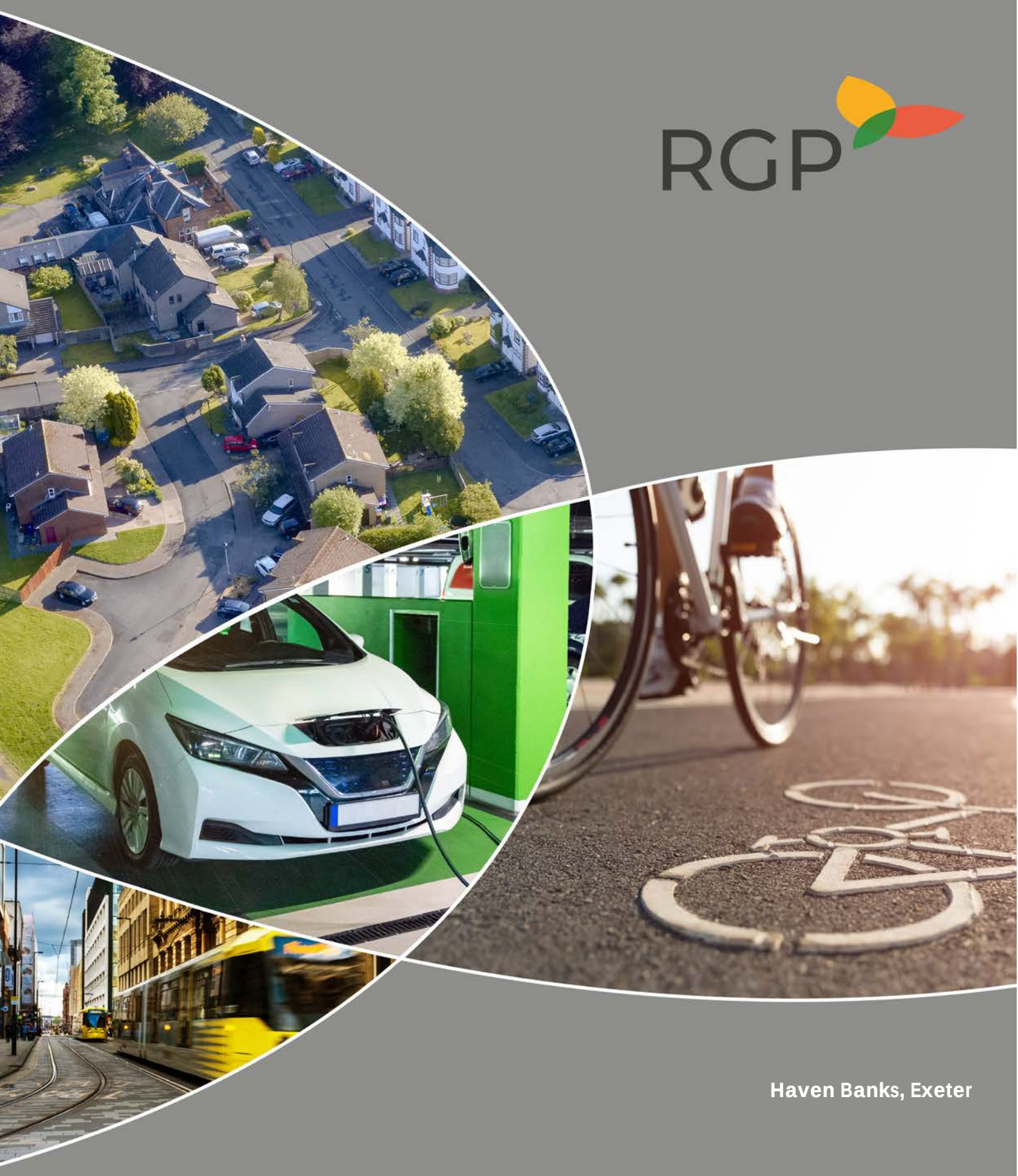

Haven Banks, Exeter

TRANSPORT ASSESSMENT

For Proposed Mixed-Use Redevelopment

On behalf of Welbeck CP

21/5945/TA04

July 2022

www.rgp.co.uk

DOCUMENT CONTROL

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3				
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5				

TABLE of CONTENTS

List of Tables

List of Figures

1 INTRODUCTION

1.1 Background

1.1.1 RGP is commissioned by Welbeck CP to provide highway and transport planning advice with respect to the proposed redevelopment of the Haven Banks Retail Park ("the site") to provide a new residential-led scheme with ground floor commercial uses.

1.1.2 The site is located within the administrative boundaries of Exeter City Council (ECC), as Local Planning Authority and Devon County Council (DCC), as County Highway Authority.

1.1.3 The existing site comprises three vacant commercial units which formerly operated collectively as the Haven Banks Retail Park, located a short distance to the south of Exeter Quayside. The Retail Park contains two large retail superstores and a leisure use with a shared car park containing 205 spaces, accessible from Water Lane. The existing retail and leisure units comprise the following approximate floor areas:

- The Range (use class Ea): 3,496 sqm;
- Matalan (use class Ea): 1,382 sqm; and
- Tenpin (use class Ed): 1,964 sqm.

1.1.4 The Water Lane access into the on-site car park facilitates two-way vehicle movements. A secondary point of egress from the site is provided onto Haven Road to the north, with no entry permitted into the car park from this location. The site also contains a rear service yard which is accessed via Water Lane separately to the visitor car park.

1.1.5 The development proposals comprise a demolition of the retail park to provide a new mixed-use scheme including 434 residential dwellings, comprising a mix of 246 flats and 188 co-living apartments. Each of the co-living apartments would contain a single bedroom, whilst the proposed 246 flats would comprise the following mix of units:

- 131 x 1 bedroom / 2 person units;
- 75 x 2 bedroom / 4 person units; and
- 40 x 3 bedroom / 6 person units.

1.1.6 The site would also provide four flexible commercial units at ground floor level, which are envisaged to comprise small café/restaurant uses. The commercial floorspace would amount to 639m2. Additionally, an ancillary management suite would be provided at ground floor level of Block D for the estate management providing residential services to the site, comprising 113m2.

1.1.7 The specific breakdown of the proposed on-site land uses by each building is provided in the following table:

Table 1 Proposed Land Uses

Block	C3: 1 bedroom units	C3: 2 bedroom units	C3: 3 bedroom units	C3: Co-living apartments	E(b) Café / Restaurant	Ancillary Office Space
Block A	11	6	5	-	349 sqm	-
Block B	14	7	-	-	220 sqm	-
Block C	105	63	35	-	-	-
Block D	-	-	-	188	70 sqm	113 sqm
TOTAL	**130**	**76**	**40**	**188**	**639 sqm**	**113 sqm**

1.1.8 The development proposal would include the closure of the car park's two points of vehicular access / egress to redesign the main throughfare as 'car-free', including the formation of a central pedestrian route through the site between Haven Road and Water Lane. The existing service road from Water Lane within the southern section of the site would be retained for the continued use of the site and would provide access to a limited number of residential parking spaces and retain access for servicing vehicles.

1.1.9 A total of 32 car parking spaces would be provided on-site, accessible from Water Lane in place of the existing service yard to the rear of the retail units currently located within the site. Additional laybys would be provided adjacent to the site on Water Lane and Haven Road respectively to facilitate deliveries and waste collections.

1.1.10 5 of these parking bays would be located outside of the main gated car park and would be reserved for the use of car club vehicles which would be accessible to both residents of the site and the wider community. The remaining 27 parking bays would be leased to residents requiring the use of a private vehicle.

1.1.11 All residential blocks would be provided with secure refuse storage and cycle parking facilities. A marked cycle lane would be provided within the site's central courtyard, connecting to the wider cycle network, with NCR 34 forming a route along the southern bank of the River Exe. Communal amenity space and associated landscaping would be provided for the use residents and visitors.

1.1.12 The proposed site layout is illustrated on the following extract, whilst the full plan is attached at **Appendix 1**.

Figure 1 Proposed Site Layout

1.1.13 This Transport Assessment is prepared to assess and demonstrate any potential impact of the redevelopment proposals on the efficient and safe functioning of the local road, pedestrian and public transport networks.

1.1.14 In addition to this Transport Assessment, a Delivery & Servicing Management Plan has been prepared by RGP to accompany the forthcoming planning application, which details a strategy to manage all delivery activity generated by the site, as well as waste storage and collections. A separate Waste Management Plan (WMP) is also prepared in tandem to these reports, providing a more specified strategy exclusively for the safe management of waste generated by each respective use of the site.

1.1.15 With regard to the promotion of sustainable travel by prospective users of the site, a Travel Plan has been prepared to identify and promote the opportunities for staff and visitors to undertake journeys via sustainable modes of transport.

1.1.16 Furthermore, to mitigate any potential impact associated with construction traffic generated during the demolition / construction phases of the site's redevelopment, a Construction Management Plan (CMP) is prepared in tandem to the above report. Each of the following documents should therefore be referred to alongside this Transport Assessment where necessary.

- Travel Plan
- Delivery and Servicing Management Plan
- Waste Management Plan
- Construction Management Plan

1.2 Pre-Application Consultation

ECC / DCC

1.2.1 As per the recommendation of the case officer at ECC, RGP attempted to make contact with DCC to present initial findings regarding the transport implications of the redevelopment proposals, however, discussions were not forthcoming.

1.2.2 A Pre-Application Transport Note was submitted to DCC for review, demonstrating the likely implications of the scheme on the functioning of the adjacent road network, as well as outlining a servicing strategy to accommodate deliveries and waste collections at the site.

1.2.3 RGP has continued to engage with ECC throughout the pre-planning process in order to contribute a suitable transport strategy that prioritises the needs of future users of the site and the surrounding community with sustainability forming the principal approach to the development's design.

1.2.4 Key features of the proposal including the 'car-lite' nature of the development, the provision of car clubs and a cycle hire hub, a connecting cycle route and cycle parking facilities were welcomed by ECC.

Car Club Operators

1.2.5 In addition to talks held with ECC, RGP has discussed the potential to accommodate car club vehicles and cycle hire facilities within the site with respective operators, including Enterprise, Co-Cars and Co-Bikes. Correspondence was held with Mark Hodgson at Co-Cars and Randall Rickabaugh at Enterprise, respectively, to gain a balanced understanding of the likely car club demand and usage that would be generated by the site.

1.2.6 The development proposals were communicated to both car club operators and reviewed in order to assess the likely needs of the site following its proposed redevelopment. The main topics of discussion related to the likely demand for car club usage by on-site residents and members of the surrounding community. Based on a range of factors, a considered approach was given to the quantity of car club vehicles proposed as part of the scheme and how to establish effective management of their usage.

1.2.7 Further detail regarding these discussions and the key items for consideration as part of any car club and cycle hire provision is provided within Section 6 of this Transport Assessment.

Public Consultation

1.2.8 A period of public consultation was held between 12th May to 26th May 2022 to engage local residents and business operators and understand any concerns raised by the local community.

1.2.9 With respect to transport and highways related themes, parking and traffic generation were the most widely discussed topics amongst the local community, specifically with queries relating to a perceived shortfall in parking availability and increased levels of traffic on Waster Lane / Haven Road.

1.2.10 RGP investigated these concerns, providing written feedback to further clarify the proposed transport infrastructure and to demonstrate the impacts identified during initial traffic generation assessments. The proposal to provide car club vehicles at the site was received positively by members of the local community, in addition to providing an increased level of short-stay cycle parking spaces. RGP also demonstrated that the redevelopment would likely represent a significant net benefit to the functioning of the adjacent road network, as per the trip generation assessment undertaken within Section 4 of this Transport Assessment.

1.3 Report Structure

1.3.1 The principal focus of this report is to consider the operation of the proposed redevelopment in regard to the anticipated trip generation potential of the site and its operation in terms of servicing, parking and accessibility by sustainable modes of transport. The remainder of this Transport Assessment comprises the following sections:

i) **Section 2**: Baseline Conditions;

ii) **Section 3**: Transport Policy Review;

iii) **Section 4**: Trip Generation and Impact;

iv) **Section 5**: Access & Internal Site Layout;

v) **Section 6**: Parking;

vi) **Section 7**: Delivery and Servicing Arrangements;

vii) **Section 8**: Summary and Conclusions.

2 TRANSPORT POLICY REVIEW

2.1 Overview

2.1.1 This section summarises the key national, regional and local transport policies pertaining to the proposed development. These policies are assessed in relation to the scale and type of development, as well as the site's location.

2.2 The National Planning Policy Framework (February 2019)

2.2.1 The latest National Planning Policy Framework (NPPF) came into effect in February 2019 and replaces all previous Government planning policy guidance. The NPPF broadly covers all aspects of planning policy and the extracts below detail those relevant to this site and transport.

2.2.2 Paragraph 108 outlines the basic transport requirements for developments to provide, and states that "*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

(i) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

(ii) Safe and suitable access to the site can be achieved for all users; and

(iii) *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree*."

2.2.3 Paragraph 111 states "all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

2.2.4 Of further note, paragraph 109 of the NPPF states that "development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

2.2.5 The findings of this report demonstrate that the proposals would not generate a 'severe' impact.

2.3 Exeter Local Plan

Local Plan First Review - Saved policies (March 2008)

2.3.1 Until the formal adoption of Exeter's new Local Plan document, the saved policies from the current Local Plan Written Statement are applicable to new development in the city. Specifically in terms of sustainable transport, **Policy T1** requires that:

"*Development should facilitate the most sustainable and environmentally acceptable modes of transport, having regard to the following hierarchy:*

1. *Pedestrians*
2. *People with mobility problems*

3. *Cyclists*
4. *Public transport users*
5. *Servicing traffic*
6. *Taxi users*
7. *Coach borne visitors*
8. *Powered two wheelers*
9. *Car borne shoppers*
10. *Car borne commercial / business users*
11. *Car borne visitors*
12. *Car borne commuters*"

2.3.2 The proposed development therefore prioritises sustainable modes of transport, with excellent provisions made for pedestrian and cycle access, with all areas of the site designed to be accessible to those with impaired mobility.

2.3.3 Further to the transport hierarchy outlined above, **Policy T2** requires that new development is strategically located to benefit from sustainable modes, specifically stating the following:

"*In accordance with the accessibility criteria set out in schedule 1: residential development should be located within walking distance of a food shop and a primary school and should be accessible by bus or rail to employment, convenience and comparison shopping, secondary and tertiary education, primary and secondary health care, social care and other essential facilities.*

Non-residential development should be accessible within walking distance and/or by bus or rail to a majority of its potential users."

2.3.4 The site's location is highly accessible by local bus and rail services which would accommodate commuting trips by residents and well as visitor journeys to the site. There is an extensive range of city centre retail, educational, employment and leisure attractions located within walking distance of the site.

2.3.5 Further to the above policies, **Policy T3** also seeks to promote and encourage the use of sustainable modes by providing connections to key pedestrian / cycle routes. The policy objective states the following:

"*Development should be laid out and linked to existing or proposed developments and facilities in ways that will maximise the use of sustainable modes of transport. Proposals should ensure that:*

(a) *All existing and proposed walking and cycle routes are safeguarded or that alternative reasonably convenient routes are provided;*

(b) *Suitable cycle parking provision is provided in accordance with the standards set out in schedule 2;*

(c) *Where more than 20 people are employed facilities for showering and changing are provided;*

(d) *Full account is taken of the needs of bus operation through and alongside new development by the provision of lay-bys, roads and other associated facilities;*

(e) Where appropriate, pedestrian and cycling links are provided to existing or proposed rail stations;

(f) *The particular needs of people with disabilities are taken into account.*"

2.3.6 The proposed redevelopment would extend a cycleway / public right of way into the site, enabling a direct connection to National Cycle Route 34. Furthermore, secure cycle parking would be provided for staff and residents of at the site in compliance with local cycle parking standards. Servicing laybys and disabled parking would also be provided at the site, in accordance with **Policy T3**, as detailed above.

2.3.7 **Policy T9** of the Local Plan saved policies is also relevant to the site, requiring that "*proposals for the development, change of use, alteration or extension of non-domestic buildings, particularly those open to the public, will only be permitted if provision is made for safe and convenient access by people with disabilities*". Step-free access would be provided throughout the site, whilst disabled parking would accommodate the needs of disabled motorists.

2.3.8 With respect to car parking provision for new development, local parking standards are defined under **Policy T10**. The relevant standards are reviewed in full within Section 6 of this Transport Assessment.

2.3.9 In terms of freight generated by new development, **Policy T13** states the following:

"*The development of lorry transhipment facilities in the city will be permitted provided that:*

(a) It will not harm the local environment;

(b) The traffic generated can be accommodated on the local road network;

(c) *The facilities are located on or close to major or radial routes.*"

2.3.10 There would be servicing infrastructure provided both on and off-site to accommodate delivery vehicle trips generated by the site. The vast majority of deliveries would be carried out by light goods vehicles (LGVs) and the site is conveniently accessible from the wider strategic road network,.

Core Strategy Development Plan Document (February 2012)

2.3.11 The adopted Core Strategy document sets out strategic policy objectives for Exeter. The key overall objectives pertaining to transport are summarised as follows:

Objective 1: Mitigate and adapt to climate change;

Objective 5: Achieve a step change in the use of sustainable transport;

Objective 7: Promote development that contributes to a healthy population; and

Objective 10: Provide infrastructure to deliver high quality development.

2.3.12 As the proposed development complies with the relevant transport objectives of the Local Plan saved polices, the overall sustainability objectives of the Core Strategy are also achieved.

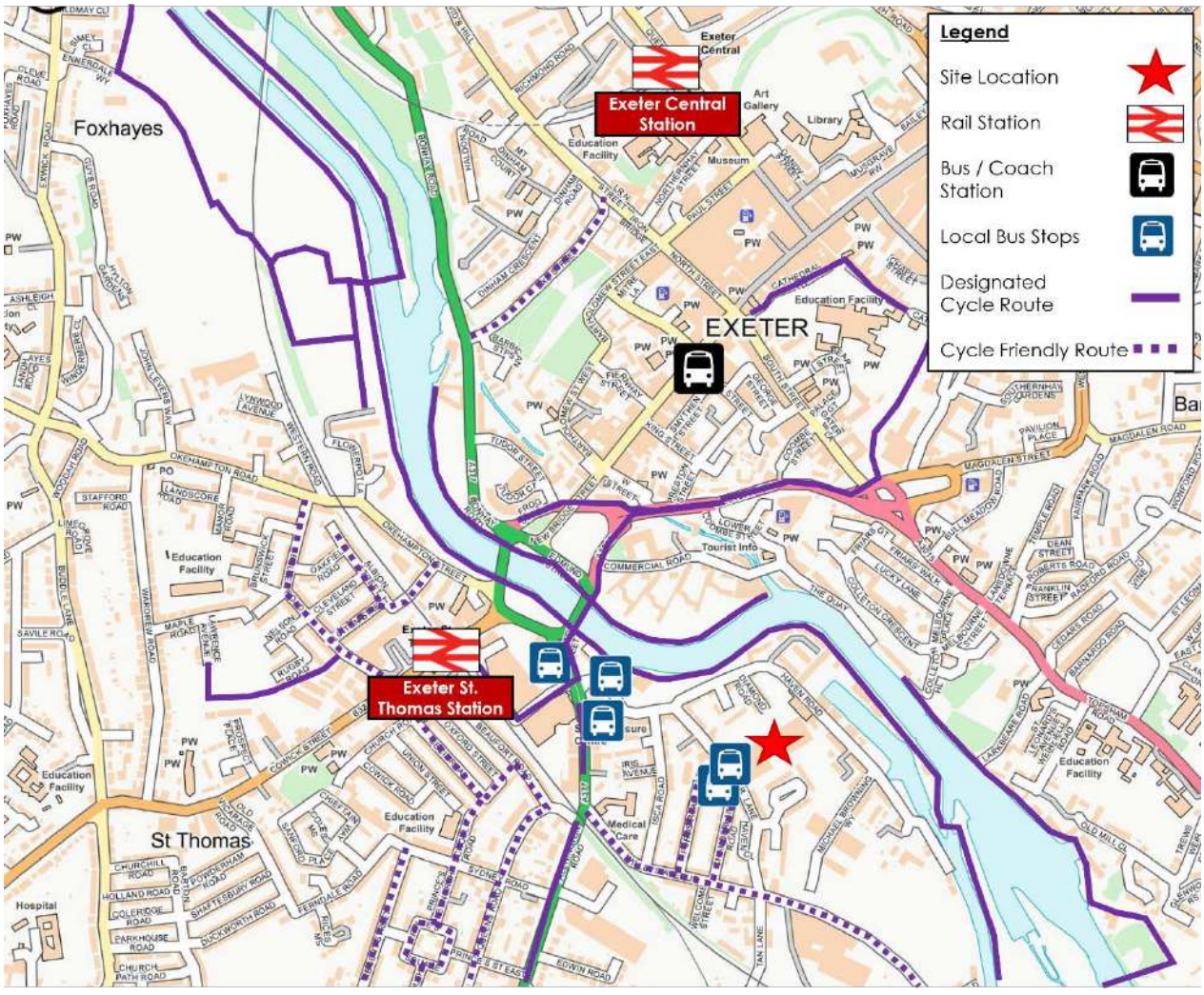
3 BASELINE CONDITIONS

3.1 Local Highway Network

3.1.1 The site is located approximately 750 metres to the south of Exeter city centre in an area known locally as Haven Banks. The surrounding area is characterised by a range of land uses, including residential, retail, leisure and industrial uses within close proximity.

3.1.2 The site's location in context of the surrounding highway network, cycle network and public transport infrastructure is illustrated by the following extract.

Figure 2 Site Location & Accessibility Plan



3.1.3 As detailed in Section 1 of this Transport Assessment, the site currently comprises 3 large retail / leisure uses, collectively forming the Haven Banks Retail Park. The site is bounded by an indoor climbing centre to the northeast, Water Lane to the southwest and residential properties to the southeast and northwest.

3.1.4 The site's car park is served by two points of vehicle access, from Haven Road to the northeast and Water Lane to the southwest, respectively. These points of vehicle access provide an entry and exit route through the on-site car park which spans between Haven Road and Water Lane.

3.1.5 The Water Lane access permits simultaneous in / out movements, whilst the Haven Road access point serves as an exit route from the on-site car park only.

3.1.6 A third vehicular access is also provided from Water Lane, functioning a service road to the rear of the existing commercial properties within the site, facilitating loading activity associated with goods deliveries and waste collections. Full details regarding the existing and proposed access arrangements are provided within Section 5 of this report.

3.1.7 Haven Road provides a route to the site from the A377 Alphington Street to the west and also serves as the main point of access into Exeter Quayside to the north of the site. The existing access into the site will be retained from Haven Road.

3.1.8 Both sides of Haven Road are marked by double yellow lines in the vicinity of the site, except for the provision of 2 designated disabled parking bays marked adjacent to the pedestrianised zone at the quayside opposite the site. Additionally, there is a section of on-street pay and display parking provided on Haven Road to the north of the site, with the chargeable tariff applied within controlled hours (09:00 – 18:00, Monday to Saturday, and 11:00 – 17:00 on Sundays.

3.1.9 Water Lane is also subject to double yellow line kerbside restrictions adjacent to the site and provides sections of on-street parking bays for resident permit holders only to the northwest and south east of the site's access points.

3.1.10 Principal access to Haven Banks is provided from the A377 Alphington Street, which in turn forms a connecting route to Junction 31 of the M5 (via the A30) to the south of Exeter. The site is therefore conveniently located in terms of access from the wider strategic highway network. This is beneficial in that delivery and servicing vehicles, requiring minimal deviation from these major highway links in order to reach the site, subsequently reducing the level of impact on surrounding residential areas.

3.2 Road Safety Review

3.2.1 RGP has undertaken an investigation and review of local road accidents to identify any potential issues regarding the safety of the local road network. This review has examined accidents in the vicinity of the site over the latest 5-year period available (2017–2021 inclusive), using data provided from the Crashmap website (www.crashmap.co.uk). The following review examines reported accidents that occurred within 250m of the site.

3.2.2 It is evident that 3 reported accidents were reported to have occurred within 250m of the site over the latest 5-year period, including 2 'slight' injuries and a single 'serious' injury. In terms of the injury classified as serious, the accident report indicates that a child attempted to cross Haven Road, not at a designated crossing facility, prior to a collision with a car. This accident occurred approximately 200m from the site to the northwest and there were no deficiencies in the highway design attributed to the cause of the accident.

3.2.3 If examining slightly further afield at the Haven Road / Alphington Street junction, only a single 'slight' injury was reported during the last 5-years. When considering Alphington Road comprises a major arterial road serving the southern portion of the city, this represents an excellent safety record and indicates there are no underlying issues with the junction feeding traffic into the Haven Banks area.

3.2.4 Overall, this review establishes that the local highway network has good safety record and that the functioning of the site's existing access points have not contributed to any potentially hazardous conditions on the adjacent carriageways. It is therefore considered that the retention of the site's existing service road from Water Lane will not compromise local highway safety.

3.3 Accessibility Credentials

3.3.1 The site's location is conductive to sustainable travel, owing to its proximity to Exeter city centre which contains a wide range of public services and amenities that would cater for the everyday needs of future residents at the site. The city centre is conveniently accessible on foot or by bike.

3.3.2 The site benefits from a good provision of pedestrian and cycle infrastructure throughout the local area, enabling safe and sustainable trips to be completed to / from the site. Public transport and 'active modes' of transport would accommodate most travel requirements of residents.

3.3.3 In addition to the commercial and leisure attractions available within the city centre, there is a range of amenities in the vicinity of the site that would further reduce the need to travel away from the local area by car or public transport. There are several leisure uses provided along the waterfront at Haven Banks, whilst the majority of shopping needs of future residents would be accommodated by the Exebridges Centre Retail Park, located approximately 350m (a 4 minute walk) to the northwest via Haven Road.

3.3.4 In order to establish the potential for future end users of the site (i.e. staff of the commercial units, residents and visitors) to travel by sustainable travel modes, a review of the existing transport infrastructure and services within the vicinity of the site is provided within the following sections of this report.

3.4 Walking and Cycling

3.4.1 There are well-lit footways provided along both sides of Haven Road and Water Lane in the vicinity of the site, providing direct pedestrian links into the site from either route. These footways continue onto the surrounding road network with dropped kerbs provided at local crossing points, providing safe and convenient walking routes away from the site.

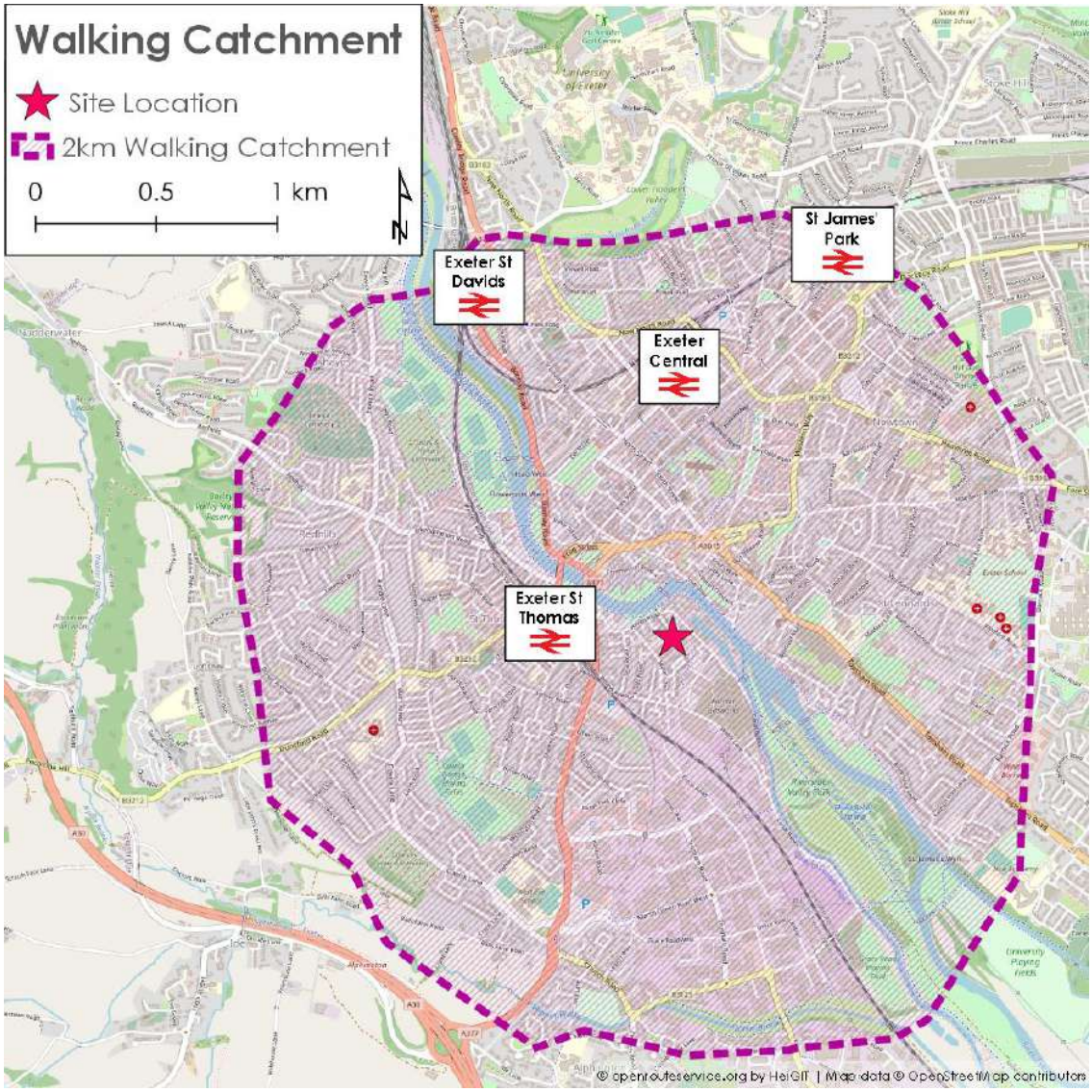
3.4.2 To the north, there is a pedestrianised area opposite the site leading to the riverfront at Haven Banks. Footpaths are provided along the edges of the river banks, forming attractive walking routes towards the town centre. A pedestrian footbridge over the river is accessible via a 1-munite walk to the north of the site, providing a principal walking route into the city centre.

3.4.3 It is also worthy of note that signalised pedestrian crossing facilities are provided across all arms of the Haven Road / Alphington Street junction, including the provision of dropped kerbs, tactile paving and central refuges. These crossing facilities enable safe and convenient pedestrian access to the nearby Exebridge Centre retail park and St Thomas rail station.

3.4.4 Walking and cycling play a vital role in healthy and active lifestyles and if convenient and safe links are available, there is significant opportunity to reduce the need for local car trips, thus reducing traffic levels on the surrounding highway network. It is commonly accepted that 2km and 5km journeys are ideally placed to be undertaken on foot or by bicycle, respectively.

3.4.5 The following extract illustrates a 2km walking isochrone from the site, demonstrating the extent of the city that is considered to be within a reasonable walking distances from the site.

Figure 3 Walking Catchment (2 Kilometres)



3.4.6 As shown above, all areas of Exeter city centre are accessible from the site on foot, including surrounding parks, schools, shops and areas of employment, as well as key public transport infrastructure.

3.4.7 The surrounding area is also well-suited to cycling, with a number of designated cycle routes provided in close proximity to the site, as shown on Figure 2 above. The local highway network is conductive to cycle journeys owing to the quiet nature of nearby roads, their flat topography and good visibility at junctions.

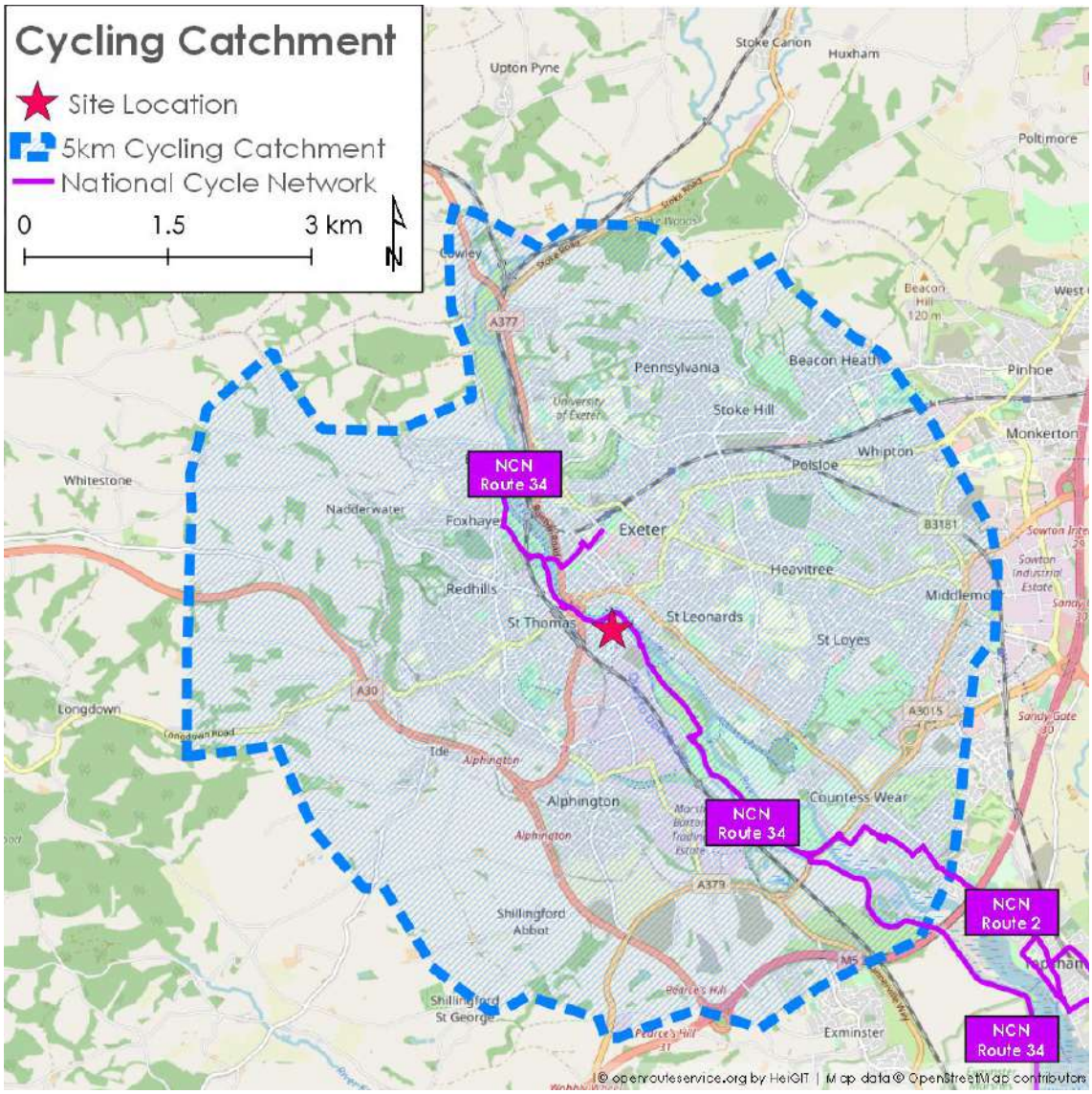
3.4.8 National Cycle Route (NCR) 34 forms a route in the vicinity of the site along the southern bank of the River Exe. NCR 34 caters for convenient trips towards Exeter St David's rail station to the north, as well as connecting to areas further afield to the southeast of the city. Furthermore, there are marked cycle lanes located along sections of the A377 Alphington Street, providing an alternative cycle route into the city centre.

3.4.9 Furthermore, there is an existing traffic-free cycle trail that forms a route through Haven Banks between Michael Browning Way, Chandlers Walk and Haven Road. This route would be extended into the site and incorporated with the cycle infrastructure that would be provided for the development. Further details regarding cycle facilities within the site are provided within Section 6 of this Transport Assessment.

3.4.10 In addition to these cycle routes, there are short-stay cycle parking spaces provided in the local area for public use, including within the pedestrianised quayside area opposite the site. Secure cycle parking spaces are also provided at regular intervals throughout the city centre, enabling convenient access to the various amenities that would be visited by prospective residents.

3.4.11 The following extract illustrates a 5km cycle catchment area, representing the geographical extent that residents would likely travel to in order to complete general daily trips by bike.

Figure 4 Cycling Catchment (5 Kilometres)



3.4.12 As shown above, Route 34 of the National Cycle Network passes through the vicinity of the site, providing a good level of access throughout the local area. The catchment demonstrates that residents could realistically reach any part of Exeter as part of a convenient journey by bike, thus providing an attractive commuting option for those employed within the city.

3.5 Public Transport

3.5.1 The nearest bus stops to the site are located on Water Lane, in the immediate vicinity of the site's access. These stops are served by Stagecoach's 'Green' bus route which provides services every 20 minutes between Marsh Barton and Sowton Park & Ride.

3.5.2 Additionally, there are bus stops located on Alphington Street, approximately 300m (a 3-4 minute walk) to the northwest of the site via Haven Road. This set of stops provides seating, shelter and full timetable information. Bus route 'B' calls at the Alphington Road stops, providing half-hourly services towards both Exeter city centre and either Dawlish, Exminster or Marsh Barton.

3.5.3 These services would provide prospective residents with highly convenient transport to areas across the wider city, including for trips to Exeter St David's station.

3.5.4 With respect to rail services in Exeter, there are 3 main stations serving the city (St Thomas, St David's and Central), each of which are located within a reasonable walking and cycling distance from the site, as illustrated on **Figures 3 & 4**, above.

3.5.5 The site is located approximately 600m (a 7-minute walk) to the southeast of Exeter St Thomas rail station. The station is operated by Great Western Railway and provides services every 30 minutes in each direction toward Paignton and Exmouth.

3.5.6 Connecting services from Exeter St David's would accommodate onward trips towards major destinations such as Bristol Temple Meads, London Paddington, Birmingham New Street, Manchester Piccadilly, Leeds, Newcastle and Edinburgh. Exeter St David's station is also accessible via an 20-25 minute walk or 8 minute cycle journey from the site.

3.5.7 Furthermore, Exeter Central is located approximately 1.25k to the north of the site in the city centre (an 18 minute walk). Similarly to St Tomas station, Exeter Central also provides half-hourly services towards Paignton and Exmouth, however, the Central station is also served by hourly trains providing direct travel to London Waterloo. These services would therefore accommodate convenient business trips into London and other destinations further afield, for example.

3.5.8 It should be noted that passengers with mobility impairments should board services from either Exeter Central or St David's, as step-free access is provided onto all platforms at these stations.

3.6 Summary

3.6.1 Based on the above review, it is considered that the site is highly accessible by sustainable modes of transport to a wide range of amenities within the city centre including extensive shopping and leisure attractions, as well as other general services. The sites proximity to the city's commercial centre significantly reduces the need for residents to travel further afield for employment or shopping related trips. Where journeys are required to destinations outside of Exeter, the site is well connected via public transport modes that would accommodate longer commuting trips.

4 TRIP GENERATION

4.1 Overview

4.1.1 It is important to consider the potential trips to be generated by the new residential and commercial space in comparison to the site's former operation as a retail park. There are key operational differences between the former and proposed uses of the site that would influence the number of trips generated. Importantly, the level of car parking would be reduced from 205 spaces to 36, resulting in the proposed development orientating to fewer vehicle trips due to the limited opportunities for occupants and visitors to park within the site.

4.1.2 The former site operation as a retail park is considered to be a particularly car-reliant land use, with visitors to the site undertaking shopping trips where the preference of customers is predominantly is to transport bulks of goods by car. Combined with the previous levels of parking on-site, the retail park is anticipated to proportionately generate a greater degree of vehicle activity when compared to the proposed residential land uses.

4.1.3 The majority of residential apartments to be provided within the site comprise co-living apartments and 1-bedroom flats with highly convenient access to essential amenities via sustainable modes of transport. These properties tend to attract young professionals without families or dependent persons, such as children for example. Tenancies of this nature typically do not generate car dependency and the majority of trips away from the site by prospective residents would be undertaken on foot to local city centre destinations.

4.1.4 Additionally, it is important to recognise that as the former retail park comprised a visitor attraction with a large catchment of visitors across the wider city, the total number of people travelling to / from the site would be significant greater than a residential-led development, which would not serve as a primary attraction. The corresponding number of trips across all modes is therefore anticipated to be reduced following the proposed redevelopment of the site.

4.1.5 The following section assesses the existing and proposed multi-modal trip generation potential of the site, with a view to establishing the likely change in the number of trips as a result of the redevelopment.

4.2 Existing Site Operation

4.2.1 RGP has assessed the anticipated trip generation potential of the proposed residential development using the Trip Rate Information Computer System (TRICS). This is a database used to estimate the trip generation potential for new developments across a range of land uses. The TRICS database was therefore interrogated for the purpose of this report to identify and evaluate the trip generation potential of the new residential dwellings.

4.2.2 The existing retail park contains two large retail units and a leisure use comprising the following approximate floor areas:

(g) The Range (use class Ea): 3,496 sqm;

(h) Matalan (use class Ea): 1,382 sqm;

(i) Tenpin (use class Ed): 1,964 sqm.

