Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

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1.0 Introduction

Overview and Site History

1.1 SLR Consulting Ltd is appointed by Trivallis to provide highways and transport advice in relation to the proposed residential regeneration of the existing community in Penrhys, Rhondda Cynon Taff (RCT). This report is a Transport Assessment (TA).

1.2 Penrhys village is approximately 24 hectares and was built between 1966-1969 with 951 homes and at the time was the largest public sector housing venture in Wales. It contained a mixture of private and affordable housing.

1.3 Local Authority begun a relocation programme for Penrhys by the 1990s, with many of the original buildings being demolished once the tenants had been relocated. Less than 300 buildings remain in the village today, of which only 220 are currently occupied. Penrhys was transferred from Rhondda Cynon Taf Council (RCT Homes) to the housing association 'Trivallis' in 2007.

1.4 Many of the former buildings are now demolished and much of the site is now cleared for this significant brownfield development opportunity. There are 12 residential blocks within or adjacent to the Phase 1A site which will need to be demolished as part of the regeneration scheme and residents of these buildings have been offered temporary housing at Penrhys or off-site accommodation whilst Phase 1A is constructed. The existing community of Penrhys have, through a community engagement process, stated their desire to remain on the site and have reinforced the importance of the community spirit they feel, which is strongly linked to the Llanfair Uniting Church, which also acts a community centre and the primary school.

Figure 1-1: The Southwestern Area of Penrhys (facing southwest)

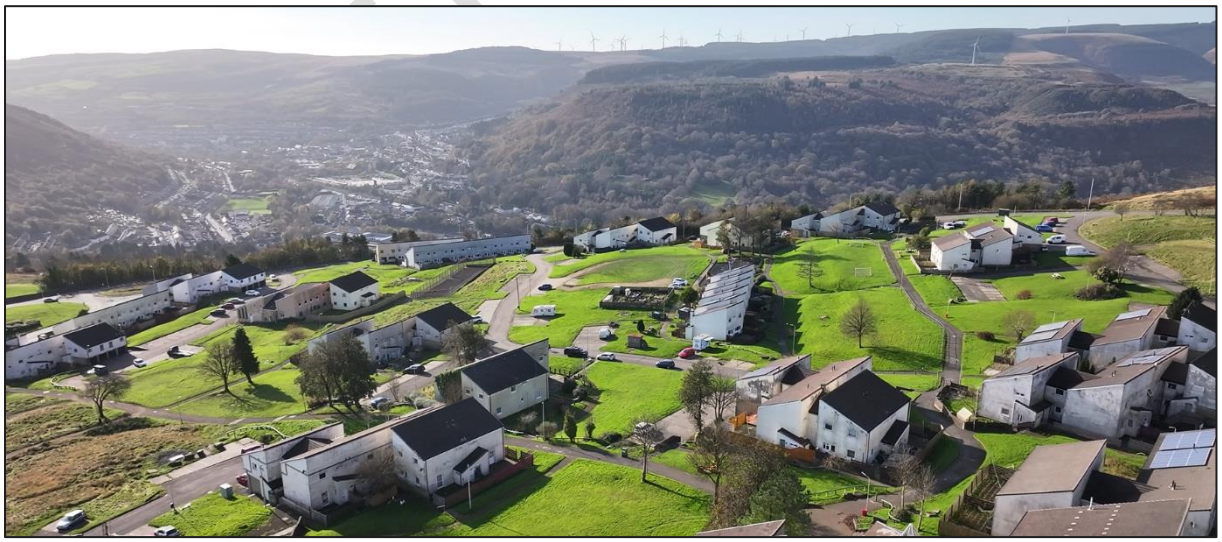


Image Source: trivallis.co.uk

Development Proposals

1.5 Trivallis proposes to redevelop the entire Penrhys village to create a new community where existing residents want to remain, and new residents want to move to.

1.6 Trivallis are currently promoting plans for a mixed-use development of 800-900 new homes to regenerate the entire village, including providing some 1,000 sqm of complementary commercial space and an improved public realm. The regeneration project will also include improvements to Penrhys Primary School, as well as new sports facilities and high-quality green spaces.

1.7 The redevelopment of the site will come forward in stages, the first of which is Phase 1A, an initial development of 121 residential units, which is the subject of this TA. A further outline application will be sought for the wider village site, which will be supported by an additional TA.

