### acstro

# Transport Statement

**Proposed Mixed Use Development** 

The Gaiety, City Road, Cardiff

September 2024

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### **Revision History**

Α	9 <sup>th</sup> September 2024	First Issue

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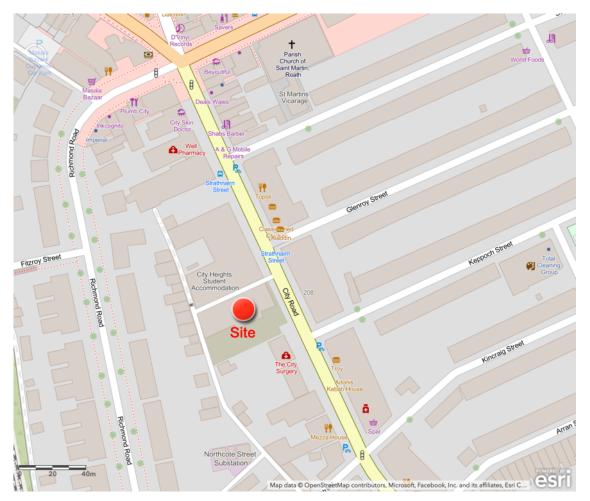
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### 1 Introduction

- 1.1 Acstro has been appointed to prepare a Transport Statement to support a planning application for development at the site of the former Gaiety Theatre, City Road, Cardiff.
- 1.2 The proposed mixed-use development comprises of 7-storey building accommodating 70 affordable apartments, to be managed by Wales & West Housing, and three commercial units at ground floor level.
- 1.3 The general location of the site is shown in Figure 1.



**Figure 1 Location Plan** 

- 1.4 This document considers the transport implications associated with the development of the site. In particular, this Transport Statement demonstrates that the site is in a sustainable location that is closely related to existing facilities and services and is accessible to pedestrians, cyclists and public transport users.
- 1.5 The structure of the Transport Statement is as follows:
  - Section 2 describes the relevant planning policy context that is relevant in terms of transport issues;
  - Section 3 describes the site's location, its proximity to services and facilities and its accessibility by all forms of transport.

- Section 4 describes the proposed development and its access arrangements.
- Section 5 provides an estimate of the likely trip generation of the proposed development of the land is also provided.
- Section 6 provides a summary and conclusion.



### 2 Policy Context

### Future Wales - The National Plan 2040

- 2.1 This is the national development framework that sets out the direction for development in Wales to 2040.
- 2.2 Policies 11 and 12 relate to national and regional connectivity, respectively. These seek to encourage longer-distance trips to be made by public transport, while also making longer journeys possible by electric vehicles. In urban areas, to support sustainable growth and regeneration, the priorities are improving and integrating active travel and public transport. Active travel must be an essential and integral component of all new developments.
- 2.3 Planning authorities must act to reduce levels of car parking in urban areas, including supporting car-free developments in accessible locations.

### Planning Policy Wales (12th Edition)

- 2.4 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.
- 2.5 In terms of transport related policies paragraph 4.1.1 states that "the planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport".
- 2.6 Paragraph 4.1.10 states that "the planning system has a key role to play in reducing the need to travel and supporting sustainable transport, by facilitating developments which:
  - are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;
  - are designed in a way which integrates them with existing land uses and neighbourhoods; and
  - make it possible for all short journeys within and beyond the development to be easily made by walking and cycling."
- 2.7 PPW advocates a sustainable transport hierarchy for planning, the hierarchy being, from top to bottom:
  - Walking and Cycling
  - Public Transport
  - Ultra Low Emission Vehicles
  - Other Private Motor Vehicles
- 2.8 It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of the private motor vehicles.

### Llwybr Newydd – The Wales Transport Strategy 2021

- 2.9 This document sets out the Welsh Government's vision for how the country's transport system can help deliver on a pathway to creating a more prosperous, green and equal society. It lists its priorities as being:
  - 1. Bringing services to people in order to reduce the need to travel. To this end a target has been set that of 30% of the workforce works remotely on a regular basis.



- 2. Allow people and goods to move easily from door to door by accessible, sustainable and efficient transport services and infrastructure.
- 3. Encourage people to make the change to more sustainable transport.
- 2.10 Modal shift is at the heart of Llwybr Newydd. This means the proportion of trips made by sustainable modes increases and fewer trips are made by private cars.
- 2.11 The Welsh Government has set a target of 45% of journeys to be made by public transport, walking and cycling by 2040. This represents an increase of 13 percentage points on the estimated baseline (2021) mode share of 32%.

### **TAN18 Transportation**

- 2.12 Planning Policy Wales Technical Advice Note 18 (TAN18) details the Welsh Government Government's policies in terms of transportation and repeats the general principles advocated in PPW i.e. that development is encouraged in sustainable, accessible, locations that will reduce the need to travel by car. Its aim is to promote an efficient and sustainable transport system and to counter the negative impacts associated with road traffic growth, for example increased air pollution, greenhouse gases and congestion (2.1). It sees the integration of transport and land use planning as key (2.3) in achieving the Welsh Government Governments' sustainable development policy objectives by:
  - promoting travel efficient settlement patterns;
  - ensuring new development is located where there is good access by public transport, walking and cycling thereby minimizing the need for travel and fostering social inclusion;
  - managing parking provision;
  - ensuring that new development includes appropriate provision for pedestrians, cycling, public transport, and traffic management and parking/servicing;
  - encouraging the location of development near other related uses to encourage multi-purpose trips; and
  - ensuring that transport infrastructure necessary to serve new development allows existing transport networks to continue to perform their identified functions.
- 2.13 The needs of walkers and cyclists must be taken into consideration and the use of these most sustainable forms of transport encouraged in all developments (TAN18 Chapter 6). Similarly, all development should be accessible by public transport (Chapter 7).

