00 - 18:00	10	2133	0.286	10	2133	0.347	10	2133	0.633
18:00 - 19:00	10	2133	0.248	10	2133	0.248	10	2133	0.496
19:00 - 20:00	10	2133	0.150	10	2133	0.225	10	2133	0.375
20:00 - 21:00	10	2133	0.098	10	2133	0.188	10	2133	0.286
21:00 - 22:00	10	2133	0.047	10	2133	0.103	10	2133	0.150
22:00 - 23:00	9	2184	0.000	9	2184	0.025	9	2184	0.025
23:00 - 24:00									
Total Rates:			4.232			4.203			8.435

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL TOTAL RAIL PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.066	9	2184	0.000	9	2184	0.066
08:00 - 09:00	10	2133	0.014	10	2133	0.005	10	2133	0.019
09:00 - 10:00	10	2133	0.009	10	2133	0.000	10	2133	0.009
10:00 - 11:00	10	2133	0.019	10	2133	0.005	10	2133	0.024
11:00 - 12:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
12:00 - 13:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
13:00 - 14:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
14:00 - 15:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
15:00 - 16:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
16:00 - 17:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
17:00 - 18:00	10	2133	0.005	10	2133	0.033	10	2133	0.038
18:00 - 19:00	10	2133	0.000	10	2133	0.014	10	2133	0.014
19:00 - 20:00	10	2133	0.000	10	2133	0.009	10	2133	0.009
20:00 - 21:00	10	2133	0.000	10	2133	0.014	10	2133	0.014
21:00 - 22:00	10	2133	0.000	10	2133	0.009	10	2133	0.009
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000
23:00 - 24:00									
Total Rates: 0.113 0.104 0									0.217

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.
Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.097	9	2184	0.010	9	2184	0.107
08:00 - 09:00	10	2133	0.272	10	2133	0.122	10	2133	0.394
09:00 - 10:00	10	2133	0.342	10	2133	0.272	10	2133	0.614
10:00 - 11:00	10	2133	0.464	10	2133	0.361	10	2133	0.825
11:00 - 12:00	10	2133	0.413	10	2133	0.417	10	2133	0.830
12:00 - 13:00	10	2133	0.366	10	2133	0.422	10	2133	0.788
13:00 - 14:00	10	2133	0.459	10	2133	0.394	10	2133	0.853
14:00 - 15:00	10	2133	0.441	10	2133	0.394	10	2133	0.835
15:00 - 16:00	10	2133	0.366	10	2133	0.366	10	2133	0.732
16:00 - 17:00	10	2133	0.291	10	2133	0.333	10	2133	0.624
17:00 - 18:00	10	2133	0.291	10	2133	0.380	10	2133	0.671
18:00 - 19:00	10	2133	0.248	10	2133	0.263	10	2133	0.511
19:00 - 20:00	10	2133	0.150	10	2133	0.234	10	2133	0.384
20:00 - 21:00	10	2133	0.098	10	2133	0.202	10	2133	0.300
21:00 - 22:00	10	2133	0.047	10	2133	0.113	10	2133	0.160
22:00 - 23:00	9	2184	0.000	9	2184	0.025	9	2184	0.025
23:00 - 24:00									
Total Rates:			4.345			4.308			8.653

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.

Entran Ltd Chapel Pill Lane Bristol

# TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL TOTAL PEOPLE Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	1.012	9	2184	0.234	9	2184	1.246
08:00 - 09:00	10	2133	5.274	10	2133	3.282	10	2133	8.556
09:00 - 10:00	10	2133	7.581	10	2133	6.399	10	2133	13.980
10:00 - 11:00	10	2133	10.745	10	2133	9.203	10	2133	19.948
11:00 - 12:00	10	2133	12.719	10	2133	11.884	10	2133	24.603
12:00 - 13:00	10	2133	12.794	10	2133	13.947	10	2133	26.741
13:00 - 14:00	10	2133	13.600	10	2133	12.606	10	2133	26.206
14:00 - 15:00	10	2133	12.278	10	2133	12.653	10	2133	24.931
15:00 - 16:00	10	2133	11.987	10	2133	12.625	10	2133	24.612
16:00 - 17:00	10	2133	11.336	10	2133	11.898	10	2133	23.234
17:00 - 18:00	10	2133	10.065	10	2133	10.150	10	2133	20.215
18:00 - 19:00	10	2133	7.670	10	2133	8.382	10	2133	16.052
19:00 - 20:00	10	2133	5.447	10	2133	6.765	10	2133	12.212
20:00 - 21:00	10	2133	3.385	10	2133	4.290	10	2133	7.675
21:00 - 22:00	10	2133	1.697	10	2133	2.625	10	2133	4.322
22:00 - 23:00	9	2184	0.168	9	2184	0.580	9	2184	0.748
23:00 - 24:00									
Total Rates:			127.758			127.523			255.281

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL CARS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.412	9	2184	0.097	9	2184	0.509
08:00 - 09:00	10	2133	2.400	10	2133	1.528	10	2133	3.928
09:00 - 10:00	10	2133	3.652	10	2133	3.010	10	2133	6.662
10:00 - 11:00	10	2133	4.890	10	2133	4.416	10	2133	9.306
11:00 - 12:00	10	2133	6.174	10	2133	5.715	10	2133	11.889
12:00 - 13:00	10	2133	5.719	10	2133	6.409	10	2133	12.128
13:00 - 14:00	10	2133	5.654	10	2133	5.396	10	2133	11.050
14:00 - 15:00	10	2133	5.096	10	2133	5.190	10	2133	10.286
15:00 - 16:00	10	2133	5.185	10	2133	5.321	10	2133	10.506
16:00 - 17:00	10	2133	5.026	10	2133	5.237	10	2133	10.263
17:00 - 18:00	10	2133	4.304	10	2133	4.365	10	2133	8.669
18:00 - 19:00	10	2133	3.225	10	2133	3.652	10	2133	6.877
19:00 - 20:00	10	2133	2.330	10	2133	2.817	10	2133	5.147
20:00 - 21:00	10	2133	1.360	10	2133	1.622	10	2133	2.982
21:00 - 22:00	10	2133	0.652	10	2133	1.045	10	2133	1.697
22:00 - 23:00	9	2184	0.076	9	2184	0.295	9	2184	0.371
23:00 - 24:00									
Total Rates:			56.155			56.115			112.270

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL LGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.066	9	2184	0.020	9	2184	0.086
08:00 - 09:00	10	2133	0.169	10	2133	0.117	10	2133	0.286
09:00 - 10:00	10	2133	0.173	10	2133	0.150	10	2133	0.323
10:00 - 11:00	10	2133	0.188	10	2133	0.136	10	2133	0.324
11:00 - 12:00	10	2133	0.173	10	2133	0.216	10	2133	0.389
12:00 - 13:00	10	2133	0.141	10	2133	0.155	10	2133	0.296
13:00 - 14:00	10	2133	0.206	10	2133	0.173	10	2133	0.379
14:00 - 15:00	10	2133	0.192	10	2133	0.206	10	2133	0.398
15:00 - 16:00	10	2133	0.155	10	2133	0.150	10	2133	0.305
16:00 - 17:00	10	2133	0.136	10	2133	0.155	10	2133	0.291
17:00 - 18:00	10	2133	0.173	10	2133	0.169	10	2133	0.342
18:00 - 19:00	10	2133	0.122	10	2133	0.150	10	2133	0.272
19:00 - 20:00	10	2133	0.070	10	2133	0.113	10	2133	0.183
20:00 - 21:00	10	2133	0.042	10	2133	0.070	10	2133	0.112
21:00 - 22:00	10	2133	0.038	10	2133	0.038	10	2133	0.076
22:00 - 23:00	9	2184	0.000	9	2184	0.005	9	2184	0.005
23:00 - 24:00									
Total Rates:			2.044			2.023			4.067

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL MOTOR CYCLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.010	9	2184	0.000	9	2184	0.010
08:00 - 09:00	10	2133	0.009	10	2133	0.005	10	2133	0.014
09:00 - 10:00	10	2133	0.005	10	2133	0.005	10	2133	0.010
10:00 - 11:00	10	2133	0.009	10	2133	0.009	10	2133	0.018
11:00 - 12:00	10	2133	0.028	10	2133	0.023	10	2133	0.051
12:00 - 13:00	10	2133	0.028	10	2133	0.028	10	2133	0.056
13:00 - 14:00	10	2133	0.023	10	2133	0.019	10	2133	0.042
14:00 - 15:00	10	2133	0.023	10	2133	0.014	10	2133	0.037
15:00 - 16:00	10	2133	0.014	10	2133	0.038	10	2133	0.052
16:00 - 17:00	10	2133	0.014	10	2133	0.009	10	2133	0.023
17:00 - 18:00	10	2133	0.014	10	2133	0.023	10	2133	0.037
18:00 - 19:00	10	2133	0.005	10	2133	0.005	10	2133	0.010
19:00 - 20:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
20:00 - 21:00	10	2133	0.009	10	2133	0.009	10	2133	0.018
21:00 - 22:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000
23:00 - 24:00									
Total Rates:			0.191			0.192			0.383

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL Underground Passengers Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	9	2184	0.056	9	2184	0.000	9	2184	0.056	
08:00 - 09:00	10	2133	0.009	10	2133	0.000	10	2133	0.009	
09:00 - 10:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
10:00 - 11:00	10	2133	0.009	10	2133	0.000	10	2133	0.009	
11:00 - 12:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
12:00 - 13:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
13:00 - 14:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
14:00 - 15:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
15:00 - 16:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
16:00 - 17:00	10	2133	0.000	10	2133	0.000	10	2133	0.000	
17:00 - 18:00	10	2133	0.005	10	2133	0.023	10	2133	0.028	
18:00 - 19:00	10	2133	0.000	10	2133	0.014	10	2133	0.014	
19:00 - 20:00	10	2133	0.000	10	2133	0.009	10	2133	0.009	
20:00 - 21:00	10	2133	0.000	10	2133	0.014	10	2133	0.014	
21:00 - 22:00	10	2133	0.000	10	2133	0.009	10	2133	0.009	
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000	
23:00 - 24:00										
Total Rates:			0.079			0.069			0.148	

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL National Rail Passengers Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.010	9	2184	0.000	9	2184	0.010
08:00 - 09:00	10	2133	0.005	10	2133	0.005	10	2133	0.010
09:00 - 10:00	10	2133	0.005	10	2133	0.000	10	2133	0.005
10:00 - 11:00	10	2133	0.009	10	2133	0.005	10	2133	0.014
11:00 - 12:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
12:00 - 13:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
13:00 - 14:00	10	2133	0.000	10	2133	0.005	10	2133	0.005
14:00 - 15:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
15:00 - 16:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
16:00 - 17:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
17:00 - 18:00	10	2133	0.000	10	2133	0.009	10	2133	0.009
18:00 - 19:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
19:00 - 20:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
20:00 - 21:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
21:00 - 22:00	10	2133	0.000	10	2133	0.000	10	2133	0.000
22:00 - 23:00	9	2184	0.000	9	2184	0.000	9	2184	0.000
23:00 - 24:00									
Total Rates:			0.029			0.029			0.058

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.

#### Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL Bus Passengers Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES TOTALS				
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	2184	0.020	9	2184	0.005	9	2184	0.025
08:00 - 09:00	10	2133	0.127	10	2133	0.084	10	2133	0.211
09:00 - 10:00	10	2133	0.192	10	2133	0.173	10	2133	0.365
10:00 - 11:00	10	2133	0.211	10	2133	0.188	10	2133	0.399
11:00 - 12:00	10	2133	0.183	10	2133	0.169	10	2133	0.352
12:00 - 13:00	10	2133	0.159	10	2133	0.159	10	2133	0.318
13:00 - 14:00	10	2133	0.173	10	2133	0.155	10	2133	0.328
14:00 - 15:00	10	2133	0.150	10	2133	0.131	10	2133	0.281
15:00 - 16:00	10	2133	0.155	10	2133	0.159	10	2133	0.314
16:00 - 17:00	10	2133	0.150	10	2133	0.169	10	2133	0.319
17:00 - 18:00	10	2133	0.145	10	2133	0.192	10	2133	0.337
18:00 - 19:00	10	2133	0.117	10	2133	0.127	10	2133	0.244
19:00 - 20:00	10	2133	0.103	10	2133	0.113	10	2133	0.216
20:00 - 21:00	10	2133	0.056	10	2133	0.098	10	2133	0.154
21:00 - 22:00	10	2133	0.047	10	2133	0.080	10	2133	0.127
22:00 - 23:00	9	2184	0.000	9	2184	0.025	9	2184	0.025
23:00 - 24:00									
Total Rates:			1.988			2.027			4.015

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

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Entran Ltd Chapel Pill Lane Bristol		Licence No: 337901
Filtering Summary		
Land Use	01/C	RETAIL/DISCOUNT FOOD STORES
Selected Trip Rate Calculation Parameter Range	700-2703 sqm GFA	
Actual Trip Rate Calculation Parameter Range	1485-2568 sqm GFA	
Date Range	Minimum: 01/01/13	Maximum: 28/11/20
Parking Spaces Range	All Surveys Included	
Days of the week selected	Saturday	17
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town Neighbourhood Centre (PPS6 Local Centre)	6 7 4
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 25,001 to 50,000 50,001 to 100,000	7 1 3 4 2
Population <5 Mile ranges selected	5,001 to 25,000 25,001 to 50,000 50,001 to 75,000 75,001 to 100,000 100,001 to 125,000 125,001 to 250,000 250,001 to 500,000 500,001 or More	1 2 1 2 1 3 3 4
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0 1.1 to 1.5 1.6 to 2.0	2 6 7 2
PTAL Rating	No PTAL Present 2 Poor	15 2

Entran Ltd Chapel Pill Lane Bristol

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL Category : C - DISCOUNT FOOD STORES TOTAL VEHICLES

Selec	cted re	egions and areas:	
01	GRE	ATER LONDON	
	ΗV	HAVERING	1 days
	WF	WALTHAM FOREST	1 days
02	SOU	TH EAST	5
	BD	BEDFORDSHIRE	1 days
03	SOU	TH WEST	
	SM	SOMERSET	1 days
05	EAST	T MI DLANDS	
	LN	LINCOLNSHIRE	2 days
	NR	NORTHAMPTONSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WES	T MIDLANDS	
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	1 days
09	NOR	TH	
	ΤV	TEES VALLEY	1 days
10	WAL	ES	
	CF	CARDIFF	1 days
	MM	MONMOUTHSHIRE	1 days
14	LEIN	ISTER	
	LU	LOUTH	1 days
	WC	WICKLOW	1 days
15	GRE	ATER DUBLIN	
	DL	DUBLIN	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: Actual Range: Range Selected by User:	Gross floor area 1485 to 2568 (units: sqm) 700 to 2703 (units: sqm)
Parking Spaces Range:	All Surveys Included
Public Transport Provision: Selection by:	Include all surveys
Date Range: 01/01	/13 to 28/11/20
This data displays the rang included in the trip rate ca	ge of survey dates selected. Only surveys that were conducted within this date range are vlculation.
<u>Selected survey days:</u> Saturday	17 days
This data displays the num	nber of selected surveys by day of the week.
<u>Selected survey types:</u> Manual count Directional ATC Count	17 days O days
This data displays the nun up to the overall number o are undertaking using mad	nber of manual classified surveys and the number of unclassified ATC surveys, the total adding of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys chines.
<u>Selected Locations:</u> Suburban Area (PPS6 Out Edge of Town	of Centre) 6 7

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.

4

Selected Location Sub Categories:	
Industrial Zone	
Development Zone	
Residential Zone	
Retail Zone	
High Street	

Neighbourhood Centre (PPS6 Local Centre)

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DF SAT			Page 3
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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:

E(a)

17 days

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

Population within 500m Range:	
All Surveys Included	
Population within 1 mile:	
5,001 to 10,000	7 days
10,001 to 15,000	1 days
15,001 to 20,000	3 days
25,001 to 50,000	4 days
50,001 to 100,000	2 days

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

Population within 5 miles:	
5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	3 days
500,001 or More	4 days

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

<u>Car ownership within 5 miles:</u>	
0.5 or Less	2 days
0.6 to 1.0	6 days
1.1 to 1.5	7 days
1.6 to 2.0	2 days

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

Petrol filling station:	
Included in the survey count	0 days
Excluded from count or no filling station	17 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

<u>Travel Plan:</u>	
Not Known	1 days
Yes	1 days
No	15 days

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

Yes

<u>PTAL Rating:</u>	
No PTAL Present	15 days
2 Poor	2 days

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

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

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
<u>LIST</u>	OF SITES relevant	to selection paramet	ers		
1	BD-01-C-01 RIDGE ROAD BEDFORD KEMPSTON Edge of Town	LIDL		BEDFORDSHI RE	
2	Residential Zone Total Gross floor a <i>Survey da</i> CF-01-C-01 EAST TYNDALL ST CARDIFF	area: <i>te: SATURDAY</i> LIDL IREET	2544 sqm <i>17/10/20</i>	<i>Survey Type: MANUAL</i> CARDIFF	
3	Suburban Area (P Development Zon Total Gross floor a <i>Survey da</i> DL-01-C-02 SANTRY AVENUE DUBLIN SANTRY	PS6 Out of Centre) e area: <i>te: SATURDAY</i> ALDI	2568 sqm <i>01/07/17</i>	<i>Survey Type: MANUAL</i> DUBLIN	
4	Edge of Town No Sub Category Total Gross floor a <i>Survey da</i> HV-01-C-01 COLLIER ROW RC ROMFORD	area: <i>te: SATURDAY</i> ALDI AD	1703 sqm <i>24/10/20</i>	<i>Survey Type: MANUAL</i> HAVERING	
5	Neighbourhood Ce High Street Total Gross floor a <i>Survey da</i> LN-01-C-02 DIXON STREET LINCOLN NEW BOUI THAM	entre (PPS6 Local Cer area: <i>te: SATURDAY</i> LIDL	ntre) 1575 sqm <i>05/09/20</i>	<i>Survey Type: MANUAL</i> LINCOLNSHIRE	
6	Suburban Area (P No Sub Category Total Gross floor a <i>Survey da</i> LN-01-C-03 NEWARK ROAD LINCOLN BRACEBRIDGE	PS6 Out of Centre) area: <i>te: SATURDAY</i> ALDI	2233 sqm <i>28/10/17</i>	<i>Survey Type: MANUAL</i> LINCOLNSHIRE	
7	Suburban Area (P High Street Total Gross floor a <i>Survey da</i> LU-01-C-01 NEWRY ROAD DUNDALK	PS6 Out of Centre) area: <i>te: SATURDAY</i> ALDI	1485 sqm <i>28/10/17</i>	<i>Survey Type: MANUAL</i> LOUTH	
8	Edge of Town Industrial Zone Total Gross floor a <i>Survey da</i> MM-01-C-01 A466	area: <i>te: SATURDAY</i> LIDL	1746 sqm <i>07/11/20</i>	<i>Survey Type: MANUAL</i> MONMOUTHSHI RE	
9	MONMOUTH MAYHILL Suburban Area (P No Sub Category Total Gross floor a <i>Survey da</i> NR-01-C-03 SAXON WAY WES CORBY	PS6 Out of Centre) area: <i>te: SATURDAY</i> ALDI T	1640 sqm <i>28/11/20</i>	<i>Survey Type: MANUAL</i> NORTHAMPTONSHI RE	
	Edge of Town No Sub Category Total Gross floor a <i>Survey da</i>	area: <i>te: SATURDAY</i>	2000 sqm <i>24/10/20</i>	Survey Type: MANUAL	

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
<u>LIST</u>	OF SITES relevant	to selection paramete	ers (Cont.)		
10	NT-01-C-01 CHAPEL LANE BINGHAM	LIDL		NOTTI NGHAMSHI RE	
11	Edge of Town Industrial Zone Total Gross floor a <i>Survey da</i> SM-01-C-01 SEAWARD WAY MINEHEAD	area: <i>te: SATURDAY</i> LIDL	2440 sqm <i>16/07/16</i>	<i>Survey Type: MANUAL</i> SOMERSET	
12	Edge of Town No Sub Category Total Gross floor a <i>Survey da</i> TV-01-C-01 JESMOND GARDEI HARTLEPOOL	nrea: <i>te: SATURDAY</i> LIDL NS	2247 sqm <i>24/06/17</i>	<i>Survey Type: MANUAL</i> TEES VALLEY	
13	Suburban Area (P Residential Zone Total Gross floor a <i>Survey da</i> WC-01-C-01 PINEWOOD CLOSI BRAY	PS6 Out of Centre) nrea: <i>te: SATURDAY</i> ALDI E	1765 sqm <i>05/09/20</i>	<i>Survey Type: MANUAL</i> WICKLOW	
14	Suburban Area (P No Sub Category Total Gross floor a <i>Survey da</i> WF-01-C-01 HEYBRIDGE WAY LEYTON HATCH LANF	PS6 Out of Centre) area: <i>te: SATURDAY</i> ALDI	1672 sqm <i>05/10/19</i>	<i>Survey Type: MANUAL</i> WALTHAM FOREST	
15	Neighbourhood Ce Residential Zone Total Gross floor a Survey da WM-01-C-01 MACKADOWN LAN BIRMINGHAM	entre (PPS6 Local Cen irea: <i>te: SATURDAY</i> LIDL IE	tre) 2099 sqm <i>07/03/20</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS	
16	KITT'S GREEN Neighbourhood Ce No Sub Category Total Gross floor a Survey day WM-01-C-02 HIGH STREET WEST BROMWICH GUNS VILLAGE	entre (PPS6 Local Cen irea: <i>te: SATURDAY</i> LIDL	tre) 2085 sqm <i>09/07/16</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS	
	Neighbourhood Ce High Street Total Gross floor a Survey da	entre (PPS6 Local Cen area: <i>te: SATURDAY</i>	tre) 2085 sqm <i>09/07/16</i>	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