1.8 Phase 1A sets the tone for the high-quality development which will follow and seeks to provide sufficient balance between providing open market housing to attract new residents to the village, as well as enough social housing to relocate existing residents in the village, enabling the next phases to come forward for redevelopment.

1.9 Aspirations for the wider site includes anew commercial area, community centre, upgraded school and sports facilities. The community centre will provide a focal point for people to meet, interact, work and spend time, and can provide a range of other day to day amenities.

1.10 The preliminary proposals for the wider Penrhys site are illustrated in **Figure 1.2**.

Figure 1-2: Penrhys Illustrative Masterplan (Wider site including Phase 1A)

This Report

1.11 This TA is produced to support the initial part of the regeneration of Penrhys comprising the land known as “Phase 1A”.

1.12 Phase 1A is located in the northwestern part of Penrhys. It includes information regarding the existing and proposed accessibility credentials of the site and provides an analysis of the forecast trip generation and its effect on the local highway network.

1.13 This TA follows the methodology as set out in the Scoping Note issued to Rhondda Cynon Taff County Borough Council (RCTCBC) in January 2025.

1.14 The Scoping Note is attached at **Appendix B**.

1.15 The site-wide masterplan is being developed in tandem with the application for Phase 1A, to ensure a cohesive design and assessment for the entire site.

1.16 The aim for Phase 1A, in alignment with the vision for the wider site, is to facilitate better mobility by being accessible by active and public transport modes, offering safe and secure cycle parking, as well as elements such as a bicycle repair hub. Car club and carpooling space could be made available, as well as EV charging points and upgraded bus stops with high quality waiting facilities.

Pre-Application Engagement

1.17 SLR met with RCTCBC Highways Officers twice prior to issuing the Scoping Note.

1.18 The first meeting was the 17th of September 2024 as part of a wider pre-application meeting with RCTCBC Officers covering a number of disciplines relating to the regeneration of Penrhys at which highways and transport was discussed. The second meeting was a highways-specific meeting with RCTCBC Officers on the 5th of November 2024. Following this meeting it was agreed that SLR would prepare a TA Scoping Note to set out the scope of assessment for the TA.

1.19 The SLR Scoping Note was submitted to RCTCBC Highways on 9th January 2025, with the aim of agreeing a methodology and a scope of works for the highways and transport element of the application. No formal response from RCTCBC Highways prior to the submission of Pre-Application Consultation (PAC).

1.20 Further pre-application meetings were held on 6th May 2025 with RCTCBC and 31st July 2025, where transport and highways were discussed.

Transport Assessment Structure

1.21 The remainder of the Transport Assessment is structured as follows:

- **Section 2** – **Existing Conditions**: a brief overview of the site in the context of sustainable transport and the local highway network.
- **Section 3** – **Planning Policy Context**: a review of the site against relevant national and local policy;

- **Section 4** – **Development Proposals**: sets out details of the proposed development;
- **Section 5** – **Mobility Strategy**: examines the strategy to reduce trips by private vehicle and encourage sustainable travel and active modes;
- **Section 6** – **Trip Generation Methodology:** a breakdown of the trip generation methodology used to derive the forecasted trip demand for the proposed development. A net trip generation will also be prepared;
- **Section 7** – **Highway Network Analysis**: sets out the percentage impact, and which junctions are proposed to be analysed in terms of capacity;
- **Section 8** – **Summary and Next Steps**: summarises and concludes the report.

2.0 Existing Conditions

2.1 This section sets out the existing accessibility to the site, including a review of Personal Injury Collision (PIC) data for the local highway network, and outlines baseline travel habits and observed traffic flows.

Site Location

2.2 The site is located in Penrhys, approximately 1.5 km east of Ystrad and 1 km west of Tylorstown. The site sits on a ridge between the Rhondda Fach and Rhondda Fawr valleys, overlooking the local area.

2.3 The site currently comprises approximately 220 residential properties and is bounded by the B4512 to the south and green space to the north, east and west. National Resources Wales controls and operates land to the north of the site.

2.4 The site location is illustrated in **Figure 2-1** and in **Figure 2-2**. Phase 1A comprises the northwestern area of Penrhys, which is area subject to the steepest topography within the site. All figures within Chapter 2 of this TA illustrate the red line boundary indicatively in red, and the wider site indicatively in blue.