### The Active Travel (Wales) Act 2013

- 2.14 The Active Travel (Wales) Act 2013 is Welsh Government legislation aimed to support an increase in the level of walking and cycling in Wales; to encourage a shift in travel behaviour to active travel modes, and to facilitate the building of walking and cycling infrastructure.
- 2.15 The Active Travel (Wales) Act 2013 requires local authorities in Wales to produce maps of walking and cycling networks in their local area, known as Active Travel Network Maps (ATNMs). These maps are designed to show two main things:
  - Existing routes those current walking and cycling routes that already meet
    Welsh Government active travel standards, meaning they can be readily used
    for everyday journeys, and

- Future routes new routes that the local authority proposes to create in the future, as well as current routes that are planned for improvement to bring them up to the standards.
- 2.16 An extract from the ATNM is provided below and shows that a future walking route is proposed along City Road, which passes the site. There are several other future active travel routes proposed for streets that connect to City Road in the vicinity of the site.



**Figure 2 Active Travel Network Map** 

### Cardiff Local Development Plan 2006 - 2026

- 2.17 In terms of transport related policies, KP4 (Masterplanning Approach) and KP5 (Good Quality and Sustainable Design) require that developments are in locations that are accessible by walking, cycling and public transport and where residents can easily access services by these sustainable modes of travel.
- 2.18 Policy KP6 (New Infrastructure) requires that new development makes appropriate provision for, or contributes towards, essential, enabling infrastructure that includes infrastructure relating to transportation and highways including access, circulation, parking, public transport provision, walking and cycling.

- 2.19 Policy KP8 (Sustainable Transport) requires that "Development in Cardiff will be integrated with transport infrastructure and services in order to:
  - Achieve the target of a 50:50 modal split between journeys by car and journeys by walking, cycling and public transport.
  - · Reduce travel demand and dependence on the car;
  - Enable and maximise use of sustainable and active modes of transport;
  - Integrate travel modes;
  - Provide for people with particular access and mobility requirements;
  - Improve safety for all travellers;
  - Maintain and improve the efficiency and reliability of the transport network;
  - Support the movement of freight by rail or water; and
  - Manage freight movements by road and minimise their impacts.
- 2.20 There are a number of more specific transport related policies that are relevant to the development proposal including T1 (Walking and Cycling), T5 (Managing transport Impacts) and T6 (Impact on Transport Networks and Services).
- 2.21 The site is located within the City Road District Centre, as defined by Policy R2.

  <u>Managing Transportation Impacts (Incorporating Parking Standards) Supplementary Planning Guidance</u>
- 2.22 The SPG sets out the maximum level of car parking provision and minimum level of cycle parking provision that should be made within new development. The application site is located within the defined Central Area
- 2.23 For all dwellings a maximum of 1 car parking space per unit and minimum of one cycle parking space per bedroom is specified.
- 2.24 For retail use a maximum of 1 car parking space per 400m<sup>2</sup> of floor area is specified. A minimum of 2 cycle spaces per 100m<sup>2</sup> is specified for staff and 1 per 100m<sup>2</sup> for visitors.

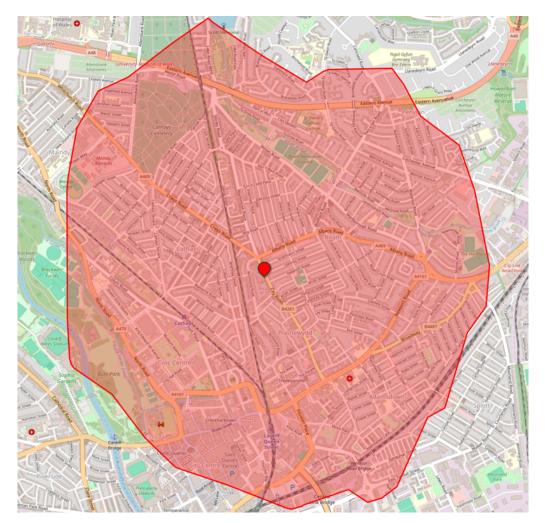


### 3 Existing Conditions

- 3.1 The application site is the former Gaiety Theatre on City Road. The site comprises of the former theatre building that sits within the northern half of the site and a car park (approximately 25 spaces) on the southern half. Most recently the building accommodated a bar / restaurant and bowling hall. The site is currently vacant.
- 3.2 City Road forms the site's eastern boundary. To the south of the site is No 189 City Road. To the west is a lane that serves the rears of both City Road and Richmond Road properties. The northern boundary is formed by a lane that provides access to the rear lane and immediately to the north of that is the City Heights student accommodation development.

### Proximity to Services & Active Travel

3.3 Guidance published in 2021 by TCPA advocates the development of 20-minute neighbourhoods. A 20-minute neighbourhood is a compact and connected place, with a range of services that meet most people's daily needs. The figure below shows the areas that can be reached within a 20-minute walk of the application site.



**Figure 3 20-Minute Walk Catchment** 

- 3.4 The site is located within the City Road District Centre and only some 150m to the south of the Albany Road District Centre where a wide range of services and facilities are located. The city centre is approximately 1.2km / 15-minutes' walk south of the site.
- 3.5 The site is accessible to pedestrians from the adjacent footway that runs along City Road. There are signal controlled crossing facilities City Road / Albany Road / Crwys Road junction (140m to the north) and City Road / Northcote Street / Kincraig Street junction (110m to the south) allowing for safe pedestrian journeys in all directions.
- 3.6 There are a number of cycle stands located on City Road's footways near the site including two stands opposite, behind the bus stop at the Glenroy Street junction, twom stands at the Keppoch Street junction and 6 stands positioned around the Strathnairn Street junction.

### Public Transport

- 3.7 The nearest bus stop is located opposite the site at the junction with Glenroy Street and is used by southbound bus services. Its northbound equivalent is located some 70m to the north of the site opposite the Strathnairn Street junction. Both stops are referred to as the Strathnairn Street stops on timetables.
- 3.8 The bus stops on both sides of the street have bus shelters with real-time bus information and high-level boarding kerbs. The bus stops provide access to the No. 9 service described in the table below. Cathays railway station is some 900m (13-minute walk) to the west of the site and Queen Street railway station is 1.4km (20-minute walk) to the south of the site.

Service No.	Route	General Daytime Frequency
9	Heath Hospital – Cardiff Sports Village	Every 12 Minutes during core hours (Mon – Fri) Every 20 Minutes (Sat & Sun)

Table 1 Strathnairn Street Bus Stop Services

### **Highway Access**

3.9 The site is adjacent to City Road (B4261). There is currently an access to the site's car park located at the site's southeastern corner.