 17
 WO-01-C-01
 LI DL
 WORCESTERSHIRE

 BLACKPOLE ROAD
 WORCESTER
 BRICKFIELDS

 Edge of Town
 Retail Zone
 Total Gross floor area:
 2417 sqm

 Survey date:
 SATURDAY
 16/07/16
 Survey Type: MANUAL

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

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No. Ave. Trip		No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	2119	0.595	13	2119	0.120	13	2119	0.715
08:00 - 09:00	17	2018	2.524	17	2018	1.612	17	2018	4.136
09:00 - 10:00	17	2018	4.029	17	2018	3.201	17	2018	7.230
10:00 - 11:00	17	2018	5.297	17	2018	4.685	17	2018	9.982
11:00 - 12:00	17	2018	6.410	17	2018	5.973	17	2018	12.383
12:00 - 13:00	17	2018	6.230	17	2018	6.751	17	2018	12.981
13:00 - 14:00	17	2018	6.160	17	2018	5.973	17	2018	12.133
14:00 - 15:00	17	2018	5.740	17	2018	5.848	17	2018	11.588
15:00 - 16:00	17	2018	5.926	17	2018	6.113	17	2018	12.039
16:00 - 17:00	17	2018	5.550	17	2018	5.784	17	2018	11.334
17:00 - 18:00	17	2018	4.816	17	2018	5.031	17	2018	9.847
18:00 - 19:00	17	2018	3.454	17	2018	4.046	17	2018	7.500
19:00 - 20:00	17	2018	2.507	17	2018	3.003	17	2018	5.510
20:00 - 21:00	17	2018	1.498	17	2018	1.912	17	2018	3.410
21:00 - 22:00	17	2018	0.740	17	2018	1.134	17	2018	1.874
22:00 - 23:00	11	2112	0.082	11	2112	0.344	11	2112	0.426
23:00 - 24:00									
Total Rates:			61.558			61.530			123.088

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:	1485 - 2568 (units: sqm)
Survey date date range:	01/01/13 - 28/11/20
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	17
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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Entran Ltd Chapel Pill Lane Bristol		Licence No: 337901
Filtering Summary		
Land Use	01/C	RETAIL/DISCOUNT FOOD STORES
Selected Trip Rate Calculation Parameter Range	e 900-2635 sqm GFA	
Actual Trip Rate Calculation Parameter Range	1023-2568 sqm GFA	
Date Range	Minimum: 01/01/13	Maximum: 21/10/20
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday Tuesday Wednesday Thursday Friday	1 4 6 4 3
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town Neighbourhood Centre (PPS6 Local Centre)	4 8 6
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000 25,001 to 50,000 50,001 to 100,000	1 4 3 2 1 5 2
Population <5 Mile ranges selected	5,001 to 25,000 25,001 to 50,000 50,001 to 75,000 75,001 to 100,000 125,001 to 250,000 250,001 to 500,000 500,001 or More	1 3 1 3 3 3 4
Car Ownership <5 Mile ranges selected	0.6 to 1.0 1.1 to 1.5 1.6 to 2.0 2.1 to 2.5	11 5 1 1
PTAL Rating	No PTAL Present 2 Poor 4 Good	16 1 1

FRICS 7 DF MM \	'.8.1 WD	240321	B20.15	Database r	ight of TRIC	S Consortium	Limited,	2021. All righ	ts reserved	Thursday	01/04/2 Page
Entran Li	td	Chapel I	Pill Lane	Bristol						Licence	No: 33790
Γ	TRIP	RATE C	CALCULAT	ION SELEC	CTION PAR	AMETERS:					
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							1 days				
(	าว	SOUTE	FAST				i uays				
	52	WS		SEX			2 days				
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	00	SM	SOMERSE	Г			1 days				
(	D4	EAST A	NGLIA								
		СА	CAMBRIDO	GESHIRE			1 days				
		NF	NORFOLK				1 days				
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		NT	NOTTINGH	IAMSHIRE			1 days				
(	06	WEST	MIDLAND	S							
		WM	WEST MID	LANDS			2 days				
		WO	WORCEST	ERSHIRE			1 days				
(	29	NORTH	1								
		DH	DURHAM				1 days				
		TW	TYNE & WI	EAR			1 days				
-	10	WALES									
		CF	CARDIFF				1 days				
-	11	SCOIL					1				
	10						r days				
	13	IVIUNS I					1 days				
	15	GREAT	ED DHBH	IN			i uays				
	10						1 days				
			DODLIN				iuays				

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

#### Primary Filtering selection:

ANTRIM

17

AN

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

1 days

Parameter:	Gross floor area
Actual Range:	1023 to 2568 (units: sqm)
Range Selected by User:	900 to 2635 (units: sqm)

Parking Spaces Range: All Surveys Included

ULSTER (NORTHERN I RELAND)

Public Transport Provision: Selection by:

Include all surveys

Date Range: 01/01/13 to 21/10/20

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.

<u>Selected survey days:</u>	
Monday	1 days
Tuesday	4 days
Wednesday	6 days
Thursday	4 days
Friday	3 days

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

Selected survey types:	
Manual count	18 days
Directional ATC Count	0 days

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

<u>Selected Locations:</u>	
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	8
Neighbourhood Centre (PPS6 Local Centre)	6

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

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DF MM WD			Page 3
Entran Ltd	Chapel Pill Lane	Bristol	Licence No: 337901

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:

E(a)

18 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
5,001 to 10,000	4 days
10,001 to 15,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	5 days
50,001 to 100,000	2 days

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

Population within 5 miles:	
5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	3 days
250,001 to 500,000	3 days
500,001 or More	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	11 days
1.1 to 1.5	5 days
1.6 to 2.0	1 days
2.1 to 2.5	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.

Petrol filling station:	
Included in the survey count	0 days
Excluded from count or no filling station	18 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

<u>Travel Plan:</u>	
Not Known	1 days
Yes	3 days
No	14 days

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

Yes

16 days
1 days
1 days

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

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

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
LIST	OF SITES relevant	to selection parame	<u>ters</u>		
1	AD-01-C-01 GREENWELL ROA ABERDEEN EAST TULLOS INI Suburban Area (F Industrial Zone	LIDL D D. ESTATE PS6 Out of Centre)		ABERDEEN CITY	
2	Total Gross floor <i>Survey da</i> AN-01-C-02 BELFAST ROAD CARRICKFERGUS	area: <i>hte: MONDAY</i> LIDL	1950 sqm <i>18/11/19</i>	<i>Survey Type: MANUAL</i> ANTRIM	
3	Edge of Town Development Zor Total Gross floor <i>Survey da</i> BE-01-C-01 CLYDESDALE WA BELVEDERE	ne area: <i>hte: WEDNESDAY</i> LIDL Y	1325 sqm <i>12/10/16</i>	<i>Survey Type: MANUAL</i> BEXLEY	
4	Edge of Town Industrial Zone Total Gross floor <i>Survey da</i> CA-01-C-01 CROMWELL ROAE WISBECH	area: t <i>te: WEDNESDAY</i> LIDL )	2145 sqm <i>06/11/19</i>	<i>Survey Type: MANUAL</i> CAMBRI DGESHI RE	
5	Edge of Town Retail Zone Total Gross floor <i>Survey da</i> CF-01-C-01 EAST TYNDALL S CARDIFF	area: h <i>te: FRIDAY</i> LIDL TREET	1466 sqm <i>21/10/16</i>	<i>Survey Type: MANUAL</i> CARDIFF	
6	Suburban Area (F Development Zor Total Gross floor <i>Survey da</i> DH-01-C-01 WATLING ROAD BISHOP AUCKLAN	PPS6 Out of Centre) ne area: <i>THURSDAY</i> ALDI	2568 sqm <i>29/06/17</i>	<i>Survey Type: MANUAL</i> DURHAM	
7	Edge of Town Retail Zone Total Gross floor <i>Survey da</i> DL-01-C-01 SALLYNOGGIN RO	area: h <i>te: THURSDAY</i> LIDL DAD	1023 sqm <i>06/04/17</i>	<i>Survey Type: MANUAL</i> DUBLIN	
8	THOMASTOWN Neighbourhood C Residential Zone Total Gross floor <i>Survey da</i> KE-01-C-01 DEERPARK ROAD KILLARNFY	entre (PPS6 Local Ce area: <i>MEDNESDAY</i> ALDI	entre) 2163 sqm <i>20/06/18</i>	<i>Survey Type: MANUAL</i> KERRY	
	Suburban Area (F No Sub Category Total Gross floor <i>Survey da</i>	PPS6 Out of Centre) area: hte: THURSDAY	1354 sqm <i>17/10/19</i>	Survey Type: MANUAL	

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
<u></u>	OF SITES relevant	to selection parameters (	<u>Cont.)</u>		
9	MR-01-C-01 STREATHAM ROA MITCHAM	LI DL D		MERTON	
10	Neighbourhood C Residential Zone Total Gross floor <i>Survey da</i> NF-01-C-01 AYLSHAM ROAD NORWICH	entre (PPS6 Local Centre) area: <i>hte: WEDNESDAY</i> LIDL	2400 sqm <i>06/11/19</i>	<i>Survey Type: MANUAL</i> NORFOLK	
11	Neighbourhood C No Sub Category Total Gross floor <i>Survey da</i> NT-01-C-01 CHAPEL LANE BINGHAM	entre (PPS6 Local Centre) area: <i>hte: FRIDAY</i> LIDL	2555 sqm <i>29/11/19</i>	<i>Survey Type: MANUAL</i> NOTTI NGHAMSHI RE	
12	Edge of Town Industrial Zone Total Gross floor <i>:</i> <i>Survey da</i> SM-01-C-01 SEAWARD WAY MINEHEAD	area: t <i>e: FRIDAY</i> LIDL	2440 sqm <i>15/07/16</i>	<i>Survey Type: MANUAL</i> SOMERSET	
13	Edge of Town No Sub Category Total Gross floor <i>Survey da</i> TW-01-C-01 EDGEFIELD AVEN NEWCASTLE EAWDON	area: h <i>te: THURSDAY</i> ALDI IUE	2247 sqm <i>22/06/17</i>	<i>Survey Type: MANUAL</i> TYNE & WEAR	
14	Neighbourhood C No Sub Category Total Gross floor Survey da WM-01-C-01 MACKADOWN LAI BIRMINGHAM	entre (PPS6 Local Centre) area: <i>hte: TUESDAY</i> LIDL NE	1798 sqm <i>30/04/19</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS	
15	NIT S GREEN Neighbourhood C No Sub Category Total Gross floor <i>Survey da</i> WM-01-C-02 HIGH STREET WEST BROMWICH GUNS VILLAGE	entre (PPS6 Local Centre) area: <i>ite: TUESDAY</i> LIDL	2085 sqm <i>12/07/16</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS	
	Neighbourhood C High Street Total Gross floor Survey da	entre (PPS6 Local Centre) area: <i>te: TUESDAY</i>	2085 sqm <i>12/07/16</i>	Survey Type: MANUAL	

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
<u>LIST</u>	OF SITES relevant	to selection paran	neters (Cont.)		
16	WO-01-C-01 BLACKPOLE ROAE WORCESTER BRICKFIELDS Edge of Town Retail Zone	LI DL		WORCESTERSHI RE	
17	Total Gross floor a Survey da WS-01-C-01 WESTHAMPNETT CHICHESTER	area: t <i>e: WEDNESDAY</i> LIDL ROAD	2417 sqm <i>13/07/16</i>	<i>Survey Type: MANUAL</i> WEST SUSSEX	
18	Edge of Town Retail Zone Total Gross floor a <i>Survey da</i> WS-01-C-02 FOUNDRY LANE HORSHAM	area: t <i>e: TUESDAY</i> LIDL	2125 sqm <i>20/10/20</i>	<i>Survey Type: MANUAL</i> WEST SUSSEX	
	Suburban Area (P Industrial Zone Total Gross floor a <i>Survey da</i>	PS6 Out of Centre area: <i>ite: WEDNESDAY</i>	) 1616 sqm <i>21/10/20</i>	Survey Type: MANUAL	

6

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.

## Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	PARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip		
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate		
00:00 - 01:00											
01:00 - 02:00											
02:00 - 03:00											
03:00 - 04:00											
04:00 - 05:00											
05:00 - 06:00											
06:00 - 07:00	2	1871	0.481	2	1871	0.000	2	1871	0.481		
07:00 - 08:00	17	2024	0.465	17	2024	0.163	17	2024	0.628		
08:00 - 09:00	18	1987	2.441	18	1987	1.608	18	1987	4.049		
09:00 - 10:00	18	1987	3.174	18	1987	2.659	18	1987	5.833		
10:00 - 11:00	18	1987	3.529	18	1987	3.249	18	1987	6.778		
11:00 - 12:00	18	1987	3.971	18	1987	3.797	18	1987	7.768		
12:00 - 13:00	18	1987	4.208	18	1987	4.194	18	1987	8.402		
13:00 - 14:00	18	1987	4.183	18	1987	4.371	18	1987	8.554		
14:00 - 15:00	18	1987	4.027	18	1987	4.234	18	1987	8.261		
15:00 - 16:00	18	1987	4.060	18	1987	4.077	18	1987	8.137		
16:00 - 17:00	18	1987	4.029	18	1987	4.152	18	1987	8.181		
17:00 - 18:00	18	1987	3.713	18	1987	3.926	18	1987	7.639		
18:00 - 19:00	18	1987	3.395	18	1987	3.658	18	1987	7.053		
19:00 - 20:00	18	1987	2.559	18	1987	2.816	18	1987	5.375		
20:00 - 21:00	18	1987	1.653	18	1987	2.047	18	1987	3.700		
21:00 - 22:00	18	1987	0.772	18	1987	1.155	18	1987	1.927		
22:00 - 23:00	16	2017	0.037	16	2017	0.229	16	2017	0.266		
23:00 - 24:00											
Total Rates:			46.697			46.335			93.032		

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:	1023 - 2568 (units: sqm)
Survey date date range:	01/01/13 - 21/10/20
Number of weekdays (Monday-Friday):	18
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL TAXIS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.003	17	2024	0.003	17	2024	0.006
08:00 - 09:00	18	1987	0.017	18	1987	0.011	18	1987	0.028
09:00 - 10:00	18	1987	0.042	18	1987	0.039	18	1987	0.081
10:00 - 11:00	18	1987	0.042	18	1987	0.036	18	1987	0.078
11:00 - 12:00	18	1987	0.017	18	1987	0.028	18	1987	0.045
12:00 - 13:00	18	1987	0.031	18	1987	0.028	18	1987	0.059
13:00 - 14:00	18	1987	0.039	18	1987	0.039	18	1987	0.078
14:00 - 15:00	18	1987	0.036	18	1987	0.031	18	1987	0.067
15:00 - 16:00	18	1987	0.034	18	1987	0.034	18	1987	0.068
16:00 - 17:00	18	1987	0.031	18	1987	0.034	18	1987	0.065
17:00 - 18:00	18	1987	0.039	18	1987	0.036	18	1987	0.075
18:00 - 19:00	18	1987	0.039	18	1987	0.050	18	1987	0.089
19:00 - 20:00	18	1987	0.022	18	1987	0.020	18	1987	0.042
20:00 - 21:00	18	1987	0.028	18	1987	0.025	18	1987	0.053
21:00 - 22:00	18	1987	0.017	18	1987	0.022	18	1987	0.039
22:00 - 23:00	16	2017	0.000	16	2017	0.000	16	2017	0.000
23:00 - 24:00									
Total Rates:			0.437			0.436			0.873

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL OGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.015	17	2024	0.006	17	2024	0.021
08:00 - 09:00	18	1987	0.014	18	1987	0.008	18	1987	0.022
09:00 - 10:00	18	1987	0.017	18	1987	0.028	18	1987	0.045
10:00 - 11:00	18	1987	0.022	18	1987	0.022	18	1987	0.044
11:00 - 12:00	18	1987	0.020	18	1987	0.020	18	1987	0.040
12:00 - 13:00	18	1987	0.020	18	1987	0.017	18	1987	0.037
13:00 - 14:00	18	1987	0.025	18	1987	0.025	18	1987	0.050
14:00 - 15:00	18	1987	0.008	18	1987	0.014	18	1987	0.022
15:00 - 16:00	18	1987	0.008	18	1987	0.014	18	1987	0.022
16:00 - 17:00	18	1987	0.011	18	1987	0.008	18	1987	0.019
17:00 - 18:00	18	1987	0.003	18	1987	0.003	18	1987	0.006
18:00 - 19:00	18	1987	0.020	18	1987	0.017	18	1987	0.037
19:00 - 20:00	18	1987	0.017	18	1987	0.017	18	1987	0.034
20:00 - 21:00	18	1987	0.014	18	1987	0.014	18	1987	0.028
21:00 - 22:00	18	1987	0.006	18	1987	0.006	18	1987	0.012
22:00 - 23:00	16	2017	0.000	16	2017	0.000	16	2017	0.000
23:00 - 24:00									
Total Rates:			0.220			0.219			0.439

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL PSVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000	
07:00 - 08:00	17	2024	0.000	17	2024	0.000	17	2024	0.000	
08:00 - 09:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
09:00 - 10:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
10:00 - 11:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
11:00 - 12:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
12:00 - 13:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
13:00 - 14:00	18	1987	0.003	18	1987	0.003	18	1987	0.006	
14:00 - 15:00	18	1987	0.003	18	1987	0.003	18	1987	0.006	
15:00 - 16:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
16:00 - 17:00	18	1987	0.003	18	1987	0.003	18	1987	0.006	
17:00 - 18:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
18:00 - 19:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
19:00 - 20:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
20:00 - 21:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
21:00 - 22:00	18	1987	0.000	18	1987	0.000	18	1987	0.000	
22:00 - 23:00	16	2017	0.000	16	2017	0.000	16	2017	0.000	
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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL CYCLISTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.027	2	1871	0.000	2	1871	0.027
07:00 - 08:00	17	2024	0.020	17	2024	0.000	17	2024	0.020
08:00 - 09:00	18	1987	0.056	18	1987	0.050	18	1987	0.106
09:00 - 10:00	18	1987	0.062	18	1987	0.042	18	1987	0.104
10:00 - 11:00	18	1987	0.081	18	1987	0.070	18	1987	0.151
11:00 - 12:00	18	1987	0.070	18	1987	0.078	18	1987	0.148
12:00 - 13:00	18	1987	0.059	18	1987	0.070	18	1987	0.129
13:00 - 14:00	18	1987	0.073	18	1987	0.062	18	1987	0.135
14:00 - 15:00	18	1987	0.059	18	1987	0.064	18	1987	0.123
15:00 - 16:00	18	1987	0.064	18	1987	0.062	18	1987	0.126
16:00 - 17:00	18	1987	0.067	18	1987	0.050	18	1987	0.117
17:00 - 18:00	18	1987	0.109	18	1987	0.115	18	1987	0.224
18:00 - 19:00	18	1987	0.078	18	1987	0.087	18	1987	0.165
19:00 - 20:00	18	1987	0.034	18	1987	0.048	18	1987	0.082
20:00 - 21:00	18	1987	0.050	18	1987	0.059	18	1987	0.109
21:00 - 22:00	18	1987	0.006	18	1987	0.031	18	1987	0.037
22:00 - 23:00	16	2017	0.006	16	2017	0.015	16	2017	0.021
23:00 - 24:00									
Total Rates:			0.921			0.903			1.824

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL VEHICLE OCCUPANTS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.561	2	1871	0.000	2	1871	0.561
07:00 - 08:00	17	2024	0.590	17	2024	0.206	17	2024	0.796
08:00 - 09:00	18	1987	3.068	18	1987	2.008	18	1987	5.076
09:00 - 10:00	18	1987	4.200	18	1987	3.467	18	1987	7.667
10:00 - 11:00	18	1987	4.913	18	1987	4.496	18	1987	9.409
11:00 - 12:00	18	1987	5.509	18	1987	5.251	18	1987	10.760
12:00 - 13:00	18	1987	5.783	18	1987	5.903	18	1987	11.686
13:00 - 14:00	18	1987	5.813	18	1987	6.040	18	1987	11.853
14:00 - 15:00	18	1987	5.657	18	1987	5.788	18	1987	11.445
15:00 - 16:00	18	1987	5.811	18	1987	5.730	18	1987	11.541
16:00 - 17:00	18	1987	5.646	18	1987	5.909	18	1987	11.555
17:00 - 18:00	18	1987	5.100	18	1987	5.537	18	1987	10.637
18:00 - 19:00	18	1987	4.935	18	1987	5.165	18	1987	10.100
19:00 - 20:00	18	1987	3.649	18	1987	4.038	18	1987	7.687
20:00 - 21:00	18	1987	2.340	18	1987	2.922	18	1987	5.262
21:00 - 22:00	18	1987	1.054	18	1987	1.585	18	1987	2.639
22:00 - 23:00	16	2017	0.050	16	2017	0.285	16	2017	0.335
23:00 - 24:00									
Total Rates:			64.679			64.330			129.009

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

Entran Ltd Chapel Pill Lane Bristol

# TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL PEDESTRIANS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.053	2	1871	0.000	2	1871	0.053
07:00 - 08:00	17	2024	0.221	17	2024	0.049	17	2024	0.270
08:00 - 09:00	18	1987	0.906	18	1987	0.733	18	1987	1.639
09:00 - 10:00	18	1987	1.359	18	1987	1.046	18	1987	2.405
10:00 - 11:00	18	1987	1.432	18	1987	1.214	18	1987	2.646
11:00 - 12:00	18	1987	1.314	18	1987	1.306	18	1987	2.620
12:00 - 13:00	18	1987	1.639	18	1987	1.667	18	1987	3.306
13:00 - 14:00	18	1987	1.653	18	1987	1.650	18	1987	3.303
14:00 - 15:00	18	1987	1.488	18	1987	1.432	18	1987	2.920
15:00 - 16:00	18	1987	1.482	18	1987	1.669	18	1987	3.151
16:00 - 17:00	18	1987	1.678	18	1987	1.728	18	1987	3.406
17:00 - 18:00	18	1987	1.739	18	1987	1.756	18	1987	3.495
18:00 - 19:00	18	1987	1.502	18	1987	1.569	18	1987	3.071
19:00 - 20:00	18	1987	0.878	18	1987	1.146	18	1987	2.024
20:00 - 21:00	18	1987	0.805	18	1987	0.881	18	1987	1.686
21:00 - 22:00	18	1987	0.433	18	1987	0.621	18	1987	1.054
22:00 - 23:00	16	2017	0.003	16	2017	0.074	16	2017	0.077
23:00 - 24:00									
Total Rates:			18.585			18.541			37.126