Figure 2-1: Site Location

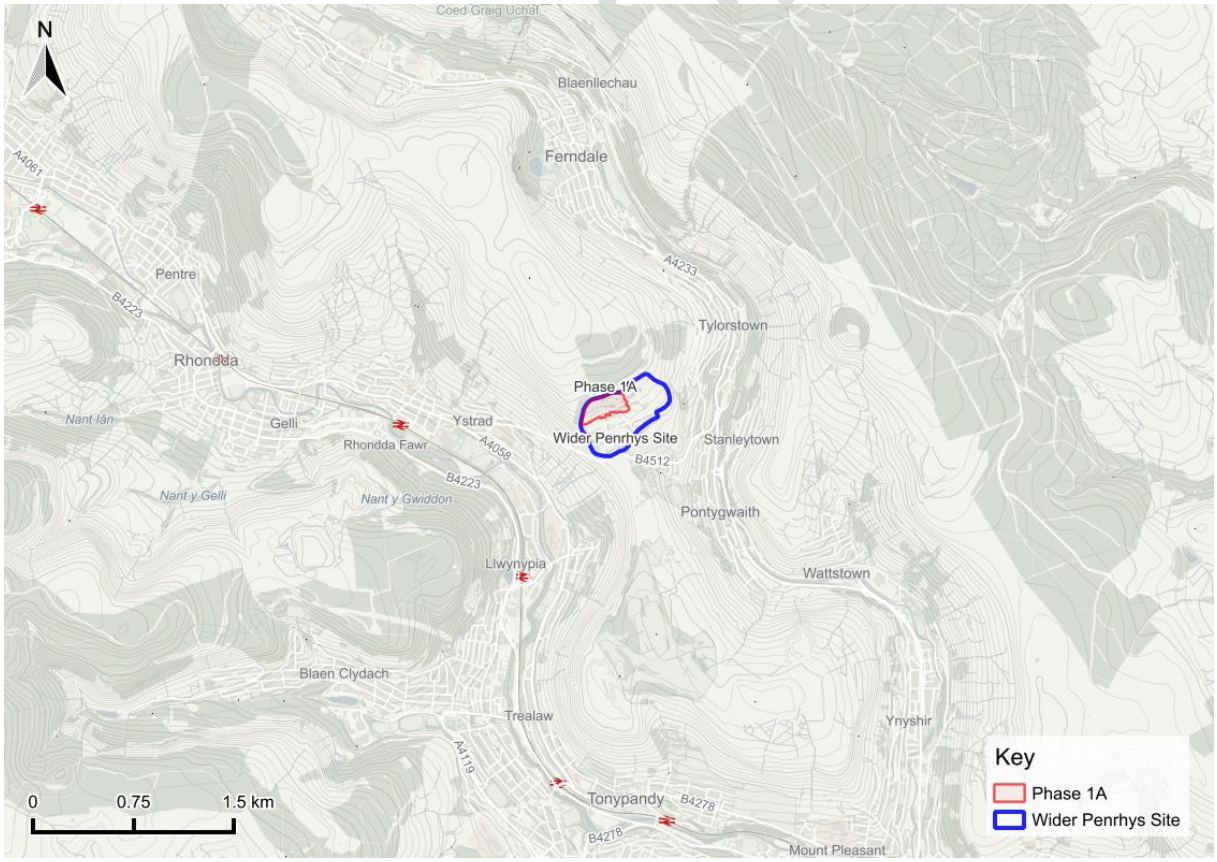
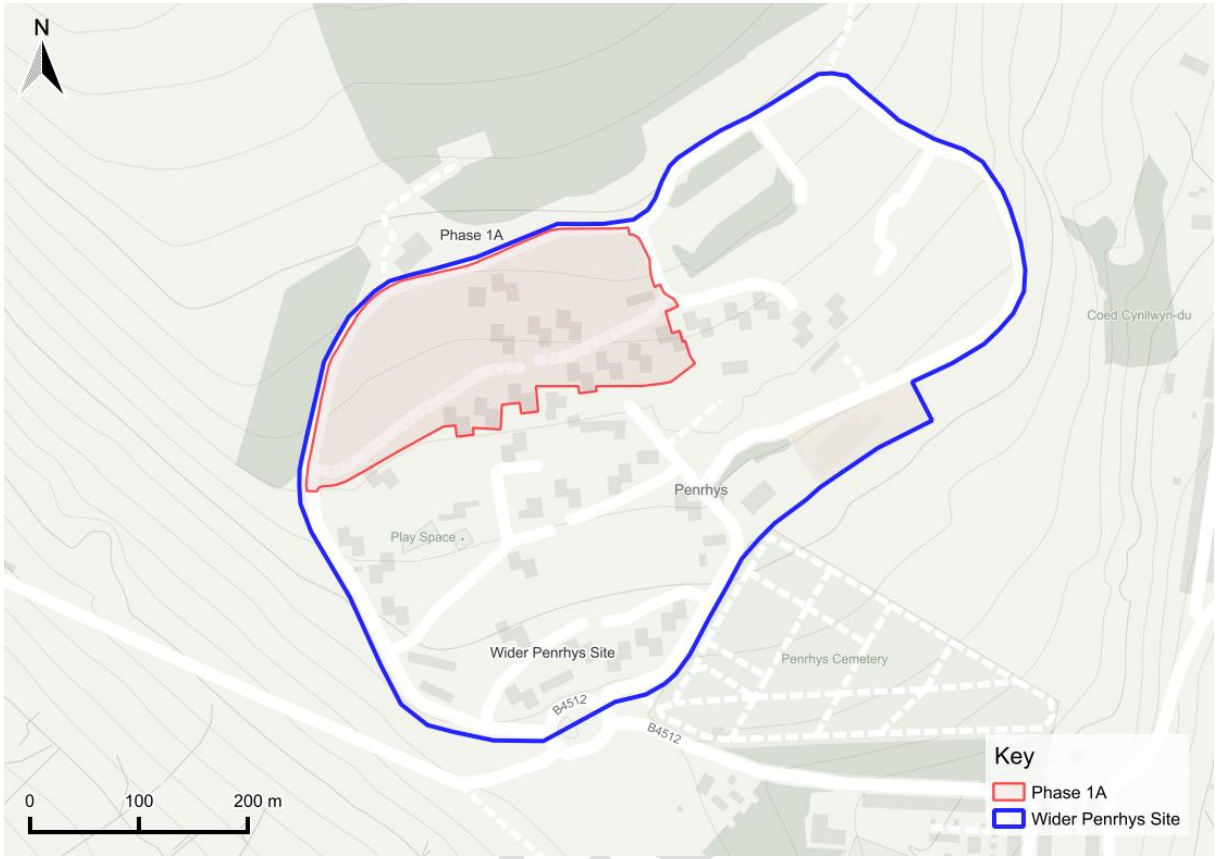