**Figure 4 Existing Access** 

3.10 City Road has a 20mph speed limit. On its western side, adjacent to the sitre, there are double-yellow lines signifying no waiting at any time. Loading is permitted. On the street's eastern side there are a number of parking bays. Parking is restricted to 1 hour, with no return within 1 hour, between 8am and 6.30pm, Mondays to Saturdays.

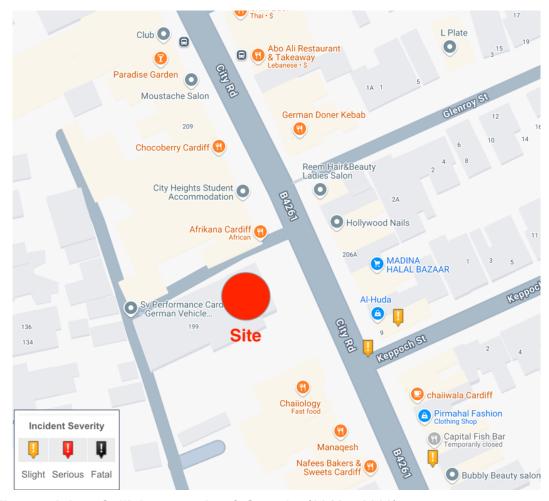


Figure 5 Injury Collision Location & Severity (2018 – 2022) (www.crashmap.co.uk)

3.11 City Road, in the vicinity of the site, has a good safety record. During the latest 5-year period for which data is available (2018 to 2022 inclusive) there have been 2 slight severity injury accidents near the Keppoch Street junction and one other further to the south. The absence of significant clusters of collisions or collisions of greater severity indicate that the highway is operating within an acceptable level of safety.

### 4 Proposed Development

- 4.1 The proposed development comprises of the construction of a 7-storey building accommodating 70 flats, to be managed by Wales & West Housing. There will be 66 1-bed flats and four 2-bed flats.
- 4.2 At ground floor level there will be three commercial units, each providing 54m² of floor area.

### Access, Parking and Servicing

- 4.3 Pedestrian and cycle access to the development will be direct from the City Road footway that fronts the site.
- 4.4 A bike store accommodating 74 cycle spaces will be provided for the 70 flats (1 space per bedroom), in compliance with the Council's Parking Standard requirements.
- 4.5 One staff cycle storage space is provided for each of the commercial units. It is considered that visitor cycle parking is already adequately provided for by the 10 cycle stands that are located on nearby footways.
- 4.6 No off-street car parking is provided within the development. This meets the requirements of Cardiff Council's Managing Transport Impacts (Incorporating Parking Standards) Supplementary Planning Guidance (Parking Standards SPG) for development in the city's Central Area. It reflects that the development is in a highly sustainable location with a significant number of local facilities within close proximity that can be accessed by walking and cycling for stop and where there is easy access to frequent and regular public transport services. Users of the development would not be reliant on car transport and it is considered that this is a suitable location for car free development.
- 4.7 The existing access to the site's car park will be permanently stopped-up.
- 4.8 A refuse store opens onto the lane on the site's northern boundary, within close proximity to City Road itself.
- 4.9 Refuse collection vehicles and delivery vehicles servicing the flats and commercial units will load and unload from the kerbside on City Road. This is permitted under the existing traffic regulations that are in place and the arrangement is consistent with that for most other properties on City Road.



### 5 Trip Generation

- 5.1 This section considers the likely trip generation of the proposed development. The assessment is made on the basis that the development will arise from a clean, empty, site as the intention is that the existing building will be demolished under permitted development rights with appropriate prior notification made to the Council. No assessment is made of the number of trips that can be generated by the existing permitted use of the site on the basis that demolition can progress regardless of the outcome of the new development's planning application.
- 5.2 Nevertheless, it is germane that the redevelopment of the site will result in the removal of a 25-space car park and permanent closure of its access from City Road. This will end the prospect of vehicles crossing the footway at this location and in so doing reduce the potential for vehicles accessing the site to cause conflict with pedestrians walking along City Road's footway.

### Residential

- 5.3 The potential trip generation of the proposed development of the site has been estimated by reference to the TRICS trip rate database, a database of over 7,100 traffic surveys of various types of development throughout the UK and Ireland.
- 5.4 From the TRICS database evidence of multi-modal trip rates of developments of affordable or local authority flats have been obtained. The sample of TRICS survey sites has been confined to those undertaken in edge of town centre locations in mainland Britain (excluding Greater London). The detailed TRICS output is provided as Appendix 1 and summarised in the following tables.

Appendix 1 TRICS Multi Modal Trip Rate Data - Residential

Time Range	Trip Rate per Unit	Trip Generation 70 Units
07:00-08:00	0.36	25
08:00-09:00	1.13	79
09:00-10:00	0.59	41
10:00-11:00	0.53	37
11:00-12:00	0.66	46
12:00-13:00	0.67	47
13:00-14:00	0.64	45
14:00-15:00	0.77	54
15:00-16:00	1.83	128
16:00-17:00	0.90	63
17:00-18:00	0.90	63
18:00-19:00	0.46	32
Daily:	9.428	660

Table 2 Total People Trip Rates & Trip Generation

5.5 The data suggests that the residential element of the development will generate around 660 daily people trips.

5.6 The zero parking provision on site and the limited availability of on-street parking spaces for residents near to the site will make car ownership and use unattractive to residents. As such it is considered that the vast majority of the 660 daily trips generated by the 70 flats will be made by sustainable modes of travel.

### Commercial

- 5.7 The three ground floor commercial units provide a total floorspace of 162m<sup>2</sup>.
- 5.8 The typical trip rates of local shops, defined by TRICS as 'a collection of small local shops within close proximity' have been obtained from the TRICS database. The database has no survey of sites located within or at the edge of town centre and we must therefore rely on surveys undertaken in suburban or edge of town locations. Those suburban or edge of town locations are likely to exhibit a higher proportion of car-borne trips than should reasonably be expected from this development located in City Road. The TRICS data is included in full in Appendix 2 and summarised below.