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL BUS/TRAM PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.053	2	1871	0.000	2	1871	0.053
07:00 - 08:00	17	2024	0.058	17	2024	0.029	17	2024	0.087
08:00 - 09:00	18	1987	0.176	18	1987	0.064	18	1987	0.240
09:00 - 10:00	18	1987	0.179	18	1987	0.148	18	1987	0.327
10:00 - 11:00	18	1987	0.260	18	1987	0.213	18	1987	0.473
11:00 - 12:00	18	1987	0.229	18	1987	0.193	18	1987	0.422
12:00 - 13:00	18	1987	0.232	18	1987	0.196	18	1987	0.428
13:00 - 14:00	18	1987	0.257	18	1987	0.316	18	1987	0.573
14:00 - 15:00	18	1987	0.313	18	1987	0.327	18	1987	0.640
15:00 - 16:00	18	1987	0.299	18	1987	0.291	18	1987	0.590
16:00 - 17:00	18	1987	0.316	18	1987	0.305	18	1987	0.621
17:00 - 18:00	18	1987	0.322	18	1987	0.355	18	1987	0.677
18:00 - 19:00	18	1987	0.330	18	1987	0.355	18	1987	0.685
19:00 - 20:00	18	1987	0.173	18	1987	0.218	18	1987	0.391
20:00 - 21:00	18	1987	0.145	18	1987	0.157	18	1987	0.302
21:00 - 22:00	18	1987	0.059	18	1987	0.089	18	1987	0.148
22:00 - 23:00	16	2017	0.000	16	2017	0.028	16	2017	0.028
23:00 - 24:00									
Total Rates:			3.401			3.284			6.685

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL TOTAL RAIL PASSENGERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.006	17	2024	0.000	17	2024	0.006
08:00 - 09:00	18	1987	0.011	18	1987	0.003	18	1987	0.014
09:00 - 10:00	18	1987	0.006	18	1987	0.003	18	1987	0.009
10:00 - 11:00	18	1987	0.011	18	1987	0.003	18	1987	0.014
11:00 - 12:00	18	1987	0.006	18	1987	0.003	18	1987	0.009
12:00 - 13:00	18	1987	0.006	18	1987	0.011	18	1987	0.017
13:00 - 14:00	18	1987	0.003	18	1987	0.014	18	1987	0.017
14:00 - 15:00	18	1987	0.006	18	1987	0.011	18	1987	0.017
15:00 - 16:00	18	1987	0.006	18	1987	0.006	18	1987	0.012
16:00 - 17:00	18	1987	0.020	18	1987	0.011	18	1987	0.031
17:00 - 18:00	18	1987	0.008	18	1987	0.003	18	1987	0.011
18:00 - 19:00	18	1987	0.008	18	1987	0.008	18	1987	0.016
19:00 - 20:00	18	1987	0.003	18	1987	0.003	18	1987	0.006
20:00 - 21:00	18	1987	0.000	18	1987	0.003	18	1987	0.003
21:00 - 22:00	18	1987	0.003	18	1987	0.003	18	1987	0.006
22:00 - 23:00	16	2017	0.000	16	2017	0.006	16	2017	0.006
23:00 - 24:00									
Total Rates:			0.103			0.091			0.194

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00	2	1871	0.053	2	1871	0.000	2	1871	0.053	
07:00 - 08:00	17	2024	0.064	17	2024	0.029	17	2024	0.093	
08:00 - 09:00	18	1987	0.187	18	1987	0.067	18	1987	0.254	
09:00 - 10:00	18	1987	0.185	18	1987	0.151	18	1987	0.336	
10:00 - 11:00	18	1987	0.271	18	1987	0.215	18	1987	0.486	
11:00 - 12:00	18	1987	0.235	18	1987	0.196	18	1987	0.431	
12:00 - 13:00	18	1987	0.238	18	1987	0.207	18	1987	0.445	
13:00 - 14:00	18	1987	0.260	18	1987	0.330	18	1987	0.590	
14:00 - 15:00	18	1987	0.319	18	1987	0.338	18	1987	0.657	
15:00 - 16:00	18	1987	0.305	18	1987	0.296	18	1987	0.601	
16:00 - 17:00	18	1987	0.336	18	1987	0.316	18	1987	0.652	
17:00 - 18:00	18	1987	0.330	18	1987	0.358	18	1987	0.688	
18:00 - 19:00	18	1987	0.338	18	1987	0.364	18	1987	0.702	
19:00 - 20:00	18	1987	0.176	18	1987	0.221	18	1987	0.397	
20:00 - 21:00	18	1987	0.145	18	1987	0.159	18	1987	0.304	
21:00 - 22:00	18	1987	0.062	18	1987	0.092	18	1987	0.154	
22:00 - 23:00	16	2017	0.000	16	2017	0.034	16	2017	0.034	
23:00 - 24:00										
Total Rates:			3.504			3.373			6.877	

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL TOTAL PEOPLE Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.695	2	1871	0.000	2	1871	0.695
07:00 - 08:00	17	2024	0.895	17	2024	0.285	17	2024	1.180
08:00 - 09:00	18	1987	4.217	18	1987	2.858	18	1987	7.075
09:00 - 10:00	18	1987	5.805	18	1987	4.706	18	1987	10.511
10:00 - 11:00	18	1987	6.697	18	1987	5.995	18	1987	12.692
11:00 - 12:00	18	1987	7.128	18	1987	6.831	18	1987	13.959
12:00 - 13:00	18	1987	7.718	18	1987	7.846	18	1987	15.564
13:00 - 14:00	18	1987	7.799	18	1987	8.081	18	1987	15.880
14:00 - 15:00	18	1987	7.522	18	1987	7.623	18	1987	15.145
15:00 - 16:00	18	1987	7.662	18	1987	7.757	18	1987	15.419
16:00 - 17:00	18	1987	7.726	18	1987	8.003	18	1987	15.729
17:00 - 18:00	18	1987	7.279	18	1987	7.765	18	1987	15.044
18:00 - 19:00	18	1987	6.854	18	1987	7.184	18	1987	14.038
19:00 - 20:00	18	1987	4.737	18	1987	5.453	18	1987	10.190
20:00 - 21:00	18	1987	3.342	18	1987	4.021	18	1987	7.363
21:00 - 22:00	18	1987	1.555	18	1987	2.329	18	1987	3.884
22:00 - 23:00	16	2017	0.059	16	2017	0.409	16	2017	0.468
23:00 - 24:00									
Total Rates:			87.690			87.146			174.836

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL CARS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	;		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.401	2	1871	0.000	2	1871	0.401
07:00 - 08:00	17	2024	0.398	17	2024	0.131	17	2024	0.529
08:00 - 09:00	18	1987	2.198	18	1987	1.448	18	1987	3.646
09:00 - 10:00	18	1987	2.883	18	1987	2.396	18	1987	5.279
10:00 - 11:00	18	1987	3.230	18	1987	2.947	18	1987	6.177
11:00 - 12:00	18	1987	3.727	18	1987	3.546	18	1987	7.273
12:00 - 13:00	18	1987	3.971	18	1987	3.962	18	1987	7.933
13:00 - 14:00	18	1987	3.906	18	1987	4.074	18	1987	7.980
14:00 - 15:00	18	1987	3.800	18	1987	4.001	18	1987	7.801
15:00 - 16:00	18	1987	3.809	18	1987	3.817	18	1987	7.626
16:00 - 17:00	18	1987	3.783	18	1987	3.884	18	1987	7.667
17:00 - 18:00	18	1987	3.498	18	1987	3.708	18	1987	7.206
18:00 - 19:00	18	1987	3.157	18	1987	3.400	18	1987	6.557
19:00 - 20:00	18	1987	2.374	18	1987	2.615	18	1987	4.989
20:00 - 21:00	18	1987	1.532	18	1987	1.899	18	1987	3.431
21:00 - 22:00	18	1987	0.688	18	1987	1.060	18	1987	1.748
22:00 - 23:00	16	2017	0.031	16	2017	0.204	16	2017	0.235
23:00 - 24:00									
Total Rates:			43.386			43.092			86.478

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.

Entran Ltd Chapel Pill Lane Bristol

## TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL LGVS Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.080	2	1871	0.000	2	1871	0.080
07:00 - 08:00	17	2024	0.047	17	2024	0.023	17	2024	0.070
08:00 - 09:00	18	1987	0.196	18	1987	0.134	18	1987	0.330
09:00 - 10:00	18	1987	0.229	18	1987	0.190	18	1987	0.419
10:00 - 11:00	18	1987	0.224	18	1987	0.229	18	1987	0.453
11:00 - 12:00	18	1987	0.190	18	1987	0.193	18	1987	0.383
12:00 - 13:00	18	1987	0.173	18	1987	0.173	18	1987	0.346
13:00 - 14:00	18	1987	0.193	18	1987	0.213	18	1987	0.406
14:00 - 15:00	18	1987	0.168	18	1987	0.176	18	1987	0.344
15:00 - 16:00	18	1987	0.193	18	1987	0.196	18	1987	0.389
16:00 - 17:00	18	1987	0.190	18	1987	0.207	18	1987	0.397
17:00 - 18:00	18	1987	0.154	18	1987	0.162	18	1987	0.316
18:00 - 19:00	18	1987	0.157	18	1987	0.162	18	1987	0.319
19:00 - 20:00	18	1987	0.140	18	1987	0.154	18	1987	0.294
20:00 - 21:00	18	1987	0.064	18	1987	0.098	18	1987	0.162
21:00 - 22:00	18	1987	0.053	18	1987	0.059	18	1987	0.112
22:00 - 23:00	16	2017	0.006	16	2017	0.022	16	2017	0.028
23:00 - 24:00									
Total Rates:			2.457			2.391			4.848

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL MOTOR CYCLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.003	17	2024	0.000	17	2024	0.003
08:00 - 09:00	18	1987	0.014	18	1987	0.006	18	1987	0.020
09:00 - 10:00	18	1987	0.003	18	1987	0.006	18	1987	0.009
10:00 - 11:00	18	1987	0.011	18	1987	0.014	18	1987	0.025
11:00 - 12:00	18	1987	0.017	18	1987	0.011	18	1987	0.028
12:00 - 13:00	18	1987	0.014	18	1987	0.014	18	1987	0.028
13:00 - 14:00	18	1987	0.017	18	1987	0.017	18	1987	0.034
14:00 - 15:00	18	1987	0.014	18	1987	0.008	18	1987	0.022
15:00 - 16:00	18	1987	0.017	18	1987	0.017	18	1987	0.034
16:00 - 17:00	18	1987	0.011	18	1987	0.017	18	1987	0.028
17:00 - 18:00	18	1987	0.020	18	1987	0.017	18	1987	0.037
18:00 - 19:00	18	1987	0.022	18	1987	0.028	18	1987	0.050
19:00 - 20:00	18	1987	0.006	18	1987	0.011	18	1987	0.017
20:00 - 21:00	18	1987	0.014	18	1987	0.011	18	1987	0.025
21:00 - 22:00	18	1987	0.008	18	1987	0.008	18	1987	0.016
22:00 - 23:00	16	2017	0.000	16	2017	0.003	16	2017	0.003
23:00 - 24:00									
Total Rates:			0.191			0.188			0.379