Figure 2-2: Site Location (in context of Penrhys)



Access to Penrhys

2.5 Penrhys is currently accessed via a large roundabout junction with Penrhys Road (B4512) and Heol Pendyrus (here forth referred to as ring road). A fifth arm allows for access to a small car park to the south associated with Our Lady of Penrhys and Penrhys Amphitheatre. There are no existing designated pedestrian crossing points located at this junction on any arm.

2.6 A stepped pedestrian footpath is located directly adjacent to the roundabout to the north, providing access to the built-up residential area. There are footways along all arms of the roundabout which are typically 2 m in width, although this varies. There is a bus stop accessed directly from the roundabout between the two Heol Pendyrus arms. Dropped kerbs and tactile paving are not present on any of the roundabout arms.

Photo 2-1: Penrhys Roundabout Bus Stop and northbound footpath

(source: Google Maps)

Existing Local Facilities

2.7 The site currently contains a primary school, a childcare centre (Children and Family Centre), a play area, a local convenience store, and a fast-food unit. Llanfair Uniting Church is considered to be the heart of the community and serves as a community centre. It offers a space for worship, events, and local activities. It hosts a Children And Family Evening (CAFE) on Wednesdays and Thursdays from 18:00-19:00. There is also a clothes bank, food bank, Friday coffees and more.

2.8 Three bus stops are currently provided along the Heol Pendyrus ring-road, including the 'Primary School, the 'Boilerhouse' and 'Penrhys Youth Club' bus stops. There is also a bus stop on the main access roundabout to the immediate south of Penrhys.

2.9 Other amenities are located in Ystrad and Tylorstown in the valleys to the east and west side of Penrhys. They are within reasonable walking distance based on a horizontal alignment, but involve steep gradients which inflate walking journey times. This means that journey times from these locations to Penrhys are likely to be longer than the opposite direction.

2.10 The journey times below have therefore been calculated using the Google Maps journey planning tool to provide a more accurate indication of journey times. Google Maps accounts for gradients and wait times at crossings.