4.2.3 To assess the trip generation potential associated with the current use of the site, the TRICS database has been interrogated to obtain trip rate data from surveys of comparable retail and leisure uses, respectively. The following assessment outlines the likely trip generation potential associated with the existing bowling alley and retail stores.

4.2.4 There are limited bowling alley sites that have been surveyed from a multi-modal perspective on the TRICS database. However, based on criteria representative of the application site, two bowling alley sites have been selected for the following trip generation assessment. These TRICS sites are situated in Poole and Durham, respectively, and share comparable locational characteristics, such as the range of local land uses, access to the strategic highway network and availability of sustainable modes of transport. The full TRICS outputs from this interrogation are attached at **Appendix 2**, whilst the criteria of this TRICS interrogation is summarised as follows:

i) Regions: England and Wales (excluding Greater London);

ii) Land use: leisure – bowling alleys;

iii) Selected locations: edge of town centre & suburban area;

iv) Survey days: weekdays.

4.2.5 A second TRICS interrogation was carried out by RGP in order to obtain trip rate data of comparable retail uses to represent the two superstores within the existing retail park. From the surveyed sites on TRICS, three retail superstores have been selected for the purposes of this assessment, including comparable homeware stores. Each site is similarly located on the edge of a town/city centre and are served by a range of public transport modes. When establishing trip rate data for comparable retail uses, RGP input the following search criteria when interrogating the TRICS database.

i) Regions: England and Wales (excluding Greater London);
ii) Land use: Retail – other individual non-food superstore;

iii) Selected locations: town centre, edge of town centre & edge of town;

iv) Survey days: weekdays

4.2.6 Three retail sites were manually deselected due to their unrepresentative trading nature (i.e. pet supply stores) and their limited public transport opportunities. The full TRICS outputs used to represent the operation of the retail sues on site are attached at **Appendix 3**.

4.2.7 **Table 2**, below, provides a full summary of the existing trip generation potential of the bowling alley from a multi-modal perspective, establishing the total number of trips and the corresponding modes of transport used. Particular focus if given to the proportion of trips generated during the conventional highway peak hour periods (08:00-09:00 and 17:00-18:00 hours), as well as the daily total (07:00-00:00 hours). It should be noted that the bowling alley's operational hours are between 10:00-23:00 hours, so no trips are generated during the AM peak hour period.

Table 2 Existing Trip Generation – Bowling Alley (1,964 sqm)

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**0**	**0**	**0**	**20**	**20**	**40**	**182**	**210**	**392**
Taxis	*0*	*0*	*0*	*3*	*3*	*7*	*22*	*22*	*45*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*3*
Sustainable Modes	**0**	**0**	**0**	**44**	**46**	**89**	**360**	**381**	**742**
Walk	*0*	*0*	*0*	*42*	*34*	*76*	*167*	*114*	*281*
Cycle	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*2*	*6*
Public Transport	*0*	*0*	*0*	*2*	*12*	*13*	*190*	265	455
All Movements	**0**	**0**	**0**	**64**	**66**	**139**	**542**	**591**	**1,134**

4.2.8 As summarised above, the bowling alley would likely generate a total of 392 two-way vehicle trips over the course of a typical operational weekday. Whilst none of these would occur during the AM peak hour period due to the associated opening times of the bowling alley, in the region of 40 two-way vehicle trips would be generated during the PM peak hour period, as a worst-case scenario. Of these daily vehicle trips, 48 two-way trips would comprise journeys made to / from the site by taxis and servicing vehicles.

4.2.9 In terms of sustainable modes of transport, the bowling alley would generate a daily total of 455 two-way trips by public transport. The remaining 287 two-way trips would comprise journeys made via active modes of transport, such as walking and cycling.

4.2.10 It should be noted that due to discrepancies in the trip rate data pertaining to car passengers, this data has been omitted from the above trip generation assessment. As these trips do not form independent arrivals / departures, it is therefore not considered necessary to assess the proportion of car passengers as a result.

4.2.11 Additionally, the public transport trips include 2 coach party arrivals, consisting of approximately 155 passengers over the course of the day. Although it is not anticipated that coach trips would have been frequently generated by the bowling alley at Haven Banks, there are nearby coach parking facilities that could have accommodated such arrivals. These trips have therefore been included within the above total.

4.2.12 In terms of the two existing retail units on-site, **Table 3**, below, provides a summary of the associated multi-modal trip generation potential of these uses of the site. As with the previous assessment, the below figures give particular consideration to the conventional peak hour periods in combination with the daily total of trips.

Table 3 Existing Trip Generation – Retail Units (4,878 sqm)

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**22**	**15**	**38**	**48**	**51**	**99**	**646**	**628**	**1,274**
Taxis	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*2*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*3*	*6*
Sustainable Modes	**7**	**6**	**13**	**1**	**2**	**4**	**67**	**67**	**132**
Walk	*6*	*6*	*12*	*1*	*1*	*3*	*54*	*56*	*109*
Cycle	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*2*
Public Transport	*1*	*0*	*1*	*0*	*1*	*1*	*12*	*10*	*21*
All Movements	**29**	**21**	**51**	**49**	**52**	**103**	**713**	**695**	**1,406**

4.2.13 As demonstrated above, the existing retail superstores would likely generate in the region of 1,274 two-way vehicle trips over the course of a typical weekday (equating to an average of 637 arrivals and departures per day). This figure includes 8 two-way movements by taxis and servicing vehicles.

4.2.14 Of these daily vehicular trips, 38 two-way movements would occur during the AM peak hour, whilst a further 51 two-way movements would be generated during the PM peak hour period, representing a worst-case scenario.

4.2.15 Throughout the course of a typical weekday, approximately 21 two-way trips by public transport would be generated, with the remaining 111 two-way trips comprising journeys made on foot or bicycle. The proportion of sustainable trips generated by the retail units is significantly lower than that associated with the bowling alley. This is due to the fact that customers on shopping trips to retail superstores tend to transport goods by private vehicle, particularly if purchasing large quantities or bulky retail goods.

4.2.16 To avoid discrepancies in the above assessment, RGP has again omitted vehicle passengers from the total number of trips, thus maintaining consistency with the data established for the bowling alley.

4.2.17 To determine the total number of trips generated by the combined uses of the existing site, **Table 4,** below, provides a summary of the existing site operation from a trip generation perspective, including both the bowling alley and retail units.

Table 4 Existing Trip Generation – Combined Land Uses

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**22**	**15**	**38**	**68**	**71**	**139**	**828**	**838**	**1,666**
Taxis	*0*	*0*	*0*	*3*	*3*	*7*	*23*	*23*	*47*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*5*	*9*
Sustainable Modes	**7**	**6**	**13**	**45**	**48**	**93**	**427**	**448**	**874**
Walk	*6*	*6*	*12*	*43*	*35*	*79*	*221*	*170*	*390*
Cycle	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*3*	*8*
Public Transport	*1*	*0*	*1*	*2*	*13*	*14*	*202*	*275*	*476*
All Movements	**29**	**21**	**51**	**113**	**118**	**242**	**1255**	**1286**	**2,540**

4.2.18 As summarised above, the existing / former retail park on-site has the potential to generate in the region of 1,666 two-way vehicle trips over the course of a typical weekday (i.e. 833 visitors). This would include approximately 139 two-way trips during the PM peak hour period as a worst-case scenario, at which time each of the retail stores and bowling alley would be open for trade.

4.2.19 These vehicle trips represent 66% of the total number of trips generated by the existing site, whilst 19% of trips would consist of journeys made by public transport. The remaining 15% of journeys to the existing site are completed either on foot or by bike.

4.3 Proposed Site Operation

4.3.1 The proposed development would provide a total of 434 residential units and 639m^2 of commercial floorspace, likely to comprise restaurant / café uses.

4.3.2 A further interrogation of the TRICS database has been carried out to obtain trip rate data of comparable residential uses to represent the proposed apartments within the redeveloped site. There are limited car-free and low-parking residential survey sites on the TRICS database outside of London. RGP has therefore selected three sites with an average level of 0.6 parking spaces per unit, located in Manchester and Borehamwood. The application site would provide approximately 0.1 space per unit, hence the following assessment is considered to be particularly robust with regard to vehicular activity generated by the site. The criteria selected as part of this TRICS integration is summarised as follows:

i) Regions: England and Wales (excluding Greater London);

ii) Land use: residential – flats privately owned;

iii) Selected locations: town centre & edge of town centre;

iv) Survey days: weekdays.

4.3.3 It should be noted that several TRICS survey sites were manually deselected from this assessment due to the disproportionately high levels of on-site parking. The resultant multi-modal trip generation associated with the proposed residential units is summarised within **Table 5**, below. The full outputs are available at **Appendix 4**.

Table 5 Proposed Trip Generation – Residential Units (434 Apartments)

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**3**	**31**	**35**	**33**	**8**	**41**	**162**	**171**	**333**
Taxis	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*3*	*7*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*10*	*10*	*21*
Sustainable Modes	**12**	**138**	**148**	**208**	**62**	**270**	**796**	**778**	**1,574**
Walk	*10*	*84*	*94*	*125*	*56*	*181*	*586*	*576*	*1,162*
Cycle	*0*	*3*	*3*	*7*	*0*	*7*	*13*	*17*	*30*
Public Transport	*2*	*51*	*53*	*76*	*6*	*82*	*197*	*185*	*385*
All Movements	**15**	**169**	**183**	**241**	**70**	**311**	**958**	**949**	**1,907**

4.3.4 As outlined above, the proposed 434 residential units on-site would generate in the region of 333 two-way vehicle trips over the course of a typical weekday, with up to 41 occurring during the PM peak hour period, representing a 'worst-case' scenario.

4.3.5 A total of 385 two-way trips by either bus or rail services would be generated, with the remaining 1,192 two-way trips comprising journeys on foot or bike.

4.3.6 In terms of the proposed commercial units on-site, these will be significantly smaller in scale than the existing superstores and as such, RGP has undertaken a further TRICS assessment to establish the likely operation of these units post-development. It is anticipated that the commercial units would operate as either a restaurant, café or general retail outlet. In RGP's experience, restaurant uses typically generate the greatest number of trips compared to these other likely land uses and as such, the following TRICS interrogation establishes the trip rata data of restaurant uses within comparable sites to ensure additional robustness. The TRICS criteria for this assessment is summarised as follows:

i) Regions: England and Wales (excluding Greater London);

ii) Land use: hotel, food & drink - restaurants;

iii) Selected locations: town centre, edge of town centre & neighbourhood centre;

iv) Survey days: weekdays.

4.3.7 Based on the above search criteria, RGP has selected 7 survey sites for further review, each located in areas with comparable characteristics including access by sustainable modes and parking availability. 5 sites were manually deleted due to unrepresentative parking provision, locations within shopping centres and fast-food / drive-through operations.

4.3.8 The full trip rate data is attached at **Appendix 5** and **Table 6** provides a summary of the corresponding trip generation potential of the proposed commercial uses.

Table 6 Proposed Trip Generation – Commercial Units (639 sqm)

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**0**	**0**	**0**	**7**	**2**	**9**	**72**	**70**	**142**
Taxis	*0*	*0*	*0*	*1*	*1*	*2*	*8*	*8*	*15*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*4*
Sustainable Modes	**0**	**0**	**0**	**7**	**2**	**9**	**99**	**90**	**189**
Walk	*0*	*0*	*0*	*5*	*1*	*7*	*67*	64	131
Cycle	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Public Transport	*0*	*0*	*0*	*2*	*1*	*2*	32	26	*58*
All Movements	**0**	**0**	**0**	**14**	**4**	**18**	**171**	**160**	**331**

4.3.9 The proposed commercial uses would generate approximately 331 two-way daily person movements by all modes of transport. Up to142 two-way vehicle movements would be generated during typical weekdays, with 18 occurring during the PM peak hour period as a 'worst-case' scenario.

4.3.10 In order to establish the total number of trips generated by the proposed development, the resultant trip generation associated with both the residential and commercial uses has been combined and summarised in **Table 7**, below.

Table 7 Proposed Trip Generation - Combined Land Uses

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**3**	**31**	**35**	**40**	**10**	**50**	**234**	**241**	**475**
Taxis	*0*	*0*	*0*	*1*	*1*	*2*	*11*	*11*	*22*
Delivery / Servicing vehicles	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*12*	*25*
Sustainable Modes	**12**	**138**	**148**	**215**	**64**	**279**	**895**	**868**	**1,763**
Walk	*10*	*84*	*94*	*130*	*57*	*188*	*653*	*640*	*1,293*
Cycle	*0*	*3*	*3*	*7*	*0*	*7*	*13*	*17*	*30*
Public Transport	*2*	*51*	*53*	*78*	*7*	*84*	*229*	*211*	*440*
All Movements	**15**	**169**	**183**	**255**	**74**	**329**	**1,129**	**1,109**	**2,238**

4.3.11 Following the redevelopment of the site, both residential and commercial uses are anticipated to generate a combined 2,238 two-way trips by all modes of transport, with 183 occurring during the AM peak hour and 329 during the PM peak hour.

4.3.12 With consideration given to vehicular trips, the site would generate in the region of 475 two-way trips with 50 occurring during the PM peak hour as a worst-case (representing one vehicle trip every 1-2 minutes, on average). The number of daily vehicle trips would equate to approximately 21% of the modal split (including delivery and service vehicle trips which are examined in greater detail in Section 7 of this report).

4.3.13 This proportion of vehicular activity is considered to represent a particularly robust assessment, given the greater proportions of parking provided at the various survey sites obtained from the TRICS database to undertake this study. A total of 32 parking bays would be provided within the site and assuming every associated vehicle completed 2 two-way trips per day, this would equate to a total of 64 two-way movements on average. The above trip generation estimate is reflective of the higher parking provisions provided at the various TRICS sites and is therefore considered to be disproportionately greater than anticipated site operation. However, these vehicle trips are applied to the following impact assessment to ensure robustness.

4.3.14 A total of 440 two-way trips would be made by public transport over the course of a typical weekday, with 84 taking place during the PM peak hour as a worst-case scenario. The remaining 1,323 two-way daily trips would comprise journeys made by active modes of transport (walking and cycling).

4.4 Development Impact

4.4.1 In order to demonstrate the likely net impact of the development proposals on the local highway network, the projected number of vehicle trips has been compared to those associated with the existing / former use of the site. The anticipated net impact is summarised in the following table.

Table 8 Net Development Impact

	AM peak hour			PM peak hour			Total Daily		
	Arr	Dep	Two-way	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	**-19**	**16**	**-3**	**-28**	**-61**	**-89**	**-594**	**-597**	**-1191**
Taxis	*0*	*0*	*0*	*-2*	*-2*	*-5*	*-12*	*-12*	*-25*
Delivery / Servicing vehicles	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**16**
Sustainable Modes	*5*	*132*	*135*	*170*	*16*	*186*	*468*	*420*	*889*
Walk	*4*	*78*	*82*	*87*	*22*	*109*	*432*	*470*	*903*
Cycle	*0*	*3*	*3*	*7*	*0*	*7*	*9*	*14*	*22*
Public Transport	*1*	*51*	*52*	*76*	*-6*	*70*	*27*	*-64*	*-36*
All Movements	**-14**	**148**	**132**	**142**	**-44**	**87**	**-126**	**-177**	**-302**

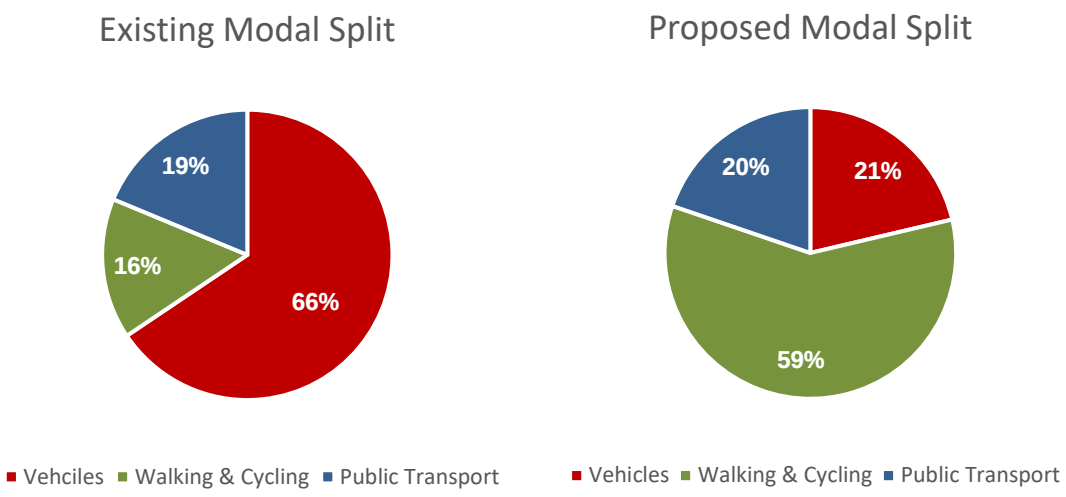
4.4.2 As summarised above, the proposed use of the site would likely generate a net reduction of -1,191 two-way vehicle trips over the course of a typical weekday, including a reduction in traffic during both peak hour periods. This is due to the operational nature of the former retail units comprising car-dominant land uses.

4.4.3 It is evident that the redevelopment of the site would transfer many of these car-based trips to sustainable modes of transport, particularly in terms of pedestrian trips. The significant reduction in vehicular traffic corresponds to an increase in trips on foot (an uplift of 903 two-way pedestrian trips). The number of overall daily trips generated by the proposed site would fall by 302 two-way movements inclusive of all modes of transport.

4.4.4 It is also worth noting that a net reduction in trips by public transport would also likely occur, which is beneficial to the existing bus and rail networks in the local area.

4.4.5 **Figure 5**, below, illustrates the existing modal split associated with trips made to the retail park in comparison to the anticipated modal split following the redevelopment of the site.

Figure 5 Modal Split



4.4.6 As illustrated above, the site's proposed change of use from a retail park to a car-free mixed-use development would significantly reduce the proportion of vehicle trips made to the site. A greater uptake in journeys by active modes would result from the change of use of the site

4.5 Summary

4.5.1 Overall, it is evident from the above assessments that the proposed redevelopment of the site would result in a significant net benefit to the local highway network, with a large reduction in vehicle trips generated to the surrounding area, including during the peak hour periods. As a result, it is not considered necessary to undertake further detailed junction capacity modelling.

4.5.2 It is also worth noting that due to the significant modal shift that would occur from vehicular trips to pedestrian trips, it is also anticipated that a minor reduction in journeys made via public transport modes would reduce post-development. This would represent a benefit to existing service capacity on the local bus and rail networks.

5 ACCESS AND INTERNAL SITE LAYOUT

5.1 Vehicle Access

5.1.1 The following section of this report details the access arrangements associated with vehicle and pedestrian trips made to / from the site. Further information pertaining to the types of deliveries, goods drop-off procedures and delivery frequencies is provided within Section 7 of this Transport Assessment, as well as the accompanying DSMP.

New Layby Provision

5.1.2 As part of the proposed redevelopment, the existing points of vehicle access serving the car park from Water Lane and Haven Road would be closed, with full height kerbs reinstated along the edges of the respective carriageways. Double yellow line carriageway markings would be extended along Haven Road and Water Lane across the former points of vehicle access to stipulate no parking at any time.

5.1.3 Two new laybys would be provided adjacent to the site on Water Lane and Haven Road, respectively. The layby on Water Lane would accommodate deliveries generated by the site, as well as a portion of resident pick-up / drop-off activity. The proposed layby on Haven Road would predominantly cater for deliveries and waste collections generated by Blocks A and B within the site, including deliveries to the commercial units within the site.

5.1.4 The proposed laybys would measure 12m in length and could therefore accommodate large refuse collection vehicles utilised by ECC. The laybys could also receive HGVs used on rare occasions for large deliveries, or for removals associated with a change in tenancy.

5.1.5 In order to demonstrate the safe functioning of the proposed laybys, Drawing 2019/5945/012, attached at **Appendix 6**, illustrates a large refuse collection vehicle (11.2m in length) stopped within the proposed layby on Haven Road without impeding the through-flow of traffic on the adjacent carriageway. Delivery and servicing vehicles would enter and exit the laybys in a forward gear.

5.1.6 The layby on Water Lane, illustrated on the proposed site layout would comprise the same design and dimensions, thereby also safely accommodating vehicles of this size.

Internal Access Routes

5.1.7 The secondary point of vehicle access from Water Lane, which currently functions as a route for servicing vehicles to the rear of the existing retail units, would be retained post-development to afford access to the residential car parking bays and servicing area behind Block C. Modifications would be made to the service road junction with Water Lane, including a new bell-mouth to afford an expanded turning radius for delivery / servicing vehicles accessing the site, representing an improved arrangement compared to the existing point of access.

5.1.8 These modifications are illustrated on Drawing 2019/5945/010, attached at **Appendix 6**. This drawing also confirms that delivery and refuse vehicles could safely and conveniently enter and exit the site's retained service road without mounting the newly instated footway.

5.1.9 This servicing area to the rear of Block C would be conveniently located adjacent to a residential bin store to facilitate safe waste collections, as well as being within close proximity to the parcel room. Two delivery vans would be accommodated simultaneously at this designated servicing area. A turning head would be provided within this retained access route to accommodate the safe manoeuvring of refuse collection vehicles and large delivery vehicles to the rear of the rear of Block C.

5.1.10 Drawing 2019/5945/011, attached at **Appendix 6,** illustrates the swept path analysis undertaken by RGP, demonstrating that delivery and servicing vehicles could safely manoeuvre within the turning head following the completion of loading activity carried out in the servicing bays. No complex turning procedures would be required for vehicles to egress the site in a forward gear back onto Water Lane.

5.1.11 In addition to this retained service road, the private driveway off Water Lane at the north-western corner of the site would also be retained with minor alterations to accommodate deliveries to Block D, providing room for an additional 3 delivery vans simultaneously.

5.1.12 RGP has prepared a swept path assessment to demonstrate vehicle access to the rear of Block D. Drawing 2019/5945/009, attached at **Appendix 6**, illustrates the required manoeuvring of a 4.6t light van to access the servicing area adjacent of Block D within the site. It is evident that sufficient space would be afforded for 3 vans within the servicing area, whilst the turning head would facilitate the safe and convenient manoeuvring of vehicles on departure form the site.

5.1.13 The combined servicing areas would facilitate up to 7 LGVs at any given time to carry out loading activity at the site. On rare occasions that HGVs are required during a change of tenancy, for example, these vehicles could also be accommodated within the servicing area to the rear of Block C. Full details regarding the anticipated delivery vehicle dimensions are provided within the DSMP prepared in support of the proposed redevelopment.

Emergency Vehicle Access

5.1.14 To accommodate emergency vehicle access at the site, retractable bollards would be provided at the main pedestrian entrance into the site from Water Lane. Emergency vehicles would be granted access into the site and would navigate the central pedestrianised route to reach each building where required to do so.

5.1.15 In any event that a fire tender vehicle was required on-site, access to each building can be achieved via either Haven Road, Water Lane, the on-site service road or the central pedestrianised route through the site.

5.1.16 Typical fire tender vehicles measure 8m-10m in length and 2.5m in width, thus they would be safely accommodated by the retained service road to the rear of block C. If required to access the north-western edge of the building at Block D, fire tender vehicles could reverse into the private driveway from Water Lane to the rear of the building.

5.1.17 To illustrate the fire access strategy, drawing 2021/5945/013, attached at **Appendix 6**, demonstrates the required vehicle manoeuvring of fire tender within the site on both the retained service road and the new central pedestrian route.

5.1.18 The appended drawing confirms that a fire tender vehicle could stop within 20m of all areas of each building on-site. Additionally, vehicles would not be required to reverse any distance greater than 20m, in compliance with guidance issued in *Manual for Streets*.

5.1.19 Ambulances are smaller in dimension than a fire tender vehicle and could therefore access these areas safely and conveniently from Water Lane. Ambulance access at the site would follow the same strategy demonstrated above for fire tender vehicles.

5.2 Pedestrian & Cycle Access

5.2.1 In place of the vehicular route currently provided within the site, a central pedestrianised route would be provided through the site with accompanying landscaping. The footpath would provide a convenient and attractive pedestrian link between Water Lane and Haven Road, as well as providing access to the main entrances to residential blocks. A footway would also be provided to the rear of Block C along the site's vehicular access.

5.2.2 A central Courtyard would be provided within the site adjacent to the main pedestrian entrance into Block B. The courtyard would serve as communal amenity space with associated street furniture, landscaping and cycle parking facilities.

5.2.3 The retained service road from Water Lane into the site would comprise a shared-use surface, enabling pedestrian movement along this route to the rear of Block C towards the parking area on-site. The nearside footway provided along Water Lane would be extended into the site and onto the shared-use surface along the site's service road.

5.2.4 An uncontrolled pedestrian crossing point with dropped kerbs and tactile paving would be provided across the access junction.

5.2.5 A minimum footway width of 2.0m would be retained along Haven Road and Water Lane adjacent to the site, including at the locations of the proposed new laybys.

5.2.6 A marked cycle route would be provided on the shared use surface within the central courtyard, providing a connecting link to the wider cycle network, with NCR 34 forming a route along the southern bank of the River Exe. An existing public right of way forms a route to the east of the site between Water Lane, Chandlers Walk and Michael Browning Way. This right of way would be extended into the site, enabling the connection to the existing cycle network at Haven Banks.

5.2.7 A new cycle hire hub would be provided within the site's pedestrian courtyard which would enhance access via the cycle network as noted above. Further details regarding cycle parking for the site are provided within Section 6, below.

5.2.8 The communal space provided within the site, including the footpaths and courtyard would benefit from step-free access. The central pedestrian footpath would facilitate wheelchair access. Each building would be provided with lifts to the upper floors, enabling step-free access internally in each block.

5.2.9 Furthermore, it is proposed that the section of the carriageway on Haven Road adjacent to the site would be raised to form a new pedestrian priority zone, connecting the site to the wider quayside area to the north of Haven Road. The raised section of carriageway would serve as a traffic calming mechanism, improving pedestrian safety and comfort in the vicinity of the site.

6 PARKING

6.1 Overview

6.1.1 The site is currently provided with an on-site pay and display car park, containing 205 spaces which are available for public use with a maximum duration of stay of 4 hours. The car park predominantly services the existing retail park, although is used by some visitors to other nearby waterfront attractions. The car park is privately managed and does not form part of the Haven Banks public car parking provision operated by ECC, which includes three nearby car parks at Michal Browning Way, known respectively as Haven Banks 1, 2 & 3.

6.1.2 As part of the redevelopment proposals, the existing car park would be removed and a new car parking area would be provided along the retained service road from Water Lane, containing 32 spaces. Due to the site's highly accessible location by sustainable modes, it is considered that a 'car-lite' proposal is suitable for the development and accords with relevant parking policy at a national, regional and local level.

6.2 Existing Car Park Operation

6.2.1 The car park serving the former Haven Banks Retail Park provides 205 spaces, including 12 disabled parking bays. These spaces are operated by Smart Parking and are subject to the following tariff, Monday to Sunday:

(i) 2 hour stay: £1.00

(ii) 3 hour stay: £2.00

(iii) 4 hour stay: £3.00

6.2.2 The existing car park is open 24 hours a day and permits a maximum stay of up to 4 hours. Due to the short duration of stay, it is anticipated that the vast majority of visitors to the car park are customers of either the Haven Banks Retail Park or the retail / leisure attractions located along Exeter Quayside to the east.

6.2.3 In order to understand typical parking demand and trends associated with the existing use of the car park, RGP has examined data obtained from the current car park operator; Smart Parking. Detailed records of the car park's usage have been examined, which demonstrate a range of key indicators such as the number of monthly visitors, total transactions and the average duration of stay per day.

6.2.4 For the purposes of this review, RGP has examined the latest parking data over a 10-month period as provided by Smart Parking, ranging from June 2021 to March 2022. For reference, the full data sheets are attached to this Transport Assessment at **Appendix 7**.

6.2.5 The following table provides a summary of the current car park occupancy levels and how these correspond proportionately to the on-site parking capacity, as well as the wider public car parking capacity within 1km (a 12 minute) walk from the site.

Table 9 Existing Car Park Occupancy Levels

Parking Data Period	Peak Parking Demand (Hourly Visitors)	Proportion of On-Site Capacity (205 spaces)	Proportion of City Centre Capacity (2,471 spaces)
June 2021	36	18%	1.5%
July 2021	37	18%	1.5%
August 2021	48	23%	1.9%
September 2021	36	18%	1.5%
October 2021	40	20%	1.6%
November 2021	35	17%	1.4%
December 2021	38	19%	1.5%
January 2022	36	18%	1.5%
February 2022	48	23%	1.9%
March 2022	37	18%	1.5%

6.2.6 As demonstrated above, over the latest 10-month period a peak in hourly vehicle arrivals at the site was recorded at 48 hourly visitors, occurring in August 2021 and February 2022. These recorded peaks in parking demand at the site represent 23% of existing capacity and 1.9% of parking capacity within 1km of the site.

6.2.7 Even if assuming each visitor stayed for the maximum duration of 4 hours, a total accumulation of 192 vehicles would therefore be generated within the car park, representing up to 94% of available capacity.

6.2.8 The Smart Parking data confirms that the average duration of stay within the car park peaks at 101 minutes on Saturdays (1 hr 41 mins). It is therefore evident that ample spare capacity is retained during periods of peak demand at the site.

6.2.9 It is therefore evident from this data that the removal of the existing car park as part of the redevelopment proposals could potentially displace up to 48 vehicles at a given time throughout the year, with this peak likely to occur at 11:00 hours on Saturdays.

6.2.10 The above review confirms that the existing car park is significantly under-utilised and that peak parking demand generated by the site could be absorbed by other nearby public car parks, including the Council operated car parks in Haven Banks.

6.2.11 Importantly, this assessment does not take into account the fact that demand for local parking would also be significantly reduced following the removal of the existing retail park. The majority of parking activity within the site was generated by the bowling alley and retail stores. Following the removal of these visitor attractions, most of the observed parking demand at the site would be reduced in tandem with the proposed redevelopment. The above assessment of existing parking demand is therefore considered to be particularly robust.

6.3 Public Parking Availability

Haven Banks

6.3.1 RGP considers that the existing public parking provision within Exeter city centre provides sufficient capacity to absorb the degree of displaced parking as a result of the redeveloped site. Of particular note, there are three public pay and display car parks operated by ECC in the vicinity of the site, accessible from Michael Browning Way approximately 250m (a 2-3 minute walk) to the southeast of the site via Haven Road.

6.3.2 These car parks, known as Haven Banks 1, 2 & 3, respectively, would not be altered as a result of the development proposals and provide a combined capacity of 162 parking spaces. Each of these car parks is open 24 hours a day, with a chargeable tariff enforced between he hours of 08:00 – 18:00, Monday to Sunday.

6.3.3 In order to understand current usage of these car parks, RGP has obtained monthly occupancy data from ECC regarding the usage of these car parks at Haven Banks. This data outlines the number of monthly visitors to the Haven Banks car parks between January 2019 and May 2022. A full summary of the Council's occupancy data for these car parks is attached at **Appendix 8**.

6.3.4 As a worst-case, if examining the peak monthly demand for these car parks during this 16-month period, a peak of 6,749 visitors to these car parks was recorded over a month-long period in August 2019. This figure equates to an average of 218 visitors per day, or 22 visitors per hour during controlled hours (8am – 6pm). Given that 162 car parking spaces are available within these car parks, it is again evident that these local car parks in Haven Banks are significantly underutilised, with spare capacity retained during peak periods.

City Centre

6.3.5 In addition to the local parking availability, all public parking opportunities within 1km (a 12 minute) of the site has been reviewed by RGP in order to understand the likely level of impact any parking displacement would have on other local car parks.

6.3.6 As illustrated on **Appendix 9,** attached herewith, there are 19 alternative public car parks available for use within a 12 minute walk of the site. The following table provides a summary of these car park operations.

Table 10 Existing Public Parking Availability (Within 1km)

Car Park	Operator	Distance from Site	Number of Spaces	Opening Hours	Tariff
Bartholomew Terrace	ECC	700m	46	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £13.00
Cathedral & Quay	ECC	425m	355	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £11.00
Exeter Cathedral	Premier Park	750m	40	Mon-Sun: 24 hours	1 hr: £2.00 2 hrs: £3.50 4hrs: £6.00 24 hrs: £12.00
Flowerpot Lane	ECC	825m	58	Mon-Sun: 08:00-18:00	1 hr: £1.00 2 hrs: 1.50 4hrs: £2.50 Daily max: £3.50

George Street	Premier Parking Solutions	700m	13	Mon-Sun: 24 hours	1 hr: £2.00 2 hrs: £4.00 4hrs: £7.00 24 hrs: £10.00
Guildhall Centre	ECC	1km	397	Mon-Sun: 08:00-00:00	1 hr: £3.30 2 hrs: £4.40 4hrs: £6.60 Daily max: £15.00
Harlequins	ECC	950m	91	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £13.00
Haven Banks – One	ECC	175m	80	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £11.00
3 Magdalen Rd	ECC	975m	210	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £13.00
Magdalen Street	ECC	625m	100		
Market Street	NCP	750m	74	Mon-Sun: 24 hours	1 hr: £2.60 2 hrs: £5.10 4hrs: £9.10 24 hrs: £12.10
Mary Arches Street	ECC	900m	50	Mon-Sun: 08:00-00:00	1 hr: £3.30 2 hrs: £4.40 4hrs: £6.60 Daily max: £15.00
Northernhay Street	Premier Parking Solutions	1km	25	Mon-Sun: 08:00-20:00	1 hr: £1.10 2 hrs: £2.20 4hrs: £4.40 24 hrs: £6.50
Okehampton St	ECC	700m	81	Mon-Sun: 08:00-18:00	1 hr: £1.00 2 hrs: 1.50 4hrs: £2.50 Daily max: £3.50
Princesshay	Princesshay	1km	273	Mon-Sun 07:00-02:00	1 hr: £2.40 2 hrs: £3.20 4hrs: £6.00 Daily max: £12.40
Princesshay 2	ECC	1.25km	109	Mon-Sun: 08:00-18:00	1 hr: £2.20 2 hrs: £3.30 4hrs: £5.50 Daily max: £13.00
Princesshay 3	ECC	1km	138		
Smythen Street	ECC	625m	49		
Southernhay	Premier Parking Solutions	850m	157	Mon-Sun: 24 hours	1 hr: £2.00 2 hrs: £3.00 12hrs: £7.00 24 hrs: £12.00
Total Spaces	**2,346**				

6.3.7 As summarised above, there are a further 2,346 public car parking spaces in Exeter city centre, within a 12 minute walk of the site. The net loss of parking (205 spaces) therefore represents approximately 9% of the parking available within this catchment area. However, the peak number of hourly arrivals which may potentially be displaced (up to 48 vehicles) represents 2% of the parking availability within a 12 minute walk from the site.

6.3.8 It is important to note that there are several more public car parks provided throughout the city, although it is recognised that these would not likely serve the Exeter Quayside area near the site.

6.4 Proposed Parking Arrangements

6.4.1 As indicated on the proposed site layout, a total of 32 car parking spaces would be provided along the site's secondary access from Water Lane. 5 of these spaces would be located outside of the main gated car park and would be reserved for the use of car club vehicles, whilst 2 parking bays would be reserved for the exclusive use of disabled motorists. The remaining spaces would be leased to staff and tenants on-site.

6.4.2 During early discussions held between ECC and the Design Team, it was expressed by the Council that a car-free development would represent a preferred option owing to the proposed accommodation type and the site's proximity to the city centre.

6.4.3 As set out in Section 3 of this report, the site is conveniently located in terms of access to the city centre by active modes of transport such as walking and cycling. The daily needs of residents would be met by the extensive range of amenities provided both within the local area and the wider city centre. For journeys to destinations further afield, the site benefits from a good level of access to the public transport network, including rail and bus services available in close proximity to the site.

6.4.4 Furthermore, the proposed residential accommodation within the site would largely comprise 1-bedroom apartments and co-living space, which typically lends to young professionals requiring short-term / transient tenancies whilst working in the city, for example. This type of tenancy does not typically attract residents who depend on the use of a private vehicle to complete daily trips away from the site, whereas larger family homes would generate a greater degree of demand for car parking.

6.4.5 Notwithstanding this, it is anticipated that a small proportion of car use would be generated for essential journeys, by either tenants or commercial staff. It is therefore proposed that a small provision of on-site parking is appropriate to meet the demands of the site and preventing potential overspill of parking onto the adjacent highway network. The 32 proposed parking bays would represent approximately 0.07 spaces per residential unit, although the provision of car club bays would proportionately cater for a larger number of residents.

6.4.6 The following section of this Transport Assessment provides a review of parking policy and standards, and how the proposed parking provision corresponds to the relevant parking requirements of the site.

6.5 Policy and Standards

6.5.1 Local parking standards are contained within the Council's 'Sustainable Transport' SPD (2013) for retail uses, whilst the residential standards are contained within the 'Residential Design' SPD (2010). The Council has adopted an 'indicative' approach to these parking standards to provide a degree of flexibility to applicants.

6.5.2 The Development Delivery Development Plan (2015) provides further guidance on parking, stating that:

…"Car free residential developments will be encouraged within the city centre and may be appropriate in other locations which are well served by public transport. In all cases, due regard will also be given to site specific circumstances. Minimum parking standards are retained for cycles and disabled users"…

6.5.3 The site falls outside of the Council's defined city centre boundary, thus car-free and low parking developments will be considered on the individual merits of the site. If applying the Council's currently adopted parking guidelines, the corresponding level of permitted parking provision is as follows:

Table 11 ECC parking Requirements

Proposed Use	No. Units/ Floor Area	Car Parking Standards		'Indicative' permitted level
		Unallocated	Allocated	
Restaurant/Retail	639m² (GIA)	1 per 20m² GIA	N/A	32 spaces
C1 Co-Living Apartments (1b2p)	188	0.8 per unit	N/A	150 spaces
C1 Flats (1b2p)	131	0.8 per unit	N/A	104 spaces
C1 Flats (2b3p)	75	0.9 per unit	N/A	68 spaces
C1 House (3b6p)	40	1.23 per unit	0.4 per unit for 1 unallocated space 0.1 per unit for a 2nd unallocated space	49 unallocated 20 allocated
Total	**434 dwellings 639m² Commercial**	**-**	**-**	**423 spaces**

6.5.4 The Residential Design SPD also refers to the provision of electric vehicle charging infrastructure, stating that "Developers should plan for the future installation of electric car charging points for all on-street parking. As a minimum ducting and potential for easy connection to the electricity network should be provided to allow for future installation of charging apparatus".

6.5.5 There is no specific guidance issued by ECC regarding the quantity of disabled parking spaces, electric vehicle charging points or car club spaces. The remainder of this section therefore seeks to determine an appropriate allocation of parking based on the individual requirements of the site.

6.6 Car Club Vehicles

6.6.1 Due to the low levels of proposed on-site parking, it is considered that the provision of car club vehicles within the site represents an important alternative to the use of privately owned vehicles for future residents. Where car journeys are considered necessary to transport bulky goods, or for trips to destinations that are not easily accessed via sustainable modes, car clubs offer a viable alternative where the use of vehicles is not frequently needed.

6.6.2 RGP has engaged with car club operators Enterprise and Co-Cars, respectively, in order to determine a suitable quantity of car club vehicles to cater for the development. Following detailed discussions, it is advised by both operators that a minimum of 4 car club vehicles would be adequate for the scale of development and given the likely demand generated by the proportion of 1-bedroom dwellings.

6.6.3 It is therefore proposed that 5 car club bays would be provided on-site, which are understood would be managed by Co-Cars, subject to confirming any forthcoming agreement. It is envisaged that at a later stage following occupation of the site that there would be scope to re-allocate additional parking bays for the use of car club vehicles if required to meet increased demand in future.

6.6.4 These car club bays would be provided outside of the main gated car park on the retained service road off Water Lane. The car club vehicles would be available for the use of the wider community, as well as staff / residents of the site. These vehicles would be clearly visible from Water Lane, forming a hub for car club users in the site's vicinity.

6.7 Disabled Parking

6.7.1 There are no specific car parking standards defined in local policy documents pertaining to the provision of disabled car parking spaces. Traditionally, it is recognised that the 'best practice' approach is to allocate 5% of any parking provision for the use of disabled motorists at new developments.

6.7.2 It is therefore proposed that 2 reserved parking bays for blue badge permit holders would be provided within the site, representing 6% of the total parking provision. These spaces would be located within the main parking area on-site, facilitating convenient access to the pedestrianised courtyard and various residential blocks.

6.7.3 RGP understands that there are no residential units that are proposed specifically to comply with the Optional Requirement M4(3) of the Building Regulations. As such, there is no requirement to allocate disabled parking spaces to individual dwellings within the site. The disabled parking bays would be used by site occupants and visitors as and when necessary.

6.7.4 In addition to the two on-site parking bays, there is an existing provision of disabled parking on the adjacent road network that would be retained for public use post-development. There are two disabled spaces marked on Haven Road in the vicinity of the site, adjacent to the pedestrianised courtyard at the Piazza Terracina waterfront.