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI-MODAL National Rail Passengers Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.003	17	2024	0.000	17	2024	0.003
08:00 - 09:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
09:00 - 10:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
10:00 - 11:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
11:00 - 12:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
12:00 - 13:00	18	1987	0.003	18	1987	0.000	18	1987	0.003
13:00 - 14:00	18	1987	0.000	18	1987	0.003	18	1987	0.003
14:00 - 15:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
15:00 - 16:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
16:00 - 17:00	18	1987	0.003	18	1987	0.003	18	1987	0.006
17:00 - 18:00	18	1987	0.003	18	1987	0.000	18	1987	0.003
18:00 - 19:00	18	1987	0.008	18	1987	0.003	18	1987	0.011
19:00 - 20:00	18	1987	0.003	18	1987	0.003	18	1987	0.006
20:00 - 21:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
21:00 - 22:00	18	1987	0.000	18	1987	0.000	18	1987	0.000
22:00 - 23:00	16	2017	0.000	16	2017	0.000	16	2017	0.000
23:00 - 24:00									
Total Rates:			0.023			0.012			0.035

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.
Licence No: 337901

#### Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES MULTI - MODAL Bus Passengers Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.000	2	1871	0.000	2	1871	0.000
07:00 - 08:00	17	2024	0.041	17	2024	0.026	17	2024	0.067
08:00 - 09:00	18	1987	0.059	18	1987	0.039	18	1987	0.098
09:00 - 10:00	18	1987	0.070	18	1987	0.070	18	1987	0.140
10:00 - 11:00	18	1987	0.092	18	1987	0.081	18	1987	0.173
11:00 - 12:00	18	1987	0.103	18	1987	0.087	18	1987	0.190
12:00 - 13:00	18	1987	0.070	18	1987	0.087	18	1987	0.157
13:00 - 14:00	18	1987	0.115	18	1987	0.154	18	1987	0.269
14:00 - 15:00	18	1987	0.182	18	1987	0.193	18	1987	0.375
15:00 - 16:00	18	1987	0.185	18	1987	0.165	18	1987	0.350
16:00 - 17:00	18	1987	0.224	18	1987	0.187	18	1987	0.411
17:00 - 18:00	18	1987	0.218	18	1987	0.221	18	1987	0.439
18:00 - 19:00	18	1987	0.260	18	1987	0.271	18	1987	0.531
19:00 - 20:00	18	1987	0.134	18	1987	0.151	18	1987	0.285
20:00 - 21:00	18	1987	0.109	18	1987	0.112	18	1987	0.221
21:00 - 22:00	18	1987	0.053	18	1987	0.059	18	1987	0.112
22:00 - 23:00	16	2017	0.000	16	2017	0.019	16	2017	0.019
23:00 - 24:00									
Total Rates:			1.915			1.922			3.837

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.

TRICS 7.8.1 240321 B20.15 Database right DF WD	of TRICS Consortium Limited, 2021. All right	s reserved Thursday 01/04/21 Page 1
Entran Ltd Chapel Pill Lane Bristol		Licence No: 337901
Filtering Summary		
Land Use	01/C	RETAIL/DISCOUNT FOOD STORES
Selected Trip Rate Calculation Parameter Range	e 700-2703 sqm GFA	
Actual Trip Rate Calculation Parameter Range	700-2568 sqm GFA	
Date Range	Minimum: 01/01/13	Maximum: 28/11/20
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday Tuesday Wednesday Thursday Friday	2 4 7 4 3
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town Neighbourhood Centre (PPS6 Local Centre)	4 8 8
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000 25,001 to 50,000 50,001 to 100,000	1 4 3 3 1 6 2
Population <5 Mile ranges selected	5,001 to 25,000 25,001 to 50,000 50,001 to 75,000 75,001 to 100,000 125,001 to 250,000 250,001 to 500,000 500,001 or More	1 3 2 3 3 3 5
Car Ownership <5 Mile ranges selected	0.6 to 1.0 1.1 to 1.5 1.6 to 2.0 2.1 to 2.5	12 6 1 1
PTAL Rating	No PTAL Present 2 Poor 4 Good	18 1 1

Licence No: 337901

Entran Ltd Chapel Pill Lane Bristol

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL Category : C - DISCOUNT FOOD STORES TOTAL VEHICLES

Seled	ted regions and areas:	
01	GREATER LONDON	
	BE BEXLEY	1 days
	MR MERTON	1 days
02	SOUTH EAST	-
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	SM SOMERSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	AD ABERDEEN CITY	1 days
	SR STIRLING	1 days
13	MUNSTER	
	KE KERRY	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
17	ULSTER (NORTHERN I RELAND)	
	AN ANTRIM	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: Actual Range: Range Selected by I	Jser:	Gross floor area 700 to 2568 (units: sqm) 700 to 2703 (units: sqm)	
Parking Spaces Ran	ge:	All Surveys Included	
Public Transport Pro Selection by:	vision:		Include all surveys
Date Range:	01/01/	/13 to 28/11/20	

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.

2 days
4 days
7 days
4 days
3 days

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

<u>Selected survey types:</u>	
Manual count	20 days
Directional ATC Count	0 days

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

Selected Locations:	
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	8
Neighbourhood Centre (PPS6 Local Centre)	8

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

Selected Location Sub Categories:	
Industrial Zone	4
Development Zone	2
Residential Zone	3
Retail Zone	5
High Street	1
No Sub Category	5

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:

<u>Use Class:</u> E(a)

20 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
5,001 to 10,000	4 days
10,001 to 15,000	3 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	6 days
50,001 to 100,000	2 days

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

Population within 5 miles:	
5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
125,001 to 250,000	3 days
250,001 to 500,000	3 days
500,001 or More	5 days

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

Car ownership within 5 miles:	
0.6 to 1.0	12 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days
2.1 to 2.5	1 davs

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.

Petrol filling station:	
Included in the survey count	0 days
Excluded from count or no filling station	20 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

<u>Travel Plan:</u>	
Not Known	1 days
Yes	3 days
No	16 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.

<u>PTAL_Rating:</u>	
No PTAL Present	18 days
2 Poor	1 days
4 Good	1 days

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

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
<u></u>	OF SITES relevant	to selection parameters			
1	AD-01-C-01 GREENWELL ROA ABERDEEN EAST TULLOS INI Suburban Area (F Industrial Zone	LIDL D D. ESTATE PPS6 Out of Centre)		ABERDEEN CITY	
2	Total Gross floor <i>Survey da</i> AN-01-C-02 BELFAST ROAD CARRICKFERGUS	area: h <i>te: MONDAY</i> LIDL	1950 sqm <i>18/11/19</i>	<i>Survey Type: MANUAL</i> ANTRIM	
3	Edge of Town Development Zor Total Gross floor <i>Survey da</i> BE-01-C-01 CLYDESDALE WA	ne area: h <i>te: WEDNESDAY</i> LIDL Y	1325 sqm <i>12/10/16</i>	<i>Survey Type: MANUAL</i> BEXLEY	
	BELVEDERE				
4	Edge of Town Industrial Zone Total Gross floor <i>Survey da</i> CA-01-C-01 CROMWELL ROAE WISBECH	area: h <i>te: WEDNESDAY</i> LIDL )	2145 sqm <i>06/11/19</i>	<i>Survey Type: MANUAL</i> CAMBRI DGESHI RE	
5	Edge of Town Retail Zone Total Gross floor <i>Survey da</i> CF-01-C-01 EAST TYNDALL S CARDIFF	area: a <i>te: FRIDAY</i> LIDL TREET	1466 sqm <i>21/10/16</i>	<i>Survey Type: MANUAL</i> CARDIFF	
6	Suburban Area (F Development Zor Total Gross floor <i>Survey da</i> DH-01-C-01 WATLING ROAD BISHOP AUCKLAN	PPS6 Out of Centre) ne area: <i>nte: THURSDAY</i> ALDI	2568 sqm <i>29/06/17</i>	<i>Survey Type: MANUAL</i> DURHAM	
7	Edge of Town Retail Zone Total Gross floor <i>Survey da</i> DL-01-C-01 SALLYNOGGIN RO DUBLIN	area: <i>hte: THURSDAY</i> LIDL DAD	1023 sqm <i>06/04/17</i>	<i>Survey Type: MANUAL</i> DUBLIN	
8	THOMASTOWN Neighbourhood C Residential Zone Total Gross floor <i>Survey da</i> KE-01-C-01 DEERPARK ROAD KILLARNEY	entre (PPS6 Local Centre) area: a <i>te: WEDNESDAY</i> ALDI	2163 sqm <i>20/06/18</i>	<i>Survey Type: MANUAL</i> KERRY	
	Suburban Area (F No Sub Category Total Gross floor <i>Survey da</i>	PPS6 Out of Centre) area: <i>tte: THURSDAY</i>	1354 sqm <i>17/10/19</i>	Survey Type: MANUAL	

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Entran Ltd	Chapel Pill Lane	Bristol			Licence No: 337901
LIST	OF SITES relevant	to selection parame	eters (Cont.)		
9	MR-01-C-01 STREATHAM ROA MITCHAM	LI DL D		MERTON	
10	Neighbourhood C Residential Zone Total Gross floor <i>Survey da</i> NF-01-C-01 AYLSHAM ROAD NORWICH	entre (PPS6 Local C area: <i>te: WEDNESDAY</i> LIDL	entre) 2400 sqm <i>06/11/19</i>	<i>Survey Type: MANUAL</i> NORFOLK	
11	Neighbourhood C No Sub Category Total Gross floor <i>Survey da</i> NT-01-C-01 CHAPEL LANE BINGHAM	entre (PPS6 Local C area: <i>te: FRIDAY</i> LIDL	entre) 2555 sqm <i>29/11/19</i>	<i>Survey Type: MANUAL</i> NOTTI NGHAMSHI RE	
12	Edge of Town Industrial Zone Total Gross floor <i>Survey da</i> SM-01-C-01 SEAWARD WAY MINEHEAD	area: t <i>e: FRIDAY</i> LIDL	2440 sqm <i>15/07/16</i>	<i>Survey Type: MANUAL</i> SOMERSET	
13	Edge of Town No Sub Category Total Gross floor <i>Survey da</i> SR-01-C-02 WEAVER ROW STIRLING	area: <i>te: THURSDAY</i> LIDL	2247 sqm <i>22/06/17</i>	<i>Survey Type: MANUAL</i> STIRLING	
14	SAINT NINIANS Neighbourhood C Residential Zone Total Gross floor <i>Survey da</i> TW-01-C-01 EDGEFIELD AVEN NEWCASTI F	entre (PPS6 Local C area: <i>ite: WEDNESDAY</i> ALDI UE	entre) 1559 sqm <i>09/09/20</i>	<i>Survey Type: MANUAL</i> TYNE & WEAR	
15	FAWDON Neighbourhood C No Sub Category Total Gross floor <i>Survey da</i> WM-01-C-01 MACKADOWN LAI BIRMINGHAM	entre (PPS6 Local C area: <i>te: TUESDAY</i> LIDL NE	entre) 1798 sqm <i>30/04/19</i>	<i>Survey Type: MANUAL</i> WEST MIDLANDS	
	KITT'S GREEN Neighbourhood C No Sub Category Total Gross floor <i>Survey da</i>	entre (PPS6 Local C area: <i>te: TUESDAY</i>	entre) 2085 sqm <i>12/07/16</i>	Survey Type: MANUAL	