2.11 The amenities available are shown at **Table 2-1**. The are also illustrated in **Figure 2-3**.

Figure 2-3: Local Facilities plan

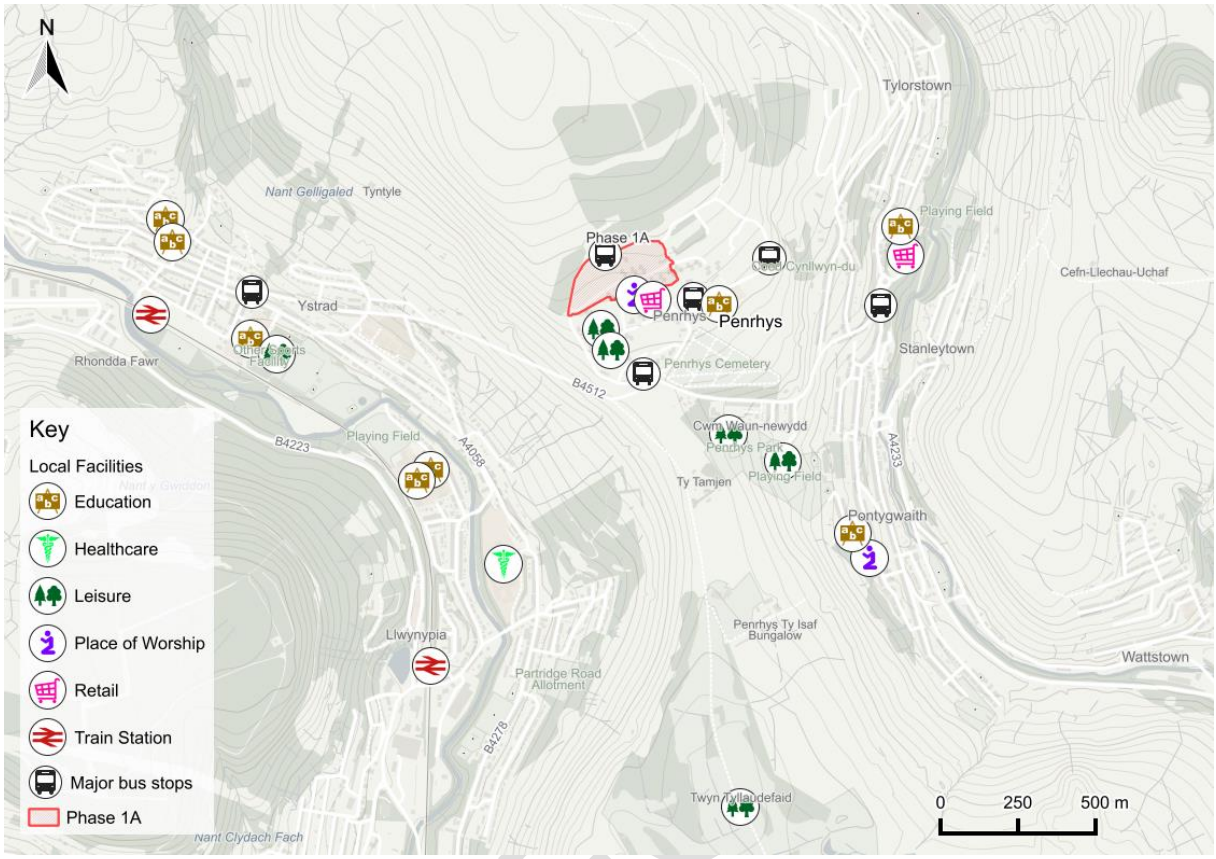


Table 2-1: Local Amenities to/from Phase 1A

Amenity Type	Amenity	Distance (m)	Journey Time from Phase 1A (minutes)		Journey Time to Phase 1A (minutes)	
			Walk	Cycle	Walk	Cycle
Public Transport						
Bus Stop	Boilerhouse (Heol Pendyrus)	100	3	1	2	1
	Roundabout	280	4	1	6	3
	Penrhys Youth Club (Heol Pendyrus)	600	9	3	9	2
Railway Station	Ystrad Rhondda	2080	28	9	39	22
	Llwynypia	2680	35	11	46	25
Leisure						
Park	Penrhys Play Area	190	2	1	3	1
Rugby Club	Tylorstown Rugby Club	830	11	3	13	5
Bowls Club	Penrhys Bowls Club	980	12	4	14	6
Golf Club	Rhondda Golf Club	1180	15	4	17	6
Retail						
Convenience Store	Local Convenience Store	80	2	1	3	1