6.7.5 There are also a further 8 disabled parking bays provided within the Council operated car parks along Michael Browning Way, with the further being located approximately 250m from the site. These spaces would accommodate the disabled parking needs of visitors making trips to / from the site.

6.7.6 Notwithstanding the various provisions detailed above, blue badge permit holders in Devon are permitted to park in resident permit holder bays on their street (i.e. Haven Road or Water Lane) for an unlimited duration, free of charge.

6.8 Cycle Parking

6.8.1 As indicated on the proposed site layout (**Appendix 1**), there are 6 separate cycle stores proposed for the use of the residential and commercial units. With respect to residential cycle parking standards, local policy requires that a single space is provided for all 1 and 2 bedroom units, whilst 2 spaces should be provided for all larger units.

6.8.2 Based on this requirement, the site should therefore provide a minimum of 474 secure cycle parking spaces for the residential units on-site. The residential bikes stores should be split by each block of units respectively, as summarised below:

Table 12 Cycle Parking Requirements

Residential Block	Minimum Cycle Parking Requirement	Proposed Provision
Block A	27	27
Block B	21	21
Block C	238	247
Block D	188	188
Total	474	485

6.8.3 As summarised above, the proposed cycle stores have been designed to accommodate the required quantities of cycle parking spaces within each respective block. The proposed provision within Block C would slightly exceed the minimum required quantity.

6.8.4 With regard to cycle parking for the restaurant / café uses, the Sustainable Transport SPD makes reference to commercial cycle parking but does not define specific standards. Guidance issued by ECC states the following:

…"Where more than 20 people are to be employed, these facilities must be provided. Where possible, they should also be provided for smaller employment premises, particularly newbuild development which is well located in relation to the city's cycle network"…

6.8.5 To accommodate cycle parking demand generated by the commercial units, as well as visitors to the site, it is also proposed that a further 12 'Sheffield style' cycle stands would be provided within the site, affording secure short-stay cycle parking with capacity for up to 24 bikes. These cycle stands would be conveniently accessible from the main pedestrian courtyard within the site and would be utilised by visitors to the commercial and residential units within the site.

6.8.6 Furthermore, space has been allocated within the site to provide a new cycle hire hub that would be managed by the operator Co-Bikes, connecting to their existing network of hire facilities throughout Exeter. The provision of a cycle hire facility within the site would further facilitate the use of sustainable modes by future residents making trips in and around the city, providing an attractive alternative to the use of cars for local journeys. The cycle hire hub is conductive to the operation of the 'car-lite' development, and when combined with the car club vehicles, would contribute to a wider mobility hub within the site.

7 DELIVERIES AND SERVICING

7.1 Background

7.1.1 The following section outlines the proposed arrangements to safely accommodate all goods deliveries generate by the site and the storage / removal of waste materials. A detailed strategy to implemented by the future occupants of the site is set out in the accompanying Delivery and Servicing Management Plan (DSMP) prepared by RGP in support of the redevelopment proposals.

7.2 Deliveries

7.2.1 As detailed previously within Section 5 of this Transport Assessment, it is proposed that new laybys would be provided on haven Road and Water Lane, respectively, for the use of delivery vehicles. Furthermore, space would be provided within the retained access road from Water Lane to accommodate 2 delivery vans simultaneously to the rear of Block C. A third servicing area would be provided to the rear of Block D, providing room for an additional 3 delivery vans simultaneously.

7.2.2 These loading facilities would ensure that all deliveries can be safely and discreetly accommodated at the site without obstructing traffic on either Haven Road or Water Lane.

7.2.3 As detailed previously within Section 5, the relevant swept path assessments have been carried out by RGP to confirm the safe operation of the various servicing areas and vehicle access points provided at the site, with the technical drawings appended to this document.

7.2.4 The majority of deliveries made to the site would comprise household goods and are expected to be of an ad-hoc nature, such as postal deliveries and courier services generated by the residential units, which do not operate as part of a contracted freight company. Some larger deliveries would occasionally be generated by prospective residents associated with supermarket deliveries and online sales of general retail goods from Amazon, for example. The largest vehicle typically utilised for such deliveries would comprise either a 7.5t panel van or box van.

7.2.5 Residential blocks C and D would each be provided with a concierge / parcel room to receive deliveries to apartments within the respective block. Blocks A and B would be provided with resident mailboxes at the main entrance to these blocks. These arrangements would be implemented to ensure convenient parcel drop-offs are facilitated, subsequently reducing the duration of loading activity required to complete deliveries to the site.

7.2.6 In terms of the proposed commercial units, it is also anticipated that light gods vehicles (LGVs) would fulfil the deliveries requirements of each retail use. The delivery of general retail goods and fresh food supplies, for example, are typically carried out using 7.5t panel / box vans.

7.2.7 where larger delivery vehicles are required on infrequent occasions, such as during a change of tenancy, these can be accommodated either by the Water Lane layby via the retained access from Water Lane. Both loading areas could accommodate the use of a 12m rigid lorry. A vehicle of this size could also be accommodated in the servicing area to the rear of Block C, if required.

7.2.8 These various delivery arrangements are summarised below, whilst a detailed plan annotating the proposals (drawing 2021/5945/006) is attached at **Appendix 6**.

(j) Haven Road layby – Residential & commercial deliveries to Blocks A & B (LGVs)

(k) Water Lane layby – Residential deliveries to blocks C and D (LGVs & HGVs)

(l) Service area behind Block D – Residential deliveries to Block D (LGVs)

(m) Service area behind Block C – Residential deliveries to block C (LGVs & HGVs)

7.2.9 As demonstrated in Section 5 of this report, safe access by these delivery vehicles would be achieved at each designated loading point, with sufficient space for vehicles to manoeuvre and access / egress in a forward gear.

7.2.10 Details pertaining to the routing plan allocated to goods and servicing vehicles are provided within the DSMP, submitted to ECC in tandem with this Transport Assessment.

7.3 Frequency and Duration of Deliveries

7.3.1 In order to establish the likely frequency of delivery vehicles generated by the proposed uses of the site, RGP has examined the trip rate data applied to the assessments carried out in Section 3 of this document. The commercial trip rate data for the existing and proposed uses of the site contains specific trip rates for goods vehicle arrivals and departures. This data has been used to calculate the corresponding number of commercial deliveries.

7.3.2 The residential trip rate data does not differentiate delivery vehicle trips and as such, RGP has examined the trip rate data from a range of surveyed sites on the TRICS database that operate as car-free developments. This affords an accurate representation of the likely postal and supermarket delivery frequencies generated by residents over the course of a day, given that car-free units typically have a greater dependency on goods deliveries.

7.3.3 **Table 13**, below, provides a summary of the existing and proposed frequency of deliveries generated by the site, as well as the corresponding net change predicted following the site's redevelopment.

Table 13 Summary of Delivery Frequencies

	Daily Deliveries
Existing Site	**5**
Proposed Site	**26**
Residential	*21*
Commercial Uses	*4*
Net Change	**+21**

7.3.4 As summarised above, the combined uses of the proposed site are likely to generate an increase of 21 deliveries over the course of a typical weekday equating to a total of 26 daily deliveries carried out by LGVs. These additional delivery vehicle arrivals would be comfortably accommodated within the designated servicing areas and laybys provided for use of the site.

7.3.5 The locations of each loading point at the site enables deliveries to be conveniently distributed to each area of the site, thus reducing the time required to complete deliveries and subsequently reducing the impact of servicing activity. The site could simultaneously receive up to 7 delivery vehicles at a given time, hence the above frequencies would be safely accommodated through the day.

7.3.6 The majority of deliveries would comprise small goods of an ad-hoc nature, such as postal and courier visits, which would be typically completed within 5 minutes. Some large supermarket deliveries or the transfer of bulky goods, for example, may require a duration of up to 10 minutes to carry out. On the rare occasions that larger vehicles are required for removals during a change of tenancy, for example, HGVs such as a 10m / 12m rigid lorry would likely require up to 30 minutes to transfer goods to / from the site.

7.4 Waste Storage and Collections

7.4.1 A Waste Management Plan (WMP) has been prepared by RGP in tandem to this Transport Assessment to accompany the forthcoming planning application. The WMP should therefore be read in conjunction with this report, as it provides a detailed strategy pertaining to the waste storage and removal strategy to be adopted by the site's occupants. The remainder of this section provides an overview of this strategy, outlining the key aspects involved with the overall site operation.

7.4.2 Each proposed building within the site would be provided with shared refuse stores for the secure deposit of waste and recycling generated by the respective residential and commercial properties within the site.

7.4.3 Waste will be securely held at ground floor level of each building, where bins allocated for the disposal of general waste, mixed dry recycling will be provided. The bin stores would be lockable and have drainage points to keep the area clean and secure. Should it be required, site management would arrange to hire a cleaning service to help maintain the refuse stores as and when necessary.

7.4.4 The site would accommodate safe and convenient refuse collections, resulting in a minimal impact on the adjacent highway network. The site's internal layout has been designed as such that no complex turning procedures would be required by collection vehicles. Following the completion of waste removals from each designated collection point, vehicles would egress the site safely in a forward gear.

7.4.5 Waste collections associated with Block C would be carried out on-site within the retained service road provided from Water Lane to the rear of the building, where a turning head would be provided to ensure vehicles can manoeuvre prior to departing the site in a forward gear back onto Water Lane. As discussed previously in Section 5, Drawing 2021/5945/008, attached at **Appendix 6**, demonstrates access by a large refuse vehicle within the site's main servicing area to the rear of Block C.

7.4.6 Collections from Block D would take place from Water Lane, adjacent to the delivery access to the rear of the building. During scheduled collections, residential management staff would be present on-site to transfer bins to the edge of the carriageway for collections to take place. The drawing attached at **Appendix 6** demonstrates that a refuse collection vehicle could stop adjacent to the site to undertake collections, whilst retaining enough space for traffic to pass on Water Lane without encroaching the marked bus cage on the opposite side of the carriageway.

7.4.7 The new layby on Haven Road to the northeast of the site would accommodate all collections from Blocks A and B, as demonstrated by the swept path assessment shown on drawing 2021/5945/012.

8 SUMMARY AND CONCLUSIONS

8.1.1 This Transport Assessment has considered the transport planning implications associated with the proposed redevelopment of the Haven Banks Retail Park, Exeter, to provide new residential and commercial properties. RGP make the following conclusions of this Transport Assessment:

(i) The site is considered to be conveniently located in terms of access from the wider highway network owing to its proximity major highway links including the A377, A3015, A30 and Junction 30 of the M5. Minimal deviation from these routes is required by delivery and servicing vehicles making trips to / from the site;

(ii) The site's location is conductive to journeys made by active modes such as walking and cycling. Its city centre location enables the vast majority of essential services to be accessed via a short walk from the site. There is an excellent standard of pedestrian and cycle infrastructure provided throughout the local area, catering for convenient trips to / from Exeter's commercial centre.

(iii) The locality also benefits from a good provision of public transport infrastructure, with bus stops provided on Water Lane and Alphington Street in the vicinity of the site. Exeter St Thomas rail station is also accessible via a 7 minute walk to the northwest of the site. Both Exeter Central and Exeter St Davids stations can also be reach on foot within 20-25 minutes, or a 7 minute cycle journey. These rail stations would facilitate commuting trips made by residents to destinations further afield.

(iv) The proposed development would likely generate a net reduction of 1,183 two-way vehicle movements of the course of a typical weekday, including reduction is traffic during both the peak hour periods. This overall reduction would represent a significant benefit to the functioning of the local road network, compared to the site's former use as a retail park. The previous site operation was proportionately more reliant on car based trips, whereas the residential-led redevelopment would shift the majority of trips to sustainable modes of transport;

(v) The proposed parking provision of 32 car parking spaces is suitable to meet the needs of the proposed development and compliant with local parking policy. The allocation of 5 spaces for car club vehicles would accommodate infrequent trips away from the site by residents requiring essential use of a car. A further 2 parking bays would be reserved for the exclusive use of disabled motorists. Visitor parking would be catered in the nearby public car parks;

(vi) Secure cycle parking stores would be provided on-site for the use of staff and residents, exceeding the minimum required quantities based on local cycle parking standards. A good provision of short-stay cycle parking stands would also be provided for the sue of visitors, whilst a cycle hire hub would also be provided within the site to further encourage sustainable travel to / from the site;

(vii) The access arrangements would meet the requirements set out in national best-practice guidelines and would afford sufficient room for residents, delivery and refuse collection teams to safely access and egress the site in a forward gear. Provision would also be made for emergency vehicle access through the site. A communal courtyard and central pedestrian route would afford an attractive route through the development, connecting Water Lane to Haven Road and the wider quayside at Haven Banks;

(viii) The proposed residential units would generate daily postal deliveries and some occasional supermarket deliveries which would be completed using light goods vehicles. The ultimate operation of the commercial units is not yet established, although it is anticipated that due to the scale of each unit, deliveries would be carried out using LGVs comprising fresh food / drink, linen and general goods. An increase of up to 21 additional daily deliveries is expected, although the size of required delivery vehicles would be reduced;

(ix) 2 new laybys on Haven Road and Water Lane would accommodate the additional deliveries, combined with the retained service road and private driveway from Water Lane. The proposed site could accommodate up to 7 delivery vans simultaneously;

(x) Residential refuse collections would be coordinated by ECC as part of an existing collection route through Haven Banks. Private collections would be scheduled by the commercial tenants, with an envisaged shared collection strategy to consolidate the number of weekly waste removals from the site.

8.1.2 As a result of the data and evidence presented within this Transport Assessment, Devon County Council, as local highway authority, is respectfully requested to confirm that the development proposals are satisfactory on highway grounds.

APPENDIX 1 PROPOSED SITE LAYOUT PLAN

Rev	Comments	Date	Dr	Ch
P1	1st Issue	22-02-2022	PH	AM
P6	Block D Communal space amended	23-03-2022	AM	PP
P7	General amendments	01-04-2022	JW	AM
P8	General landscape & building layout amendments	19-05-2022	AM	PP
P9	General landscape amendments	26-05-2022	AM	PP
P10	General landscape amendments	30-05-2022	AM	PP
P11	General amendments	07-06-2022	JW	AM
P12	General amendments	21-06-2022	JW	AM
P13	General landscape amendments	27-06-2022	AM	PP
P14	General amendments	01-07-2022	AM	PP

PWA Code: 20021

Notes: Use annotated dimensions only. All dimensions in millimeters unless otherwise stated. This drawing is to be read in conjunction with all other related material. Any discrepancies, conflicts or errors must be reported to Piper Whitlock Architecture before commencing work.

- Existing tree removed
- Existing tree retained
- Proposed new tree

N

0 5m 20m 40m

Drawing Title:
Proposed Site Layout
Ground Floor Plan

Client:
Welbeck CP

Project Ref: HREXE | Orig: -PWA | Zone: -00 | Lev: -00 | Type: -DR | Role: A | Num: -0050 | Rev: -P14

Status: PRE-PLANNING | Stage: 2 | Scale @ A1: 1:500

Project Name:
Haven Road,
Exeter

PIPER WHITLOCK

2nd Floor, Anglo St. James House, 39a Southgate Street, Winchester, Hampshire, SO23 9EH
Tel: 01962 843586, Email: enquiries@piperwhitlock.co.uk, www.piperwhitlock.co.uk

APPENDIX 2 TRICS OUTPUTS (BOWLING ALLEY)

Calculation Reference: AUDIT-728001-211101-1154

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : B - BOWLING ALLEYS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DC	DORSET	1 days
09	NORTH		
	DH	DURHAM	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: 1700 to 1809 (units: sqm)
Range Selected by User: 913 to 5060 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 15/10/11

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:

Friday	2 days

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

Selected survey types:

Manual count	2 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:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1

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

Selected Location Sub Categories:

Development Zone	1
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

E(d)	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

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

75,001 to 100,000	1 days
250,001 to 500,000	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	1 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	2 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	2 days

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

LIST OF SITES relevant to selection parameters

1 DC-07-B-01 BOWLPLEX DORSET
POOLE ROAD
POOLE

Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 1700 sqm
Survey date: FRIDAY *18/07/08* *Survey Type: MANUAL*

2 DH-07-B-01 BOWLING DURHAM
FREEMANS PLACE
DURHAM

Edge of Town Centre
Development Zone
Total Gross floor area: 1809 sqm
Survey date: FRIDAY *05/12/08* *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 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.055	1	1809	0.000	1	1809	0.055
10:00 - 11:00	2	1755	0.456	2	1755	0.114	2	1755	0.570
11:00 - 12:00	2	1755	0.541	2	1755	0.513	2	1755	1.054
12:00 - 13:00	2	1755	0.541	2	1755	0.541	2	1755	1.082
13:00 - 14:00	2	1755	0.598	2	1755	0.741	2	1755	1.339
14:00 - 15:00	2	1755	0.570	2	1755	0.427	2	1755	0.997
15:00 - 16:00	2	1755	0.427	2	1755	0.684	2	1755	1.111
16:00 - 17:00	2	1755	0.627	2	1755	0.541	2	1755	1.168
17:00 - 18:00	2	1755	0.997	2	1755	1.026	2	1755	2.023
18:00 - 19:00	2	1755	0.969	2	1755	1.111	2	1755	2.080
19:00 - 20:00	2	1755	1.596	2	1755	1.567	2	1755	3.163
20:00 - 21:00	2	1755	0.997	2	1755	1.510	2	1755	2.507
21:00 - 22:00	2	1755	0.541	2	1755	0.627	2	1755	1.168
22:00 - 23:00	1	1700	0.118	1	1700	0.824	1	1700	0.942
23:00 - 24:00	1	1700	0.235	1	1700	0.471	1	1700	0.706
Total Rates:			9.268			10.697			19.965

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.*

Parameter summary

Trip rate parameter range selected:	1700 - 1809 (units: sqm)
Survey date date range:	01/01/06 - 15/10/11
Number of weekdays (Monday-Friday):	2
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 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
11:00 - 12:00	2	1755	0.028	2	1755	0.000	2	1755	0.028
12:00 - 13:00	2	1755	0.000	2	1755	0.028	2	1755	0.028
13:00 - 14:00	2	1755	0.028	2	1755	0.028	2	1755	0.056
14:00 - 15:00	2	1755	0.028	2	1755	0.028	2	1755	0.056
15:00 - 16:00	2	1755	0.028	2	1755	0.000	2	1755	0.028
16:00 - 17:00	2	1755	0.114	2	1755	0.142	2	1755	0.256
17:00 - 18:00	2	1755	0.171	2	1755	0.171	2	1755	0.342
18:00 - 19:00	2	1755	0.256	2	1755	0.171	2	1755	0.427
19:00 - 20:00	2	1755	0.114	2	1755	0.171	2	1755	0.285
20:00 - 21:00	2	1755	0.142	2	1755	0.114	2	1755	0.256
21:00 - 22:00	2	1755	0.057	2	1755	0.114	2	1755	0.171
22:00 - 23:00	1	1700	0.059	1	1700	0.059	1	1700	0.118
23:00 - 24:00	1	1700	0.118	1	1700	0.118	1	1700	0.236
Total Rates:			1.143			1.144			2.287

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
11:00 - 12:00	2	1755	0.028	2	1755	0.028	2	1755	0.056
12:00 - 13:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
13:00 - 14:00	2	1755	0.057	2	1755	0.057	2	1755	0.114
14:00 - 15:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
15:00 - 16:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
16:00 - 17:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
17:00 - 18:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
18:00 - 19:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
19:00 - 20:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
20:00 - 21:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
21:00 - 22:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
22:00 - 23:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			0.085			0.085			0.170

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.114	2	1755	0.000	2	1755	0.114
11:00 - 12:00	2	1755	0.000	2	1755	0.028	2	1755	0.028
12:00 - 13:00	2	1755	0.000	2	1755	0.114	2	1755	0.114
13:00 - 14:00	2	1755	0.085	2	1755	0.028	2	1755	0.113
14:00 - 15:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
15:00 - 16:00	2	1755	0.000	2	1755	0.085	2	1755	0.085
16:00 - 17:00	2	1755	0.000	2	1755	0.028	2	1755	0.028
17:00 - 18:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
18:00 - 19:00	2	1755	0.000	2	1755	0.028	2	1755	0.028
19:00 - 20:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
20:00 - 21:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
21:00 - 22:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
22:00 - 23:00	1	1700	0.059	1	1700	0.000	1	1700	0.059
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			0.258			0.311			0.569

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
11:00 - 12:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
12:00 - 13:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
13:00 - 14:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
14:00 - 15:00	2	1755	0.028	2	1755	0.000	2	1755	0.028
15:00 - 16:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
16:00 - 17:00	2	1755	0.028	2	1755	0.000	2	1755	0.028
17:00 - 18:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
18:00 - 19:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
19:00 - 20:00	2	1755	0.114	2	1755	0.000	2	1755	0.114
20:00 - 21:00	2	1755	0.000	2	1755	0.057	2	1755	0.057
21:00 - 22:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
22:00 - 23:00	1	1700	0.000	1	1700	0.059	1	1700	0.059
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			0.170			0.116			0.286

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.111	1	1809	0.000	1	1809	0.111
10:00 - 11:00	2	1755	0.627	2	1755	0.256	2	1755	0.883
11:00 - 12:00	2	1755	0.969	2	1755	0.655	2	1755	1.624
12:00 - 13:00	2	1755	1.197	2	1755	0.798	2	1755	1.995
13:00 - 14:00	2	1755	1.225	2	1755	1.140	2	1755	2.365
14:00 - 15:00	2	1755	0.826	2	1755	0.769	2	1755	1.595
15:00 - 16:00	2	1755	1.111	2	1755	0.969	2	1755	2.080
16:00 - 17:00	2	1755	1.054	2	1755	0.969	2	1755	2.023
17:00 - 18:00	2	1755	2.080	2	1755	1.425	2	1755	3.505
18:00 - 19:00	2	1755	1.567	2	1755	2.080	2	1755	3.647
19:00 - 20:00	2	1755	3.163	2	1755	2.166	2	1755	5.329
20:00 - 21:00	2	1755	1.824	2	1755	3.078	2	1755	4.902
21:00 - 22:00	2	1755	1.197	2	1755	1.254	2	1755	2.451
22:00 - 23:00	1	1700	0.118	1	1700	2.235	1	1700	2.353
23:00 - 24:00	1	1700	1.059	1	1700	1.529	1	1700	2.588
Total Rates:			18.128			19.323			37.451

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.057	2	1755	0.028	2	1755	0.085
11:00 - 12:00	2	1755	0.171	2	1755	0.085	2	1755	0.256
12:00 - 13:00	2	1755	1.225	2	1755	0.057	2	1755	1.282
13:00 - 14:00	2	1755	2.679	2	1755	0.313	2	1755	2.992
14:00 - 15:00	2	1755	0.655	2	1755	1.197	2	1755	1.852
15:00 - 16:00	2	1755	0.171	2	1755	0.798	2	1755	0.969
16:00 - 17:00	2	1755	0.142	2	1755	0.057	2	1755	0.199
17:00 - 18:00	2	1755	2.137	2	1755	1.738	2	1755	3.875
18:00 - 19:00	2	1755	0.342	2	1755	0.399	2	1755	0.741
19:00 - 20:00	2	1755	0.057	2	1755	0.427	2	1755	0.484
20:00 - 21:00	2	1755	0.399	2	1755	0.228	2	1755	0.627
21:00 - 22:00	2	1755	0.228	2	1755	0.000	2	1755	0.228
22:00 - 23:00	1	1700	0.176	1	1700	0.353	1	1700	0.529
23:00 - 24:00	1	1700	0.059	1	1700	0.118	1	1700	0.177
Total Rates:			8.498			5.798			14.296

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
11:00 - 12:00	2	1755	0.000	2	1755	0.285	2	1755	0.285
12:00 - 13:00	2	1755	0.028	2	1755	0.000	2	1755	0.028
13:00 - 14:00	2	1755	0.484	2	1755	1.111	2	1755	1.595
14:00 - 15:00	2	1755	0.598	2	1755	0.228	2	1755	0.826
15:00 - 16:00	2	1755	0.057	2	1755	0.940	2	1755	0.997
16:00 - 17:00	2	1755	0.000	2	1755	0.513	2	1755	0.513
17:00 - 18:00	2	1755	0.085	2	1755	0.598	2	1755	0.683
18:00 - 19:00	2	1755	0.085	2	1755	0.484	2	1755	0.569
19:00 - 20:00	2	1755	0.114	2	1755	0.285	2	1755	0.399
20:00 - 21:00	2	1755	0.228	2	1755	0.399	2	1755	0.627
21:00 - 22:00	2	1755	0.114	2	1755	0.171	2	1755	0.285
22:00 - 23:00	1	1700	0.000	1	1700	0.471	1	1700	0.471
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			1.793			5.485			7.278

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
11:00 - 12:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
12:00 - 13:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
13:00 - 14:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
14:00 - 15:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
15:00 - 16:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
16:00 - 17:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
17:00 - 18:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
18:00 - 19:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
19:00 - 20:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
20:00 - 21:00	2	1755	0.028	2	1755	0.057	2	1755	0.085
21:00 - 22:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
22:00 - 23:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			0.028			0.057			0.085

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.000	1	1809	0.000	1	1809	0.000
10:00 - 11:00	2	1755	5.700	2	1755	0.000	2	1755	5.700
11:00 - 12:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
12:00 - 13:00	2	1755	0.000	2	1755	5.700	2	1755	5.700
13:00 - 14:00	2	1755	0.912	2	1755	0.000	2	1755	0.912
14:00 - 15:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
15:00 - 16:00	2	1755	0.000	2	1755	1.539	2	1755	1.539
16:00 - 17:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
17:00 - 18:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
18:00 - 19:00	2	1755	0.000	2	1755	0.684	2	1755	0.684
19:00 - 20:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
20:00 - 21:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
21:00 - 22:00	2	1755	0.000	2	1755	0.000	2	1755	0.000
22:00 - 23:00	1	1700	1.235	1	1700	0.000	1	1700	1.235
23:00 - 24:00	1	1700	0.000	1	1700	0.000	1	1700	0.000
Total Rates:			7.847			7.923			15.770

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

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

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	1809	0.111	1	1809	0.000	1	1809	0.111
10:00 - 11:00	2	1755	6.384	2	1755	0.285	2	1755	6.669
11:00 - 12:00	2	1755	1.140	2	1755	1.026	2	1755	2.166
12:00 - 13:00	2	1755	2.451	2	1755	6.555	2	1755	9.006
13:00 - 14:00	2	1755	5.301	2	1755	2.565	2	1755	7.866
14:00 - 15:00	2	1755	2.109	2	1755	2.194	2	1755	4.303
15:00 - 16:00	2	1755	1.339	2	1755	4.246	2	1755	5.585
16:00 - 17:00	2	1755	1.225	2	1755	1.539	2	1755	2.764
17:00 - 18:00	2	1755	4.303	2	1755	3.762	2	1755	8.065
18:00 - 19:00	2	1755	1.995	2	1755	3.648	2	1755	5.643
19:00 - 20:00	2	1755	3.448	2	1755	2.878	2	1755	6.326
20:00 - 21:00	2	1755	2.479	2	1755	3.819	2	1755	6.298
21:00 - 22:00	2	1755	1.539	2	1755	1.425	2	1755	2.964
22:00 - 23:00	1	1700	1.529	1	1700	3.118	1	1700	4.647
23:00 - 24:00	1	1700	1.118	1	1700	1.647	1	1700	2.765
Total Rates:			36.471			38.707			75.178

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

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

APPENDIX 3 TRICS OUTPUTS (RETAIL)

Calculation Reference: AUDIT-728001-211101-1119

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE		
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
09	NORTH		
	CB	CUMBRIA	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: 1000 to 3127 (units: sqm)
Range Selected by User: 290 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 30/10/21

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

Selected survey days:

Monday	2 days
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.

Selected Locations:

Town Centre	1
Edge of Town Centre	1
Edge of Town	1

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:

Retail Zone	1
Built-Up Zone	2

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

Secondary Filtering selection:

Use Class:

E(a)	3 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:

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

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	3 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:

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.

LIST OF SITES relevant to selection parameters

1 CB-01-G-02 STAPLES CUMBRIA
JAMES STREET
CARLISLE

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 2500 sqm
Survey date: FRIDAY *05/02/10* *Survey Type: MANUAL*

2 CH-01-G-02 MAGNET CHESHIRE
KING EDWARD STREET
MACCLESFIELD

Town Centre
Built-Up Zone
Total Gross floor area: 1000 sqm
Survey date: MONDAY *06/11/17* *Survey Type: MANUAL*

3 SY-01-G-01 DUNELM MILL SOUTH YORKSHIRE
WOMBWELL LANE
BARNSLEY
BARNSLEY RETAIL PARK
Edge of Town
Retail Zone
Total Gross floor area: 3127 sqm
Survey date: MONDAY *21/06/10* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CA-01-G-01	Unrepresentative retail goods
HE-01-G-01	Unrepresentative retail goods
LN-01-G-01	Unrepresentative retail goods
NY-01-G-03	Limited public transport

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.143	2	1750	0.057	2	1750	0.200
08:00 - 09:00	3	2209	0.453	3	2209	0.317	3	2209	0.770
09:00 - 10:00	3	2209	1.418	3	2209	1.041	3	2209	2.459
10:00 - 11:00	3	2209	1.464	3	2209	1.343	3	2209	2.807
11:00 - 12:00	3	2209	1.856	3	2209	1.750	3	2209	3.606
12:00 - 13:00	3	2209	1.539	3	2209	1.554	3	2209	3.093
13:00 - 14:00	3	2209	1.418	3	2209	1.524	3	2209	2.942
14:00 - 15:00	3	2209	1.464	3	2209	1.237	3	2209	2.701
15:00 - 16:00	3	2209	1.192	3	2209	1.328	3	2209	2.520
16:00 - 17:00	3	2209	1.147	3	2209	1.041	3	2209	2.188
17:00 - 18:00	3	2209	0.981	3	2209	1.041	3	2209	2.022
18:00 - 19:00	2	2814	0.160	2	2814	0.409	2	2814	0.569
19:00 - 20:00	2	2814	0.000	2	2814	0.160	2	2814	0.160
20:00 - 21:00	2	2814	0.000	2	2814	0.071	2	2814	0.071
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			13.235			12.873			26.108

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.*

Parameter summary

Trip rate parameter range selected:	1000 - 3127 (units: sqm)
Survey date date range:	01/01/06 - 30/10/21
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:	4

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/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.000	2	1750	0.000	2	1750	0.000
08:00 - 09:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
09:00 - 10:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
10:00 - 11:00	3	2209	0.015	3	2209	0.000	3	2209	0.015
11:00 - 12:00	3	2209	0.000	3	2209	0.015	3	2209	0.015
12:00 - 13:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
13:00 - 14:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
14:00 - 15:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
15:00 - 16:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
16:00 - 17:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
17:00 - 18:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
18:00 - 19:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
19:00 - 20:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.015			0.030

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

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.000	2	1750	0.000	2	1750	0.000
08:00 - 09:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
09:00 - 10:00	3	2209	0.015	3	2209	0.015	3	2209	0.030
10:00 - 11:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
11:00 - 12:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
12:00 - 13:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
13:00 - 14:00	3	2209	0.015	3	2209	0.015	3	2209	0.030
14:00 - 15:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
15:00 - 16:00	3	2209	0.030	3	2209	0.030	3	2209	0.060
16:00 - 17:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
17:00 - 18:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
18:00 - 19:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
19:00 - 20:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.060			0.060			0.120

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

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.029	2	1750	0.000	2	1750	0.029
08:00 - 09:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
09:00 - 10:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
10:00 - 11:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
11:00 - 12:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
12:00 - 13:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
13:00 - 14:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
14:00 - 15:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
15:00 - 16:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
16:00 - 17:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
17:00 - 18:00	3	2209	0.000	3	2209	0.015	3	2209	0.015
18:00 - 19:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
19:00 - 20:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.015			0.044

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

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.171	2	1750	0.086	2	1750	0.257
08:00 - 09:00	3	2209	0.513	3	2209	0.332	3	2209	0.845
09:00 - 10:00	3	2209	1.826	3	2209	1.313	3	2209	3.139
10:00 - 11:00	3	2209	2.248	3	2209	1.886	3	2209	4.134
11:00 - 12:00	3	2209	2.595	3	2209	3.199	3	2209	5.794
12:00 - 13:00	3	2209	2.128	3	2209	2.158	3	2209	4.286
13:00 - 14:00	3	2209	1.931	3	2209	2.082	3	2209	4.013
14:00 - 15:00	3	2209	2.113	3	2209	1.720	3	2209	3.833
15:00 - 16:00	3	2209	1.660	3	2209	1.947	3	2209	3.607
16:00 - 17:00	3	2209	1.524	3	2209	1.524	3	2209	3.048
17:00 - 18:00	3	2209	1.373	3	2209	1.494	3	2209	2.867
18:00 - 19:00	2	2814	0.231	2	2814	0.551	2	2814	0.782
19:00 - 20:00	2	2814	0.000	2	2814	0.231	2	2814	0.231
20:00 - 21:00	2	2814	0.000	2	2814	0.071	2	2814	0.071
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			18.313			18.594			36.907

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

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.114	2	1750	0.086	2	1750	0.200
08:00 - 09:00	3	2209	0.121	3	2209	0.121	3	2209	0.242
09:00 - 10:00	3	2209	0.075	3	2209	0.121	3	2209	0.196
10:00 - 11:00	3	2209	0.060	3	2209	0.106	3	2209	0.166
11:00 - 12:00	3	2209	0.075	3	2209	0.091	3	2209	0.166
12:00 - 13:00	3	2209	0.121	3	2209	0.106	3	2209	0.227
13:00 - 14:00	3	2209	0.151	3	2209	0.121	3	2209	0.272
14:00 - 15:00	3	2209	0.241	3	2209	0.181	3	2209	0.422
15:00 - 16:00	3	2209	0.030	3	2209	0.060	3	2209	0.090
16:00 - 17:00	3	2209	0.030	3	2209	0.045	3	2209	0.075
17:00 - 18:00	3	2209	0.030	3	2209	0.030	3	2209	0.060
18:00 - 19:00	2	2814	0.053	2	2814	0.018	2	2814	0.071
19:00 - 20:00	2	2814	0.000	2	2814	0.053	2	2814	0.053
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.101			1.139			2.240

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

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.000	2	1750	0.000	2	1750	0.000
08:00 - 09:00	3	2209	0.015	3	2209	0.000	3	2209	0.015
09:00 - 10:00	3	2209	0.015	3	2209	0.015	3	2209	0.030
10:00 - 11:00	3	2209	0.015	3	2209	0.000	3	2209	0.015
11:00 - 12:00	3	2209	0.030	3	2209	0.000	3	2209	0.030
12:00 - 13:00	3	2209	0.060	3	2209	0.045	3	2209	0.105
13:00 - 14:00	3	2209	0.030	3	2209	0.015	3	2209	0.045
14:00 - 15:00	3	2209	0.060	3	2209	0.075	3	2209	0.135
15:00 - 16:00	3	2209	0.015	3	2209	0.030	3	2209	0.045
16:00 - 17:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
17:00 - 18:00	3	2209	0.000	3	2209	0.015	3	2209	0.015
18:00 - 19:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
19:00 - 20:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.240			0.195			0.435

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.

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.000	2	1750	0.000	2	1750	0.000
08:00 - 09:00	3	2209	0.015	3	2209	0.000	3	2209	0.015
09:00 - 10:00	3	2209	0.015	3	2209	0.015	3	2209	0.030
10:00 - 11:00	3	2209	0.015	3	2209	0.000	3	2209	0.015
11:00 - 12:00	3	2209	0.030	3	2209	0.000	3	2209	0.030
12:00 - 13:00	3	2209	0.060	3	2209	0.045	3	2209	0.105
13:00 - 14:00	3	2209	0.030	3	2209	0.015	3	2209	0.045
14:00 - 15:00	3	2209	0.060	3	2209	0.075	3	2209	0.135
15:00 - 16:00	3	2209	0.015	3	2209	0.030	3	2209	0.045
16:00 - 17:00	3	2209	0.000	3	2209	0.000	3	2209	0.000
17:00 - 18:00	3	2209	0.000	3	2209	0.015	3	2209	0.015
18:00 - 19:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
19:00 - 20:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
20:00 - 21:00	2	2814	0.000	2	2814	0.000	2	2814	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.240			0.195			0.435

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.

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

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1750	0.314	2	1750	0.171	2	1750	0.485
08:00 - 09:00	3	2209	0.649	3	2209	0.453	3	2209	1.102
09:00 - 10:00	3	2209	1.916	3	2209	1.449	3	2209	3.365
10:00 - 11:00	3	2209	2.324	3	2209	1.992	3	2209	4.316
11:00 - 12:00	3	2209	2.701	3	2209	3.290	3	2209	5.991
12:00 - 13:00	3	2209	2.309	3	2209	2.309	3	2209	4.618
13:00 - 14:00	3	2209	2.113	3	2209	2.218	3	2209	4.331
14:00 - 15:00	3	2209	2.414	3	2209	1.977	3	2209	4.391
15:00 - 16:00	3	2209	1.705	3	2209	2.037	3	2209	3.742
16:00 - 17:00	3	2209	1.554	3	2209	1.569	3	2209	3.123
17:00 - 18:00	3	2209	1.403	3	2209	1.554	3	2209	2.957
18:00 - 19:00	2	2814	0.284	2	2814	0.569	2	2814	0.853
19:00 - 20:00	2	2814	0.000	2	2814	0.284	2	2814	0.284
20:00 - 21:00	2	2814	0.000	2	2814	0.071	2	2814	0.071
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			19.686			19.943			39.629

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

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

APPENDIX 4 TRICS OUTPUTS (RESIDENTIAL)

Calculation Reference: AUDIT-728001-211101-1137

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	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: 20 to 154 (units:)
Range Selected by User: 6 to 184 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 06/01/06 to 10/06/21

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:

Thursday	2 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.

Selected Locations:

Town Centre	2
Edge of Town Centre	1

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:

Built-Up Zone	3

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

Secondary Filtering selection:

Use Class:

C3	3 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:

25,001 to 50,000	3 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days

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

Travel Plan:

Yes	1 days
No	2 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.