Appendix 2 TRICS Multi Modal Trip Rate Data - Retail

Time Range	Total People	Pedestrians	Cyclists	Public Transport Users	Drivers	Vehicle Passengers
07:00-08:00	13.30	4.90	0.40	0.12	6.78	1.11
08:00-09:00	17.01	8.87	0.21	0.07	6.69	1.16
09:00-10:00	19.68	8.33	0.28	0.19	8.77	2.12
10:00-11:00	20.94	7.37	0.07	0.15	10.00	3.36
11:00-12:00	22.84	8.07	0.24	0.33	9.95	4.26
12:00-13:00	26.58	8.25	0.09	0.16	12.42	5.66
13:00-14:00	23.75	6.53	0.21	0.28	11.69	5.04
14:00-15:00	22.50	5.55	0.16	0.20	10.78	5.81
15:00-16:00	30.12	12.41	0.21	0.45	10.41	6.64
16:00-17:00	23.89	7.00	0.58	0.07	9.89	6.35
17:00-18:00	17.58	5.23	0.24	0.33	8.45	3.33
18:00-19:00	12.37	4.29	0.49	0.11	6.00	1.48
19:00-20:00	12.05	4.88	0.20	0.04	6.03	0.91
20:00-21:00	6.68	2.57	0.19	0.02	3.26	0.64
21:00-22:00	16.76	8.19	0.00	0.00	7.62	0.95
Daily:	286.04 (100%)	102.44 (36%)	3.56 (1%)	2.49 (1%)	128.73 (45%)	48.81 (17%)

Table 3 Local Shops Multi-Modal Trip Rates (per 100m<sup>2</sup> Floor Area)



Time Range	Total People	Pedestrians	Cyclists	Public Transport Users	Drivers	Vehicle Passengers
07:00-08:00	22	8	1	0	11	2
08:00-09:00	28	14	0	0	11	2
09:00-10:00	32	13	0	0	14	3
10:00-11:00	34	12	0	0	16	5
11:00-12:00	37	13	0	1	16	7
12:00-13:00	43	13	0	0	20	9
13:00-14:00	38	11	0	0	19	8
14:00-15:00	36	9	0	0	17	9
15:00-16:00	49	20	0	1	17	11
16:00-17:00	39	11	1	0	16	10
17:00-18:00	28	8	0	1	14	5
18:00-19:00	20	7	1	0	10	2
19:00-20:00	20	8	0	0	10	1
20:00-21:00	11	4	0	0	5	1
21:00-22:00	27	13	0	0	12	2
Daily:	463	166	6	4	209	79

### **Table 4 Local Shop Multi-Modal Trip Attraction**

- 5.9 The data suggests that the commercial space will attract some 463 daily people trips. Very few of these trips will be newly generated trips however.
- 5.10 Some of the 463 trips will be internal to the development. This is where visits to the ground floor commercial units originate from and return to the residential units above.
- 5.11 Others will be pass-by trips where people visit the commercial units as part of an existing journey that passes the site. These might be, for example, residents from the new units above that call into one of the commercial units on their way out to, or home from, work or people stopping at the commercial unit as they walk past along City Road.
- 5.12 Other trips will be linked with existing journeys. For example, people visiting the commercial units as part of a wider shopping trip to City Road. Other trips will divert from existing similar retail / commercial offerings in the local area.
- 5.13 The majority of these trips attracted by the commercial unit will therefore already be present on the surrounding transport network and will not place additional demand on the transport network.
- 5.14 Research into the breakdown of trip types is provided in the TRICS Report 95-2 Passby & Diverted Traffic. It states that primary or new trips account for only a small proportion, up to 8%, of traffic generated by a new retail development. It explains that "the very low proportion of newly generated trips on the network suggested by all of the above research is not entirely surprising. People are unlikely to go shopping for food on a more frequent basis simply because a new store opens. It has even been suggested that new store openings can result in a decrease in total vehicle mileage on the network if the new store brings a shopping opportunity nearer to where an existing market is situated" (TRICS Report 95-2 para. 3.8).



5.15 Based on this research we will take a robust approach and assume that new trips attracted by the commercial unit will account for no more than 10% of the overall trip attraction volume. On that basis the commercial element of the development can be expected to generate some 46 new people trips per day.

Time Range	Total People	Pedestrians	Cyclists	Public Transport Users	Drivers	Vehicle Passengers
07:00-08:00	2	1	0	0	1	0
08:00-09:00	3	1	0	0	1	0
09:00-10:00	3	1	0	0	1	0
10:00-11:00	3	1	0	0	2	1
11:00-12:00	4	1	0	0	2	1
12:00-13:00	4	1	0	0	2	1
13:00-14:00	4	1	0	0	2	1
14:00-15:00	4	1	0	0	2	1
15:00-16:00	5	2	0	0	2	1
16:00-17:00	4	1	0	0	2	1
17:00-18:00	3	1	0	0	1	1
18:00-19:00	2	1	0	0	1	0
19:00-20:00	2	1	0	0	1	0
20:00-21:00	1	0	0	0	1	0
21:00-22:00	3	1	0	0	1	0
Daily:	46	17	1	0	21	8



### Parking Demand

5.16 Applying the hourly vehicular trip rates to the overall 162m² of commercial floorspace allows for an estimate of the overall traffic attraction and parking demand of this element of the development. The following table shows that the parking accumulation generated by the commercial units would amount to a maximum of 4 spaces at any one time. This assumes that all of the trips attracted by the development are new to the highway network. However, as described earlier only a small proportion, around 10%, of the trips attracted by the development's commercial space will be new and as such the commercial development will result in an imperceptible demand for additional parking space.