Takeaway	New York Pizza	80	2	1	3	1
Convenience Store	Morrisons Daily	1880	23	7	32	18
Supermarket	Lidl	1680	21	6	29	16
Education						
Childcare	Penrhys Children and Family Centre	350	5	2	5	2
Primary School	Penrhys Primary School	400	6	2	6	2
	Pontygwaith Primary School	1780	24	8	34	18
College	Coleg Cymoedd Rhondda Campus	1980	26	8	38	23
Religion						
Church	Llanfair Uniting Church	50	1	1	1	1
Health						
Surgery	Tylorstown Surgery	1680	21	6	28	18
Pharmacy	Sheppard Pharmacy Ystrad	1680	21	6	28	18
Hospital	Ysbyty Cwm Rhondda Hospital	2080	26	8	39	22

2.12 As summarised in **Table 2-1**, there are a number of facilities already available on site including Penrhys Primary School. Additionally, the site is located within walking distance of a number of leisure facilities including the Rhondda Golf Club and Tylorstown Rugby Club.

2.13 The walk and cycle times demonstrate that there are many key facilities within a reasonable walking distance (3.2 km) from the middle of the site, including Ystrad Rhondda Railway Station, Lidl supermarket and Pontygwaith Primary School. However, the gradient of the route should be taken into account as this may prove a barrier to movement to travel by foot and bike.

2.14 Additionally, facilities within Ystrad, Pontygwaith and Tylorstown are accessible within a reasonable everyday cycle distance (5 km), including Coleg Cymoedd Rhondda Campus, Llwynypia railway station and Ysbyty Cwm Rhondda Hospital. Again, the topography of the local area may discourage some journeys by foot and bike due to the steep gradients on the return journey.

Active Travel

Walking

2.15 There is an existing network of footways and footpaths through Penrhys which provide safe and secure routes away from roads.

2.16 The existing footpaths within Penrhys are illustrated in **Figure 2-4**.

Figure 2-4: Footpaths within Penrhys

2.17 Some of these footpaths accessible for those with mobility impairments and some are stepped. The gradients of the footpaths vary due to the topographical constraints on site. As the wider masterplan comes forwards, these routes will be improved with appropriate measures which may include re-surfacing, re-grading, widening and lighting etc.

2.18 To access Phase 1A by foot, pedestrians can use the existing footpaths through Penrhys. The Heol Pendyrus ring road will not provide access as there are currently intermittent footways along this road.

2.19 The main north-south footpath which connects Phase 1A to the main Penrhys access roundabout is approximately 300 m. This is a footpath and is not suitable for vehicles as it is stepped, and it is adopted and maintainable at public expense by RCTCBC. From the southern boundary of Phase 1A there is a decline in gradient of some 30 m. This would be an average gradient of 1:10, but this does vary and is dependent to the stepped sections.

2.20 To access Ystrad to the west, pedestrians will walk down the B4512 Penrhys Road. This road is 1.3 km in length. There is a consistent 2m footway running along the southwestern side of the carriageway, though no crossing points at the main roundabout to provide. There is no street lighting and trees are located in the footway and root heave is visible.

2.21 Walking towards Ystrad is a realistic and viable option for pedestrians for most of the year, though less attractive at night and if conditions are icy. Walking from Ystrad to Penrhys is less common as the gradient from the B4512 / A4048 mini roundabout to the Penrhys access roundabout is 1.3 km in length with an increase in gradient of 132 m. This is a gradient of

approximately 1:9 (11%). A site visit was undertaken in January 2025 and this route was walked, confirming the approximate gradient and noting that it may not be suitable for all users.