LIST OF SITES relevant to selection parameters

1 GM-03-C-02 BLOCK OF FLATS GREATER MANCHESTER
WHITWORTH STREET W.
MANCHESTER

Town Centre
Built-Up Zone
Total No of Dwellings: 154
Survey date: THURSDAY *13/10/11* *Survey Type: MANUAL*

2 GM-03-C-03 BLOCK OF FLATS GREATER MANCHESTER
FAIRFIELD STREET
MANCHESTER

Town Centre
Built-Up Zone
Total No of Dwellings: 20
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

3 HF-03-C-03 BLOCK OF FLATS HERTFORDSHIRE
SHENLEY ROAD
BOREHAMWOOD

Edge of Town Centre
Built-Up Zone
Total No of Dwellings: 91
Survey date: THURSDAY *14/11/19* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CA-03-C-03	Disproportionate level of parking
CO-03-C-01	Disproportionate level of parking
HC-03-C-01	Disproportionate level of parking
MS-03-C-02	Disproportionate level of parking
MS-03-C-03	Disproportionate level of parking
NF-03-C-02	Disproportionate level of parking
OX-03-C-01	Disproportionate level of parking
TV-03-C-01	Disproportionate level of parking

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.004	3	88	0.045	3	88	0.049
08:00 - 09:00	3	88	0.008	3	88	0.072	3	88	0.080
09:00 - 10:00	3	88	0.015	3	88	0.045	3	88	0.060
10:00 - 11:00	3	88	0.026	3	88	0.034	3	88	0.060
11:00 - 12:00	3	88	0.026	3	88	0.026	3	88	0.052
12:00 - 13:00	3	88	0.038	3	88	0.042	3	88	0.080
13:00 - 14:00	3	88	0.038	3	88	0.030	3	88	0.068
14:00 - 15:00	3	88	0.023	3	88	0.030	3	88	0.053
15:00 - 16:00	3	88	0.034	3	88	0.015	3	88	0.049
16:00 - 17:00	3	88	0.026	3	88	0.011	3	88	0.037
17:00 - 18:00	3	88	0.075	3	88	0.019	3	88	0.094
18:00 - 19:00	3	88	0.060	3	88	0.026	3	88	0.086
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.373			0.395			0.768

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.*

Parameter summary

Trip rate parameter range selected:	20 - 154 (units:)
Survey date date range:	06/01/06 - 10/06/21
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	8

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.000	3	88	0.000	3	88	0.000
08:00 - 09:00	3	88	0.000	3	88	0.000	3	88	0.000
09:00 - 10:00	3	88	0.000	3	88	0.000	3	88	0.000
10:00 - 11:00	3	88	0.000	3	88	0.000	3	88	0.000
11:00 - 12:00	3	88	0.000	3	88	0.000	3	88	0.000
12:00 - 13:00	3	88	0.004	3	88	0.004	3	88	0.008
13:00 - 14:00	3	88	0.004	3	88	0.004	3	88	0.008
14:00 - 15:00	3	88	0.000	3	88	0.000	3	88	0.000
15:00 - 16:00	3	88	0.000	3	88	0.000	3	88	0.000
16:00 - 17:00	3	88	0.000	3	88	0.000	3	88	0.000
17:00 - 18:00	3	88	0.000	3	88	0.000	3	88	0.000
18:00 - 19:00	3	88	0.000	3	88	0.000	3	88	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.000	3	88	0.008	3	88	0.008
08:00 - 09:00	3	88	0.000	3	88	0.008	3	88	0.008
09:00 - 10:00	3	88	0.004	3	88	0.008	3	88	0.012
10:00 - 11:00	3	88	0.000	3	88	0.000	3	88	0.000
11:00 - 12:00	3	88	0.000	3	88	0.000	3	88	0.000
12:00 - 13:00	3	88	0.000	3	88	0.011	3	88	0.011
13:00 - 14:00	3	88	0.004	3	88	0.000	3	88	0.004
14:00 - 15:00	3	88	0.000	3	88	0.004	3	88	0.004
15:00 - 16:00	3	88	0.000	3	88	0.000	3	88	0.000
16:00 - 17:00	3	88	0.000	3	88	0.000	3	88	0.000
17:00 - 18:00	3	88	0.015	3	88	0.000	3	88	0.015
18:00 - 19:00	3	88	0.008	3	88	0.000	3	88	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.031			0.039			0.070

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.004	3	88	0.057	3	88	0.061
08:00 - 09:00	3	88	0.011	3	88	0.087	3	88	0.098
09:00 - 10:00	3	88	0.015	3	88	0.053	3	88	0.068
10:00 - 11:00	3	88	0.030	3	88	0.042	3	88	0.072
11:00 - 12:00	3	88	0.030	3	88	0.030	3	88	0.060
12:00 - 13:00	3	88	0.049	3	88	0.053	3	88	0.102
13:00 - 14:00	3	88	0.045	3	88	0.030	3	88	0.075
14:00 - 15:00	3	88	0.030	3	88	0.030	3	88	0.060
15:00 - 16:00	3	88	0.034	3	88	0.015	3	88	0.049
16:00 - 17:00	3	88	0.030	3	88	0.011	3	88	0.041
17:00 - 18:00	3	88	0.094	3	88	0.019	3	88	0.113
18:00 - 19:00	3	88	0.072	3	88	0.038	3	88	0.110
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.444			0.465			0.909

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.000	3	88	0.026	3	88	0.026
08:00 - 09:00	3	88	0.023	3	88	0.192	3	88	0.215
09:00 - 10:00	3	88	0.030	3	88	0.158	3	88	0.188
10:00 - 11:00	3	88	0.060	3	88	0.049	3	88	0.109
11:00 - 12:00	3	88	0.079	3	88	0.113	3	88	0.192
12:00 - 13:00	3	88	0.136	3	88	0.140	3	88	0.276
13:00 - 14:00	3	88	0.143	3	88	0.098	3	88	0.241
14:00 - 15:00	3	88	0.117	3	88	0.091	3	88	0.208
15:00 - 16:00	3	88	0.121	3	88	0.106	3	88	0.227
16:00 - 17:00	3	88	0.215	3	88	0.215	3	88	0.430
17:00 - 18:00	3	88	0.287	3	88	0.128	3	88	0.415
18:00 - 19:00	3	88	0.140	3	88	0.011	3	88	0.151
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.351			1.327			2.678

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.000	3	88	0.023	3	88	0.023
08:00 - 09:00	3	88	0.000	3	88	0.053	3	88	0.053
09:00 - 10:00	3	88	0.004	3	88	0.034	3	88	0.038
10:00 - 11:00	3	88	0.008	3	88	0.015	3	88	0.023
11:00 - 12:00	3	88	0.015	3	88	0.008	3	88	0.023
12:00 - 13:00	3	88	0.008	3	88	0.026	3	88	0.034
13:00 - 14:00	3	88	0.008	3	88	0.008	3	88	0.016
14:00 - 15:00	3	88	0.015	3	88	0.008	3	88	0.023
15:00 - 16:00	3	88	0.057	3	88	0.023	3	88	0.080
16:00 - 17:00	3	88	0.057	3	88	0.015	3	88	0.072
17:00 - 18:00	3	88	0.045	3	88	0.008	3	88	0.053
18:00 - 19:00	3	88	0.015	3	88	0.000	3	88	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.232			0.221			0.453

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.000	3	88	0.042	3	88	0.042
08:00 - 09:00	3	88	0.004	3	88	0.064	3	88	0.068
09:00 - 10:00	3	88	0.000	3	88	0.019	3	88	0.019
10:00 - 11:00	3	88	0.004	3	88	0.004	3	88	0.008
11:00 - 12:00	3	88	0.011	3	88	0.011	3	88	0.022
12:00 - 13:00	3	88	0.000	3	88	0.026	3	88	0.026
13:00 - 14:00	3	88	0.000	3	88	0.011	3	88	0.011
14:00 - 15:00	3	88	0.011	3	88	0.000	3	88	0.011
15:00 - 16:00	3	88	0.011	3	88	0.000	3	88	0.011
16:00 - 17:00	3	88	0.015	3	88	0.019	3	88	0.034
17:00 - 18:00	3	88	0.128	3	88	0.008	3	88	0.136
18:00 - 19:00	3	88	0.042	3	88	0.004	3	88	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.226			0.208			0.434

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	88	0.004	3	88	0.155	3	88	0.159
08:00 - 09:00	3	88	0.038	3	88	0.404	3	88	0.442
09:00 - 10:00	3	88	0.053	3	88	0.272	3	88	0.325
10:00 - 11:00	3	88	0.098	3	88	0.109	3	88	0.207
11:00 - 12:00	3	88	0.128	3	88	0.162	3	88	0.290
12:00 - 13:00	3	88	0.192	3	88	0.257	3	88	0.449
13:00 - 14:00	3	88	0.204	3	88	0.147	3	88	0.351
14:00 - 15:00	3	88	0.170	3	88	0.132	3	88	0.302
15:00 - 16:00	3	88	0.226	3	88	0.143	3	88	0.369
16:00 - 17:00	3	88	0.317	3	88	0.260	3	88	0.577
17:00 - 18:00	3	88	0.570	3	88	0.162	3	88	0.732
18:00 - 19:00	3	88	0.283	3	88	0.053	3	88	0.336
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.283			2.256			4.539

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

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

APPENDIX 5 TRICS OUTPUTS (RESTAURANT)

Calculation Reference: AUDIT-728001-211102-1149

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : B - RESTAURANTS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	DC	DORSET	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	2 days
08	NORTH WEST		
	MS	MERSEYSIDE	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: 175 to 1136 (units: sqm)
Range Selected by User: 75 to 1136 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 31/10/21

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:

Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	3 days

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

Selected survey types:

Manual count	7 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:

Town Centre	3
Edge of Town Centre	3
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Development Zone	2
Built-Up Zone	1
High Street	3
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

E(b)	7 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:

10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

25,001 to 50,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	3 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	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	7 days

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

LIST OF SITES relevant to selection parameters

1 DC-06-B-01 PIZZA EXPRESS DORSET
HIGH STREET
POOLE

Town Centre
No Sub Category
Total Gross floor area: 178 sqm
Survey date: FRIDAY *18/07/08* *Survey Type: MANUAL*

2 DC-06-B-02 PREZZO DORSET
HIGH WEST STREET
DORCHESTER

Town Centre
High Street
Total Gross floor area: 525 sqm
Survey date: FRIDAY *16/09/16* *Survey Type: MANUAL*

3 DS-06-B-04 FRENCH RESTAURANT DERBYSHIRE
FRIAR GATE
DERBY

Town Centre
High Street
Total Gross floor area: 180 sqm
Survey date: WEDNESDAY *25/09/19* *Survey Type: MANUAL*

4 LN-06-B-01 PREZZO LINCOLNSHIRE
BRAYFORD WHARF NORTH
LINCOLN
BRAYFORD WHARF
Edge of Town Centre
Development Zone
Total Gross floor area: 1136 sqm
Survey date: TUESDAY *10/10/17* *Survey Type: MANUAL*

5 MS-06-B-01 INDIAN RESTAURANT MERSEYSIDE
GOWER STREET
LIVERPOOL
ALBERT DOCK
Edge of Town Centre
Development Zone
Total Gross floor area: 600 sqm
Survey date: FRIDAY *22/06/07* *Survey Type: MANUAL*

6 WM-06-B-05 AKBARS WEST MIDLANDS
THE BUTTS
COVENTRY

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 600 sqm
Survey date: THURSDAY *17/11/16* *Survey Type: MANUAL*

7 WM-06-B-06 ITALIAN RESTAURANT WEST MIDLANDS
EARLSDON STREET
COVENTRY

Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 175 sqm
Survey date: THURSDAY *24/11/16* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CF-06-B-01	Shopping centre location
DH-06-B-01	Disproportionate level of parking
GM-06-B-03	Unrepresentative trading nature
WM-06-B-04	Shopping centre location
WM-06-B-07	Disproportionate level of parking

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142
10:00 - 11:00	4	370	0.135	4	370	0.000	4	370	0.135
11:00 - 12:00	6	466	0.573	6	466	0.322	6	466	0.895
12:00 - 13:00	6	466	1.432	6	466	0.215	6	466	1.647
13:00 - 14:00	6	466	1.145	6	466	1.074	6	466	2.219
14:00 - 15:00	6	466	0.537	6	466	1.074	6	466	1.611
15:00 - 16:00	6	466	0.358	6	466	0.501	6	466	0.859
16:00 - 17:00	7	485	0.236	7	485	0.177	7	485	0.413
17:00 - 18:00	7	485	1.061	7	485	0.265	7	485	1.326
18:00 - 19:00	7	485	1.886	7	485	1.031	7	485	2.917
19:00 - 20:00	7	485	2.004	7	485	1.473	7	485	3.477
20:00 - 21:00	7	485	0.796	7	485	1.385	7	485	2.181
21:00 - 22:00	7	485	0.295	7	485	1.296	7	485	1.591
22:00 - 23:00	7	485	0.177	7	485	1.208	7	485	1.385
23:00 - 24:00	6	536	0.062	6	536	0.311	6	536	0.373
Total Rates:			11.268			10.903			22.171

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.*

Parameter summary

Trip rate parameter range selected:	175 - 1136 (units: sqm)
Survey date date range:	01/01/06 - 31/10/21
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

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 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000
10:00 - 11:00	4	370	0.000	4	370	0.000	4	370	0.000
11:00 - 12:00	6	466	0.000	6	466	0.000	6	466	0.000
12:00 - 13:00	6	466	0.107	6	466	0.107	6	466	0.214
13:00 - 14:00	6	466	0.107	6	466	0.107	6	466	0.214
14:00 - 15:00	6	466	0.036	6	466	0.036	6	466	0.072
15:00 - 16:00	6	466	0.000	6	466	0.000	6	466	0.000
16:00 - 17:00	7	485	0.000	7	485	0.000	7	485	0.000
17:00 - 18:00	7	485	0.147	7	485	0.088	7	485	0.235
18:00 - 19:00	7	485	0.236	7	485	0.295	7	485	0.531
19:00 - 20:00	7	485	0.354	7	485	0.354	7	485	0.708
20:00 - 21:00	7	485	0.088	7	485	0.088	7	485	0.176
21:00 - 22:00	7	485	0.029	7	485	0.029	7	485	0.058
22:00 - 23:00	7	485	0.059	7	485	0.029	7	485	0.088
23:00 - 24:00	6	536	0.031	6	536	0.062	6	536	0.093
Total Rates:			1.194			1.195			2.389

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142
10:00 - 11:00	4	370	0.135	4	370	0.000	4	370	0.135
11:00 - 12:00	6	466	0.895	6	466	0.394	6	466	1.289
12:00 - 13:00	6	466	2.649	6	466	0.286	6	466	2.935
13:00 - 14:00	6	466	2.505	6	466	2.183	6	466	4.688
14:00 - 15:00	6	466	1.396	6	466	2.398	6	466	3.794
15:00 - 16:00	6	466	0.608	6	466	1.074	6	466	1.682
16:00 - 17:00	7	485	0.589	7	485	0.412	7	485	1.001
17:00 - 18:00	7	485	2.387	7	485	0.560	7	485	2.947
18:00 - 19:00	7	485	3.565	7	485	1.974	7	485	5.539
19:00 - 20:00	7	485	3.978	7	485	3.329	7	485	7.307
20:00 - 21:00	7	485	1.532	7	485	2.593	7	485	4.125
21:00 - 22:00	7	485	0.530	7	485	2.534	7	485	3.064
22:00 - 23:00	7	485	0.265	7	485	2.269	7	485	2.534
23:00 - 24:00	6	536	0.062	6	536	0.747	6	536	0.809
Total Rates:			21.667			21.324			42.991

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	0.571	1	175	0.000	1	175	0.571
10:00 - 11:00	4	370	0.271	4	370	0.135	4	370	0.406
11:00 - 12:00	6	466	0.251	6	466	0.251	6	466	0.502
12:00 - 13:00	6	466	1.360	6	466	0.143	6	466	1.503
13:00 - 14:00	6	466	0.716	6	466	1.110	6	466	1.826
14:00 - 15:00	6	466	0.215	6	466	1.288	6	466	1.503
15:00 - 16:00	6	466	0.251	6	466	0.358	6	466	0.609
16:00 - 17:00	7	485	0.383	7	485	0.177	7	485	0.560
17:00 - 18:00	7	485	0.825	7	485	0.177	7	485	1.002
18:00 - 19:00	7	485	1.709	7	485	0.354	7	485	2.063
19:00 - 20:00	7	485	2.062	7	485	1.061	7	485	3.123
20:00 - 21:00	7	485	1.267	7	485	1.208	7	485	2.475
21:00 - 22:00	7	485	0.501	7	485	1.591	7	485	2.092
22:00 - 23:00	7	485	0.088	7	485	1.945	7	485	2.033
23:00 - 24:00	6	536	0.031	6	536	0.156	6	536	0.187
Total Rates:			10.501			9.954			20.455

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	1.143	1	175	0.000	1	175	1.143
10:00 - 11:00	4	370	0.203	4	370	0.135	4	370	0.338
11:00 - 12:00	6	466	0.143	6	466	0.036	6	466	0.179
12:00 - 13:00	6	466	0.465	6	466	0.000	6	466	0.465
13:00 - 14:00	6	466	0.107	6	466	0.179	6	466	0.286
14:00 - 15:00	6	466	0.072	6	466	0.322	6	466	0.394
15:00 - 16:00	6	466	0.036	6	466	0.036	6	466	0.072
16:00 - 17:00	7	485	0.147	7	485	0.059	7	485	0.206
17:00 - 18:00	7	485	0.265	7	485	0.088	7	485	0.353
18:00 - 19:00	7	485	0.678	7	485	0.206	7	485	0.884
19:00 - 20:00	7	485	0.796	7	485	0.471	7	485	1.267
20:00 - 21:00	7	485	0.354	7	485	0.295	7	485	0.649
21:00 - 22:00	7	485	0.029	7	485	0.913	7	485	0.942
22:00 - 23:00	7	485	0.000	7	485	0.530	7	485	0.530
23:00 - 24:00	6	536	0.000	6	536	0.156	6	536	0.156
Total Rates:			4.438			3.426			7.864

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	0.000	1	175	0.000	1	175	0.000
10:00 - 11:00	4	370	0.000	4	370	0.000	4	370	0.000
11:00 - 12:00	6	466	0.036	6	466	0.000	6	466	0.036
12:00 - 13:00	6	466	0.000	6	466	0.000	6	466	0.000
13:00 - 14:00	6	466	0.143	6	466	0.000	6	466	0.143
14:00 - 15:00	6	466	0.036	6	466	0.179	6	466	0.215
15:00 - 16:00	6	466	0.000	6	466	0.000	6	466	0.000
16:00 - 17:00	7	485	0.000	7	485	0.000	7	485	0.000
17:00 - 18:00	7	485	0.000	7	485	0.059	7	485	0.059
18:00 - 19:00	7	485	0.088	7	485	0.000	7	485	0.088
19:00 - 20:00	7	485	0.206	7	485	0.118	7	485	0.324
20:00 - 21:00	7	485	0.118	7	485	0.000	7	485	0.118
21:00 - 22:00	7	485	0.000	7	485	0.147	7	485	0.147
22:00 - 23:00	7	485	0.000	7	485	0.088	7	485	0.088
23:00 - 24:00	6	536	0.000	6	536	0.062	6	536	0.062
Total Rates:			0.627			0.653			1.280

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	1.143	1	175	0.000	1	175	1.143
10:00 - 11:00	4	370	0.203	4	370	0.135	4	370	0.338
11:00 - 12:00	6	466	0.179	6	466	0.036	6	466	0.215
12:00 - 13:00	6	466	0.465	6	466	0.000	6	466	0.465
13:00 - 14:00	6	466	0.251	6	466	0.179	6	466	0.430
14:00 - 15:00	6	466	0.107	6	466	0.501	6	466	0.608
15:00 - 16:00	6	466	0.036	6	466	0.036	6	466	0.072
16:00 - 17:00	7	485	0.147	7	485	0.059	7	485	0.206
17:00 - 18:00	7	485	0.265	7	485	0.147	7	485	0.412
18:00 - 19:00	7	485	0.766	7	485	0.206	7	485	0.972
19:00 - 20:00	7	485	1.002	7	485	0.589	7	485	1.591
20:00 - 21:00	7	485	0.471	7	485	0.295	7	485	0.766
21:00 - 22:00	7	485	0.029	7	485	1.061	7	485	1.090
22:00 - 23:00	7	485	0.000	7	485	0.619	7	485	0.619
23:00 - 24:00	6	536	0.000	6	536	0.218	6	536	0.218
Total Rates:			5.064			4.081			9.145

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

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	175	2.286	1	175	0.571	1	175	2.857
10:00 - 11:00	4	370	0.609	4	370	0.271	4	370	0.880
11:00 - 12:00	6	466	1.324	6	466	0.680	6	466	2.004
12:00 - 13:00	6	466	4.474	6	466	0.429	6	466	4.903
13:00 - 14:00	6	466	3.472	6	466	3.472	6	466	6.944
14:00 - 15:00	6	466	1.718	6	466	4.188	6	466	5.906
15:00 - 16:00	6	466	0.895	6	466	1.467	6	466	2.362
16:00 - 17:00	7	485	1.120	7	485	0.648	7	485	1.768
17:00 - 18:00	7	485	3.477	7	485	0.884	7	485	4.361
18:00 - 19:00	7	485	6.040	7	485	2.534	7	485	8.574
19:00 - 20:00	7	485	7.042	7	485	4.979	7	485	12.021
20:00 - 21:00	7	485	3.270	7	485	4.095	7	485	7.365
21:00 - 22:00	7	485	1.061	7	485	5.186	7	485	6.247
22:00 - 23:00	7	485	0.354	7	485	4.832	7	485	5.186
23:00 - 24:00	6	536	0.093	6	536	1.120	6	536	1.213
Total Rates:			37.235			35.356			72.591

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

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

APPENDIX 6 TECHNICAL DRAWINGS

ALTERATIONS TO ACCESS.

DELIVERY BAYS FOR SMALLER POSTAL/COURIER VEHICLES AND SUPERMARKET DELIVERIES (SEE INSET).

RESIDENTIAL REFUSE COLLECTION POINT.

IMPROVED BUS STOP FACILITIES TO ACCESS PARK AND RIDE SERVICE.

ROUTE FOR OCCASIONAL LARGE DELIVERIES TO RESIDENTIAL BLOCKS.

DROPPED KERB AND BOLLARDS FOR EMERGENCY ACCESS.

LOADING BAY FOR FRONTAGE RETAIL AND OCCASIONAL LARGER RESIDENTIAL DELIVERIES (FURNITURE ETC.).

IMPROVED BUS STOP FACILITIES TO ACCESS PARK AND RIDE SERVICE.

VEHICULAR ACCESS TO CAR PARKING AND REAR SERVICING/DELIVERIES.

CENTRAL POST ROOM/ COLLECTION POINT.

RETAIL BINS TO BE RELOCATED TO COLLECTION POINT ON COLLECTION DAYS.

MANAGEMENT COMPANY TO TRANSFER BINS TO THE COLLECTION AREA WHEN NEEDED.

TURNING HEAD.

RESIDENTIAL BIN STORE/ COLLECTION POINT.

LAY-BY FOR SERVICING/DELIVERIES OF ALL COMMERCIAL/RETAIL UNITS FROM HAVEN ROAD.

EXISTING VEHICULAR ACCESS CLOSED.

REFUSE AND DELIVERY ACCESS FOR ACTIVITY CENTRE RETAINED.

REFUSE COLLECTION POINT.

ALL BINS TO BE RELOCATED TO COLLECTION POINT ON COLLECTION DAYS.

REAR SERVICING/DELIVERIES.

REAR SERVICING/DELIVERIES.

BIN STORE AND COLLECTION POINT.

NOTES

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- SITE BOUNDARY
- DELIVERY/SERVICE VEHICLE ROUTING
- DELIVERY BAYS
- ROUTES TO REFUSE COLLECTION POINTS (MANAGEMENT COMPANY)
- REFUSE COLLECTION ROUTE
- DELIVERY ROUTE

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P6	SAJ	UPDATED SITE LAYOUT & SERVICING	20/07/22
P5	SAJ	HIGHWAY BOUNDARY ADDED	04/05/22
P4	SAJ	UPDATED SITE LAYOUT & SERVICING	25/04/22
P3	DLH	UPDATED SITE LAYOUT & SERVICING	18/03/22
P2	SAJ	UPDATED SITE LAYOUT & SERVICING	01/02/22
P1	DLH	FIRST ISSUE	17/01/22

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Client: CoPlan Estates Limited

Project: Haven Road, Exeter

Drawing title: Proposed Servicing Arrangements Overview

Drawing No.: 2021/5945/006 Rev.: P6

Scale: 1:500 Drawn By: SJ Checked By: NR A2

REFUSE COLLECTION POINT.

DELIVERY BAYS FOR BLOCK D.

5.0 METRE WIDE ACCESS ROAD.

ACCESS RETAINED AS EXISTING.

DROPPED KERB EXTENDED TO ASSIST REFUSE COLLECTION.

EXTENT OF DROPPED KERB RETAINED.

PROPOSED ACCESS ARRANGEMENTS (SCALE 1:250)

3.5T DELIVERY VEHICLE TURNING ON SITE (1:500)

4.6T DELIVERY VEHICLE TURNING ON SITE (1:500)

REFUSE VEHICLE SERVICING VIA WATER LANE CLEAR OF THROUGH TRAFFIC

NOTES

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RESIDUAL HAZARDS

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It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22

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30 Stamford Street, London, SE1 9LQ
Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

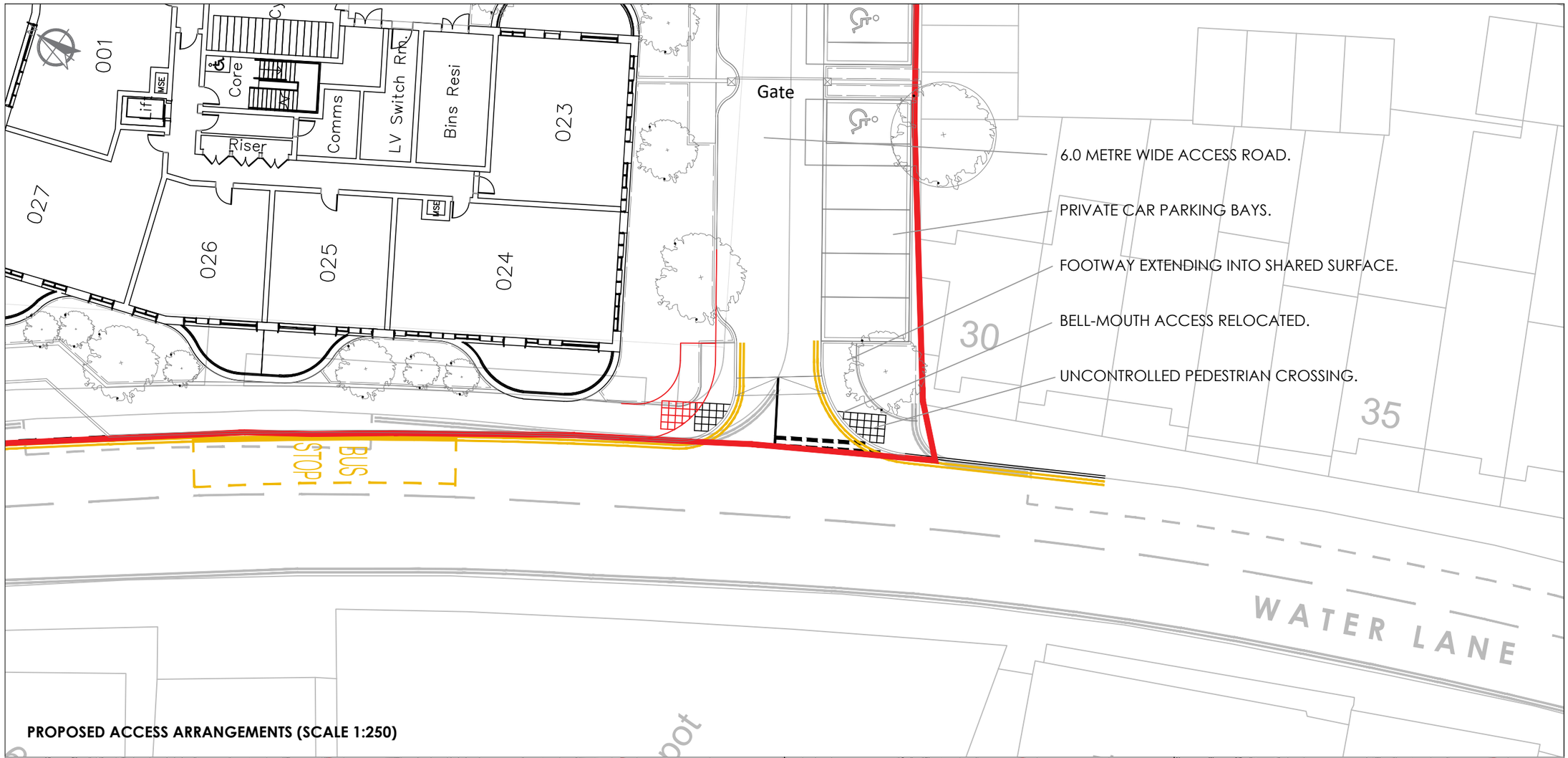
Client: CoPlan Estates Limited

Project: Haven Road, Exeter

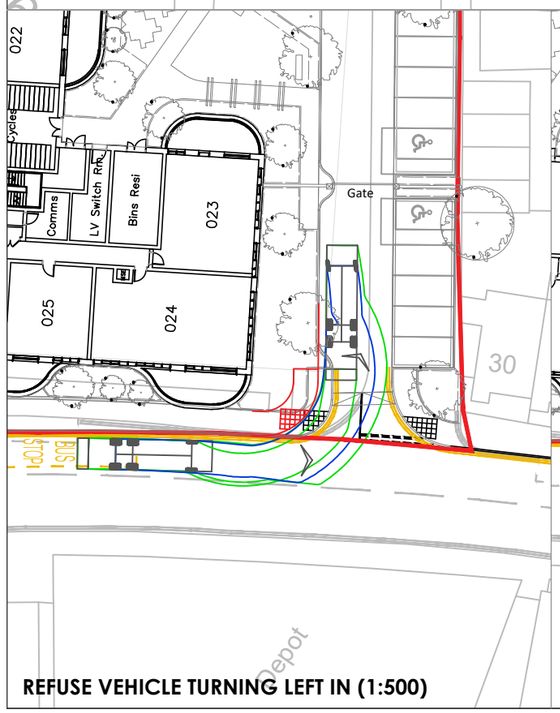
Drawing Title: Proposed Servicing Arrangements Water Lane (Northern Access)

Drawing No.	Rev.
2021/5945/009	P1

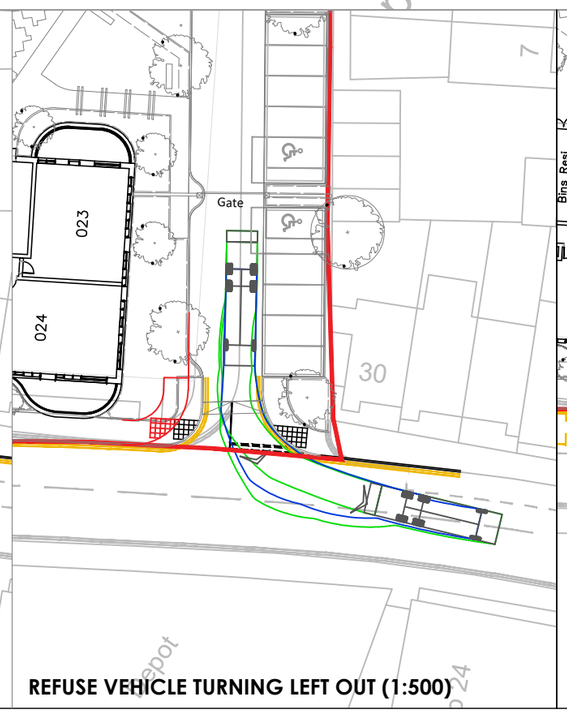
Scale	Drawn By	Checked By	
As Shown	SAJ	NDR	A3



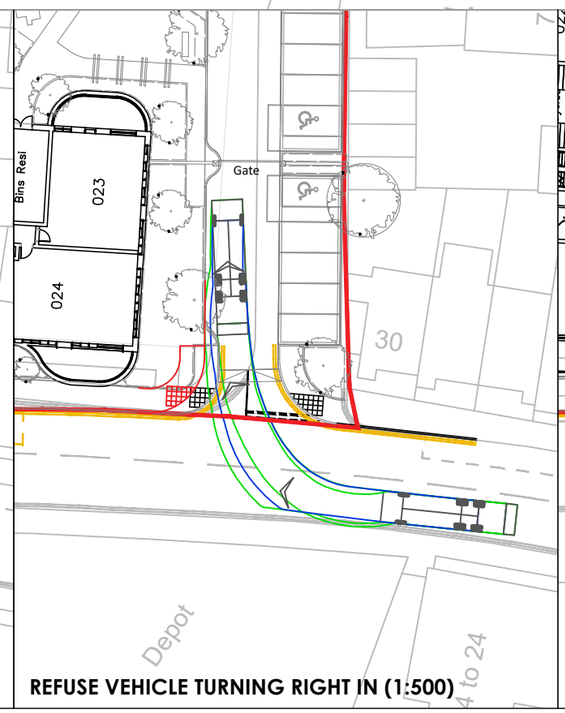
PROPOSED ACCESS ARRANGEMENTS (SCALE 1:250)



REFUSE VEHICLE TURNING LEFT IN (1:500)



REFUSE VEHICLE TURNING LEFT OUT (1:500)



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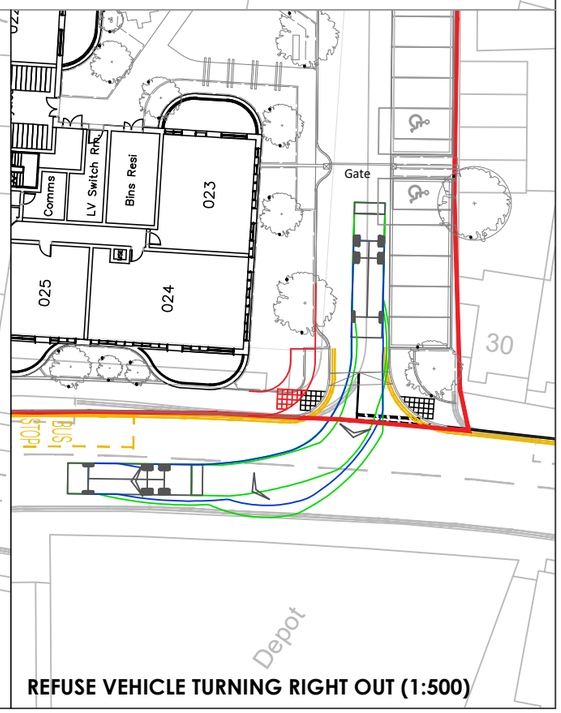

REFUSE VEHICLE TURNING RIGHT OUT (1:500)

NOTES

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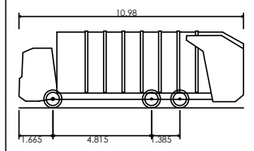
SITE BOUNDARY



Phoenix 2 One-Pass (with Elite 6x4 chassis)

Overall Length	10.980m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.000m

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22

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30 Stamford Street, London, SE1 9LQ
Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

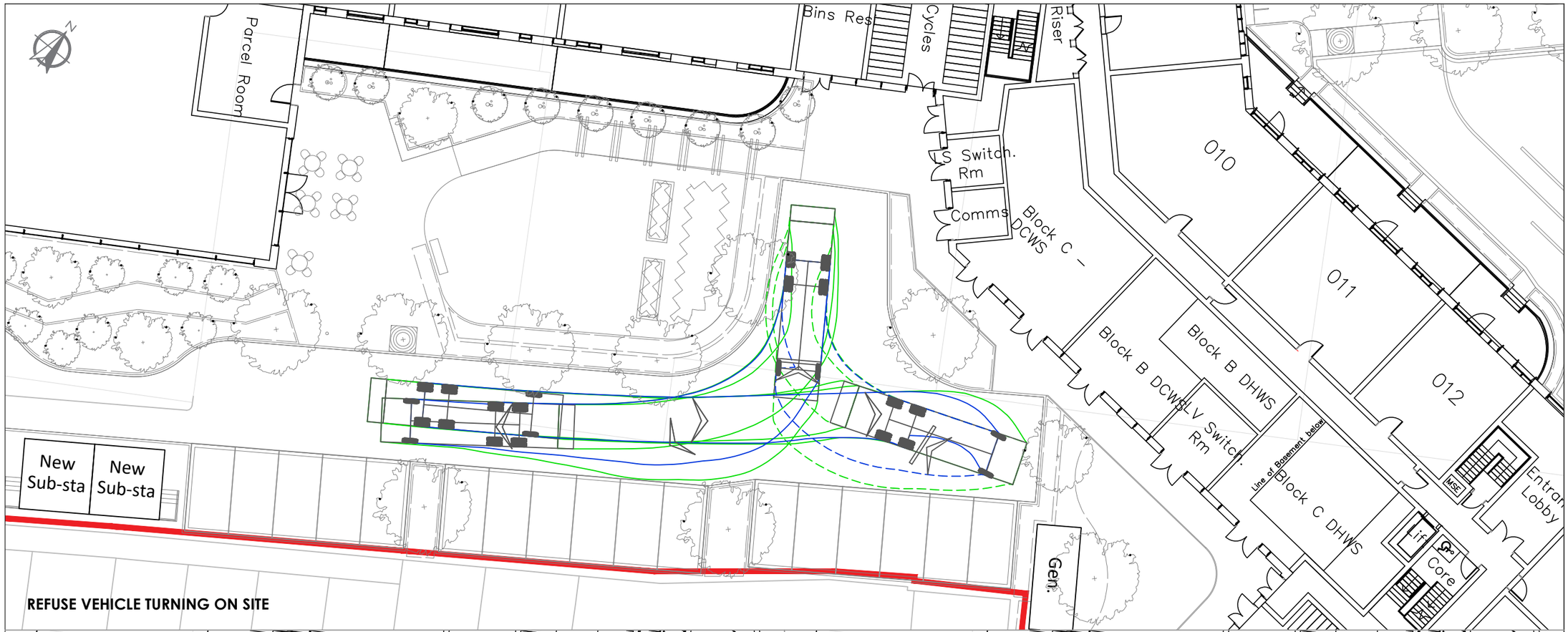
Client: CoPlan Estates Limited

Project: Haven Road, Exeter

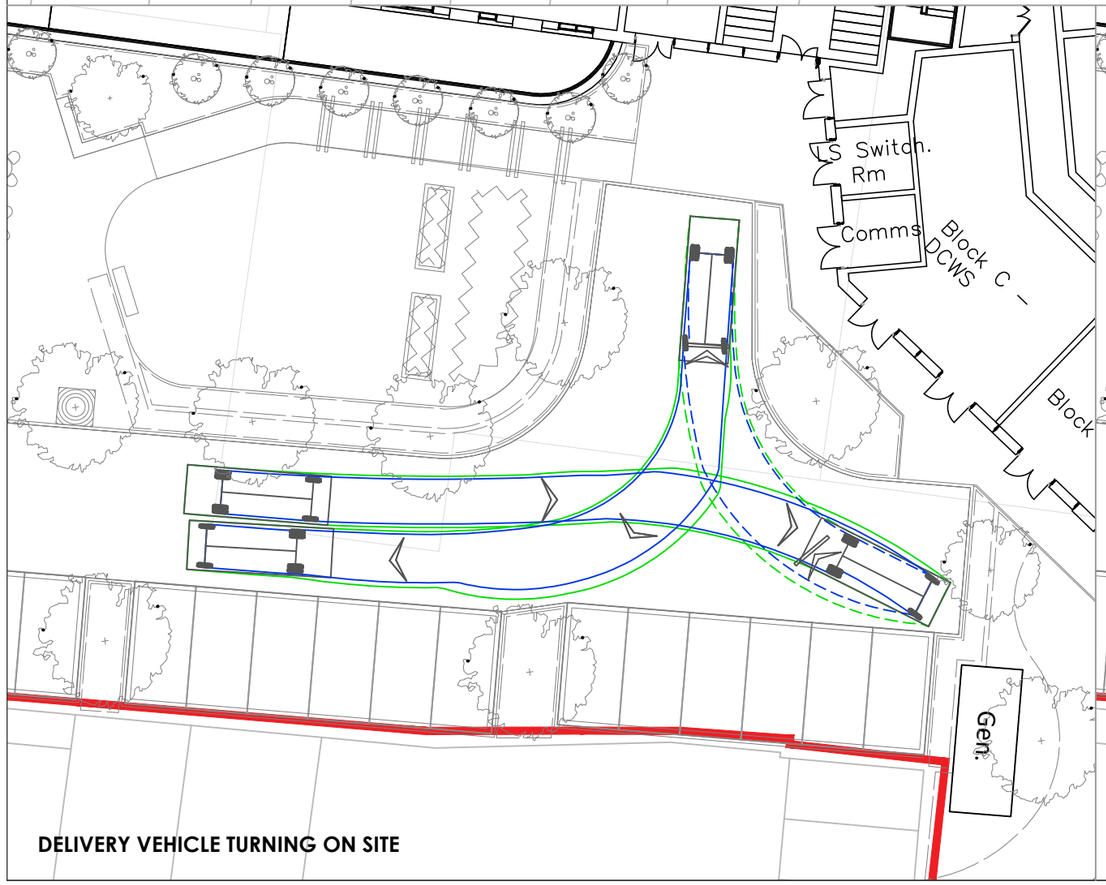
Drawing Title: Proposed Servicing Arrangements Water Lane (Southern Access)

Drawing No.	Rev.
2021/5945/010	P1

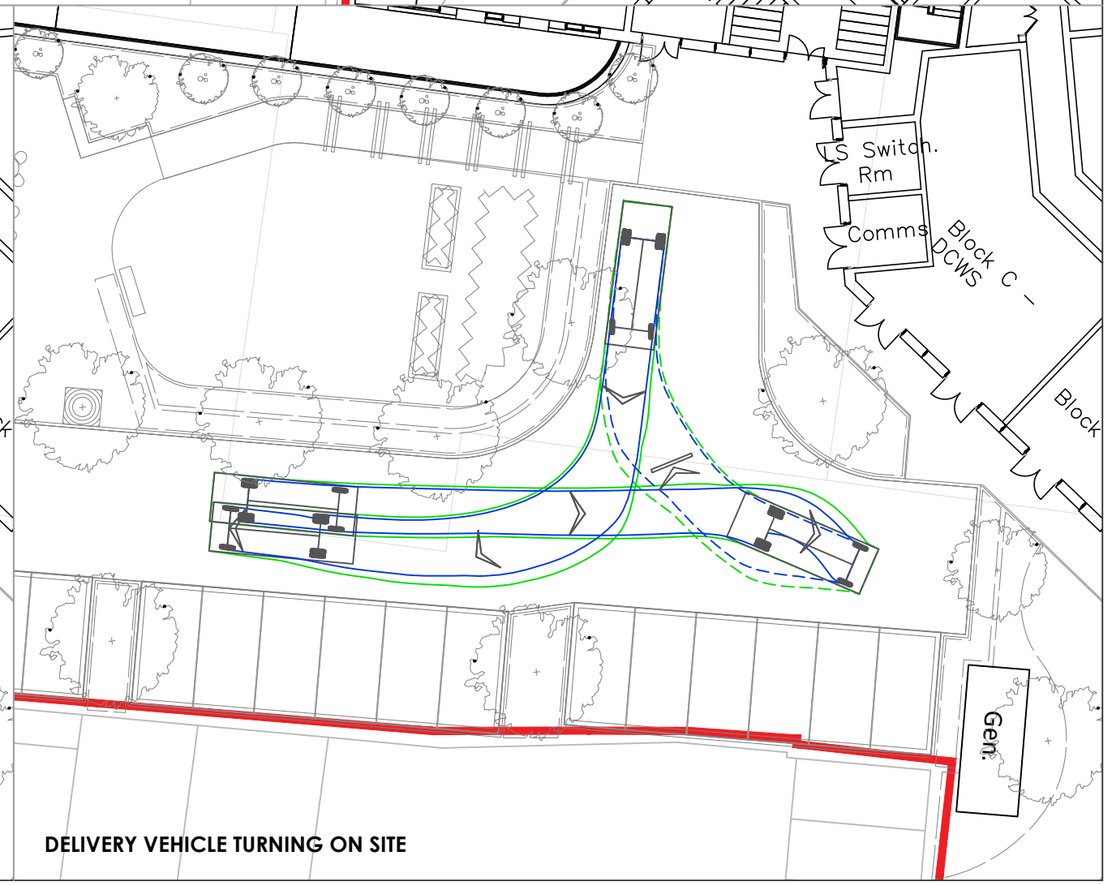
Scale	Drawn By	Checked By	
As Shown	SAJ	NDR	A3