Overall Total  New Trips (10%) & Parking											
Time Range	Trip	Rate per 1	00m <sup>2</sup>	Tri	p Attrac (162m²)		Parking	Accumulation			
	Arr.	Dep.	Total	Arr.	Dep.	Total	Acc.	Arr.	Dep.	Total	Parking Acc.
07:00-08:00	3.537	3.24	6.777	6	5	11	0	1	1	1	0
08:00-09:00	3.743	2.949	6.692	6	5	11	2	1	0	1	0
09:00-10:00	4.589	4.179	8.768	7	7	14	2	1	1	1	0
10:00-11:00	5.211	4.788	9.999	8	8	16	3	1	1	2	0
11:00-12:00	5.171	4.775	9.946	8	8	16	4	1	1	2	0
12:00-13:00	6.243	6.176	12.419	10	10	20	4	1	1	2	0
13:00-14:00	5.621	6.071	11.692	9	10	19	3	1	1	2	0
14:00-15:00	5.343	5.436	10.779	9	9	17	3	1	1	2	0
15:00-16:00	5.092	5.317	10.409	8	9	17	3	1	1	2	0
16:00-17:00	4.933	4.96	9.893	8	8	16	3	1	1	2	0
17:00-18:00	3.941	4.51	8.451	6	7	14	2	1	1	1	0
18:00-19:00	2.817	3.187	6.004	5	5	10	1	0	1	1	0
19:00–20:00	2.826	3.201	6.027	5	5	10	0	0	1	1	0
20:00-21:00	1.39	1.867	3.257	2	3	5	0	0	0	1	0
21:00-22:00	3.81	3.81	7.62	6	6	12	0	1	1	1	0
Daily:	64.267	64.466	128.733	104	104	209		10	10	21	

Table 5 Commercial Use Vehicle Trip Rate, Overall & New Trip Attraction & Parking Accumulation

### **Construction Traffic**

- 5.17 A Construction Traffic Management Plan (CTMP) will be prepared in consultation with the Main Contractor and Highway Authority prior to the commencement of the development. The CTMP will detail measures that will be employed to minimise the impacts of construction traffic on the roads surrounding the site and their users. These will include details of how and when deliveries will be made, taking account of the site's constraints and highway conditions.
- 5.18 It is expected that the submission of a CTMP, its agreement and implementation will be a condition of the planning permission.



### 6 Summary & Conclusion

- 6.1 In summary this Transport Statement has demonstrated that:
  - Planning permission is sought for the construction of a new 7-storey building, accommodating 70 flats that will be managed by Wales & West Housing Association. Three commercial units are also proposed at ground floor level.
  - The site is located in the City Road District Centre and is within 1.2km walk of the
    city centre, providing residents of the development with access to a wide range of
    services and facilities within a few minutes walk. The nearby bus stops and two
    railway stations provide access to regular and frequent public transport services.
  - No car parking spaces are provided within the development, reflecting the central and highly sustainable position of the site where car-free living is achievable and desirable.
  - 74 secure cycle parking spaces are provided within an internal cycle store for the
    use of residents and 3 spaces for those working in the commercial units. There
    are a number of existing Sheffield stands located on City Road in close proximity
    to the site that cater for visitors cycling to the development and the general area.
  - Refuse collection and deliveries will take place from the City Road kerb side as is the case for most City Road properties.
  - In terms of trip generation the development will lead to an increase in trips associated with the new residential units and commercial space. The trips generated by the residential element of the development and attracted by the proposed commercial unit will be made by sustainable forms of transport. The absence of car parking provision within the development and the limited availability of freely available on-street parking on the surrounding streets make travelling to the site by car an unattractive proposition. As such, the development is unlikely to have any material impact on traffic generation and parking demand on the surrounding streets.
- 6.2 It is considered that the proposed development meets planning policy requirements in terms of being in an appropriate location that is safely accessible by all forms of transport and that there are no significant impacts of the continued operation and safety of the surrounding highway and transport network.
- 6.3 It is concluded therefore that there are no transport related issues that should prevent the proposed development.



### Appendix 1 TRICS Multi Modal Trip Rate Data - Residential

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Calculation Reference: AUDIT-648801-240909-0914

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES MULTI-MODAL TOTAL VEHICLES

Selected regions and areas: 08 NORTH WEST

ВВ BLACKBURN WITH DARWEN 1 days

11 SCOTLAND

MORAY MO 2 days

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

### Primary Filtering selection:

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

Parameter: No of Dwellings Actual Range: 15 to 40 (units: ) Range Selected by User: 14 to 280 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 22/10/21

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

Selected survey days:

Monday 1 days Wednesday 1 days Friday 1 days

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

Selected survey types:

Manual count 3 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.

3

Selected Locations:

Edge of Town Centre

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

Selected Location Sub Categories:

Residential Zone 1
No Sub Category 2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included X days - Selected Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:

Use Class:

C3 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

### Population within 500m Range:

All Surveys Included

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Acstro Ltd Salem Llandeilo Licence No: 648801

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000 1 days 10,001 to 15,000 2 days

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

Population within 5 miles:

25,001 to 50,000 2 days 125,001 to 250,000 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 2 days 1.1 to 1.5 1 days

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

Travel Plan:

No 3 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 3 days

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

Monday 09/09/24 Page 4

Acstro Ltd Salem Llandeilo Licence No: 648801

LIST OF SITES relevant to selection parameters

1 BB-03-B-01 SEMI DETACHED/TERRACED BLACKBURN WITH DARWEN

BILLINGE STREET BLACKBURN

Edge of Town Centre Residential Zone

Total No of Dwellings: 15

Survey date: MONDAY 10/06/13 Survey Type: MANUAL

MO-03-B-01 SEMI DETACHED MORAY

HAWTHORN ROAD

**ELGIN** 

Edge of Town Centre No Sub Category

Total No of Dwellings: 15

Survey date: FRIDAY 12/05/06 Survey Type: MANUAL

3 MO-03-B-02 BUNGALOWS MORAY

PLUSCARDEN ROAD

**ELGIN** 

Edge of Town Centre No Sub Category Total No of Dwellings:

Total No of Dwellings: 40

Survey date: WEDNESDAY 10/05/06 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.33

	ARRIVALS				DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.057	3	23	0.100	3	23	0.157
08:00 - 09:00	3	23	0.129	3	23	0.329	3	23	0.458
09:00 - 10:00	3	23	0.129	3	23	0.114	3	23	0.243
10:00 - 11:00	3	23	0.143	3	23	0.143	3	23	0.286
11:00 - 12:00	3	23	0.171	3	23	0.171	3	23	0.342
12:00 - 13:00	3	23	0.157	3	23	0.157	3	23	0.314
13:00 - 14:00	3	23	0.129	3	23	0.171	3	23	0.300
14:00 - 15:00	3	23	0.129	3	23	0.200	3	23	0.329
15:00 - 16:00	3	23	0.286	3	23	0.329	3	23	0.615
16:00 - 17:00	3	23	0.229	3	23	0.143	3	23	0.372
17:00 - 18:00	3	23	0.286	3	23	0.129	3	23	0.415
18:00 - 19:00	3	23	0.129	3	23	0.086	3	23	0.215
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.974			2.072			4.046