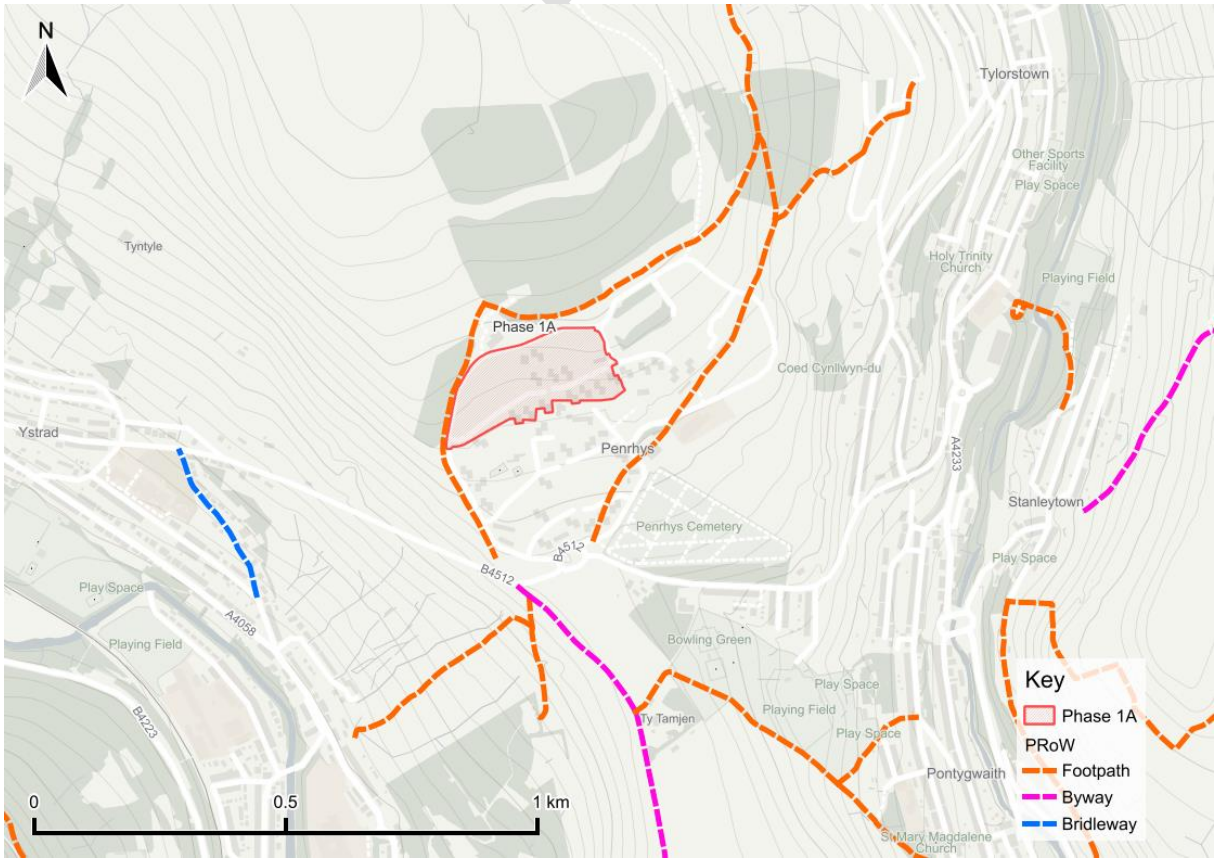
2.22 To access Ystrad railway station, pedestrians can walk west from the mini roundabout along the A4058 Gelligaled Road, then turn south along Brook Street. There are alternative routes if required along Cross Street and Trafalgar Terrace. Gelligaled Road benefits from a signalised crossing allowing for crossing from north to south. There are two further small priority junctions on the southern side of the carriageway before Brook Street which both benefit from dropped kerbs and tactile paving. Brook Street itself has a footway along its eastern side leading towards the railway station.

2.23 To the east of the Penrhys roundabout, the B4512 Penrhys Road connects to Tylorstown and the 'Lidl' roundabout. This route is 1 km in length with a decrease in gradient of 98 m, which is an approximate gradient of 1:10 or 10%. As with the route to Ystrad, this route is best walked from Penrhys to Tylorstown. The return journey may not be suitable for all users due to the steeper gradients.

2.24 A bus (route 170 or route 172) can be taken to the Lidl roundabout in Tylorstown. To then cross the roundabout to access Lidl (for example) residents will cross the northern arm of the roundabout (A4233 East Road) using dropped kerbs and a central refuge island. A footway then leads towards Lidl.

2.25 There are several Public Right of Ways (PROWs) which run through or near to the site. These are as set out in **Figure 2-5**.

Figure 2-5: Rhondda Cynon Taff Public Rights of Way (PRoW) Map



2.26 **Figure 2-5** identifies a footpath routing through the wider Penrhys site. This is not apparent on the ground however and is shown to dissect buildings on this plan. It's PROW reference is footpath TYL 7/1.