REFUSE VEHICLE TURNING ON SITE



DELIVERY VEHICLE TURNING ON SITE



DELIVERY VEHICLE TURNING ON SITE

NOTES

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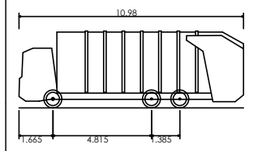
SITE BOUNDARY



Phoenix 2 One-Pass (with Elite 6x4 chassis)

Overall Length	10.980m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.000m

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22

RGP
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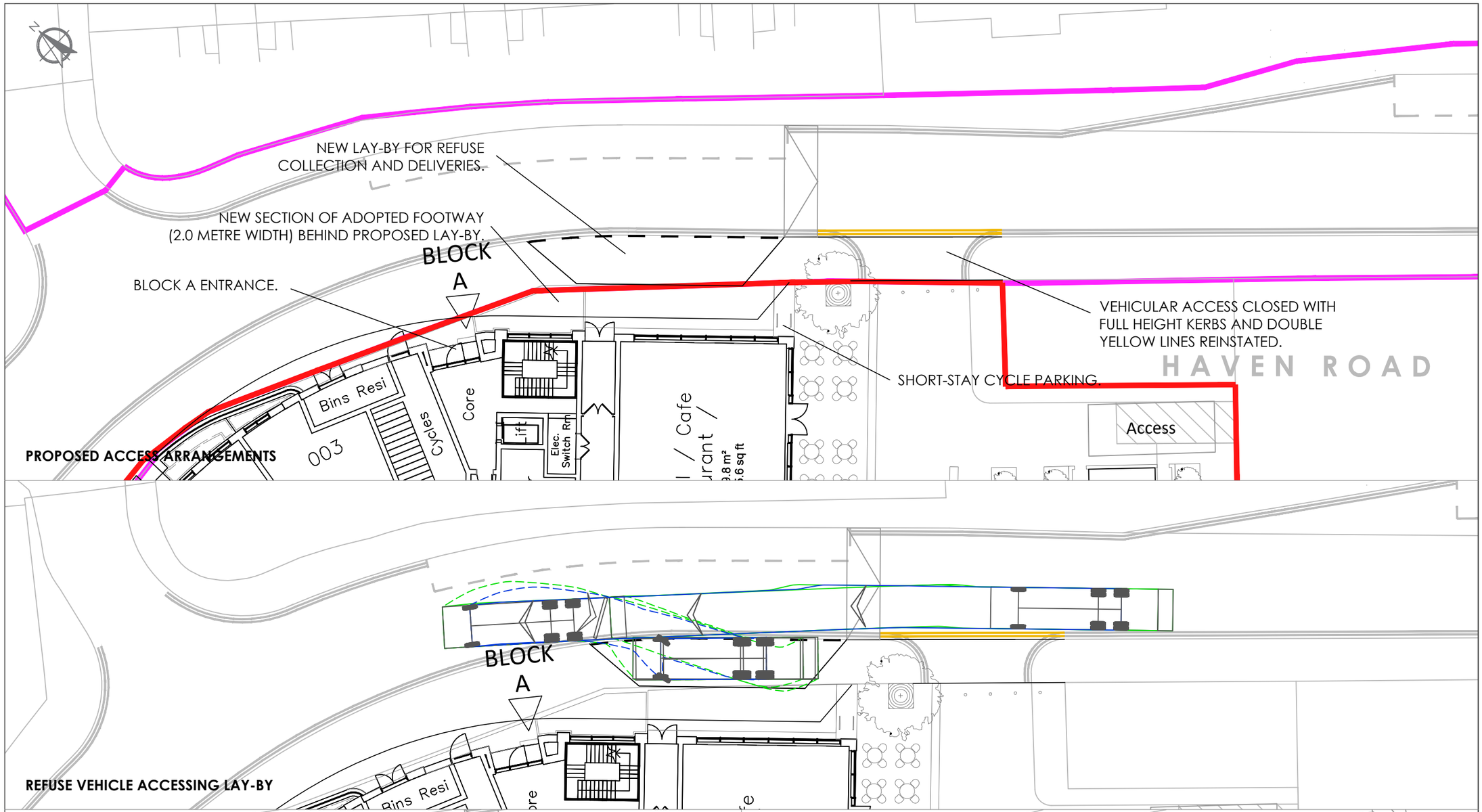
Shackleford Suite, Mill Pool House, Mill Lane, Godalming, GU7 1EY
30 Stamford Street, London, SE1 9LQ
Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

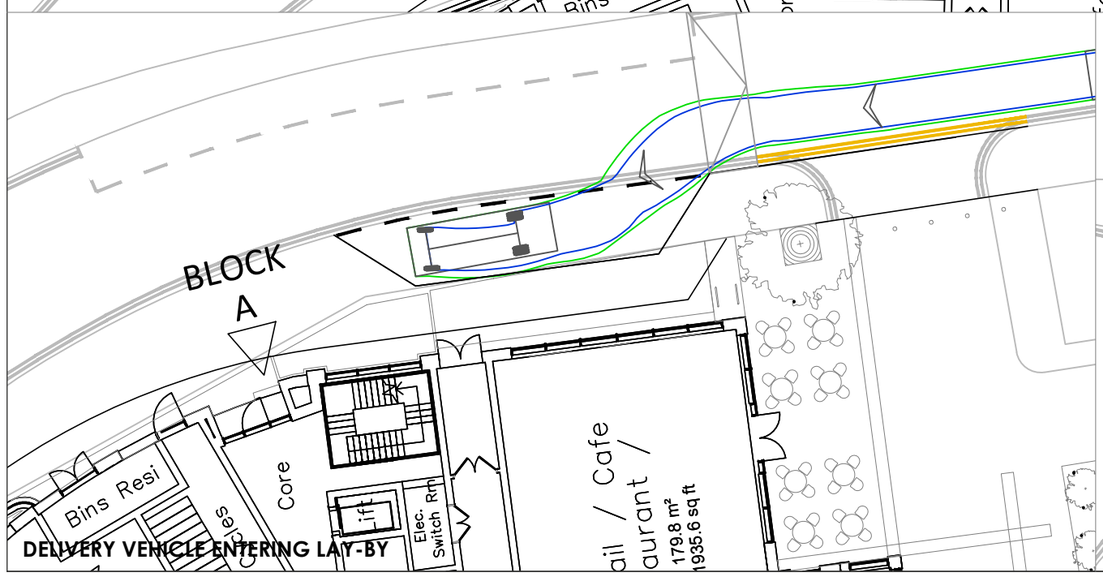
Client: CoPlan Estates Limited

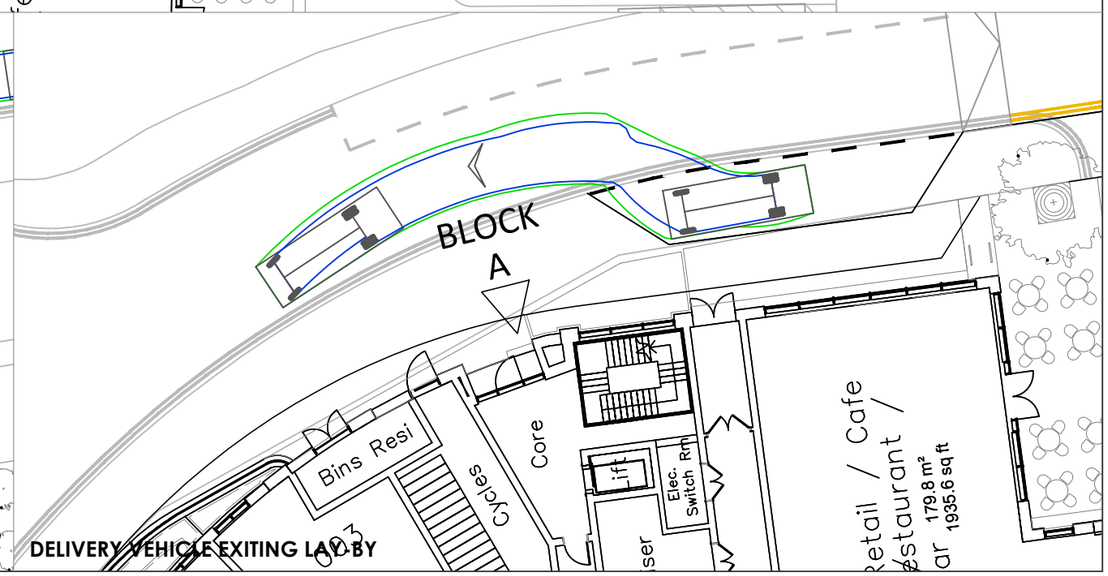
Project: Haven Road, Exeter

Drawing Title: Vehicle Swept Path Assessment Delivery & Servicing Area

Drawing No.	Rev.	Scale	Drawn By	Checked By	
2021/5945/011	P1	1:250	SAJ	NDR	A3







NOTES

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SITE BOUNDARY

PUBLIC HIGHWAY BOUNDARY

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P1	SAJ	FIRST ISSUE	25/04/22

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Tel: 01483 861681 / 020 7078 9662 www.rgp.co.uk

Client: CoPlan Estates Limited

Project: Haven Road, Exeter

Drawing Title: Proposed Servicing Arrangements Haven Road

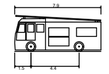
Drawing No.	Rev.	Scale	Drawn By	Checked By	
2021/5945/012	P1	1:250	SAJ	NDR	A3

NOTES

This drawing has been prepared for the purpose of planning discussions and does not constitute a detailed design drawing, or construction drawing. A Design Hazard Inventory has been prepared by RGP setting out the hazards which have been designed out. This is available upon request.

SITE BOUNDARY

HOSE REACH DISTANCE



Pumping Appliance

Overall Length	7.900m
Overall Width	2.500m
Overall Body Height	3.300m
Min Body Ground Clearance	0.140m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.750m

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P2	SAJ	UPDATED SITE LAYOUT	20/07/22
P1	DLH	FIRST ISSUE	24/04/22

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Client: CoPlan Estates Limited

Project: Haven Road, Exeter

Drawing Title: Fire Access Strategy

Drawing No.: 2021/5945/013 Rev.: P2

Scale: 1:500 Drawn By: DH Checked By: NR A2

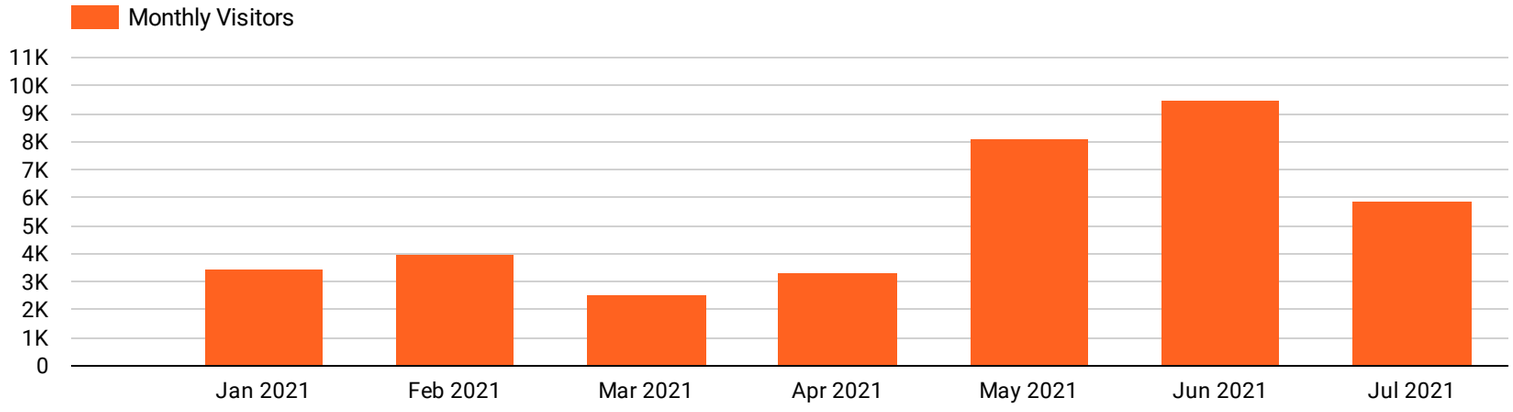
APPENDIX 7 SMART PARKING DATA SHEETS

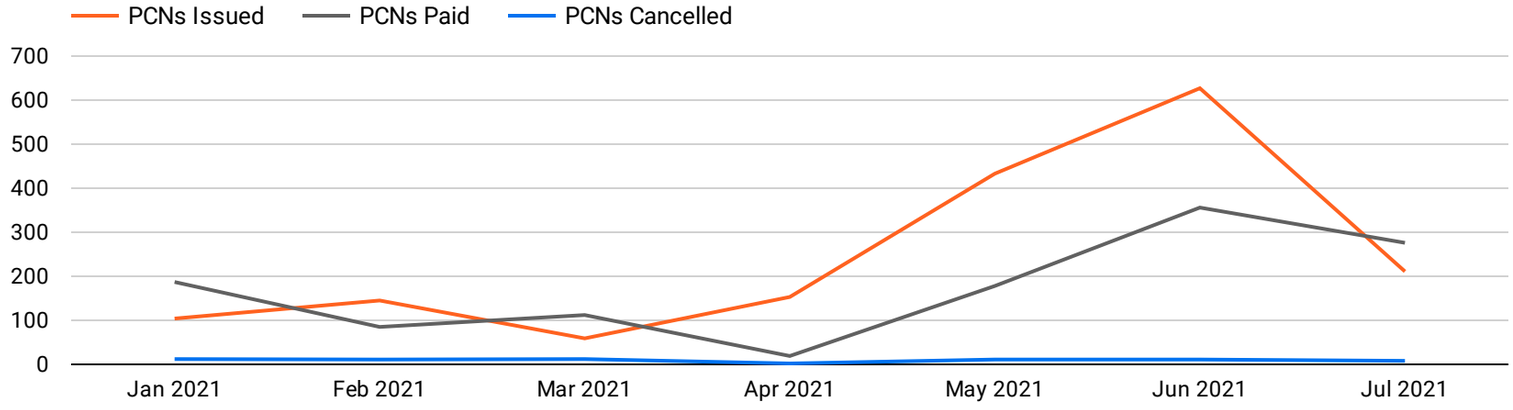
Haven Banks Retail Park

June 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
36,830	1,732	1,213	67

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	5,867	211	276	8
Grand total	**36,830**	**1,732**	**1,213**	**67**



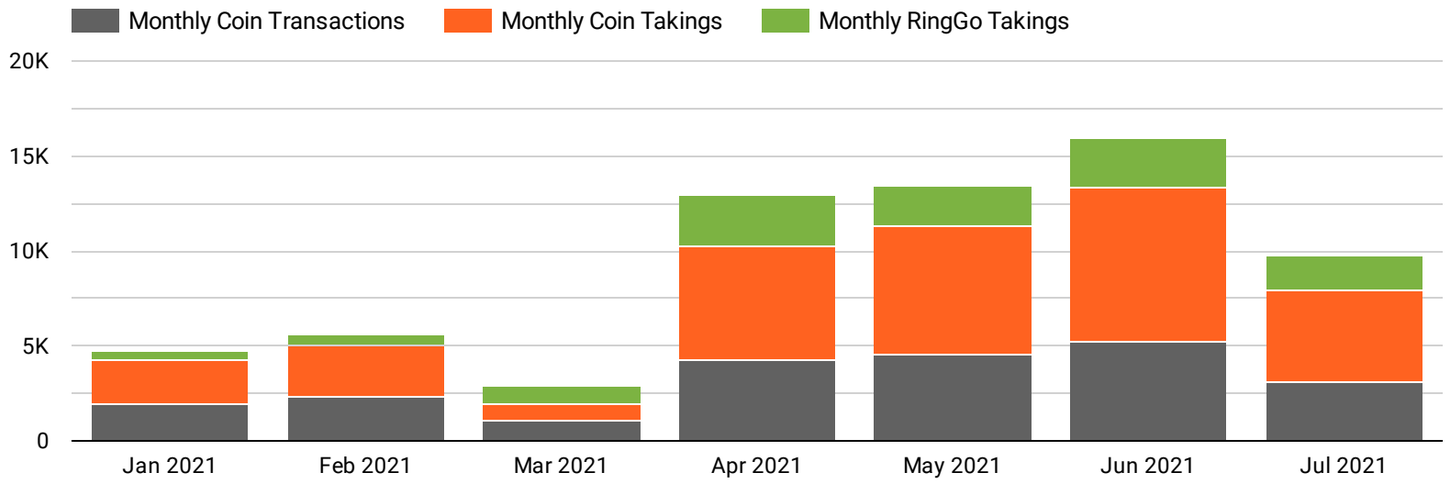


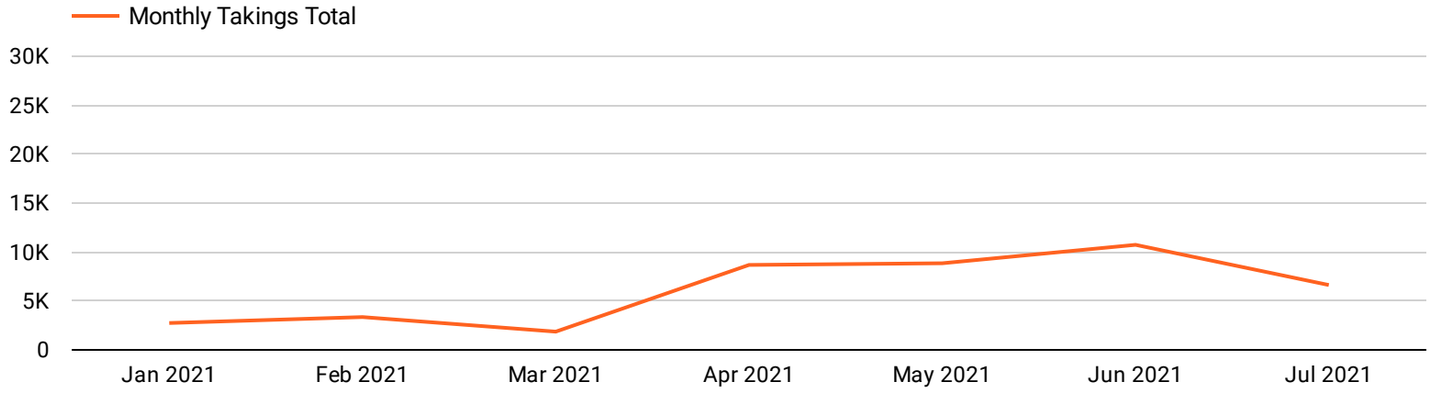
Havens Bank Retail Park

June 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
29,465	22,479	6,986

Month (Year Month)	Monthly Coin Takings	Monthly Coin Transa…	Monthly RingGo Takings	Monthly Transactions Total
Jan 2021	2,291.10	1,977.00	454.00	2,348.00
Feb 2021	2,765.90	2,287.00	586.00	2,762.00
Mar 2021	888.00	1,054.90	975.00	1,821.00
Apr 2021	6,001.00	4,227.00	2,678.00	5,325.00
May 2021	6,765.45	4,565.00	2,085.00	5,944.00
Jun 2021	8,072.65	5,237.00	2,661.00	6,950.00
Jul 2021	4,811.80	3,131.00	1,817.00	4,315.00
Grand total	**31,595.90**	**22,478.90**	**11,256.00**	**29,465.00**





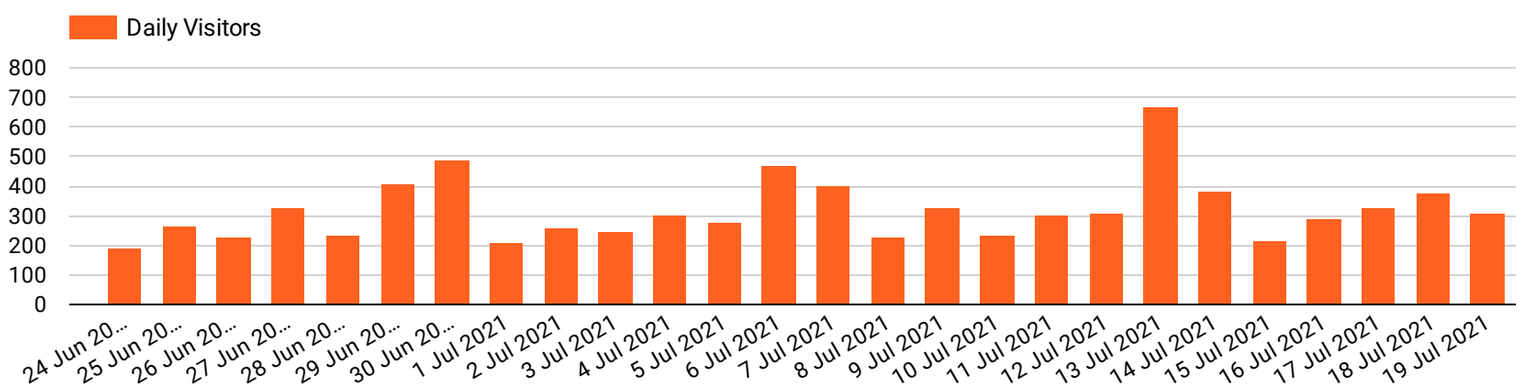
Havens Bank Retail Park

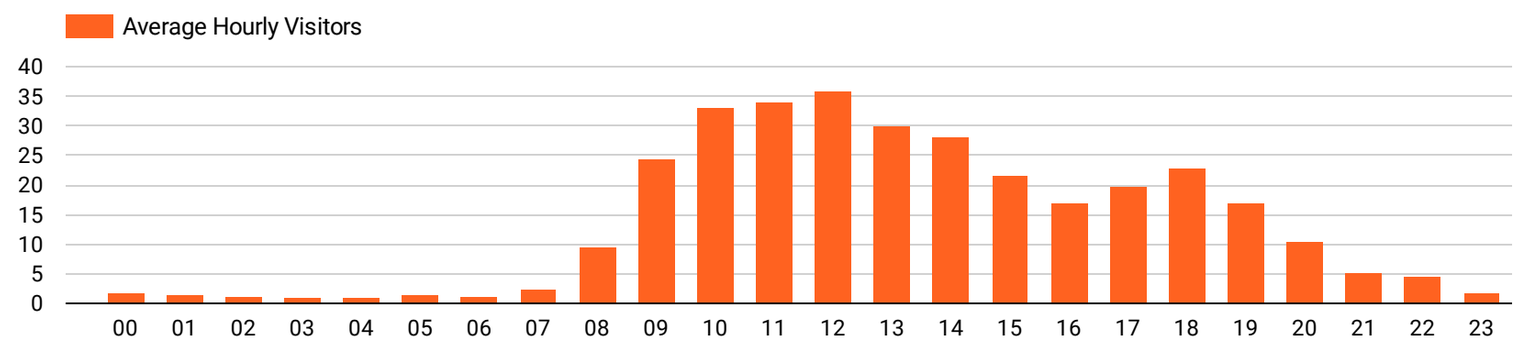
June 2021

June Breakdown

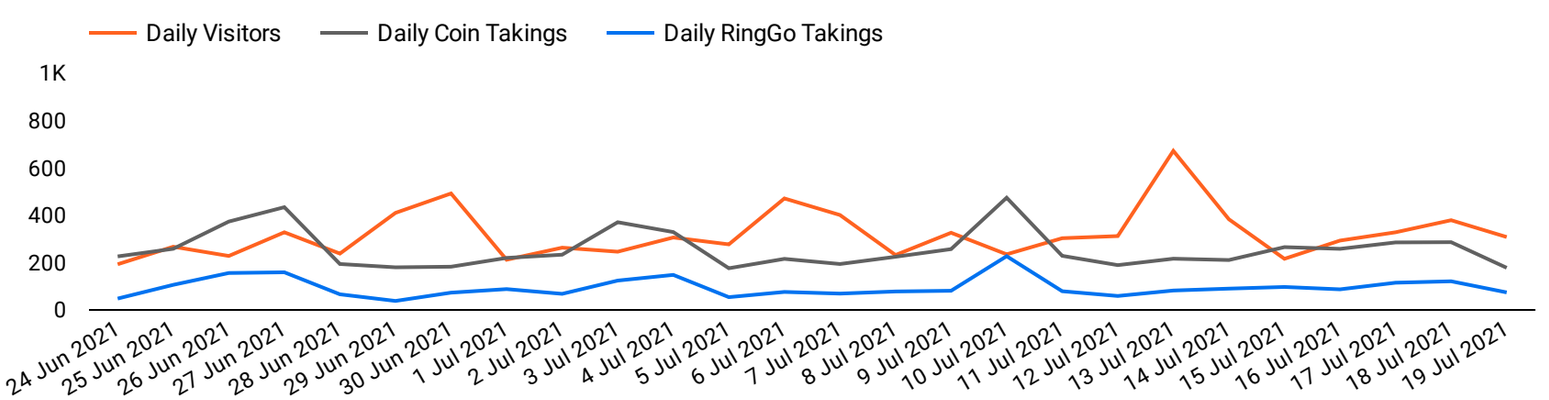
June Total Visitors	10K
PCNs Issued	627
PCNs Paid	356
PCNs Cancelled	11

Day of Week	Average Stay Time
Monday	88
Tuesday	82
Wednesday	92
Thursday	89
Friday	86
Saturday	99
Sunday	93





June Total Transactions	Monthly RingGo Transactions	June Coin Transactions	June RingGo Transactions
7K	2K	5K	2K

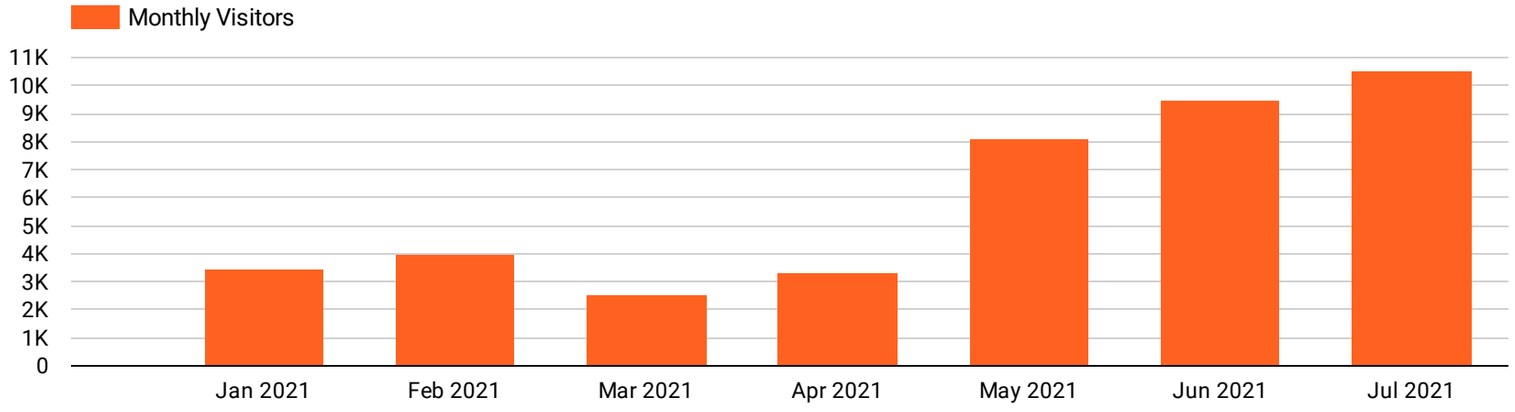


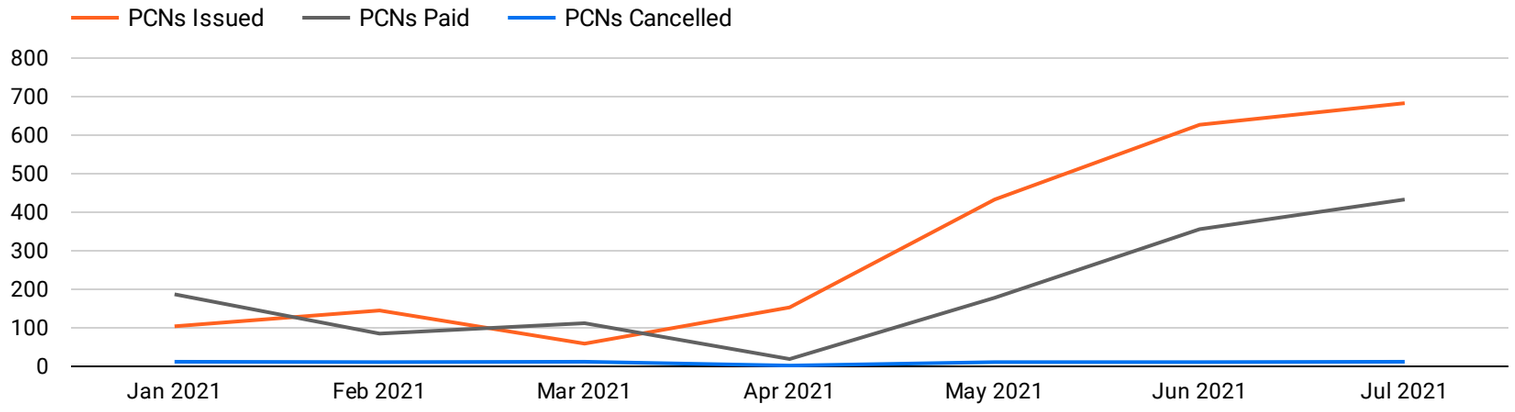
Haven Banks Retail Park

July 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
41,522	2,204	1,370	71

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Grand total	**41,522**	**2,204**	**1,370**	**71**



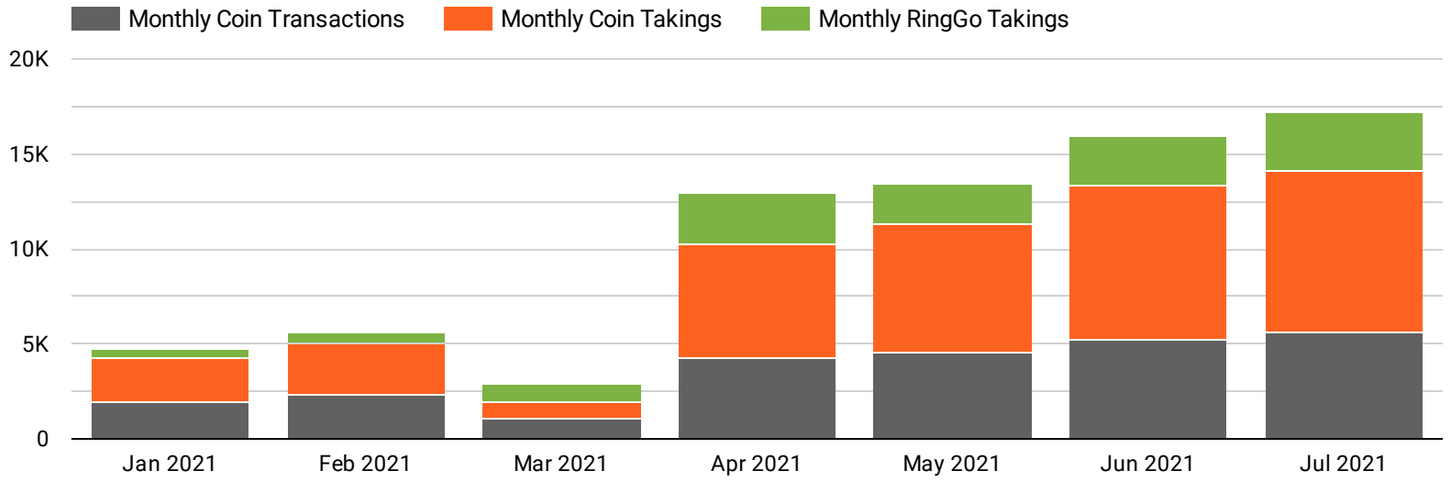


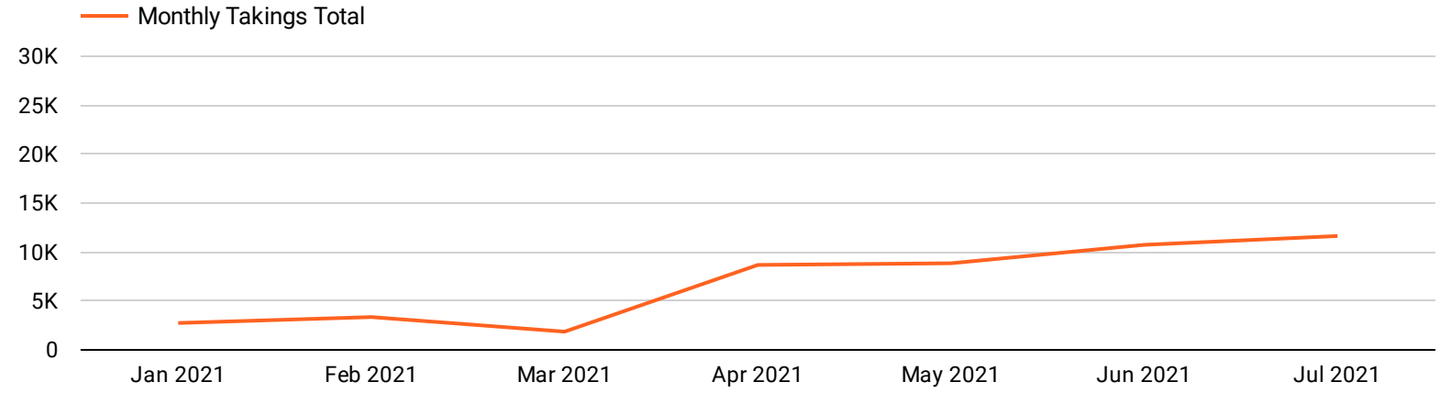
Haven Banks Retail Park

July 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
32,674	24,906	7,768

Month (Year Month)	Monthly Coin Takings	Monthly Coin Transactions	Monthly RingGo Takings	Monthly Transactions T...
Jan 2021	£2,291.10	1,977.00	£454.00	2,348.00
Feb 2021	£2,765.90	2,287.00	£586.00	2,762.00
Mar 2021	£888.00	1,054.90	£975.00	1,821.00
Apr 2021	£6,001.00	4,227.00	£2,678.00	5,325.00
May 2021	£6,765.45	4,565.00	£2,085.00	5,944.00
Jun 2021	£8,072.65	5,237.00	£2,661.00	6,950.00
Jul 2021	£8,576.05	5,558.00	£3,058.00	7,524.00
Grand total	**£35,360.15**	**24,905.90**	**£12,497.00**	**32,674.00**





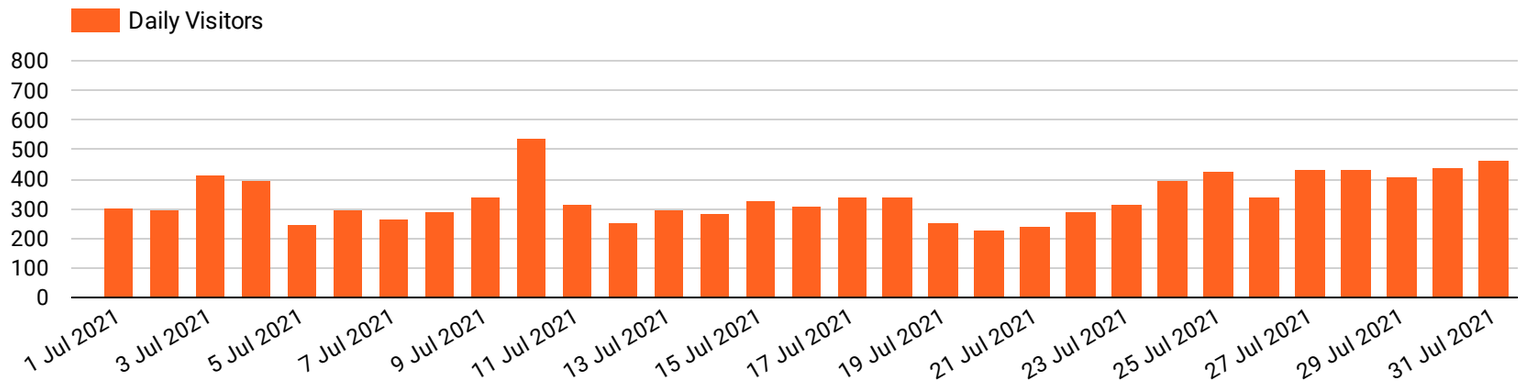
Haven Banks Retail Park

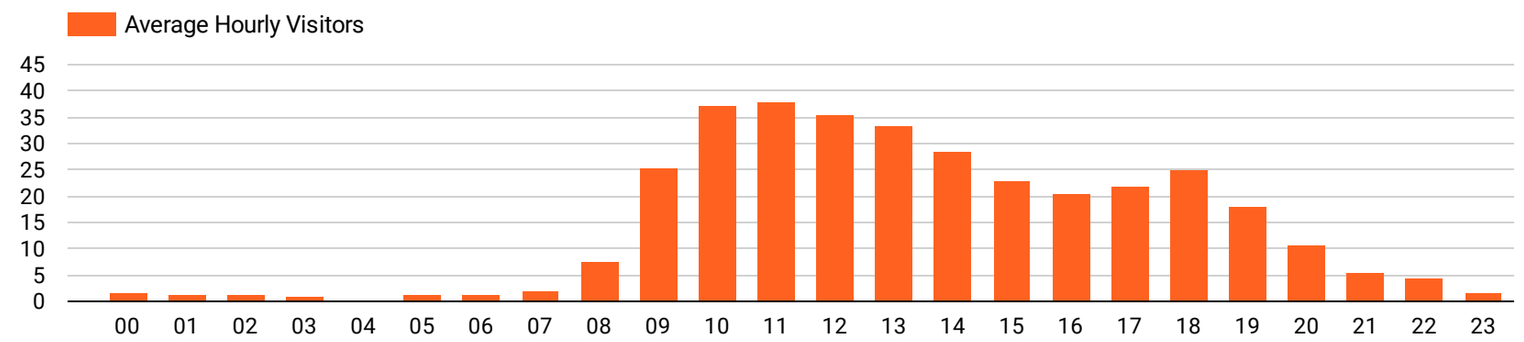
July 2021

July Breakdown

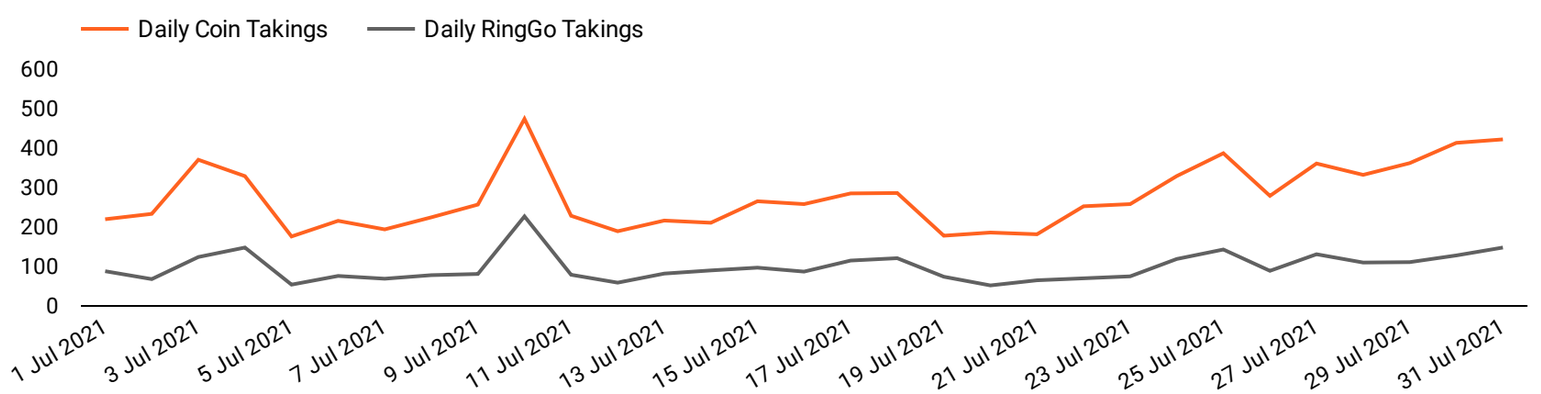
July Total Visitors	11K
PCNs Issued	683
PCNs Paid	433
PCNs Cancelled	12