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: 15 - 40 (units: )
Survey date date range: 01/01/00 - 22/10/21

Number of weekdays (Monday-Friday): 3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			1	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.029	3	23	0.029	3	23	0.058
08:00 - 09:00	3	23	0.000	3	23	0.000	3	23	0.000
09:00 - 10:00	3	23	0.000	3	23	0.014	3	23	0.014
10:00 - 11:00	3	23	0.014	3	23	0.000	3	23	0.014
11:00 - 12:00	3	23	0.000	3	23	0.000	3	23	0.000
12:00 - 13:00	3	23	0.000	3	23	0.000	3	23	0.000
13:00 - 14:00	3	23	0.000	3	23	0.000	3	23	0.000
14:00 - 15:00	3	23	0.000	3	23	0.014	3	23	0.014
15:00 - 16:00	3	23	0.000	3	23	0.000	3	23	0.000
16:00 - 17:00	3	23	0.000	3	23	0.000	3	23	0.000
17:00 - 18:00	3	23	0.000	3	23	0.000	3	23	0.000
18:00 - 19:00	3	23	0.043	3	23	0.000	3	23	0.043
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.057			0.143

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: 648801 Acstro Ltd Salem Llandeilo

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES	5	TOTALS		
	No. Ave.		Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.086	3	23	0.157	3	23	0.243
08:00 - 09:00	3	23	0.143	3	23	0.629	3	23	0.772
09:00 - 10:00	3	23	0.200	3	23	0.257	3	23	0.457
10:00 - 11:00	3	23	0.214	3	23	0.243	3	23	0.457
11:00 - 12:00	3	23	0.214	3	23	0.214	3	23	0.428
12:00 - 13:00	3	23	0.200	3	23	0.186	3	23	0.386
13:00 - 14:00	3	23	0.157	3	23	0.343	3	23	0.500
14:00 - 15:00	3	23	0.129	3	23	0.371	3	23	0.500
15:00 - 16:00	3	23	0.614	3	23	0.529	3	23	1.143
16:00 - 17:00	3	23	0.371	3	23	0.286	3	23	0.657
17:00 - 18:00	3	23	0.429	3	23	0.257	3	23	0.686
18:00 - 19:00	3	23	0.186	3	23	0.143	3	23	0.329
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.943			3.615			6.558

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			Ī	DEPARTURES	6	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.000	3	23	0.029	3	23	0.029
08:00 - 09:00	3	23	0.057	3	23	0.286	3	23	0.343
09:00 - 10:00	3	23	0.014	3	23	0.029	3	23	0.043
10:00 - 11:00	3	23	0.014	3	23	0.029	3	23	0.043
11:00 - 12:00	3	23	0.086	3	23	0.100	3	23	0.186
12:00 - 13:00	3	23	0.129	3	23	0.129	3	23	0.258
13:00 - 14:00	3	23	0.071	3	23	0.043	3	23	0.114
14:00 - 15:00	3	23	0.057	3	23	0.171	3	23	0.228
15:00 - 16:00	3	23	0.400	3	23	0.286	3	23	0.686
16:00 - 17:00	3	23	0.043	3	23	0.200	3	23	0.243
17:00 - 18:00	3	23	0.029	3	23	0.171	3	23	0.200
18:00 - 19:00	3	23	0.029	3	23	0.057	3	23	0.086
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.929	1.530					2.459

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES	6	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.000	3	23	0.029	3	23	0.029
08:00 - 09:00	3	23	0.000	3	23	0.014	3	23	0.014
09:00 - 10:00	3	23	0.029	3	23	0.043	3	23	0.072
10:00 - 11:00	3	23	0.000	3	23	0.014	3	23	0.014
11:00 - 12:00	3	23	0.014	3	23	0.029	3	23	0.043
12:00 - 13:00	3	23	0.029	3	23	0.000	3	23	0.029
13:00 - 14:00	3	23	0.029	3	23	0.000	3	23	0.029
14:00 - 15:00	3	23	0.014	3	23	0.014	3	23	0.028
15:00 - 16:00	3	23	0.000	3	23	0.000	3	23	0.000
16:00 - 17:00	3	23	0.000	3	23	0.000	3	23	0.000
17:00 - 18:00	3	23	0.014	3	23	0.000	3	23	0.014
18:00 - 19:00	3	23	0.000	3	23	0.000	3	23	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.129			0.143			0.272

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.33

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	3	23	0.114	3	23	0.243	3	23	0.357
08:00 - 09:00	3	23	0.200	3	23	0.929	3	23	1.129
09:00 - 10:00	3	23	0.243	3	23	0.343	3	23	0.586
10:00 - 11:00	3	23	0.243	3	23	0.286	3	23	0.529
11:00 - 12:00	3	23	0.314	3	23	0.343	3	23	0.657
12:00 - 13:00	3	23	0.357	3	23	0.314	3	23	0.671
13:00 - 14:00	3	23	0.257	3	23	0.386	3	23	0.643
14:00 - 15:00	3	23	0.200	3	23	0.571	3	23	0.771
15:00 - 16:00	3	23	1.014	3	23	0.814	3	23	1.828
16:00 - 17:00	3	23	0.414	3	23	0.486	3	23	0.900
17:00 - 18:00	3	23	0.471	3	23	0.429	3	23	0.900
18:00 - 19:00	3	23	0.257	3	23	0.200	3	23	0.457
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.084			5.344			9.428

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.