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Entran Ltd	Chapel Pill Lane Bristol			Licence No: 337901
<u>LIST</u>	OF SITES relevant to selection parameters	<u>(Cont.)</u>		
16	WM-01-C-02 LI DL HIGH STREET WEST BROMWICH GUNS VILLAGE		WEST MIDLANDS	
17	Neighbourhood Centre (PPS6 Local Centre High Street Total Gross floor area: Survey date: TUESDAY	) 2085 sqm <i>12/07/16</i>	Survey Type: MANUAL	
,,	BLACKPOLE ROAD WORCESTER BRICKFIELDS Edge of Town Retail Zone		WORCESTERSHIRE	
18	Total Gross floor area: <i>Survey date: WEDNESDAY</i> WS-01-C-01 LIDL WESTHAMPNETT ROAD CHICHESTER	2417 sqm <i>13/07/16</i>	<i>Survey Type: MANUAL</i> WEST SUSSEX	
19	Edge of Town Retail Zone Total Gross floor area: <i>Survey date: TUESDAY</i> WS-01-C-02 LI DL FOUNDRY LANE HORSHAM	2125 sqm <i>20/10/20</i>	<i>Survey Type: MANUAL</i> WEST SUSSEX	
20	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: <i>Survey date: WEDNESDAY</i> WY-01-C-01 FARMFOODS WATERLOO TERRACE LEEDS BRAMLEY Neighbourhood Centre (PPS6 Local Centre)	1616 sqm <i>21/10/20</i>	<i>Survey Type: MANUAL</i> WEST YORKSHIRE	
	Total Gross floor area: Survey date: MONDAY	700 sqm <i>19/10/15</i>	Survey Type: MANUAL	
This				to it diam/auto a

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.

Entran Ltd Chapel Pill Lane Bristol

#### TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES TOTAL VEHICLES Calculation factor: 100 sqm BOLD print indicates peak (busiest) period

	ARRIVALS		[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1871	0.481	2	1871	0.000	2	1871	0.481
07:00 - 08:00	19	1930	0.458	19	1930	0.161	19	1930	0.619
08:00 - 09:00	20	1901	2.443	20	1901	1.620	20	1901	4.063
09:00 - 10:00	20	1901	3.243	20	1901	2.727	20	1901	5.970
10:00 - 11:00	20	1901	3.535	20	1901	3.285	20	1901	6.820
11:00 - 12:00	20	1901	3.977	20	1901	3.814	20	1901	7.791
12:00 - 13:00	20	1901	4.229	20	1901	4.213	20	1901	8.442
13:00 - 14:00	20	1901	4.187	20	1901	4.390	20	1901	8.577
14:00 - 15:00	20	1901	4.108	20	1901	4.263	20	1901	8.371
15:00 - 16:00	20	1901	4.077	20	1901	4.103	20	1901	8.180
16:00 - 17:00	20	1901	4.069	20	1901	4.208	20	1901	8.277
17:00 - 18:00	20	1901	3.772	20	1901	3.985	20	1901	7.757
18:00 - 19:00	20	1901	3.411	20	1901	3.645	20	1901	7.056
19:00 - 20:00	20	1901	2.543	20	1901	2.809	20	1901	5.352
20:00 - 21:00	20	1901	1.649	20	1901	2.033	20	1901	3.682
21:00 - 22:00	20	1901	0.734	20	1901	1.102	20	1901	1.836
22:00 - 23:00	16	2017	0.037	16	2017	0.229	16	2017	0.266
23:00 - 24:00									
Total Rates:			46.953			46.587			93.540

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:	700 - 2568 (units: sqm)
Survey date date range:	01/01/13 - 28/11/20
Number of weekdays (Monday-Friday):	20
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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



# Appendix E PICADY Outputs



# **Junctions 10**

# **PICADY 10 - Priority Intersection Module**

Version: 10.0.2.1574

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solution

Filename: Site Access\_Pontfaen Rd.j10 Path: F:\clients\EnTran\ALDI Lampeter Report generation date: 27/10/2021 19:48:11

»2022 Base +Dev, AM »2022 Base +Dev, PM »2022 Base +Dev, SAT »2027 Base +Dev, AM »2027 Base +Dev, PM »2027 Base +Dev, SAT

## Summary of junction performance

	AM			РМ			SAT		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
		2022 Base +Dev							
Stream B-AC	0.1	7.02	0.06	0.2	8.00	0.17	0.3	8.82	0.24
Stream C-AB	0.1	4.97	0.07	0.2	5.70	0.12	0.3	5.90	0.19
Stream A-BC	0.2	3.19	0.15	0.3	3.36	0.21	0.3	3.17	0.20
				2027 B	ase +De	/			
Stream B-AC	0.1	7.06	0.06	0.2	8.05	0.17	0.3	8.90	0.24
Stream C-AB	0.1	4.94	0.08	0.2	5.69	0.12	0.3	5.88	0.19
Stream A-BC	0.2	3.21	0.16	0.3	3.40	0.22	0.3	3.20	0.21

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

### **File summary**

#### **File Description**

Title	A475 Pontfaen Rd / Site Access
Location	
Site number	
Date	27/10/2021
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	al
Description	



## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	S	-Hour	perHour
C - Dontfaen Rd (V)	234 36 C C	C-A -AB 0.118	B - Site	e Acce	0.140	A-BC	235 37 <b>V</b>
an early (administration of all show							

The junction diagram reflects the last run of Junctions.

# **Analysis Options**

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

# **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base +Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Base +Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2022 Base +Dev	SAT	ONE HOUR	10:45	12:15	15	~
D4	2027 Base +Dev	AM	ONE HOUR	07:45	09:15	15	✓
D5	2027 Base +Dev	PM	ONE HOUR	16:45	18:15	15	✓
D6	2027 Base +Dev	SAT	ONE HOUR	10:45	12:15	15	~



# Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)	
A1	~	100.000	100.000	



# 2022 Base +Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		1.92	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.92	A

# Arms

#### Arms

Arm	Name	Description	Arm type
Α	Pontfaen Rd (E)		Major
в	Site Access		Minor
С	Pontfaen Rd (W)		Major

## **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Pontfaen Rd (W)	9.00			155.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

## **Minor Arm Geometry**

Arm Minor arm type		Lane width (m) Visibility to left (m		Visibility to right (m)	
B - Site Access	B - Site Access One lane		18	18	

#### **Pelican/Puffin Crossings**

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
A - Pontfaen Rd (E)	4.00	3.00	2.00	3.00	6.00	8.00	30.00

#### Slope / Intercept / Capacity

### **Priority Intersection Slopes and Intercepts**

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	532	0.084	0.213	0.134	0.304
B-C	686	0.091	0.231	-	-
C-B	664	0.224	0.224	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.



# **Traffic Demand**

# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base +Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	
✓	✓	HV Percentages	2.00	

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	~	188	100.000
B - Site Access		ONE HOUR	~	31	100.000
C - Pontfaen Rd (W)		ONE HOUR	✓	326	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

# Demand (Veh/hr)

		То								
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)						
-	A - Pontfaen Rd (E)	0	14	174						
From	B - Site Access	10	0	21						
	C - Pontfaen Rd (W)	293	33	0						

# Vehicle Mix

## **Heavy Vehicle Percentages**

		То		
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)
<b>F</b>	A - Pontfaen Rd (E)	0	0	14
From	B - Site Access	0	0	0
	C - Pontfaen Rd (W)	12	0	0

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	7.02	0.1	А	28	43
C-AB	0.07	4.97	0.1	А	47	70
C-A					252	379
ABC	0.15	3.19	0.2	A	173	259



# Main Results for each time segment

### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6		573	0.041	23	0.0	0.0	6.544	А
C-AB	35	9		762	0.046	35	0.0	0.1	4.946	A
C-A	210	53				210				
A-BC	142	35	150.57	1374	0.103	141	0.0	0.1	2.921	A

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7		562	0.050	28	0.0	0.1	6.737	А
C-AB	45	11		783	0.057	45	0.1	0.1	4.869	А
C-A	248	62				248				
A-BC	169	42	179.80	1356	0.125	169	0.1	0.1	3.033	A

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9		547	0.062	34	0.1	0.1	7.020	А
C-AB	60	15		811	0.075	60	0.1	0.1	4.780	А
C-A	298	75				298				
<b>A-BC</b>	207	52	220.20	1336	0.155	207	0.1	0.2	3.188	А

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9		547	0.062	34	0.1	0.1	7.020	А
C-AB	61	15		811	0.075	61	0.1	0.1	4.798	A
C-A	298	75				298				
A-BC	207	52	220.20	1336	0.155	207	0.2	0.2	3.188	A

## 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7		562	0.050	28	0.1	0.1	6.742	A
C-AB	45	11		782	0.057	45	0.1	0.1	4.905	A
C-A	248	62				248				
A-BC	169	42	179.80	1356	0.125	169	0.2	0.1	3.036	A

#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6		573	0.041	23	0.1	0.0	6.550	A
C-AB	35	9		762	0.046	35	0.1	0.1	4.971	A
C-A	210	53				210				
A-BC	142	35	150.57	1374	0.103	142	0.1	0.1	2.921	A



# 2022 Base +Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		3.22	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.22	A

# Traffic Demand

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base +Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	✓	264	100.000
B - Site Access		ONE HOUR	✓	81	100.000
C - Pontfaen Rd (W)		ONE HOUR	✓	235	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

#### Demand (Veh/hr)

		То										
From		A - Pontfaen Rd (E) B - Site Access		C - Pontfaen Rd (W)								
	A - Pontfaen Rd (E)	0	24	240								
	B - Site Access	24	0	57								
	C - Pontfaen Rd (W)	181	54	0								

# Vehicle Mix



# Heavy Vehicle Percentages

		То			
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)	
From	A - Pontfaen Rd (E)	0	0	12	
	B - Site Access	0	0	0	
	C - Pontfaen Rd (W)	16	0	0	

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	8.00	0.2	А	74	111
C-AB	AB 0.12 5.70		0.2 A		65	98
C-A					150	225
<b>A</b> BC	0.21	3.36	0.3	А	242	363

# Main Results for each time segment

## 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15		569	0.107	61	0.0	0.1	7.070	А
C-AB	51	13		697	0.073	50	0.0	0.1	5.566	А
C-A	126	32				126				
<b>A</b> BC	199	50	150.57	1399	0.142	198	0.0	0.2	2.996	A

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18		557	0.131	73	0.1	0.1	7.436	А
C-AB	63	16		704	0.090	63	0.1	0.1	5.605	А
C-A	148	37				148				
A-BC	237	59	179.80	1381	0.172	237	0.2	0.2	3.147	А

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22		539	0.165	89	0.1	0.2	7.991	A
C-AB	83	21		715	0.116	82	0.1	0.2	5.676	A
C-A	176	44				176				
A-BC	291	73	220.20	1361	0.214	290	0.2	0.3	3.364	A

## 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22		539	0.165	89	0.2	0.2	7.999	А
C-AB	83	21		715	0.116	83	0.2	0.2	5.699	А
C-A	176	44				176				
A-BC	291	73	220.20	1361	0.214	291	0.3	0.3	3.364	А