Day of Week	Average Stay Time
Monday	90
Tuesday	86
Wednesday	91
Thursday	92
Friday	88
Saturday	98
Sunday	95





July Total Transactions	July Coin Transactions	July RingGo Transactions
8K	6K	2K

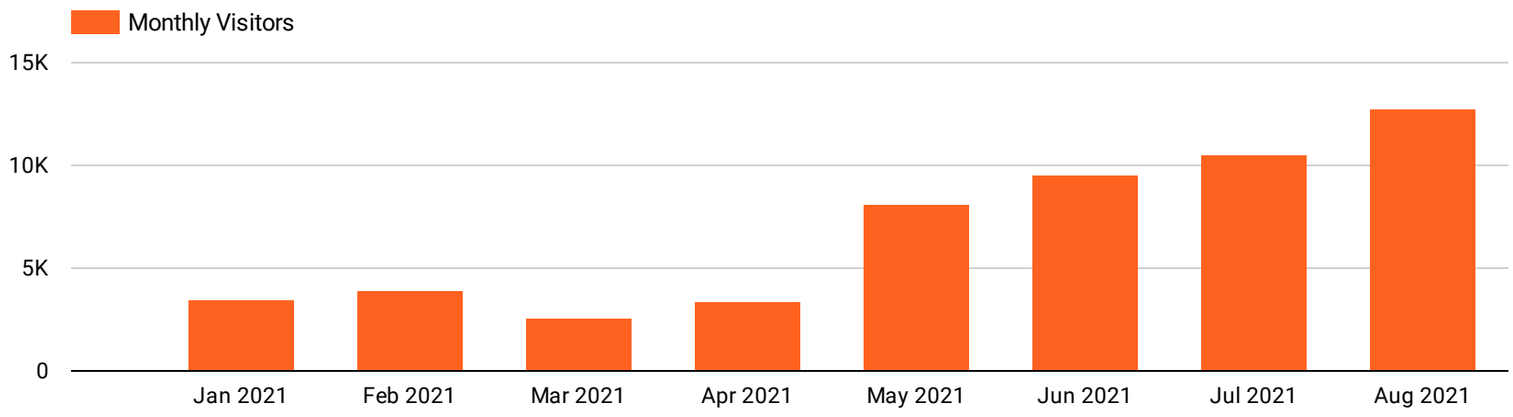


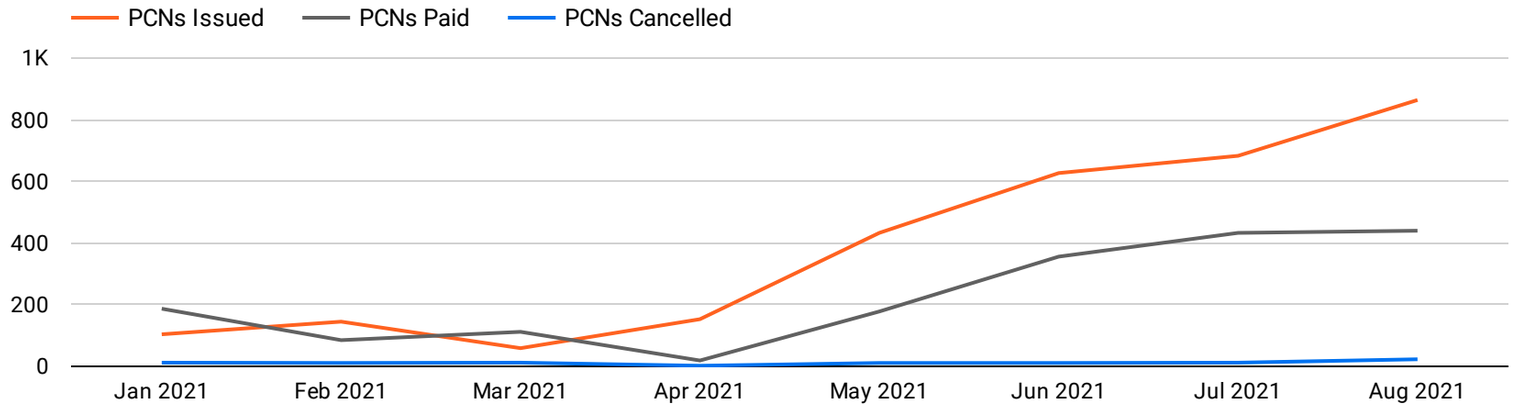
Haven Banks Retail Park

August 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
54,333	3,068	1,810	94

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Grand total	**54,333**	**3,068**	**1,810**	**94**



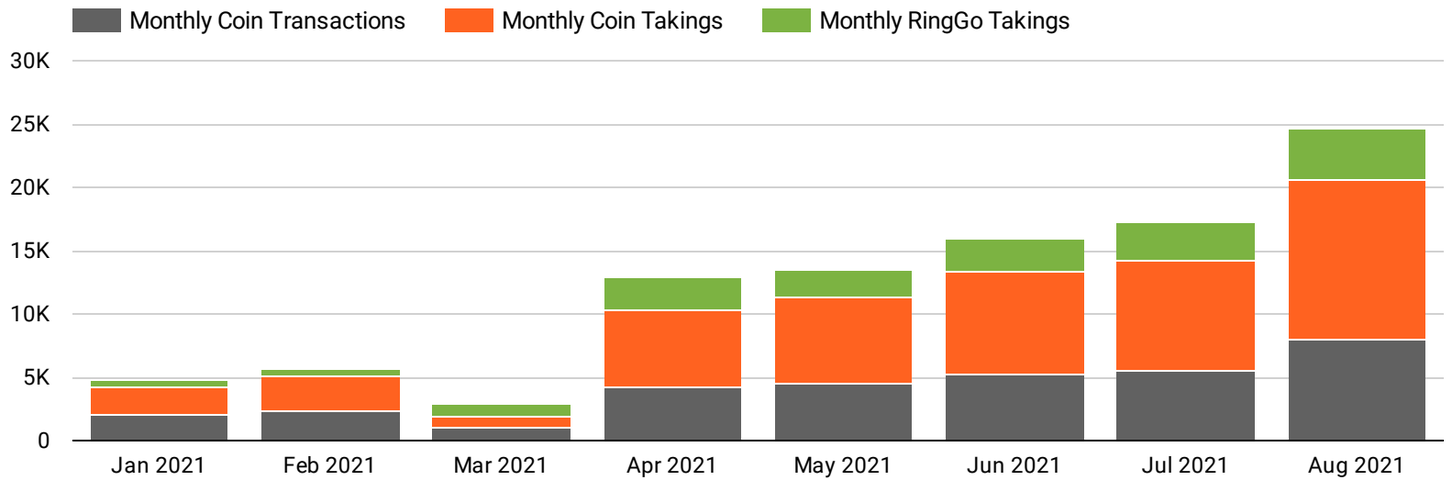


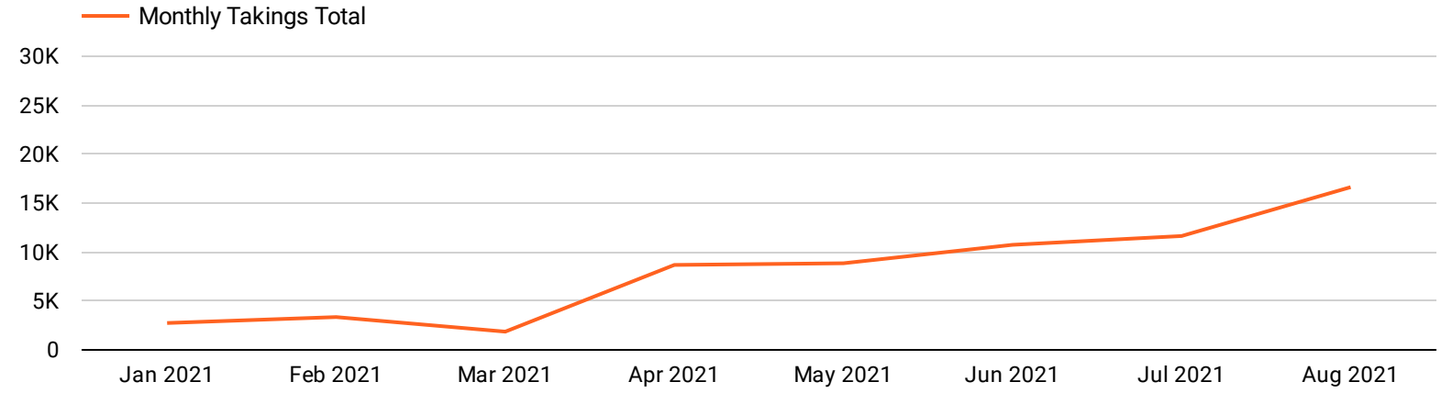
Haven Banks Retail Park

August 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
43,156	32,858	10,298

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Jan 2021	£2,291.10	£454.00	£2,745.10
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Grand total	**£47,954.45**	**£16,529.00**	**£64,483.45**





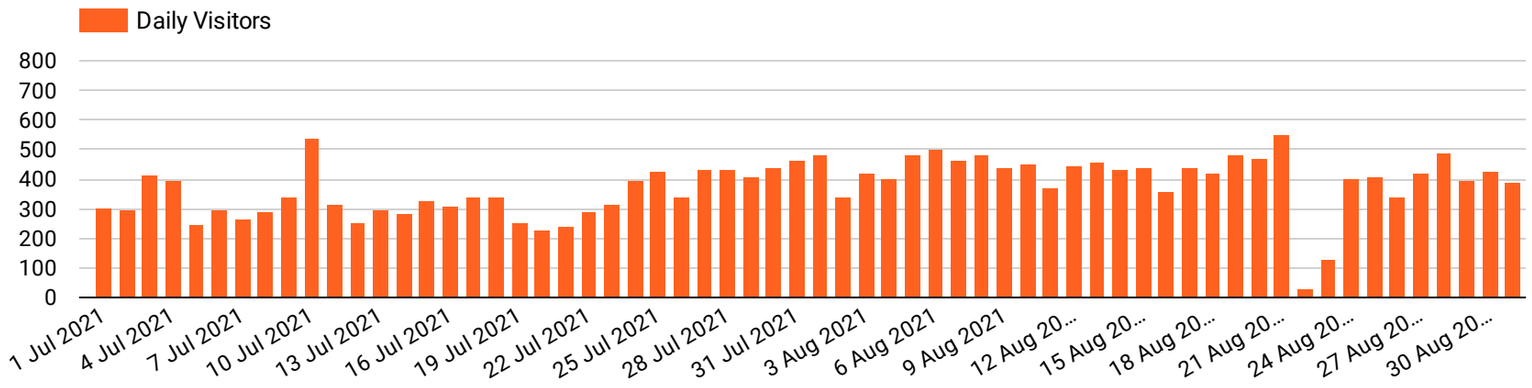
Haven Banks Retail Park

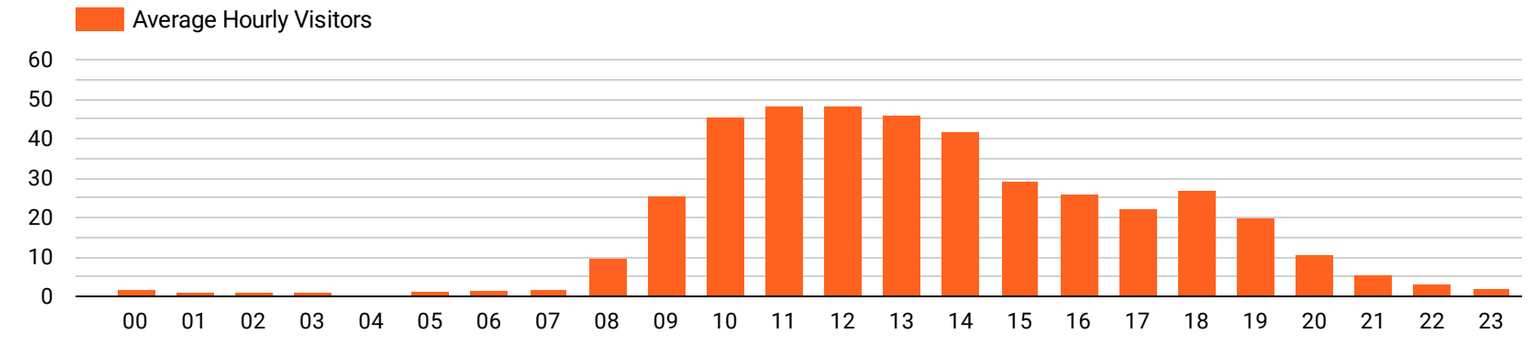
August 2021

August Breakdown

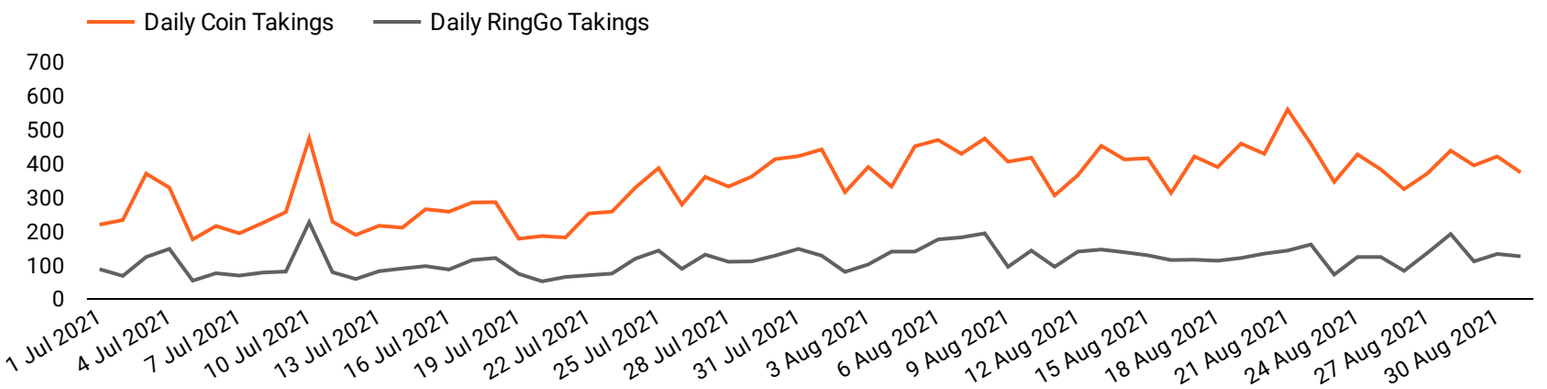
August Total Visitors	PCNs Issued
13K	864
PCNs Paid	**PCNs Cancelled**
440	23

Day of Week	Average Stay Time
Monday	93
Tuesday	98
Wednesday	98
Thursday	100
Friday	99
Saturday	101
Sunday	96





August Total Transactions	August Coin Transactions	August RingGo Transactions
10K	8K	3K

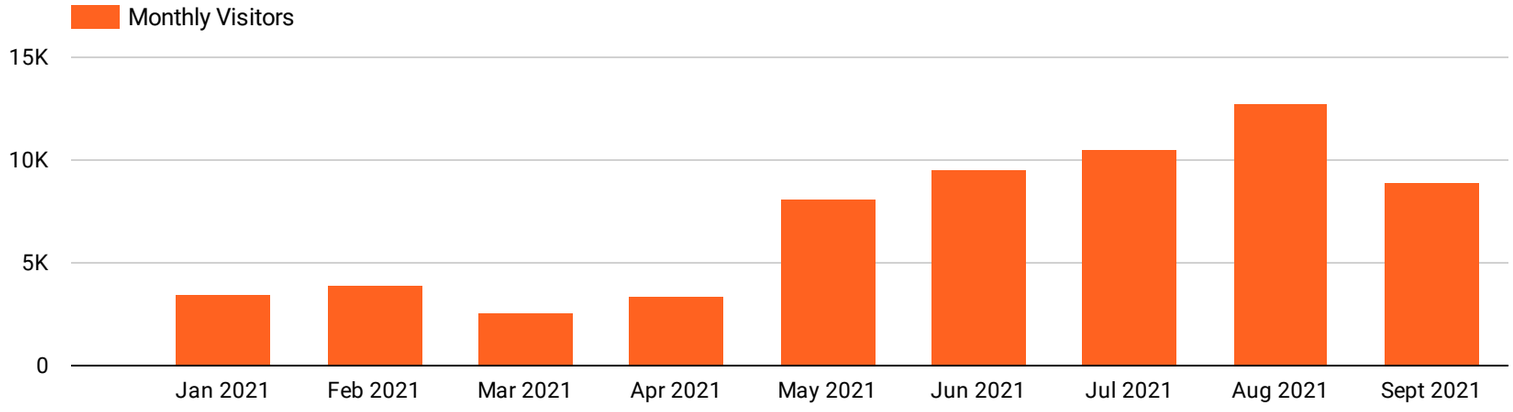


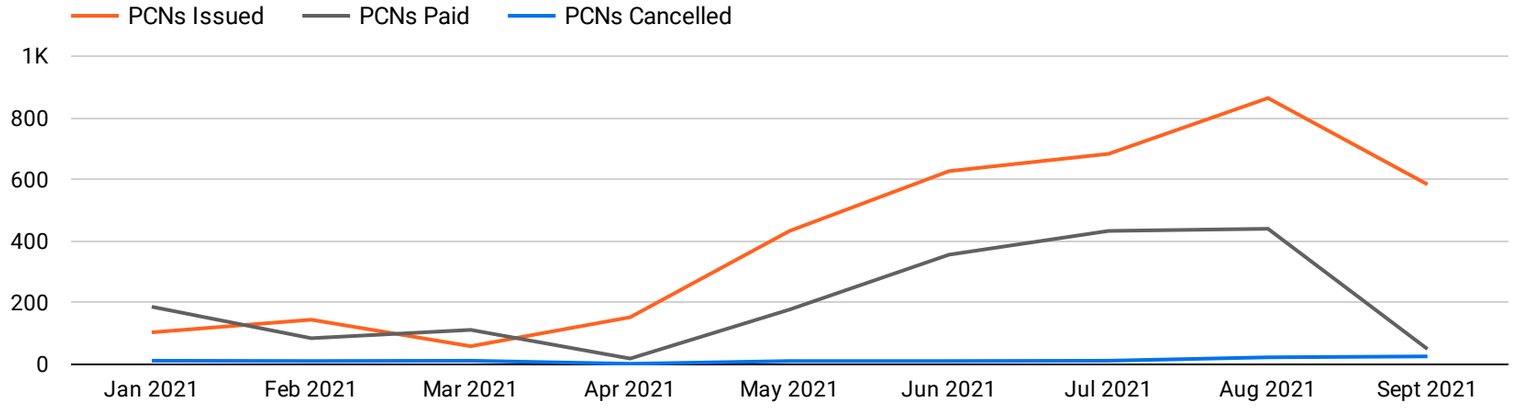
Haven Banks Retail Park

September 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
63,284	3,652	1,860	120

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sept 2021	8,951	584	50	26
Grand total	**63,284**	**3,652**	**1,860**	**120**



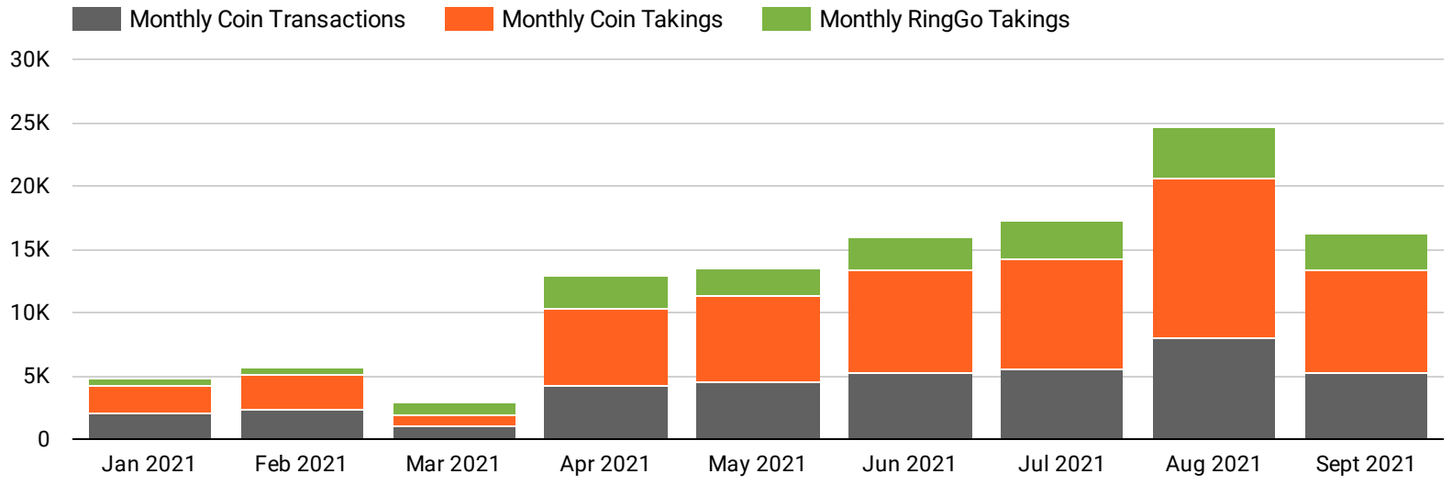


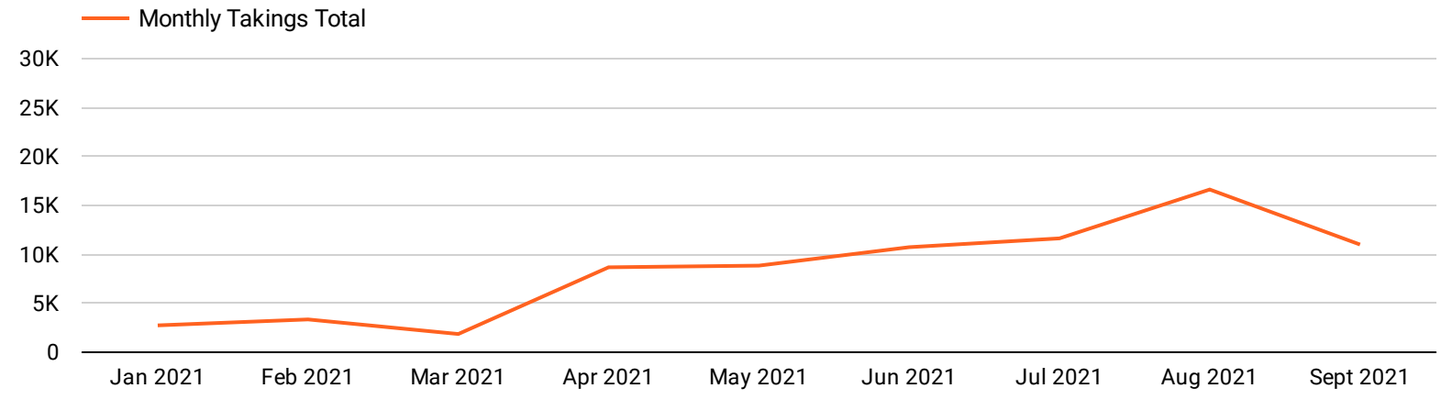
Haven Banks Retail Park

September 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
50,316	38,112	12,204

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Jan 2021	£2,291.10	£454.00	£2,745.10
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sept 2021	£8,051.45	£2,954.00	£11,005.45
Grand total	**£56,005.90**	**£19,483.00**	**£75,488.90**





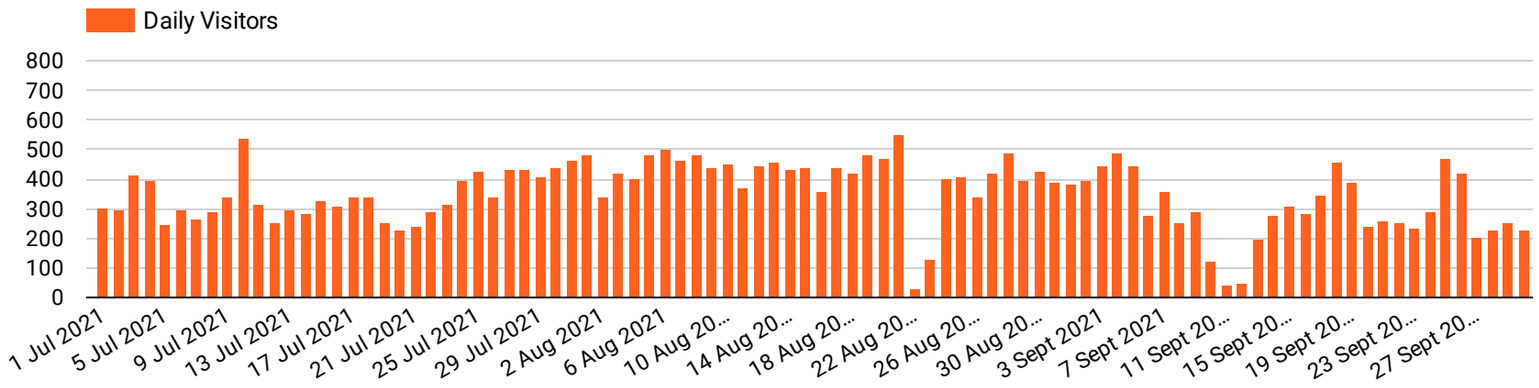
Haven Banks Retail Park

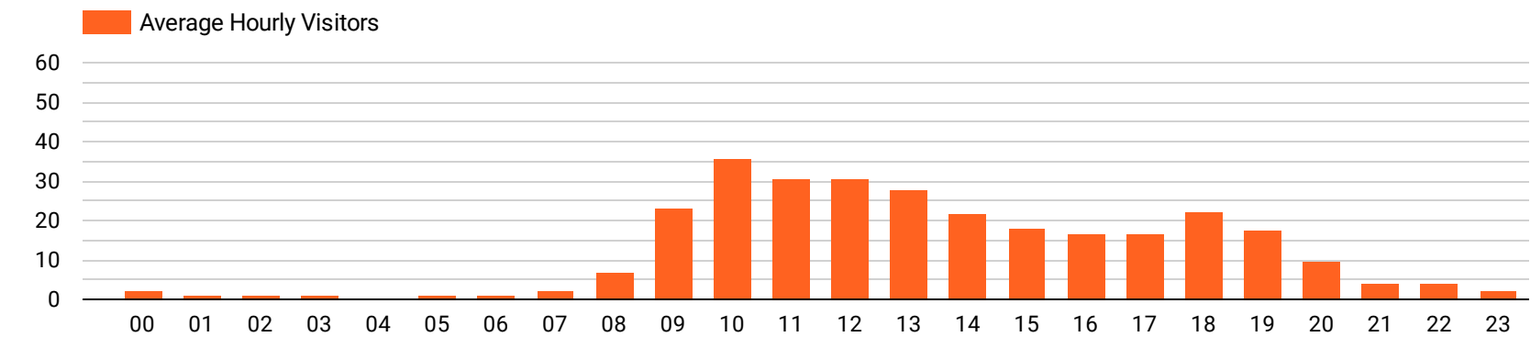
September 2021

September Breakdown

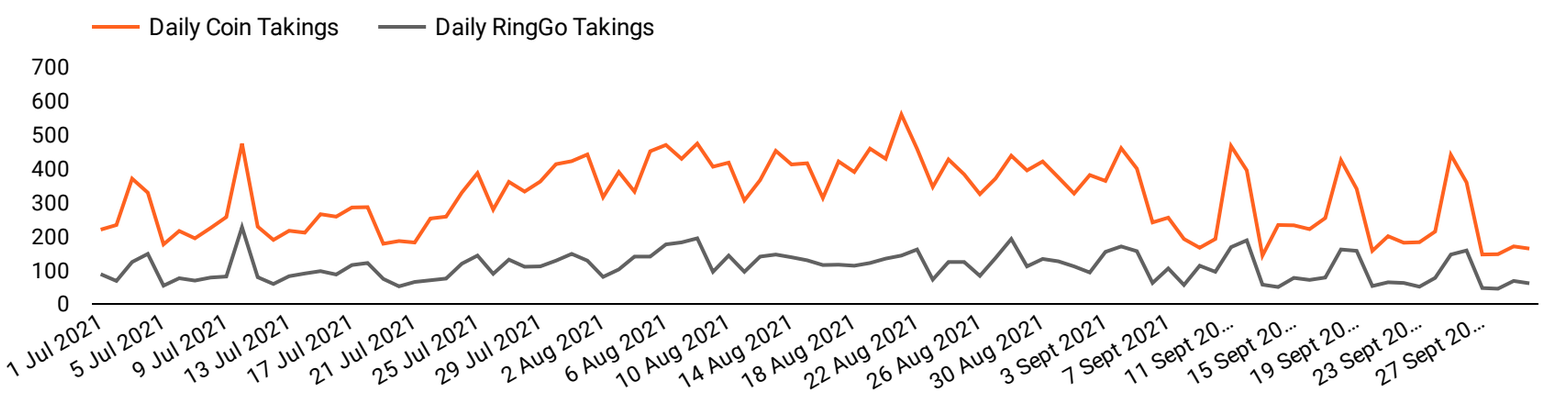
September Total Visitors	63K
PCNs Issued	584
PCNs Paid	50
PCNs Cancelled	26

Day of Week	Average Stay Time
Monday	92
Tuesday	87
Wednesday	92
Thursday	95
Friday	86
Saturday	100
Sunday	97





September Total Transactions	September Coin Transactions	September RingGo Transactions
7K	5K	2K

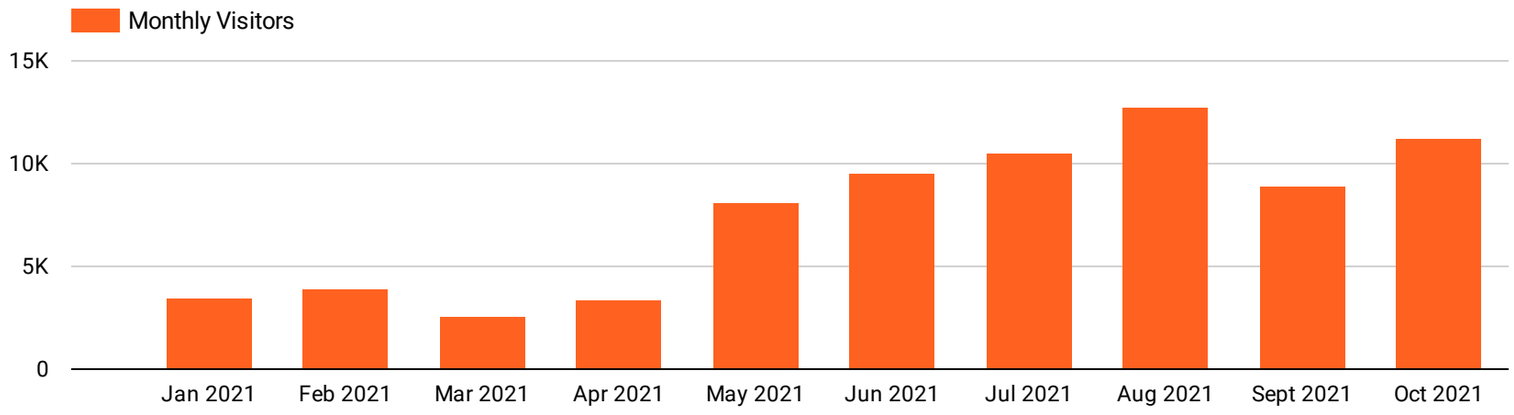


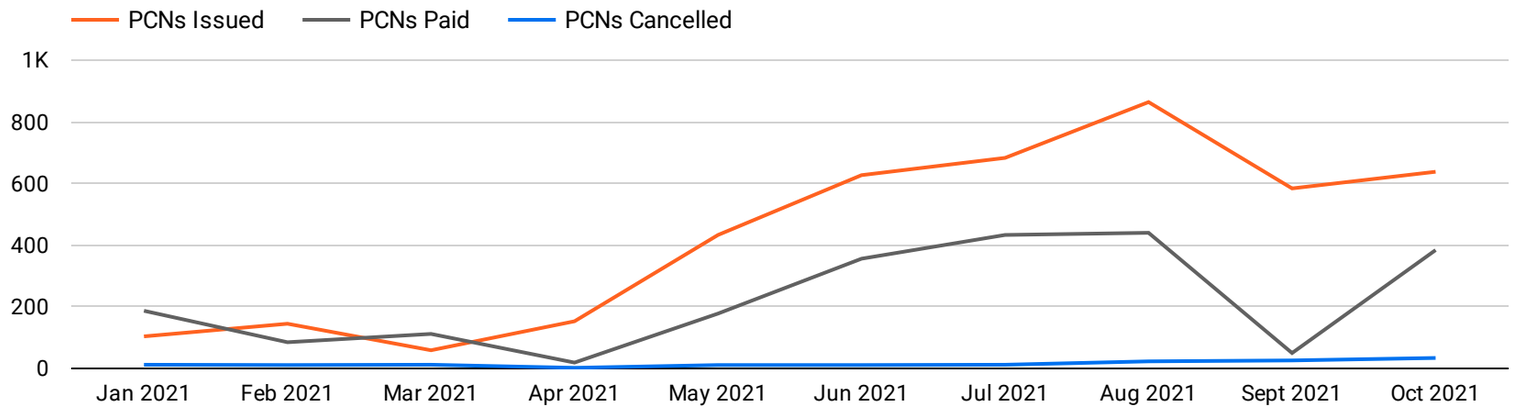
Haven Banks Retail Park

October 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
74,553	4,290	2,244	154

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sept 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Grand total	**74,553**	**4,290**	**2,244**	**154**



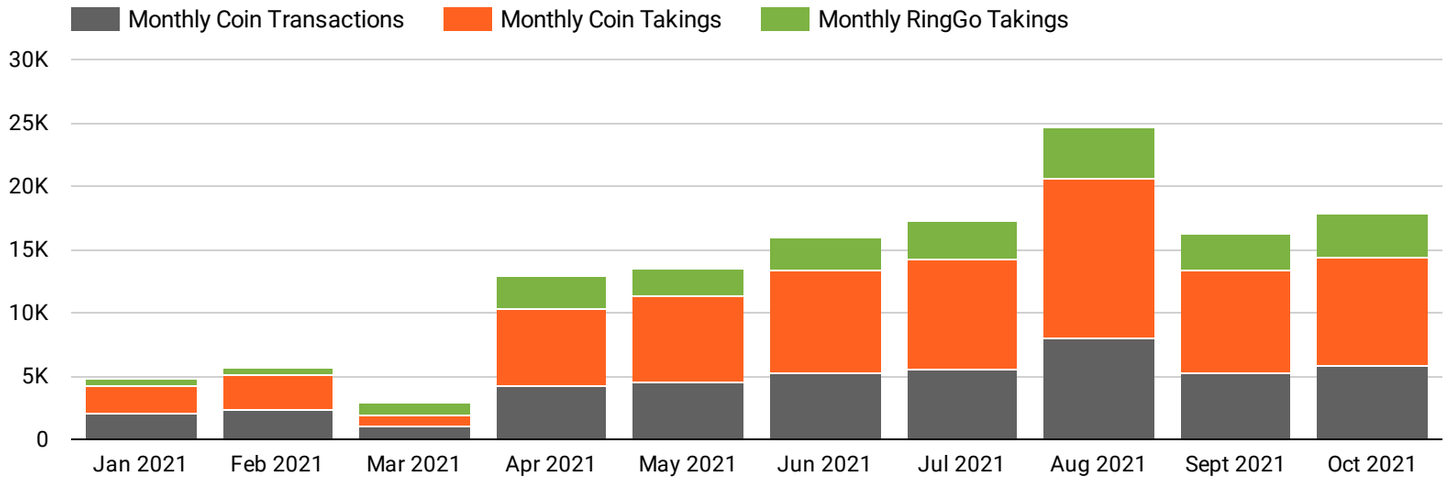


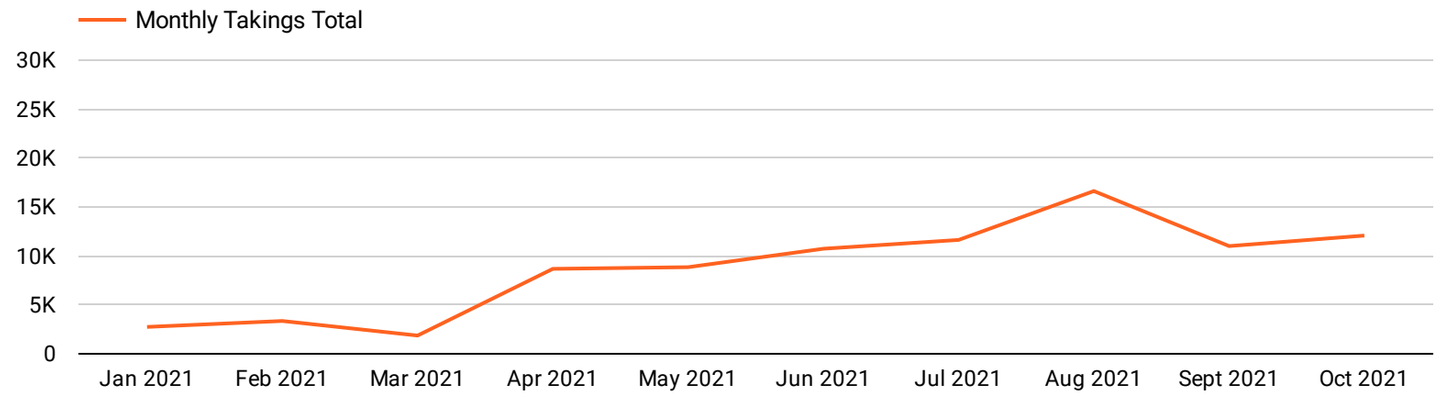
Haven Banks Retail Park

October 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
58,273	43,840	14,433

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Jan 2021	£2,291.10	£454.00	£2,745.10
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sept 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Grand total	**£64,658.65**	**£22,909.00**	**£87,567.65**