### Appendix 2 TRICS Multi Modal Trip Rate Data – Retail

Monday 09/09/24 Page 1

Calculation Reference: AUDIT-648801-240909-0945

Acstro Ltd Salem Llandeilo Licence No: 648801

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use

: 01 - RETAIL : I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL VEHICLES

### Selected regions and areas:

03	SOUTI	H WEST	
	BC	BOURNEMOUTH CHRISTCHURCH & POOLE	1 days
	GS	GLOUCESTERSHIRE	1 days
	SG	SOUTH GLOUCESTERSHIRE	1 days
06	WEST	MIDLANDS	
	WM	WEST MIDLANDS	2 days
10	WALE	S	
	CF	CARDIFF	1 days
	SW	SWANSEA	1 days
11	SCOTI	LAND	
	EB	CITY OF EDINBURGH	1 days

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

### Primary Filtering selection:

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

Parameter: Gross floor area

Actual Range: 240 to 2500 (units: sqm) Range Selected by User: 200 to 2500 (units: sqm)

Parking Spaces Range: All Surveys Included

### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 22/06/23

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

### Selected survey days:

Monday 2 days
Tuesday 1 days
Thursday 2 days
Friday 2 days
Saturday 1 days

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

### Selected survey types:

Manual count 8 days
Directional ATC Count 0 days

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

### Selected Locations:

Suburban Area (PPS6 Out of Centre) 4
Edge of Town 4

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

### Selected Location Sub Categories:

Industrial Zone 1
Commercial Zone 1
Residential Zone 5
No Sub Category 1

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

### Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included X days - Selected Servicing vehicles Excluded 8 days - Selected

Secondary Filtering selection:

### Use Class:

n/a 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

### Population within 500m Range:

All Surveys Included

### Secondary Filtering selection (Cont.):

Population within 1 mile:

 5,001 to 10,000
 2 days

 15,001 to 20,000
 3 days

 25,001 to 50,000
 2 days

 50,001 to 100,000
 1 days

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

Population within 5 miles:

125,001 to 250,000 4 days 250,001 to 500,000 4 days

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

Car ownership within 5 miles:

0.6 to 1.0 3 days 1.1 to 1.5 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 8 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.

Travel Plan:

Not Known 1 days No 7 days

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

PTAL Rating:

No PTAL Present 8 days

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

Monday 09/09/24 Page 4

Acstro Ltd Salem Llandeilo Licence No: 648801

LIST OF SITES relevant to selection parameters

1 BC-01-I-03 LOCAL SHOPS BOURNEMOUTH CHRISTCHURCH & POOLE

MARLOW DRIVE CHRISTCHURCH ST CATHERINES HILL Edge of Town Residential Zone

Total Gross floor area: 906 sgm

Survey date: FRIDAY 18/05/01 Survey Type: MANUAL

CF-01-I-01 LOCAL SHOPS CARDIFF

MICHAELSTON ROAD

**CARDIFF** 

Edge of Town No Sub Category

Total Gross floor area: 500 sqm

Survey date: MONDAY 08/10/07 Survey Type: MANUAL
3 EB-01-I-01 LOCAL SHOPS CITY OF EDINBURGH

COLINTON ROAD EDINBURGH CRAIGLOCKHART

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 825 sqm

Survey date: THURSDAY 28/10/10 Survey Type: MANUAL
GS-01-I-01 LOCAL SHOPS GLOUCESTERSHIRE

SALISBURY AVENUE CHELTENHAM WARDEN HILL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 525 sqm

Survey date: MONDAY 26/04/10 Survey Type: MANUAL
SG-01-I-01 LOCAL SHOPS SOUTH GLOUCESTERSHIRE

BURLEY GROVE
BRISTOL
KINGSWOOD

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 240 sqm

Survey date: FRIDAY 06/10/06 Survey Type: MANUAL

6 SW-01-I-01 SHOPPING CENTRE SWANSEA

SAMLET ROAD SWANSEA LLANSAMLET Edge of Town Industrial Zone

Total Gross floor area: 2500 sqm

Survey date: SATURDAY 21/09/02 Survey Type: MANUAL
WM-01-I-01 LOCAL SHOPS WEST MIDLANDS

HOLYHEAD ROAD

COVENTRY

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1550 sqm

Survey date: THURSDAY 27/09/07 Survey Type: MANUAL
3 WM-01-I-02 LOCAL SHOPS WEST MIDLANDS

MARSHALL LAKE ROAD

SOLIHULL
SHIRLEY
Edge of Town
Commercial Zone
Total Gross floor area:

Total Gross floor area: 515 sqm

Survey date: TUESDAY 18/09/07 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/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.23

	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	7	723	3.537	7	723	3.240	7	723	6.777
08:00 - 09:00	8	945	3.743	8	945	2.949	8	945	6.692
09:00 - 10:00	8	945	4.589	8	945	4.179	8	945	8.768
10:00 - 11:00	8	945	5.211	8	945	4.788	8	945	9.999
11:00 - 12:00	8	945	5.171	8	945	4.775	8	945	9.946
12:00 - 13:00	8	945	6.243	8	945	6.176	8	945	12.419
13:00 - 14:00	8	945	5.621	8	945	6.071	8	945	11.692
14:00 - 15:00	8	945	5.343	8	945	5.436	8	945	10.779
15:00 - 16:00	8	945	5.092	8	945	5.317	8	945	10.409
16:00 - 17:00	8	945	4.933	8	945	4.960	8	945	9.893
17:00 - 18:00	8	945	3.941	8	945	4.510	8	945	8.451
18:00 - 19:00	8	945	2.817	8	945	3.187	8	945	6.004
19:00 - 20:00	7	723	2.826	7	723	3.201	7	723	6.027
20:00 - 21:00	6	804	1.390	6	804	1.867	6	804	3.257
21:00 - 22:00	1	525	3.810	1	525	3.810	1	525	7.620
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			64.267			64.466			128.733

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: 240 - 2500 (units: sqm) Survey date date range: 01/01/00 - 22/06/23

Number of weekdays (Monday-Friday): 7
Number of Saturdays: 1
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/I - SHOPPING CENTRE - LOCAL SHOPS