## 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18		557	0.131	73	0.2	0.2	7.447	А
C-AB	63	16		704	0.090	64	0.2	0.1	5.653	A
C-A	148	37				148				
A-BC	237	59	179.80	1381	0.172	238	0.3	0.2	3.149	A

#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15		569	0.107	61	0.2	0.1	7.089	А
C-AB	51	13		696	0.073	51	0.1	0.1	5.598	A
C-A	126	32				126				
ABC	199	50	150.57	1399	0.142	199	0.2	0.2	2.999	A



# 2022 Base +Dev, SAT

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		3.62	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	3.62	A	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Base +Dev	SAT	ONE HOUR	10:45	12:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

## **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	~	263	100.000
B - Site Access		ONE HOUR	~	115	100.000
C - Pontfaen Rd (W)		ONE HOUR	✓	311	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

### Demand (Veh/hr)

	То								
		A - Pontfaen Rd (E) B - Site Ac		C - Pontfaen Rd (W)					
From	A - Pontfaen Rd (E)	0	37	226					
From	B - Site Access	35	0	80					
	C - Pontfaen Rd (W)	225	86	0					

# Vehicle Mix



# Heavy Vehicle Percentages

	То								
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)					
From	A - Pontfaen Rd (E)	0	0	7					
From	B - Site Access	0	0	0					
	C - Pontfaen Rd (W)	10	0	0					

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	8.82	0.3	А	106	158
C-AB	0.19	5.90	0.3	А	111	167
C-A					174	261
<b>A</b> BC	0.20	3.17	0.3	А	241	362

# Main Results for each time segment

## 10:45 - 11:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22		566	0.153	86	0.0	0.2	7.487	А
C-AB	85	21		722	0.117	84	0.0	0.2	5.635	A
C-A	150	37				150				
<b>A-BC</b>	198	50	150.57	1464	0.135	197	0.0	0.2	2.841	А

#### 11:00 - 11:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26		553	0.187	103	0.2	0.2	8.003	А
C-AB	107	27		735	0.145	107	0.2	0.2	5.724	A
C-A	173	43				173				
A-BC	236	59	179.80	1444	0.164	236	0.2	0.2	2.979	A

## 11:15 - 11:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32		535	0.237	126	0.2	0.3	8.803	А
C-AB	141	35		753	0.188	141	0.2	0.3	5.876	A
C-A	201	50				201				
A-BC	290	72	220.20	1423	0.203	289	0.2	0.3	3.174	A

## 11:30 - 11:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32		535	0.237	127	0.3	0.3	8.825	А
C-AB	142	35		753	0.188	142	0.3	0.3	5.898	А
C-A	201	50				201				
A-BC	290	72	220.20	1423	0.203	290	0.3	0.3	3.174	А



## 11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26		553	0.187	104	0.3	0.2	8.023	А
C-AB	107	27		735	0.146	107	0.3	0.2	5.768	A
C-A	173	43				173				
A-BC	236	59	179.80	1444	0.164	237	0.3	0.2	2.980	А

#### 12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22		566	0.153	87	0.2	0.2	7.522	А
C-AB	85	21		722	0.117	85	0.2	0.2	5.671	A
C-A	149	37				149				
ABC	198	50	150.57	1464	0.135	198	0.2	0.2	2.847	A



# 2027 Base +Dev, AM

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		1.91	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.91	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027 Base +Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	
✓	✓	HV Percentages	2.00	

## **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	~	194	100.000
B - Site Access		ONE HOUR	~	31	100.000
C - Pontfaen Rd (W)		ONE HOUR	~	337	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То							
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)				
From	A - Pontfaen Rd (E)	0	14	180				
From	B - Site Access	10	0	21				
	C - Pontfaen Rd (W)	304	33	0				

# Vehicle Mix



# Heavy Vehicle Percentages

		То							
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)					
From	A - Pontfaen Rd (E)	0	0	14					
From	B - Site Access	0	0	0					
	C - Pontfaen Rd (W)	12	0	0					

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	7.06	0.1	А	28	43
C-AB	0.08	4.94	0.1	A	48	71
C-A					262	392
<b>A</b> BC	0.16	3.21	0.2	A	178	267

# Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6		571	0.041	23	0.0	0.0	6.566	А
C-AB	35	9		766	0.046	35	0.0	0.1	4.922	А
C-A	218	55				218				
<b>A</b> BC	146	37	150.57	1373	0.106	146	0.0	0.1	2.933	A

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7		560	0.050	28	0.0	0.1	6.765	A
C-AB	46	11		787	0.058	45	0.1	0.1	4.841	A
C-A	257	64				257				
A-B C	174	44	179.80	1355	0.129	174	0.1	0.1	3.048	А

## 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9		544	0.063	34	0.1	0.1	7.057	А
C-AB	62	15		817	0.075	62	0.1	0.1	4.750	A
C-A	309	77				309				
A-BC	214	53	220.20	1335	0.160	213	0.1	0.2	3.208	A

## 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9		544	0.063	34	0.1	0.1	7.058	А
C-AB	62	15		817	0.076	62	0.1	0.1	4.766	A
C-A	309	77				309				
ABC	214	53	220.20	1335	0.160	214	0.2	0.2	3.208	А



### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7		560	0.050	28	0.1	0.1	6.770	А
C-AB	46	11		787	0.058	46	0.1	0.1	4.878	A
C-A	257	64				257				
A-BC	174	44	179.80	1355	0.129	175	0.2	0.1	3.051	А

#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6		571	0.041	23	0.1	0.0	6.571	А
C-AB	36	9		766	0.046	36	0.1	0.1	4.945	A
C-A	218	55				218				
A-BC	146	37	150.57	1373	0.106	146	0.1	0.1	2.933	A



# 2027 Base +Dev, PM

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		3.22	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.22	A

# Traffic Demand

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Base +Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

## **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	~	273	100.000
B - Site Access		ONE HOUR	~	81	100.000
C - Pontfaen Rd (W)		ONE HOUR	✓	241	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

### Demand (Veh/hr)

		То			
		A - Pontfaen Rd (E) B - Site Access		C - Pontfaen Rd (W)	
From	A - Pontfaen Rd (E)	0	24	249	
From	B - Site Access	24	0	57	
	C - Pontfaen Rd (W)	187	54	0	

# Vehicle Mix



# Heavy Vehicle Percentages

		То								
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)						
From	A - Pontfaen Rd (E)	0	0	12						
From	B - Site Access	0	0	0						
	C - Pontfaen Rd (W)	16	0	0						

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	8.05	0.2	A	74	111
C-AB	0.12	5.69	0.2	A	66	99
C-A					155	232
A-BC	0.22	3.40	0.3	A	251	376

# Main Results for each time segment

## 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15		567	0.108	61	0.0	0.1	7.099	А
C-AB	51	13		698	0.073	50	0.0	0.1	5.559	А
C-A	131	33				131				
<b>A-BC</b>	206	51	150.57	1399	0.147	205	0.0	0.2	3.014	A

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18		554	0.131	73	0.1	0.1	7.475	А
C-AB	64	16		705	0.091	64	0.1	0.1	5.595	А
C-A	153	38				153				
A-BC	245	61	179.80	1380	0.178	245	0.2	0.2	3.171	А

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22		536	0.166	89	0.1	0.2	8.046	A
C-AB	84	21		717	0.117	83	0.1	0.2	5.665	A
C-A	182	45				182				
A-BC	301	75	220.20	1360	0.221	300	0.2	0.3	3.396	A

## 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22		536	0.166	89	0.2	0.2	8.054	А
C-AB	84	21		717	0.117	84	0.2	0.2	5.691	А
C-A	182	45				182				
A-B C	301	75	220.20	1360	0.221	301	0.3	0.3	3.396	А



## 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18		554	0.131	73	0.2	0.2	7.486	А
C-AB	64	16		705	0.091	64	0.2	0.1	5.647	A
C-A	153	38				153				
A-BC	245	61	179.80	1380	0.178	246	0.3	0.2	3.175	A

#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15		567	0.108	61	0.2	0.1	7.121	А
C-AB	51	13		698	0.073	51	0.1	0.1	5.590	А
C-A	130	33				130				
ABC	206	51	150.57	1399	0.147	206	0.2	0.2	3.020	A



# 2027 Base +Dev, SAT

#### **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A475 Pontfaen Rd / Site Access	T-Junction	Two-way	Two-way	Two-way		3.60	A

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.60	A

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Base +Dev	SAT	ONE HOUR	10:45	12:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

## **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pontfaen Rd (E)		ONE HOUR	~	272	100.000
B - Site Access		ONE HOUR	~	115	100.000
C - Pontfaen Rd (W)		ONE HOUR	~	320	100.000

## **Demand overview (Pedestrians)**

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - Pontfaen Rd (E)	[ONEHOUR]	200.00
B - Site Access		
C - Pontfaen Rd (W)		

# **Origin-Destination Data**

#### Demand (Veh/hr)

		То	То										
		A - Pontfaen Rd (E) B - Site Access		C - Pontfaen Rd (W)									
From	A - Pontfaen Rd (E)	0	37	235									
	B - Site Access	35	0	80									
	C - Pontfaen Rd (W)	234	86	0									

# Vehicle Mix



# Heavy Vehicle Percentages

		То										
		A - Pontfaen Rd (E)	B - Site Access	C - Pontfaen Rd (W)								
From	A - Pontfaen Rd (E)	0	0	7								
	B - Site Access	0	0	0								
	C - Pontfaen Rd (W)	10	0	0								

# Results

# **Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	8.90	0.3	А	106	158
C-AB	0.19	5.88	0.3	А	113	169
C-A					181	271
<b>A</b> BC	0.21	3.20	0.3	А	250	374

# Main Results for each time segment

## 10:45 - 11:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22		564	0.154	86	0.0	0.2	7.521	А
C-AB	86	21		725	0.118	85	0.0	0.2	5.619	A
C-A	155	39				155				
A-B C	205	51	150.57	1463	0.140	204	0.0	0.2	2.858	А

#### 11:00 - 11:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26		550	0.188	103	0.2	0.2	8.049	А
C-AB	108	27		738	0.147	108	0.2	0.2	5.706	А
C-A	179	45				179				
A-BC	245	61	179.80	1444	0.169	244	0.2	0.2	3.000	А

#### 11:15 - 11:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32		531	0.238	126	0.2	0.3	8.879	A
C-AB	144	36		757	0.190	144	0.2	0.3	5.855	A
C-A	208	52				208				
A-BC	299	75	220.20	1423	0.210	299	0.2	0.3	3.203	A

## 11:30 - 11:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32		531	0.238	127	0.3	0.3	8.895	А
C-AB	144	36		757	0.190	144	0.3	0.3	5.882	А
C-A	208	52				208				
A-BC	299	75	220.20	1423	0.210	299	0.3	0.3	3.203	A



## 11:45 - 12:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26		550	0.188	104	0.3	0.2	8.070	А
C-AB	109	27		738	0.147	109	0.3	0.2	5.751	A
C-A	179	45				179				
A-BC	245	61	179.80	1444	0.169	245	0.3	0.2	3.004	А

#### 12:00 - 12:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22		564	0.154	87	0.2	0.2	7.556	А
C-AB	86	21		725	0.118	86	0.2	0.2	5.653	A
C-A	155	39				155				
ABC	205	51	150.57	1463	0.140	205	0.2	0.2	2.861	A