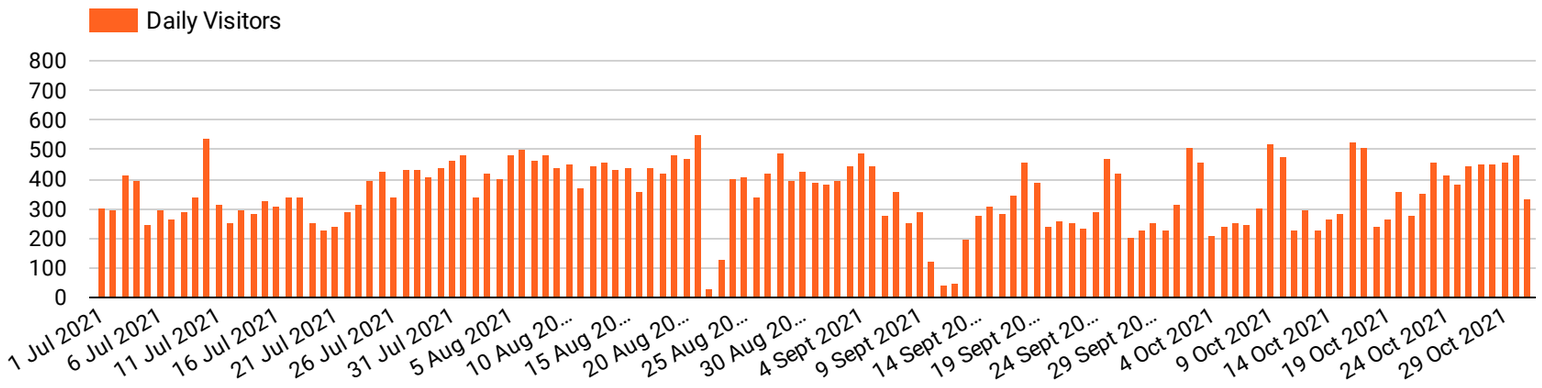
Haven Banks Retail Park

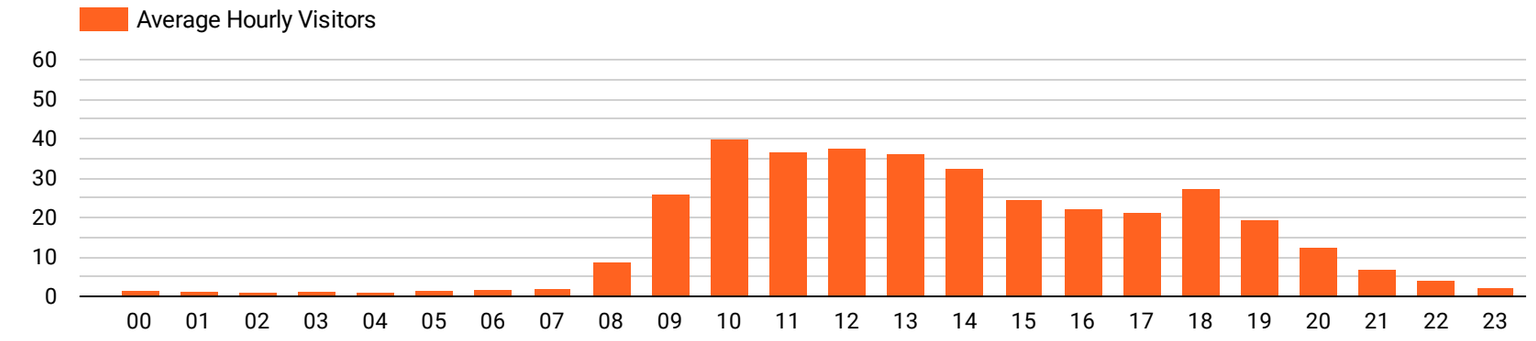
October 2021

October Breakdown

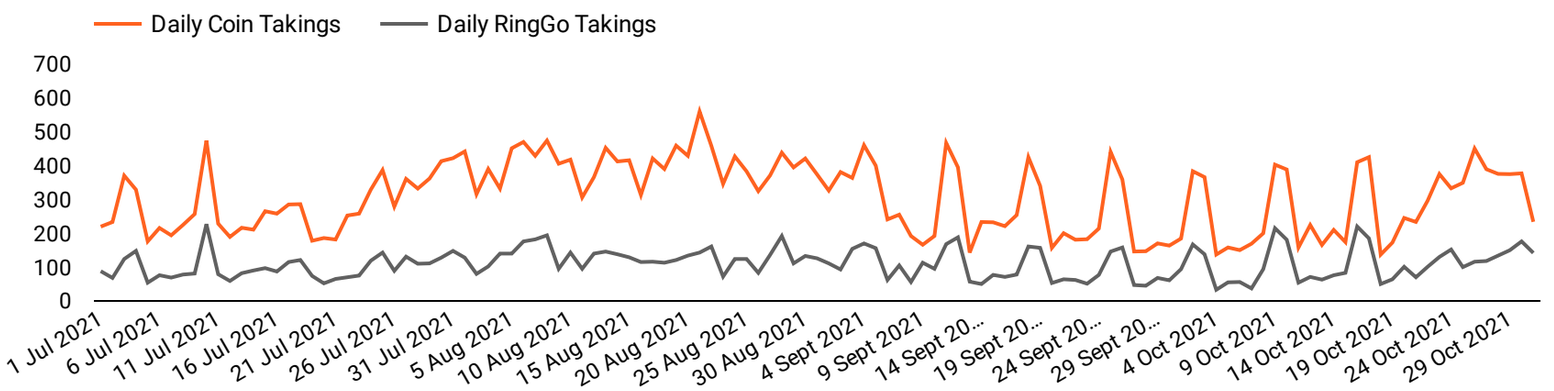
October Total Visitors	75K
PCNs Issued	638
PCNs Paid	384
PCNs Cancelled	34

Day of Week	Average Stay Time
Monday	87
Tuesday	93
Wednesday	97
Thursday	95
Friday	92
Saturday	89
Sunday	91





October Total Transactions	October Coin Transactions	October RingGo Transactions
8K	6K	2K

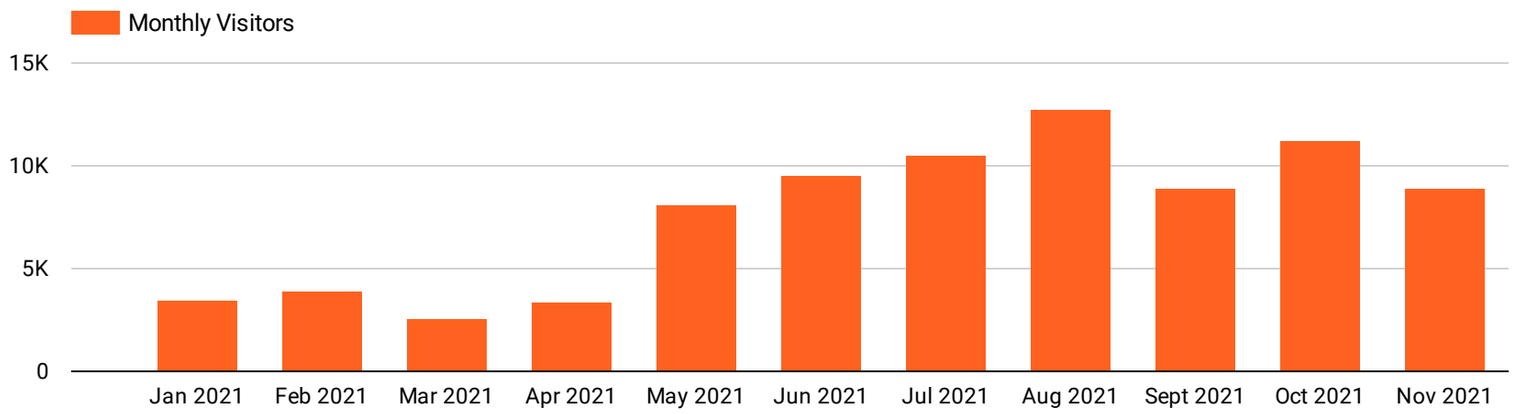


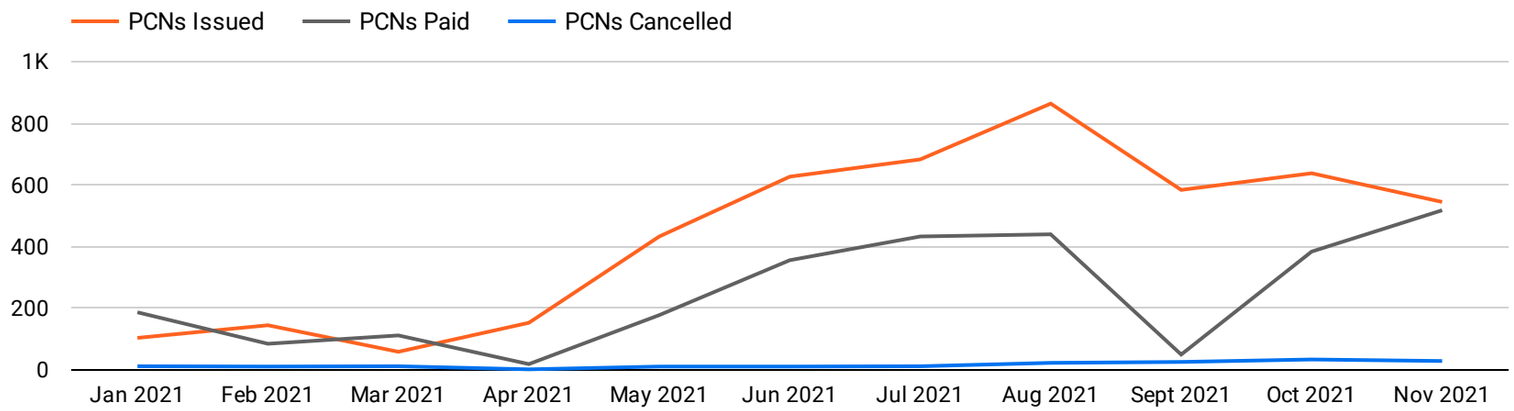
Haven Banks Retail Park

November 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
83,520	4,835	2,762	183

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sept 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Nov 2021	8,967	545	518	29
Grand total	**83,520**	**4,835**	**2,762**	**183**



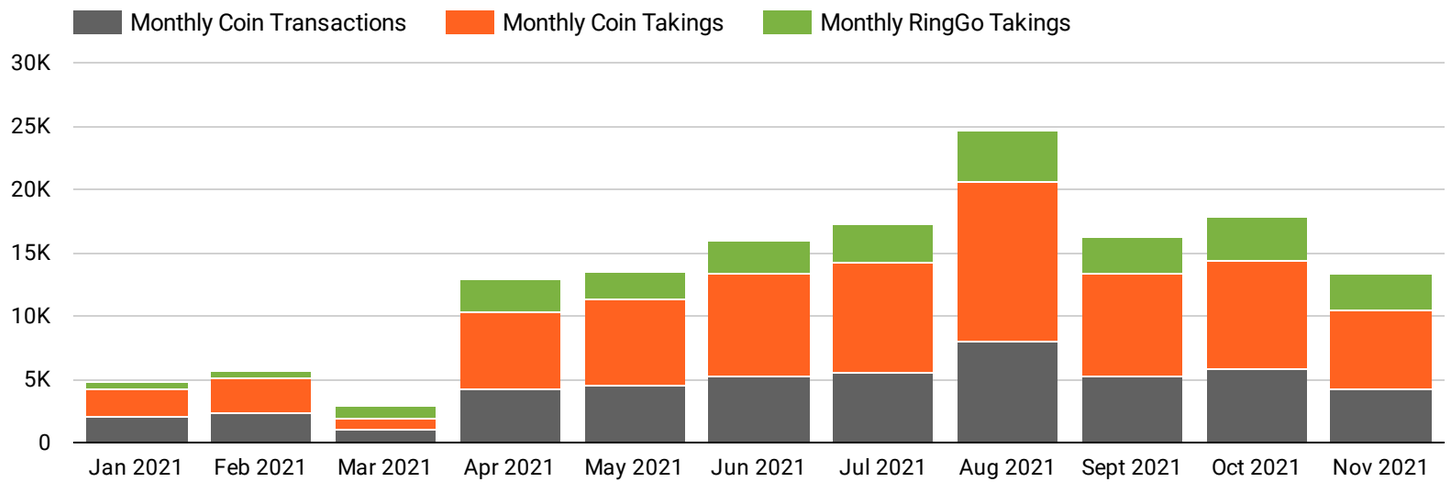


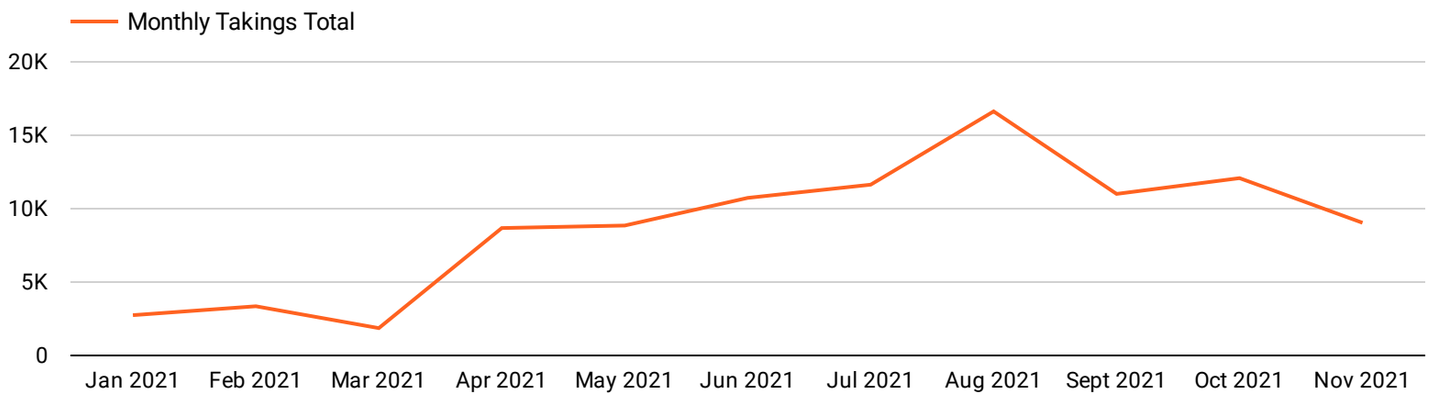
Haven Banks Retail Park

November 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
64,377	48,103	16,274

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Jan 2021	£2,291.10	£454.00	£2,745.10
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sept 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Nov 2021	£6,217.05	£2,822.00	£9,039.05
Grand total	**£70,875.70**	**£25,731.00**	**£96,606.70**





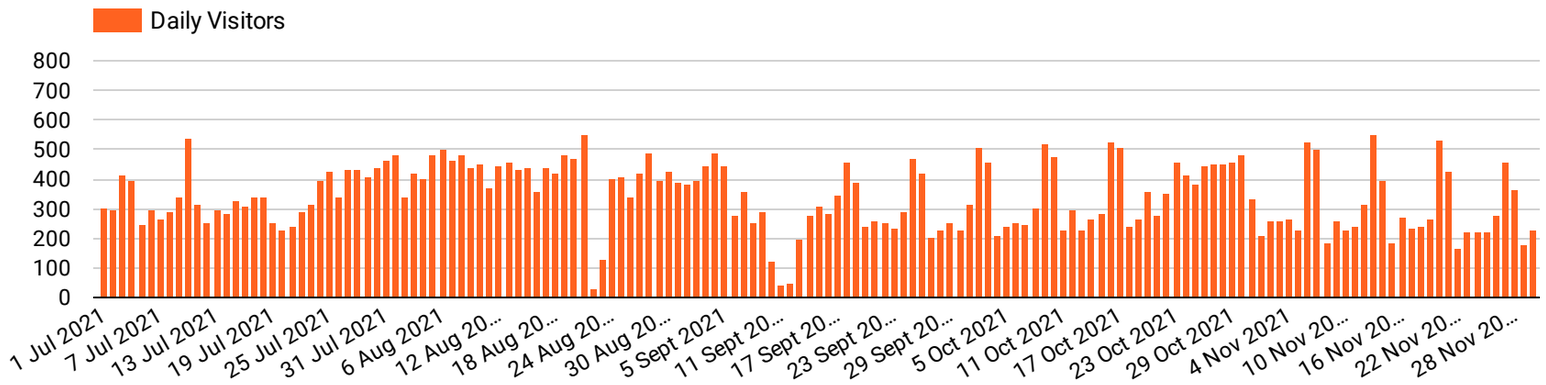
Haven Banks Retail Park

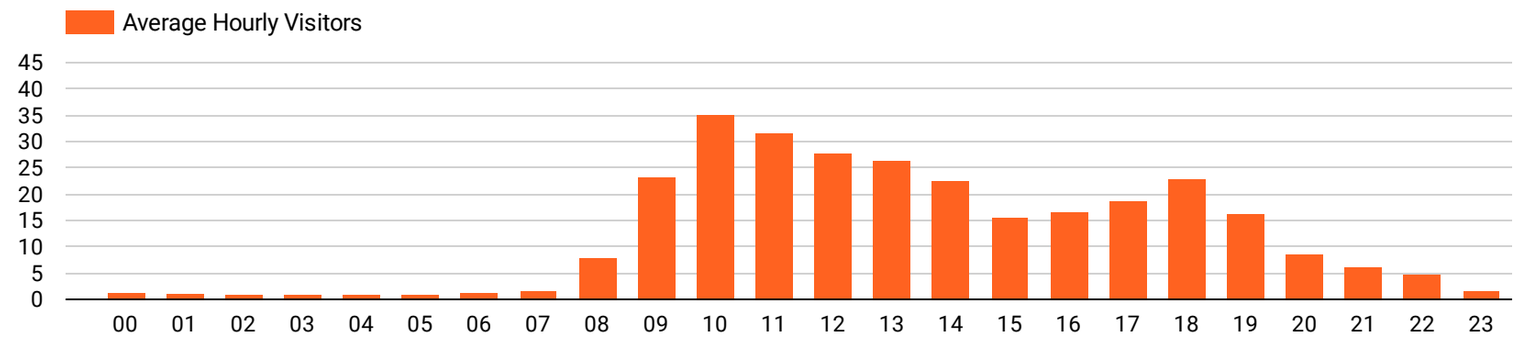
November 2021

November Breakdown

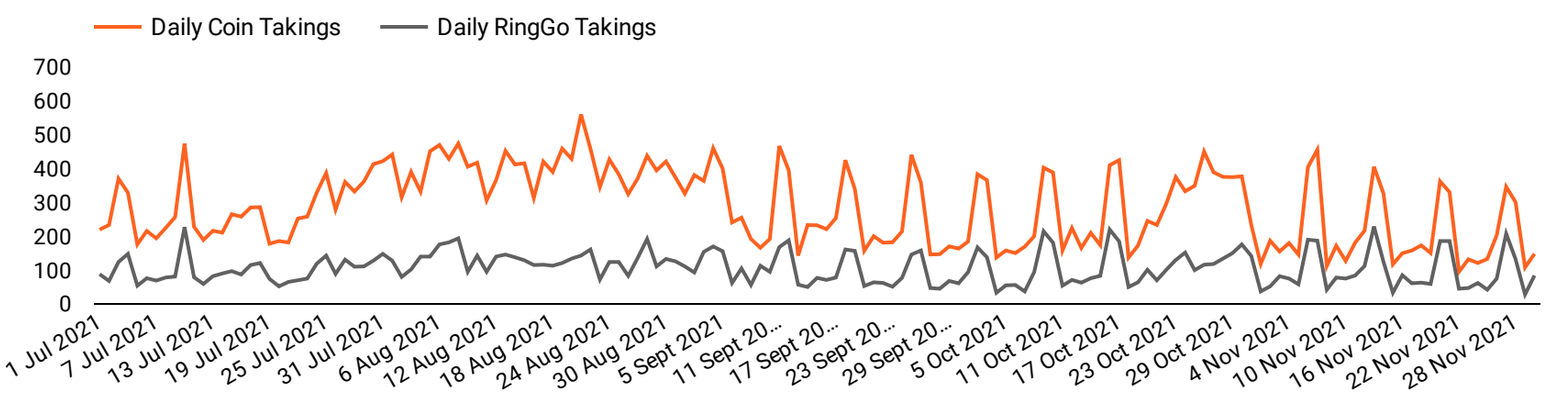
November Total Visitors	9K
PCNs Issued	545
PCNs Paid	518
PCNs Cancelled	29

Day of Week	Average Stay Time
Monday	86
Tuesday	92
Wednesday	89
Thursday	93
Friday	87
Saturday	90
Sunday	94





November Total Transactions	November Coin Transactions	November RingGo Transactions
6K	4K	2K

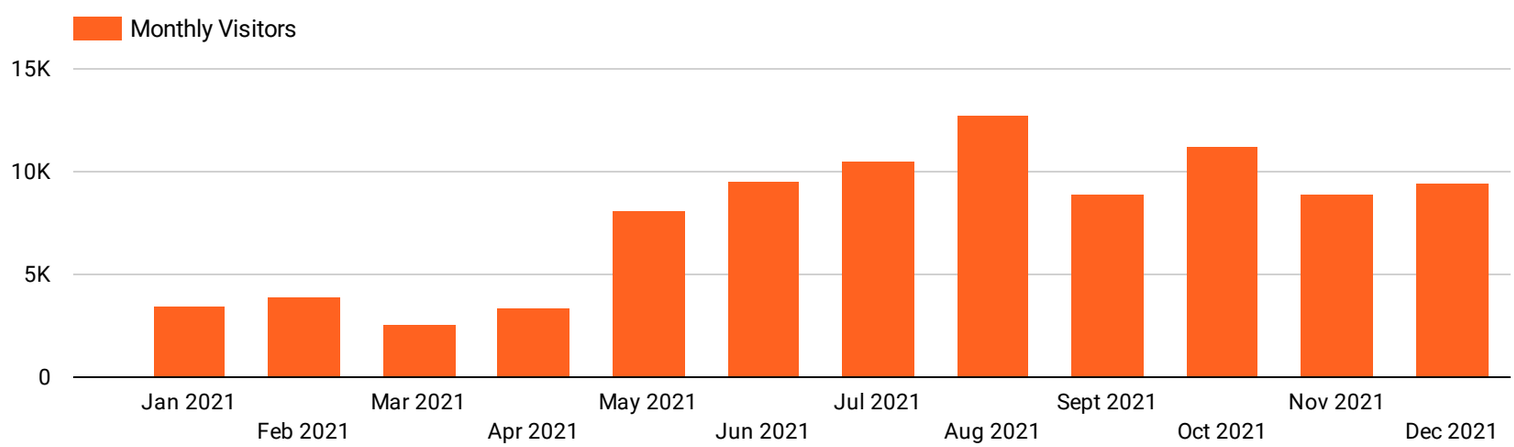


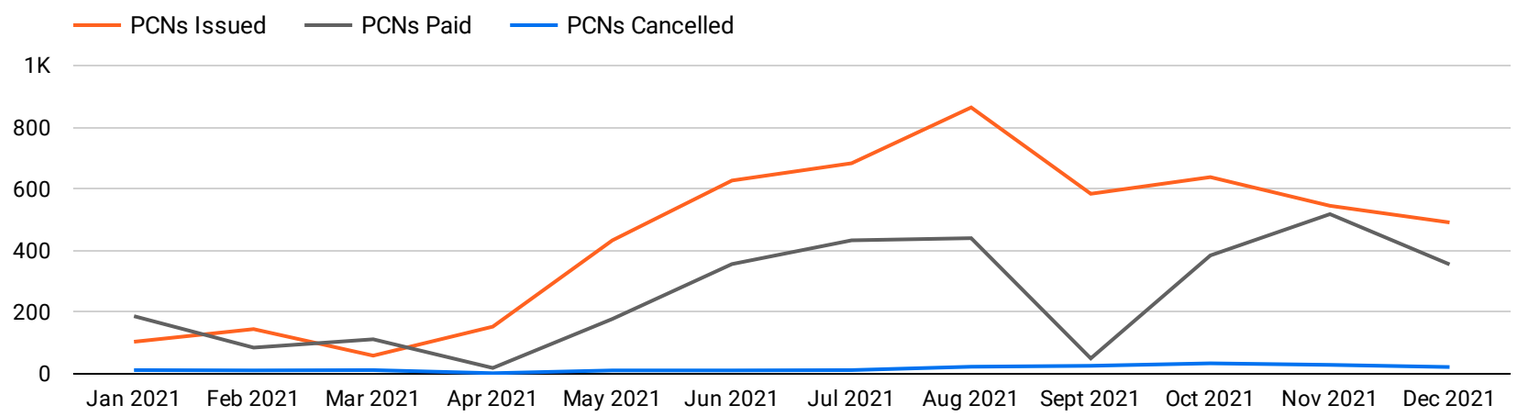
Haven Banks Retail Park

December 2021

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
92,945	5,326	3,117	205

Month (Year Month) ▲	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Jan 2021	3,458	104	187	12
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sept 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Nov 2021	8,967	545	518	29
Dec 2021	9,425	491	355	22
Grand total	**92,945**	**5,326**	**3,117**	**205**



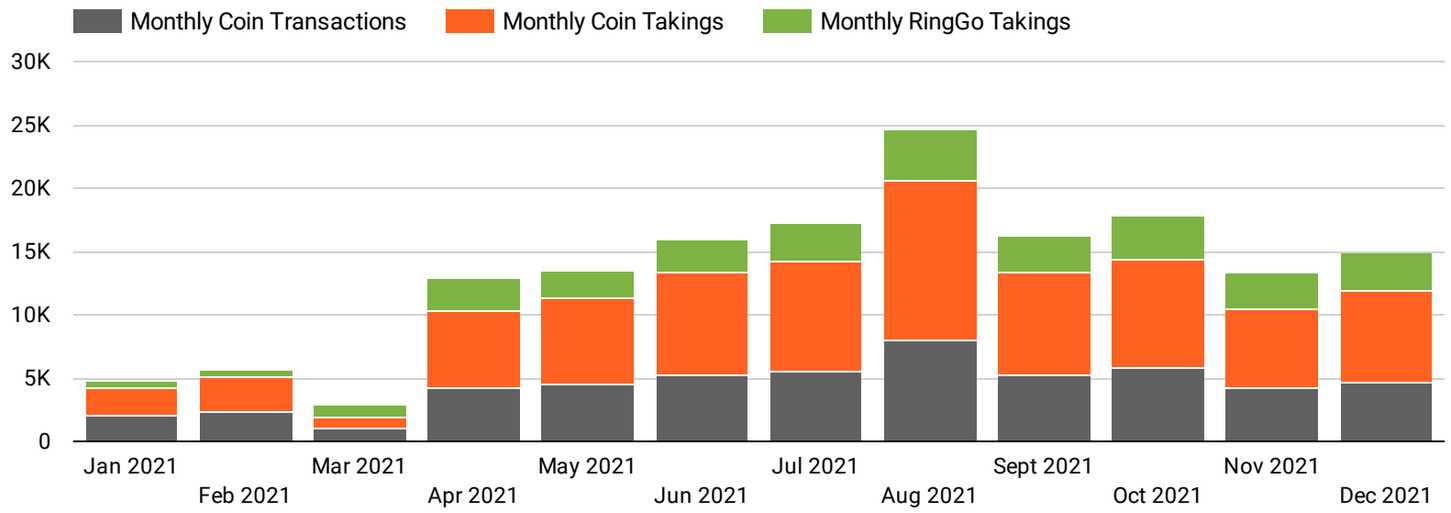


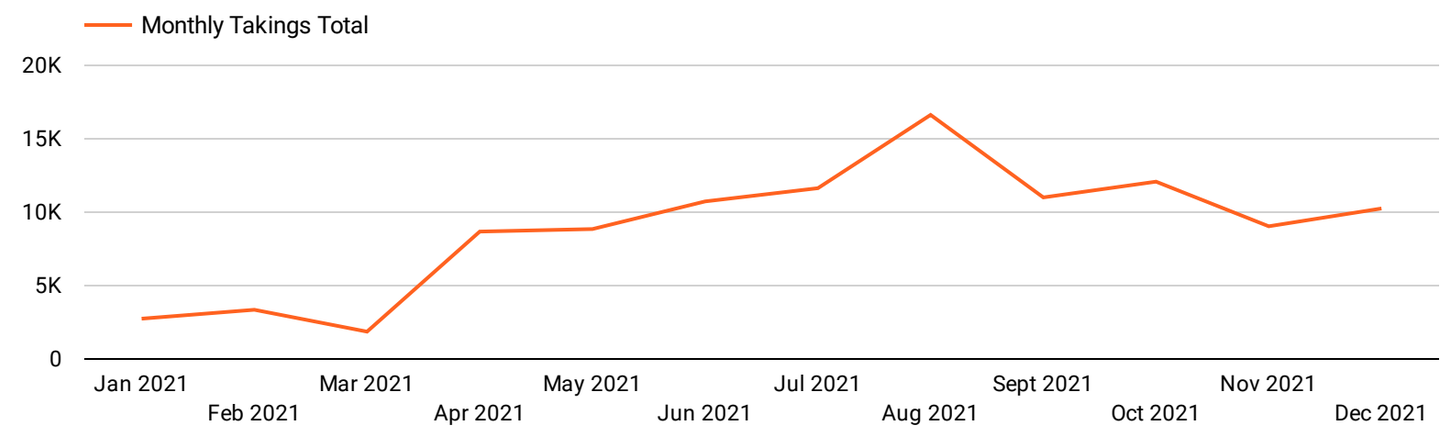
Haven Banks Retail Park

December 2021

Total Transactions	Total Coin Transactions	Total RingGo Transactions
71,044	52,786	18,258

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Jan 2021	£2,291.10	£454.00	£2,745.10
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sept 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Nov 2021	£6,217.05	£2,822.00	£9,039.05
Dec 2021	£7,199.90	£3,051.00	£10,250.90
Grand total	**£78,075.60**	**£28,782.00**	**£106,857.60**





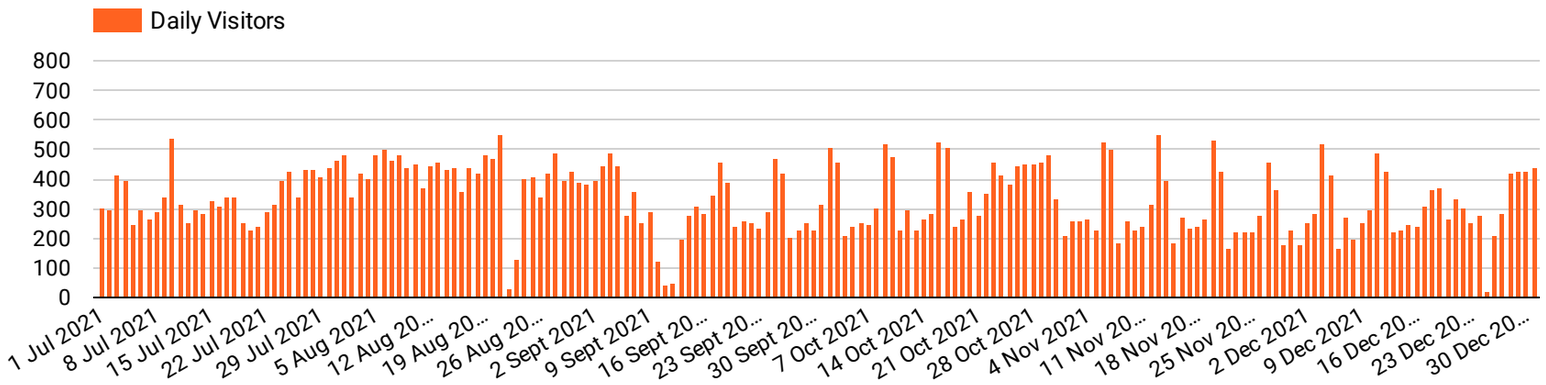
Haven Banks Retail Park

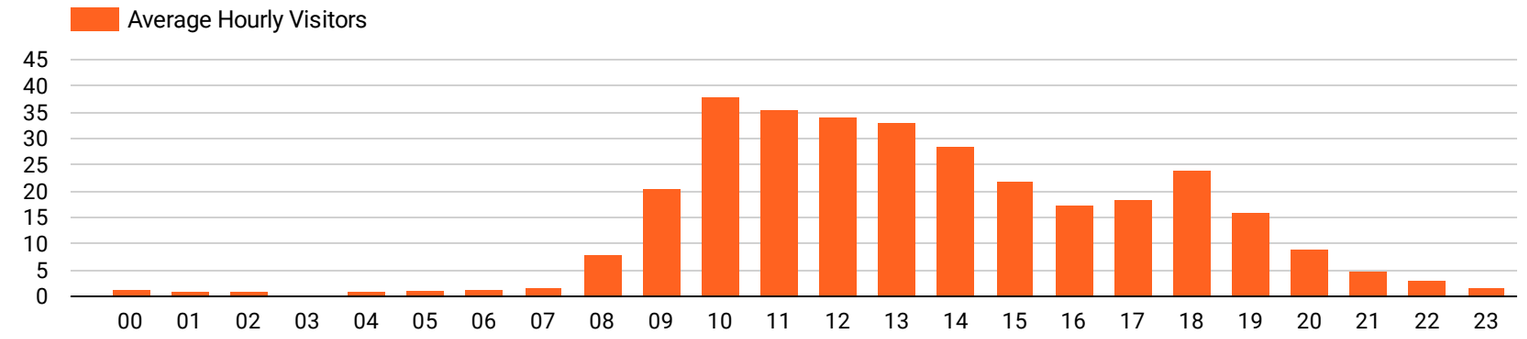
December 2021

December Breakdown

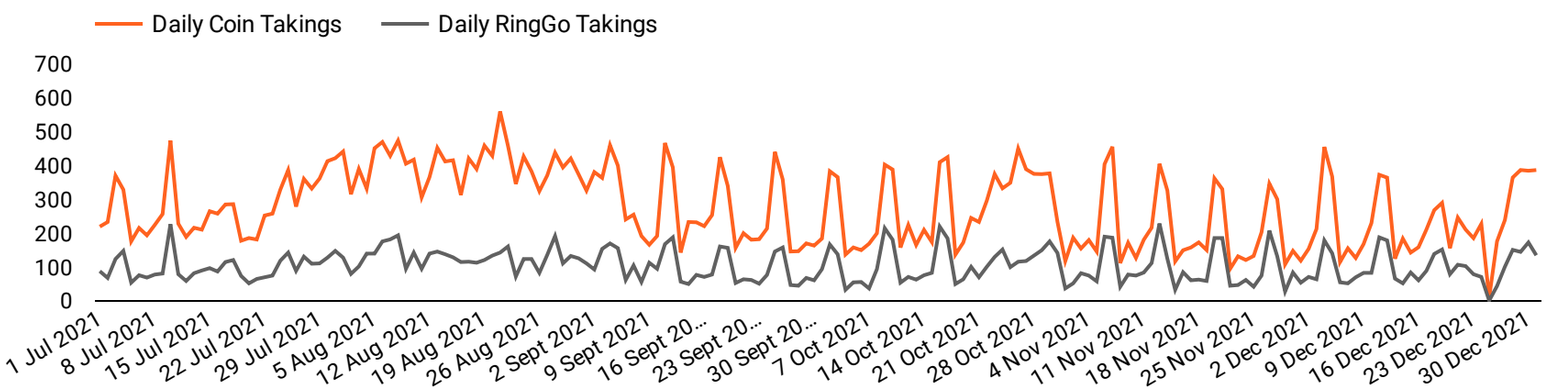
December Total Visitors	9K
PCNs Issued	491
PCNs Paid	355
PCNs Cancelled	22

Day of Week	Average Stay Time
Monday	94
Tuesday	94
Wednesday	98
Thursday	93
Friday	85
Saturday	80
Sunday	94





December Total Transactions	December Coin Transactions	December RingGo Transactions
7K	5K	2K

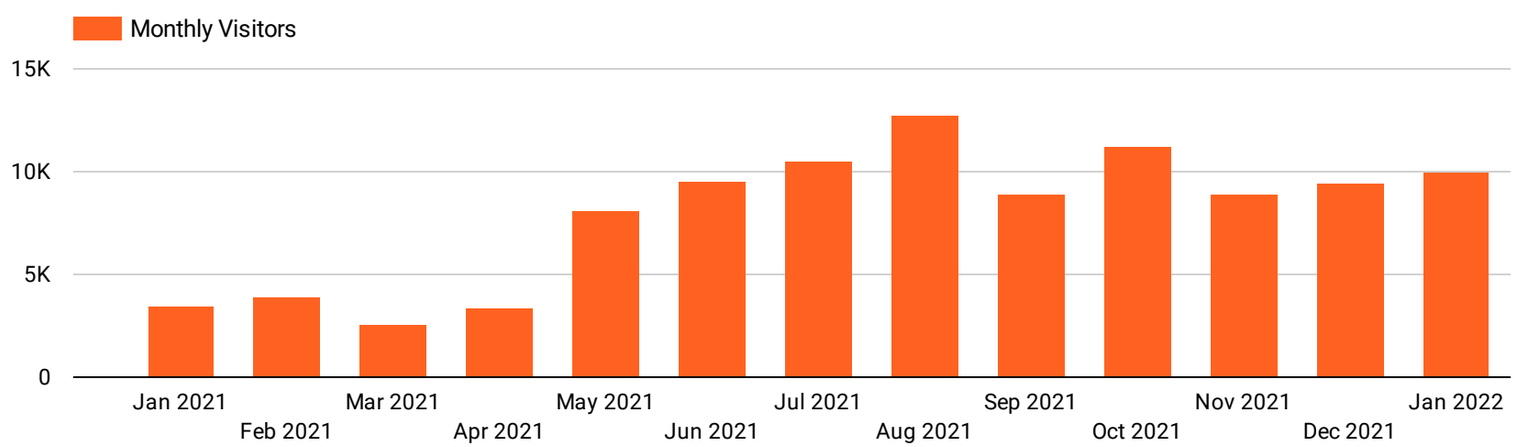


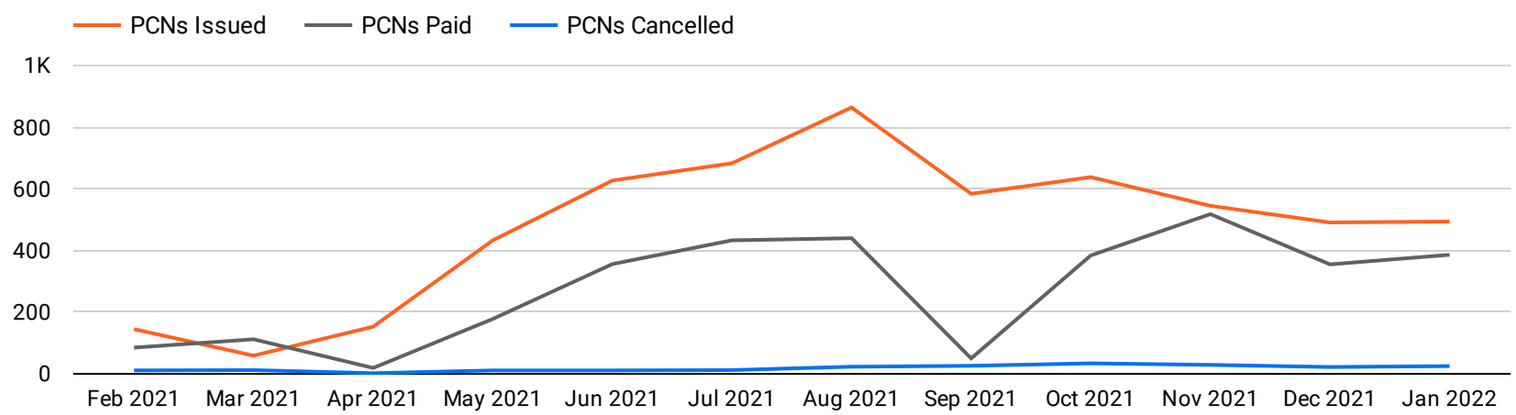
Haven Banks Retail Park

January 2022

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
99,528	5,716	3,316	218

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Feb 2021	3,962	145	85	11
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sep 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Nov 2021	8,967	545	518	29
Dec 2021	9,425	491	355	22
Jan 2022	10,041	494	386	25
Grand total	**99,528**	**5,716**	**3,316**	**218**



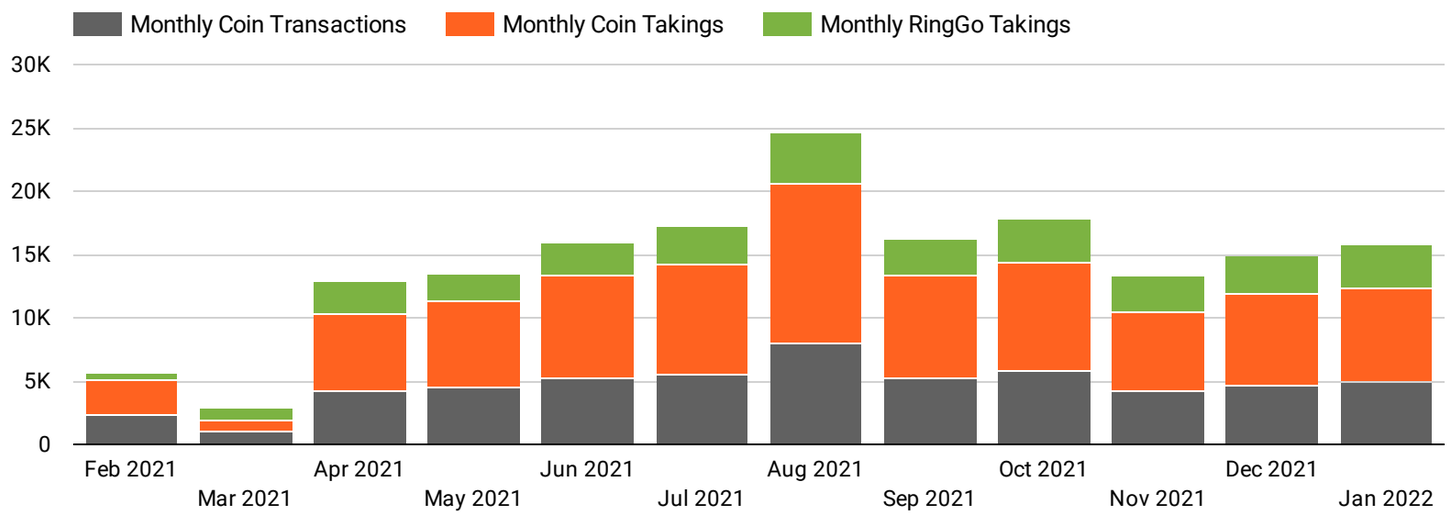


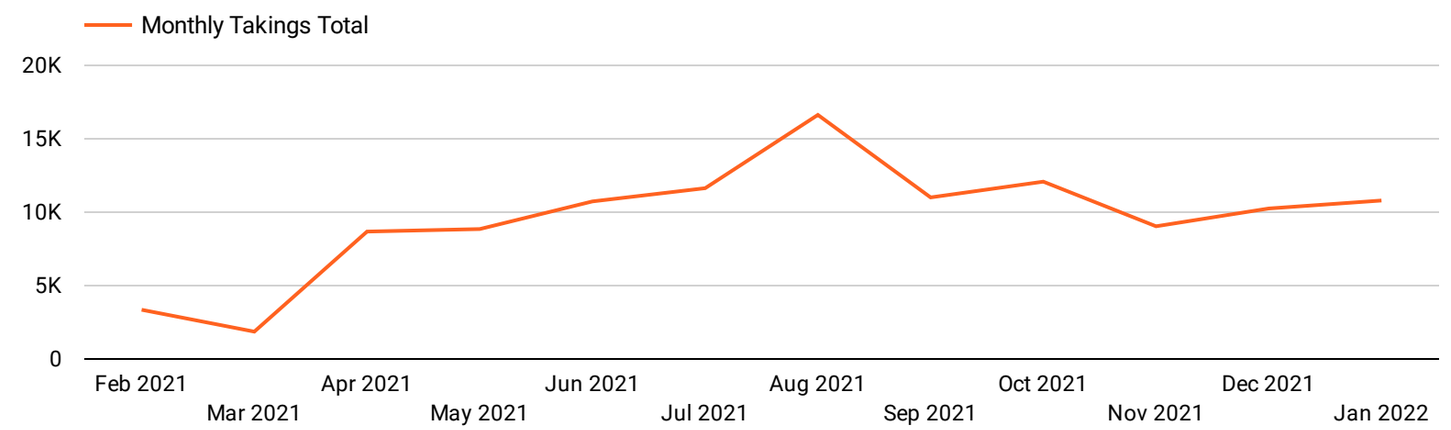
Haven Banks Retail Park

January 2022

Total Transactions	Total Coin Transactions	Total RingGo Transactions
75,962	55,771	20,191