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	7	723	0.217	7	723	0.178	7	723	0.395
08:00 - 09:00	8	945	0.119	8	945	0.093	8	945	0.212
09:00 - 10:00	8	945	0.132	8	945	0.145	8	945	0.277
10:00 - 11:00	8	945	0.040	8	945	0.026	8	945	0.066
11:00 - 12:00	8	945	0.132	8	945	0.106	8	945	0.238
12:00 - 13:00	8	945	0.040	8	945	0.053	8	945	0.093
13:00 - 14:00	8	945	0.106	8	945	0.106	8	945	0.212
14:00 - 15:00	8	945	0.066	8	945	0.093	8	945	0.159
15:00 - 16:00	8	945	0.093	8	945	0.119	8	945	0.212
16:00 - 17:00	8	945	0.317	8	945	0.265	8	945	0.582
17:00 - 18:00	8	945	0.106	8	945	0.132	8	945	0.238
18:00 - 19:00	8	945	0.238	8	945	0.251	8	945	0.489
19:00 - 20:00	7	723	0.059	7	723	0.138	7	723	0.197
20:00 - 21:00	6	804	0.104	6	804	0.083	6	804	0.187
21:00 - 22:00	1	525	0.000	1	525	0.000	1	525	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.769			1.788			3.557

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

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	7	723	4.130	7	723	3.754	7	723	7.884
08:00 - 09:00	8	945	4.444	8	945	3.412	8	945	7.856
09:00 - 10:00	8	945	5.793	8	945	5.092	8	945	10.885
10:00 - 11:00	8	945	7.248	8	945	6.110	8	945	13.358
11:00 - 12:00	8	945	7.406	8	945	6.798	8	945	14.204
12:00 - 13:00	8	945	9.271	8	945	8.808	8	945	18.079
13:00 - 14:00	8	945	8.174	8	945	8.557	8	945	16.731
14:00 - 15:00	8	945	8.253	8	945	8.332	8	945	16.585
15:00 - 16:00	8	945	8.425	8	945	8.623	8	945	17.048
16:00 - 17:00	8	945	7.830	8	945	8.412	8	945	16.242
17:00 - 18:00	8	945	5.383	8	945	6.401	8	945	11.784
18:00 - 19:00	8	945	3.478	8	945	4.007	8	945	7.485
19:00 - 20:00	7	723	3.181	7	723	3.754	7	723	6.935
20:00 - 21:00	6	804	1.659	6	804	2.240	6	804	3.899
21:00 - 22:00	1	525	4.381	1	525	4.190	1	525	8.571
22:00 - 23:00									
23:00 - 24:00			<u> </u>		·				
Total Rates:			89.056			88.490			177.546

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

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	7	723	2.628	7	723	2.272	7	723	4.900
08:00 - 09:00	8	945	4.695	8	945	4.179	8	945	8.874
09:00 - 10:00	8	945	4.272	8	945	4.060	8	945	8.332
10:00 - 11:00	8	945	3.862	8	945	3.505	8	945	7.367
11:00 - 12:00	8	945	4.126	8	945	3.941	8	945	8.067
12:00 - 13:00	8	945	4.312	8	945	3.941	8	945	8.253
13:00 - 14:00	8	945	3.306	8	945	3.227	8	945	6.533
14:00 - 15:00	8	945	2.658	8	945	2.896	8	945	5.554
15:00 - 16:00	8	945	5.753	8	945	6.653	8	945	12.406
16:00 - 17:00	8	945	3.545	8	945	3.452	8	945	6.997
17:00 - 18:00	8	945	2.500	8	945	2.725	8	945	5.225
18:00 - 19:00	8	945	1.944	8	945	2.341	8	945	4.285
19:00 - 20:00	7	723	2.391	7	723	2.490	7	723	4.881
20:00 - 21:00	6	804	1.182	6	804	1.390	6	804	2.572
21:00 - 22:00	1	525	4.000	1	525	4.190	1	525	8.190
22:00 - 23:00									
23:00 - 24:00	·				·				
Total Rates:			51.174			51.262			102.436

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

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									
07:00 - 08:00	7	723	0.079	7	723	0.040	7	723	0.119
08:00 - 09:00	8	945	0.026	8	945	0.040	8	945	0.066
09:00 - 10:00	8	945	0.066	8	945	0.119	8	945	0.185
10:00 - 11:00	8	945	0.079	8	945	0.066	8	945	0.145
11:00 - 12:00	8	945	0.145	8	945	0.185	8	945	0.330
12:00 - 13:00	8	945	0.093	8	945	0.066	8	945	0.159
13:00 - 14:00	8	945	0.106	8	945	0.172	8	945	0.278
14:00 - 15:00	8	945	0.066	8	945	0.132	8	945	0.198
15:00 - 16:00	8	945	0.410	8	945	0.040	8	945	0.450
16:00 - 17:00	8	945	0.053	8	945	0.013	8	945	0.066
17:00 - 18:00	8	945	0.159	8	945	0.172	8	945	0.331
18:00 - 19:00	8	945	0.040	8	945	0.066	8	945	0.106
19:00 - 20:00	7	723	0.000	7	723	0.040	7	723	0.040
20:00 - 21:00	6	804	0.000	6	804	0.021	6	804	0.021
21:00 - 22:00	1	525	0.000	1	525	0.000	1	525	0.000
22:00 - 23:00									
23:00 - 24:00			<u> </u>	<u> </u>	·		·		
Total Rates:			1.322			1.172			2.494

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.

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

MULTI-MODAL TOTAL PEOPLE Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.23

	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	7	723	7.054	7	723	6.244	7	723	13.298
08:00 - 09:00	8	945	9.284	8	945	7.724	8	945	17.008
09:00 - 10:00	8	945	10.263	8	945	9.417	8	945	19.680
10:00 - 11:00	8	945	11.229	8	945	9.708	8	945	20.937
11:00 - 12:00	8	945	11.811	8	945	11.030	8	945	22.841
12:00 - 13:00	8	945	13.715	8	945	12.869	8	945	26.584
13:00 - 14:00	8	945	11.692	8	945	12.062	8	945	23.754
14:00 - 15:00	8	945	11.044	8	945	11.454	8	945	22.498
15:00 - 16:00	8	945	14.681	8	945	15.434	8	945	30.115
16:00 - 17:00	8	945	11.744	8	945	12.141	8	945	23.885
17:00 - 18:00	8	945	8.147	8	945	9.430	8	945	17.577
18:00 - 19:00	8	945	5.700	8	945	6.666	8	945	12.366
19:00 - 20:00	7	723	5.631	7	723	6.422	7	723	12.053
20:00 - 21:00	6	804	2.945	6	804	3.734	6	804	6.679
21:00 - 22:00	1	525	8.381	1	525	8.381	1	525	16.762
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			143.321			142.716			286.037

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.

## acstro

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