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Feb 2021	£2,765.90	£586.00	£3,351.90
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sep 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Nov 2021	£6,217.05	£2,822.00	£9,039.05
Dec 2021	£7,199.90	£3,051.00	£10,250.90
Jan 2022	£7,381.75	£3,412.00	£10,793.75
Grand total	**£83,166.25**	**£31,740.00**	**£114,906.25**





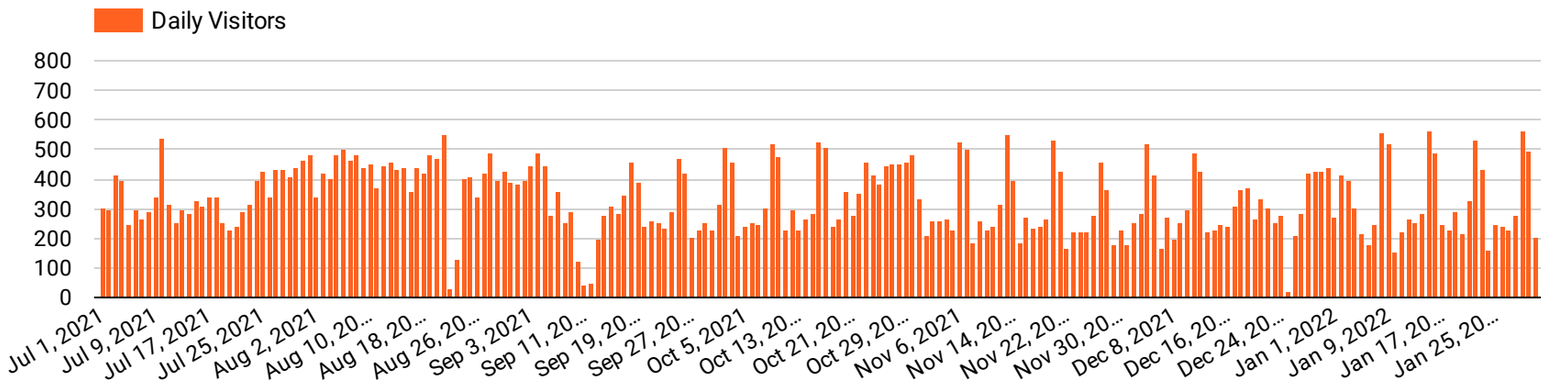
Haven Banks Retail Park

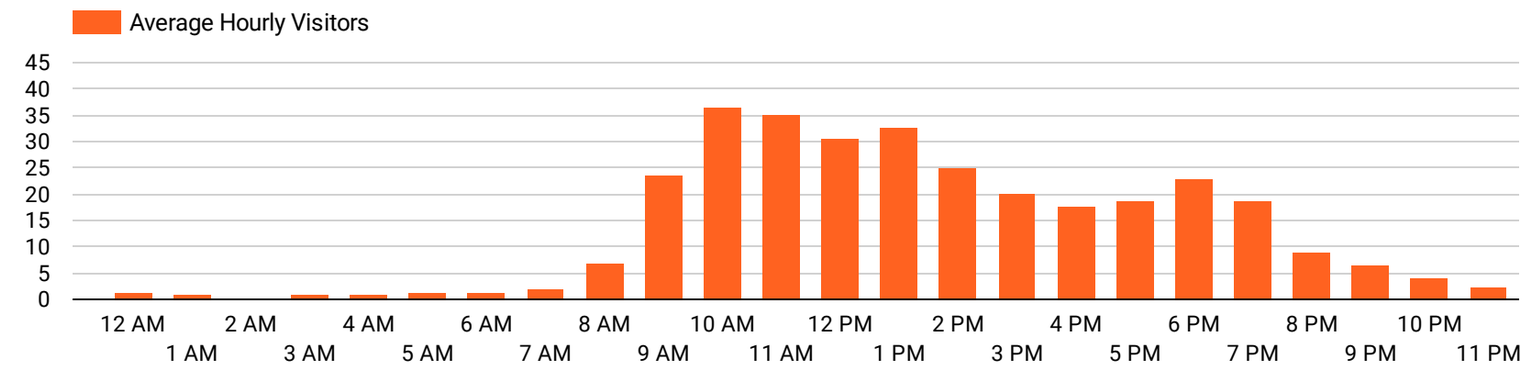
January 2022

January Breakdown

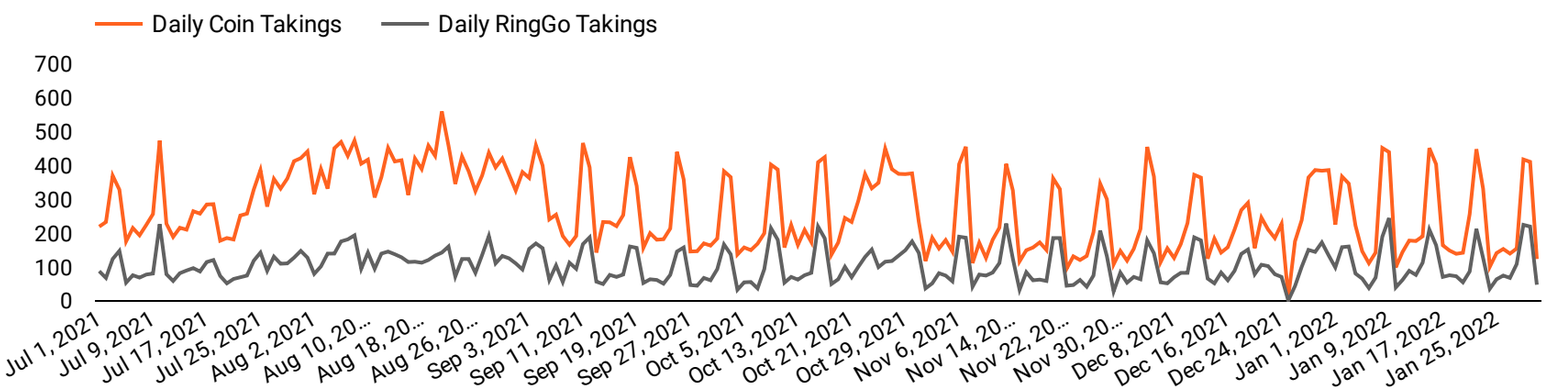
January Total Visitors	9K
PCNs Issued	494
PCNs Paid	386
PCNs Cancelled	25

Day of Week	Average Stay Time
Monday	91
Tuesday	89
Wednesday	87
Thursday	88
Friday	87
Saturday	90
Sunday	91





January Total Transactions	January Coin Transactions	January RingGo Transactions
7K	5K	2K

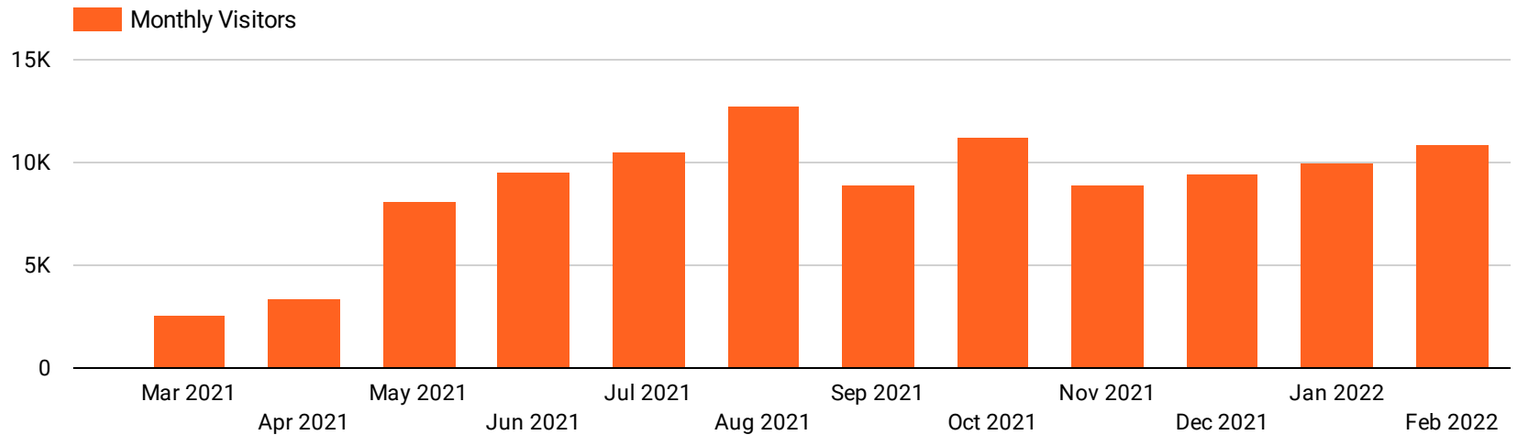


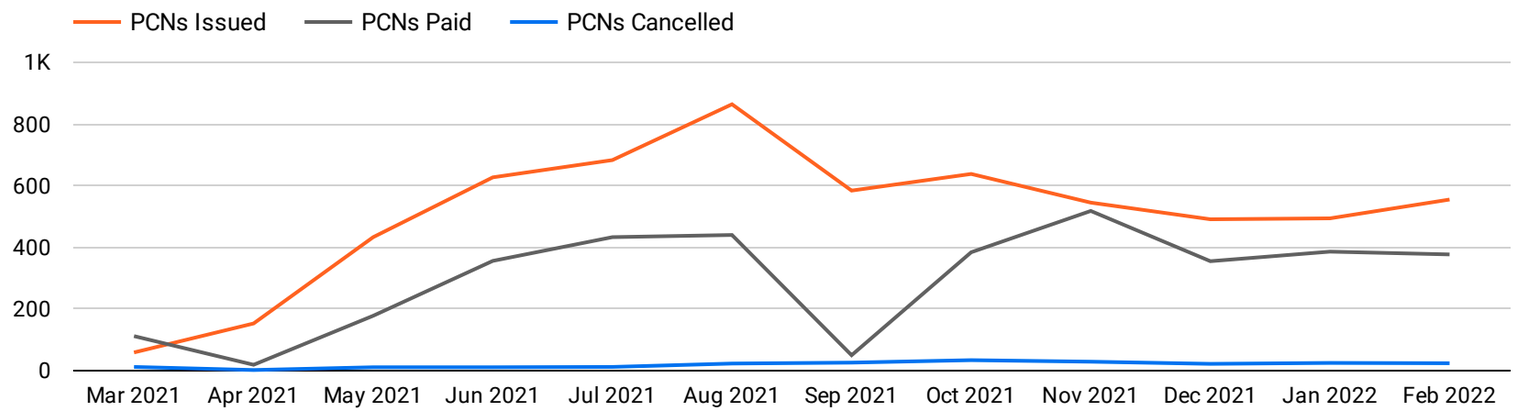
Haven Banks Retail Park

February 2022

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
106,459	6,126	3,608	231

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Mar 2021	2,563	59	112	12
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sep 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Nov 2021	8,967	545	518	29
Dec 2021	9,425	491	355	22
Jan 2022	10,041	494	386	25
Feb 2022	10,893	555	377	24
Grand total	**106,459**	**6,126**	**3,608**	**231**



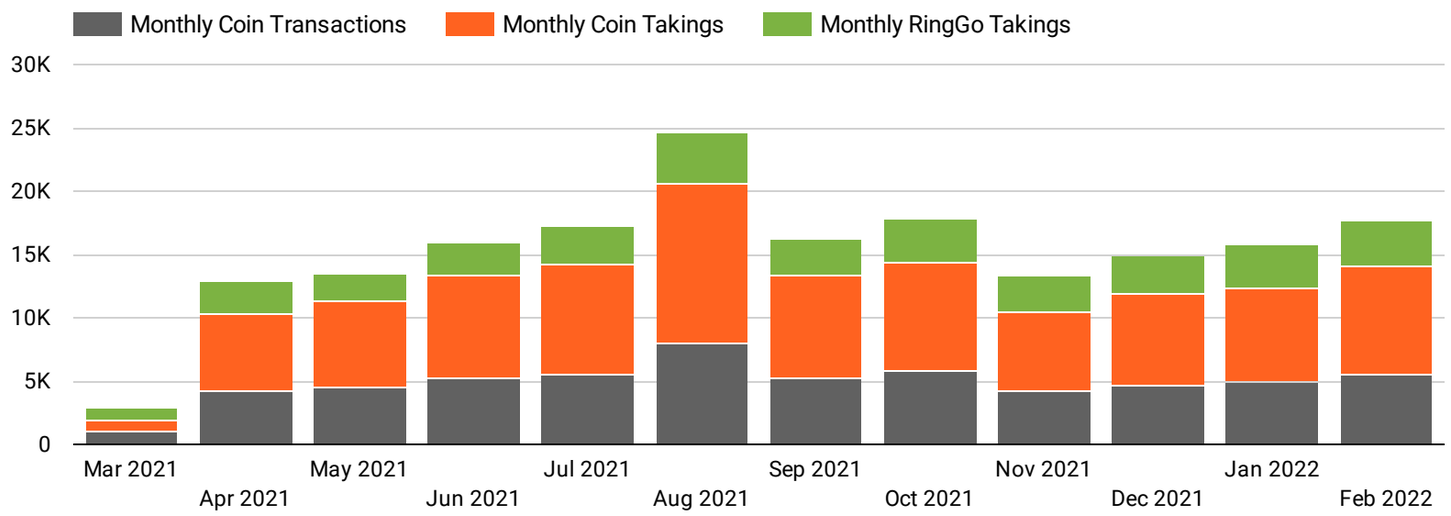


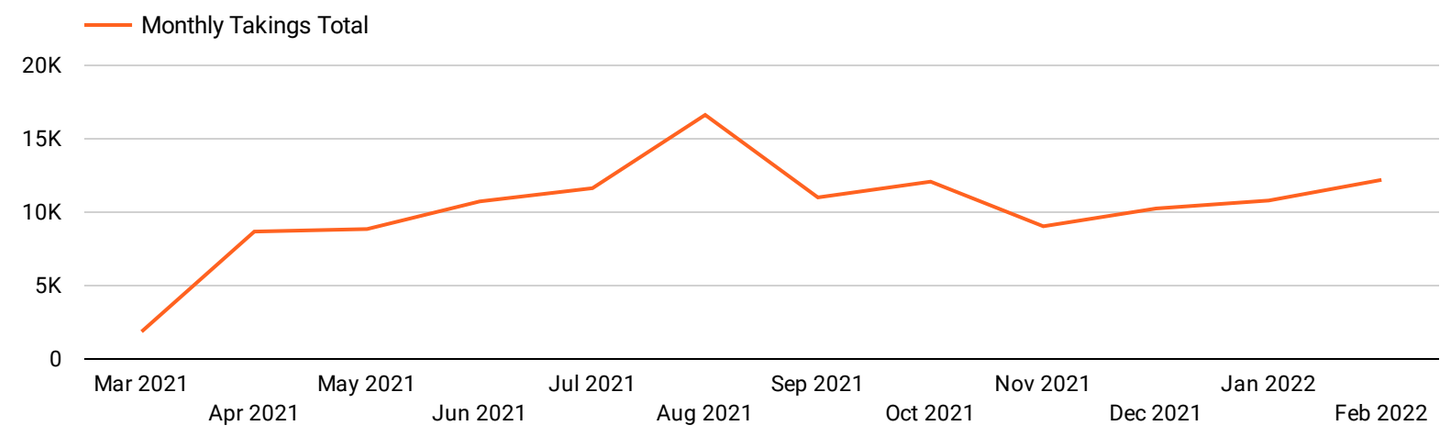
Haven Banks Retail Park

February 2022

Total Transactions	Total Coin Transactions	Total RingGo Transactions
81,147	58,984	22,163

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Mar 2021	£888.00	£975.00	£1,863.00
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sep 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Nov 2021	£6,217.05	£2,822.00	£9,039.05
Dec 2021	£7,199.90	£3,051.00	£10,250.90
Jan 2022	£7,381.75	£3,412.00	£10,793.75
Feb 2022	£8,512.90	£3,687.00	£12,199.90
Grand total	**£88,913.25**	**£34,841.00**	**£123,754.25**





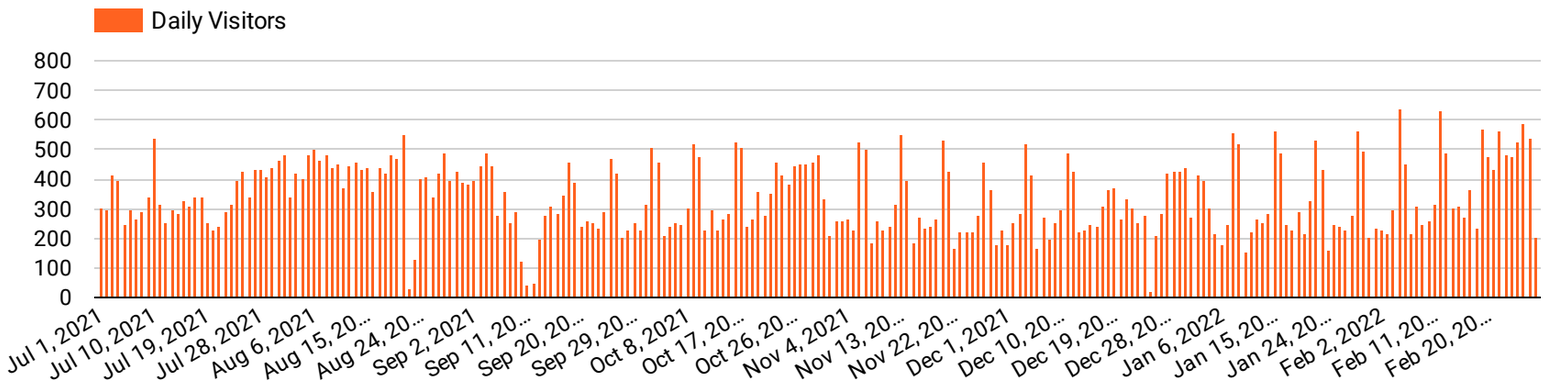
Haven Banks Retail Park

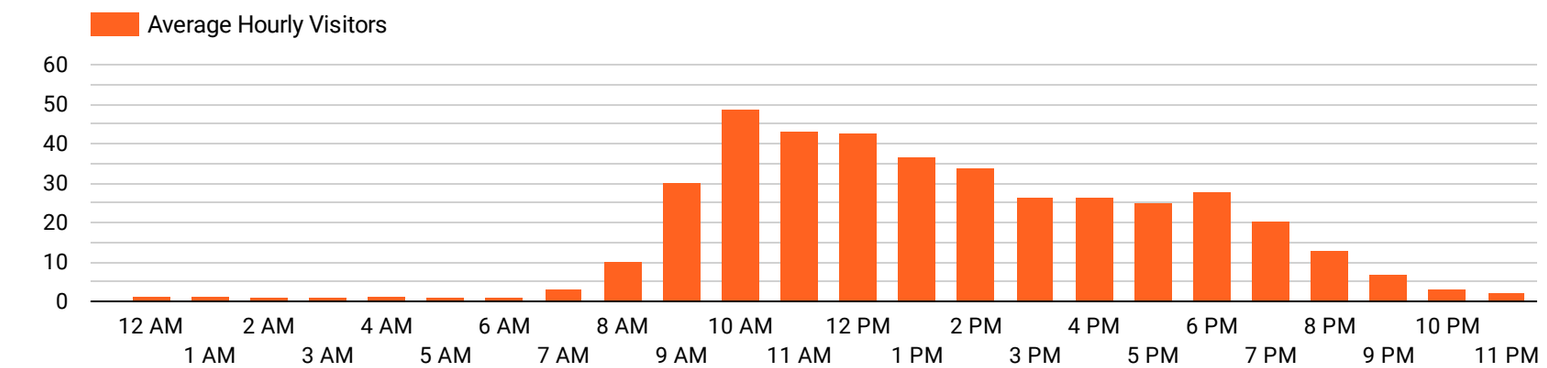
February 2022

February Breakdown

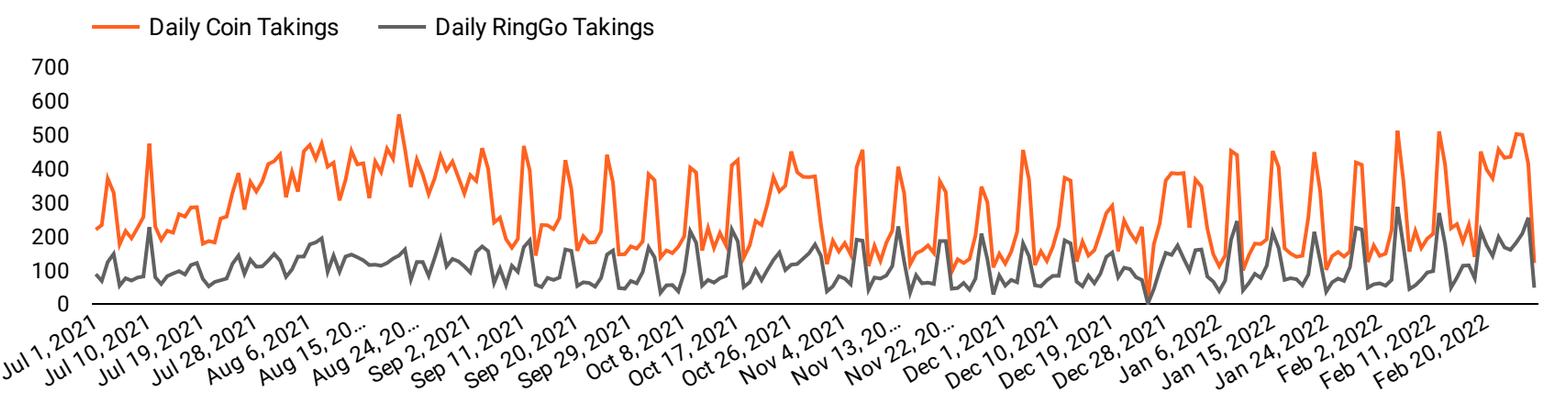
February Total Visitors	9K
PCNs Issued	555
PCNs Paid	377
PCNs Cancelled	24

Day of Week	Average Stay Time
Monday	88
Tuesday	87
Wednesday	95
Thursday	96
Friday	91
Saturday	91
Sunday	91





February Total Transactions	February Coin Transactions	February RingGo Transactions
8K	6K	2K

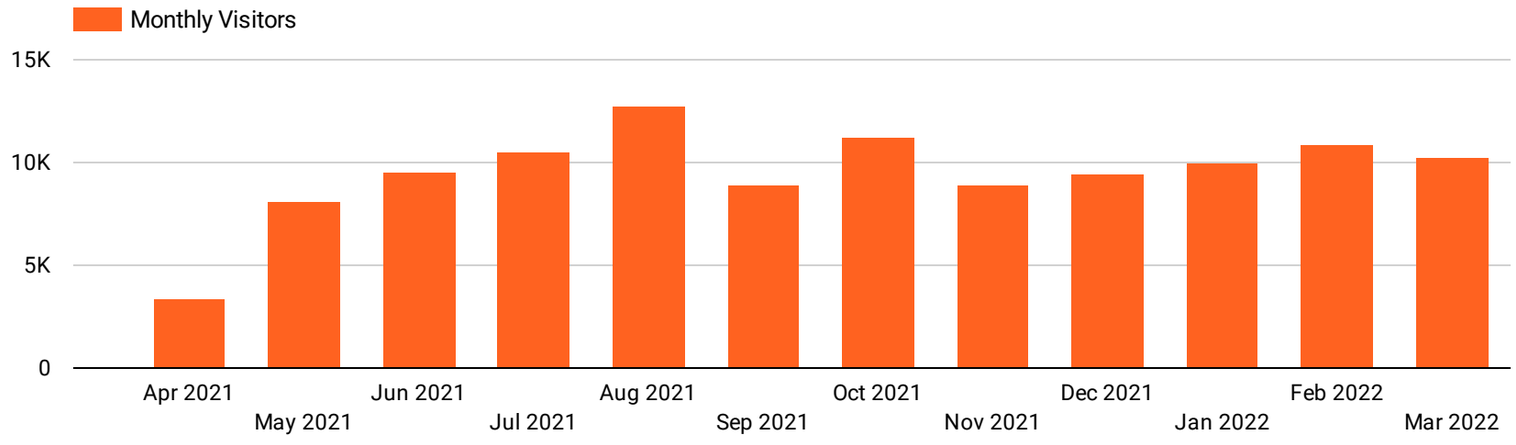


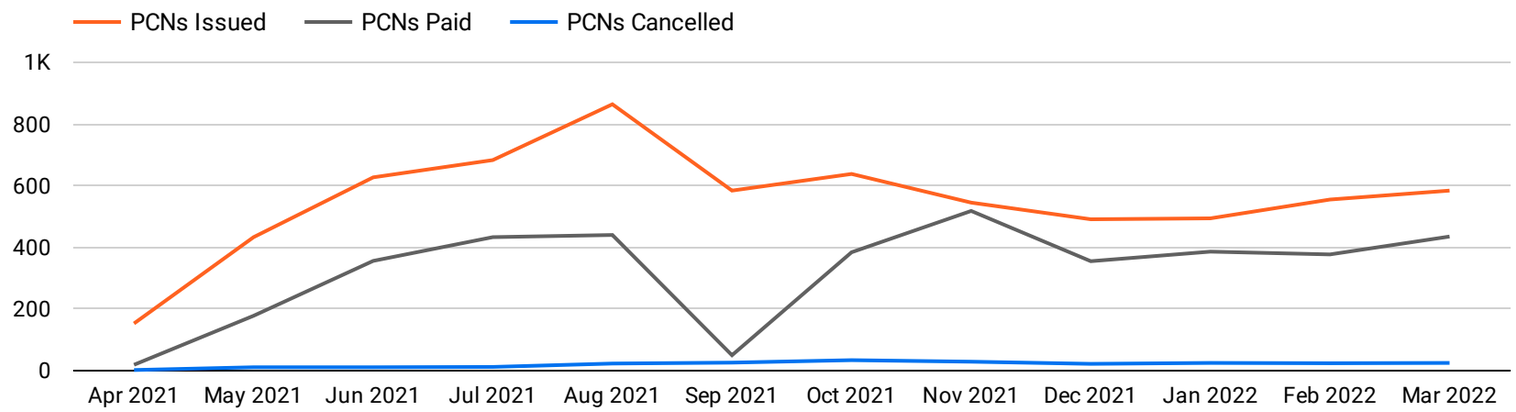
Haven Banks Retail Park

March 2022

Total Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
114,149	6,651	3,931	244

Month (Year Month)	Monthly Visitors	PCNs Issued	PCNs Paid	PCNs Cancelled
Apr 2021	3,367	153	19	2
May 2021	8,093	433	178	11
Jun 2021	9,520	627	356	11
Jul 2021	10,559	683	433	12
Aug 2021	12,811	864	440	23
Sep 2021	8,951	584	50	26
Oct 2021	11,269	638	384	34
Nov 2021	8,967	545	518	29
Dec 2021	9,425	491	355	22
Jan 2022	10,041	494	386	25
Feb 2022	10,893	555	377	24
Mar 2022	10,253	584	435	25
Grand total	**114,149**	**6,651**	**3,931**	**244**



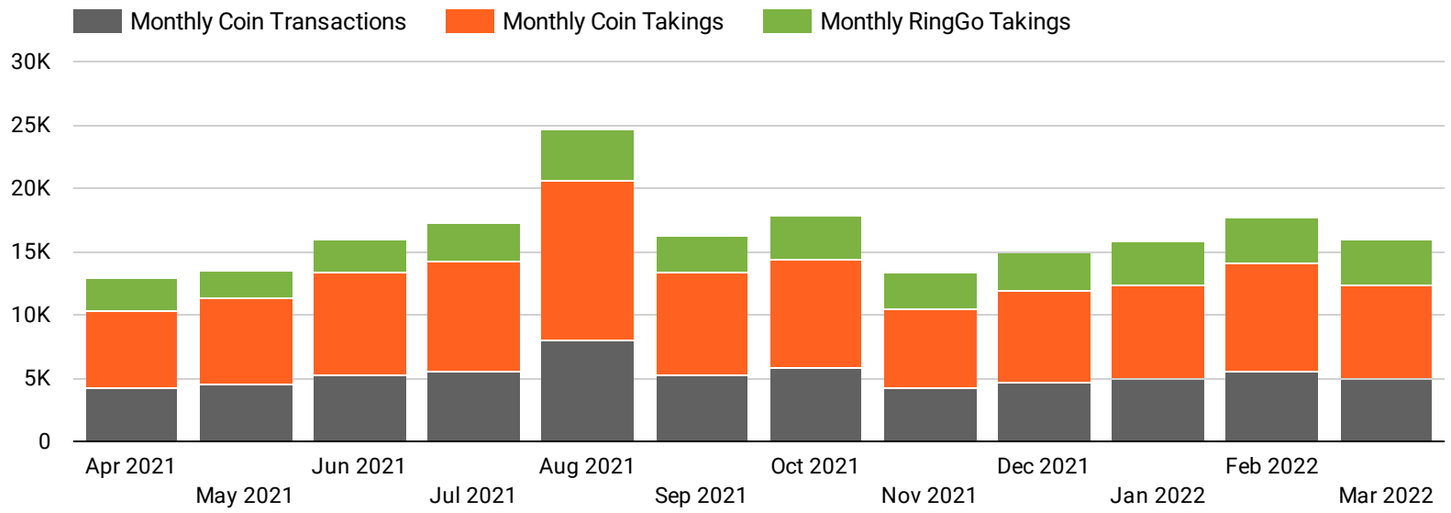


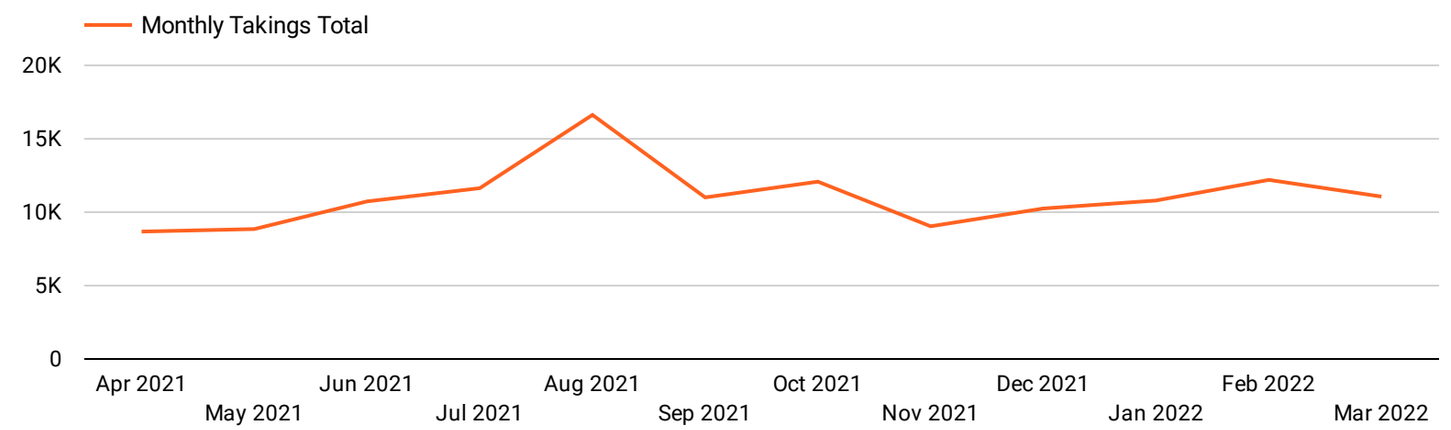
Haven Banks Retail Park

March 2022

Total Transactions	Total Coin Transactions	Total RingGo Transactions
86,696	62,858	23,838

Month (Year Month)	Monthly Coin Takings	Monthly RingGo Takings	Monthly Takings Total
Apr 2021	£6,001.00	£2,678.00	£8,679.00
May 2021	£6,765.45	£2,085.00	£8,850.45
Jun 2021	£8,072.65	£2,661.00	£10,733.65
Jul 2021	£8,576.05	£3,058.00	£11,634.05
Aug 2021	£12,594.30	£4,032.00	£16,626.30
Sep 2021	£8,051.45	£2,954.00	£11,005.45
Oct 2021	£8,652.75	£3,426.00	£12,078.75
Nov 2021	£6,217.05	£2,822.00	£9,039.05
Dec 2021	£7,199.90	£3,051.00	£10,250.90
Jan 2022	£7,381.75	£3,412.00	£10,793.75
Feb 2022	£8,512.90	£3,687.00	£12,199.90
Mar 2022	£7,443.25	£3,620.00	£11,063.25
Grand total	**£95,468.50**	**£37,486.00**	**£132,954.50**





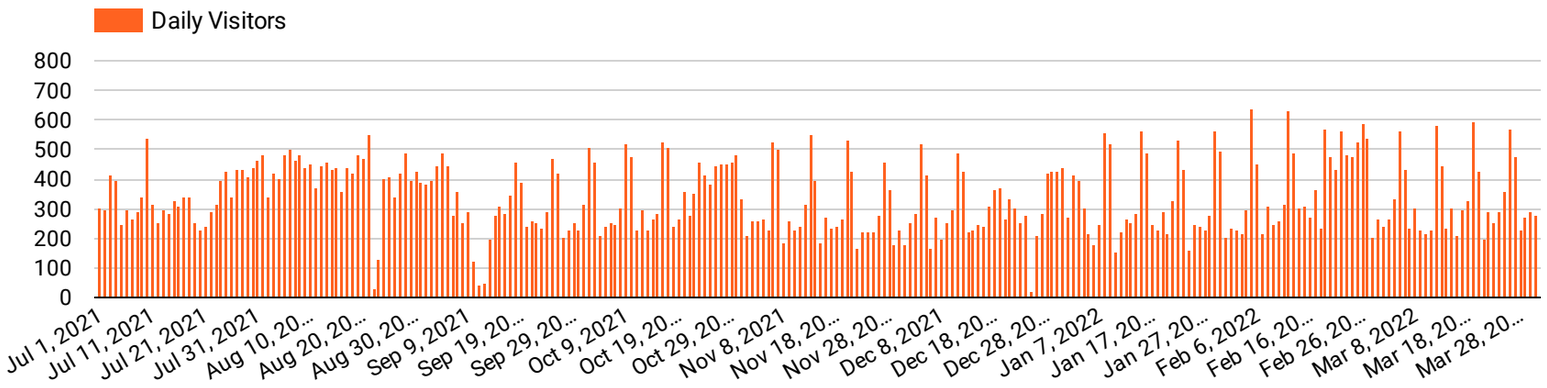
Haven Banks Retail Park

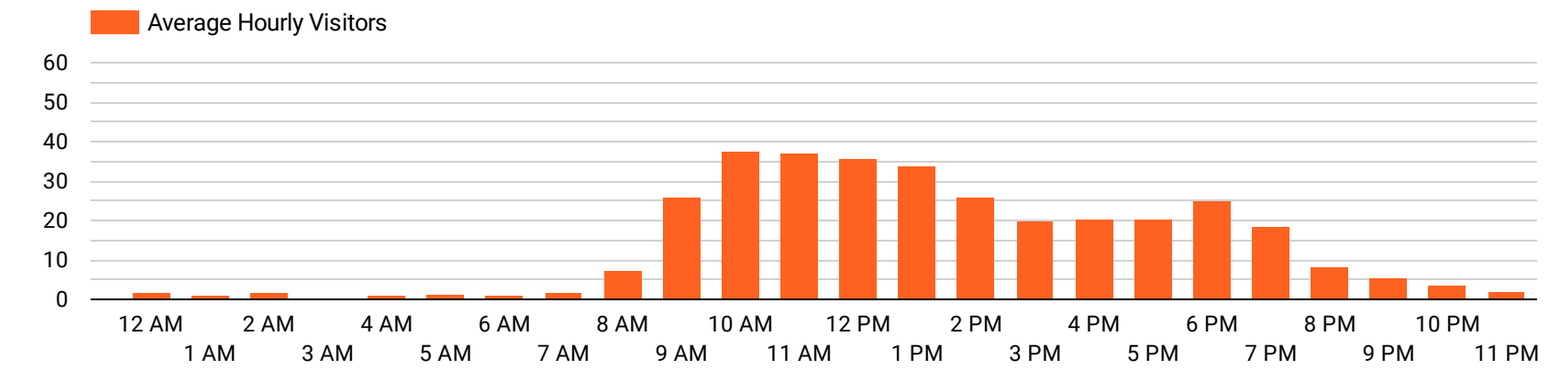
March 2022

March Breakdown

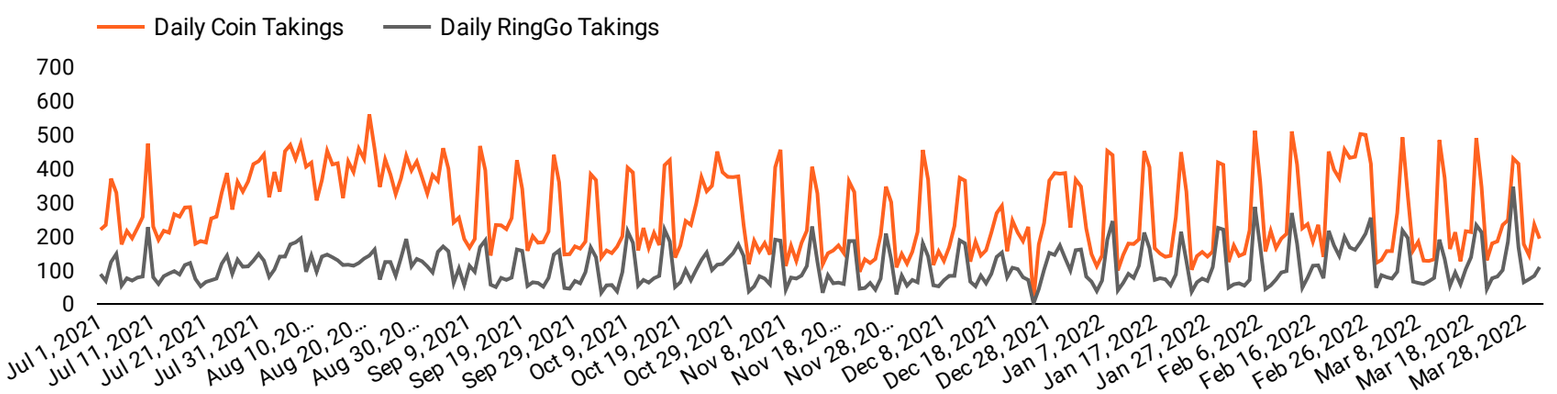
March Total Visitors	9K
PCNs Issued	584
PCNs Paid	435
PCNs Cancelled	25

Day of Week	Average Stay Time
Monday	86
Tuesday	84
Wednesday	91
Thursday	88
Friday	88
Saturday	93
Sunday	91





March Total Transactions	March Coin Transactions	March RingGo Transactions
7K	5K	2K



APPENDIX 8 EXETER CITY COUNCIL PARKING DATA (HAVEN BANKS CAR PARKS)

	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019
Haven Banks	4,784	4,826	4,948	5,496	5,566	4,910	5,770	6,749	4,789	4,291	4,096	3,924
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19

	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
Haven Banks	4,451	4,338	2,447	21	1,141	2,433	3,306	5,378	3,745	2,943	1,633	2,641
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20

	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021
Haven Banks	1,069	1,361	1,914	3,262	3,095	3,542	3,313	4,413	3,202	3,142	2,471	2,300
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21

	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022
Haven Banks	2,663	2,458	2,692	2,868	2,384							
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22

APPENDIX 9 PUBLIC CAR PARKING PLAN

LEGEND

- Site Location
- Car Park Location
- 1KM Walking Isochrone

RGP
Transport Planning and Infrastructure Design Consultants
30 Stamford Street, London, SE1 9LQ
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Client:	Welbeck CP
Project:	Haven Banks, Exeter
Title:	Exeter City Centre Public Parking

Plan No:	Job No:	Date:	
01	5945	July 2022	
Drawn By:	Checked By:	Rev:	
JDF	NDR	-	A3

RGP

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