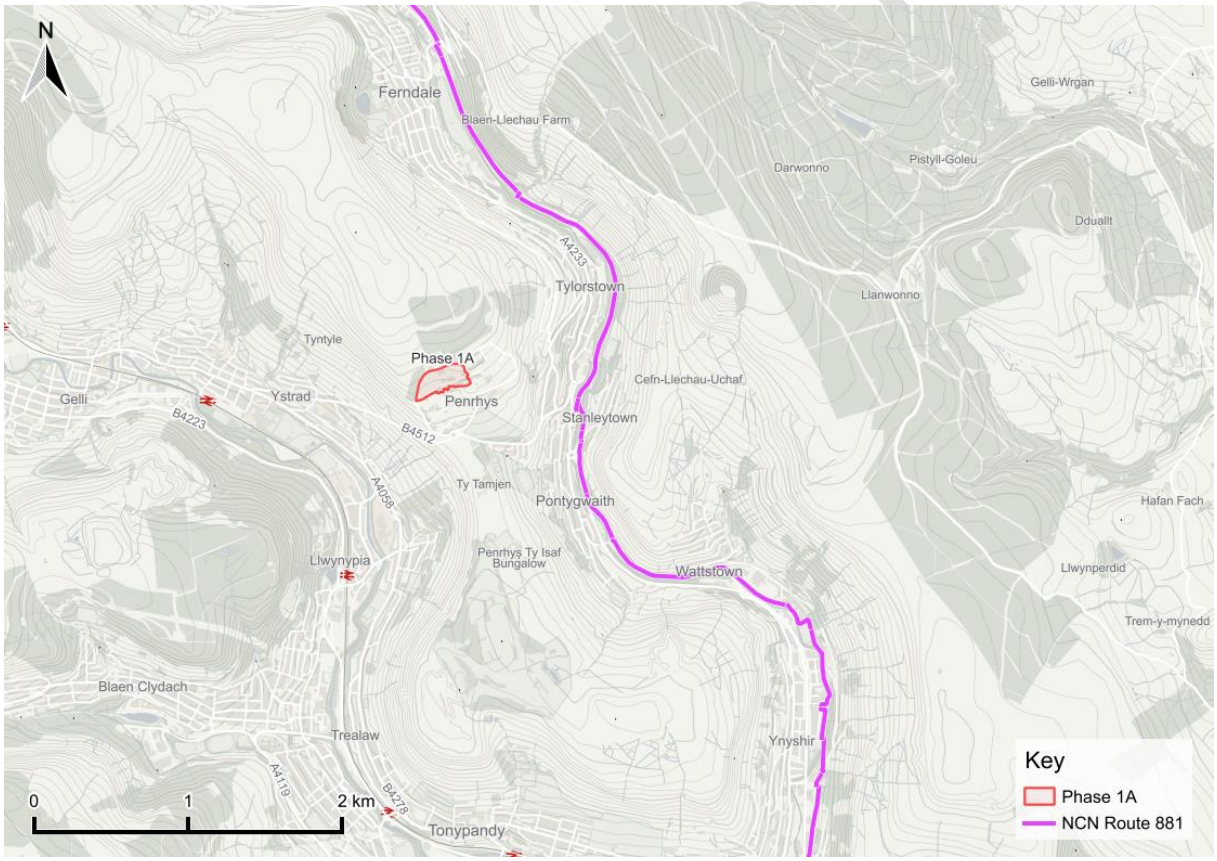
2.27 Other PRoWs surround the site connecting it with the countryside to the north and east.

Cycling

2.28 National Cycle Network (NCN) route 881 is located approximately 1.5km east of the site. This is labelled as a shared use and cycle active travel route within **Figure 2-6**. Route 881 connects Pontypridd to NCN Route 47 south of the Lluest-Wen Reservoir. It routes via Porth, Wattstown and Ferndale. The route is a mixture of on and off road, though is primarily away from vehicles.

2.29 Gradient should be considered in the context of initial access to this route, as the return journey is a steep gradient, on-road, which is suitable only for more experienced cyclists.

Figure 2-6: National Cycle Network 881



2.30 There is currently no formal cycling infrastructure in direct vicinity of the site. The roads within Penrhys are lightly trafficked and are cyclable in an east-west direction, but steeper gradients can affect cyclists in a north-south direction. EBikes can assist future residents in overcoming the local topographical challenges.

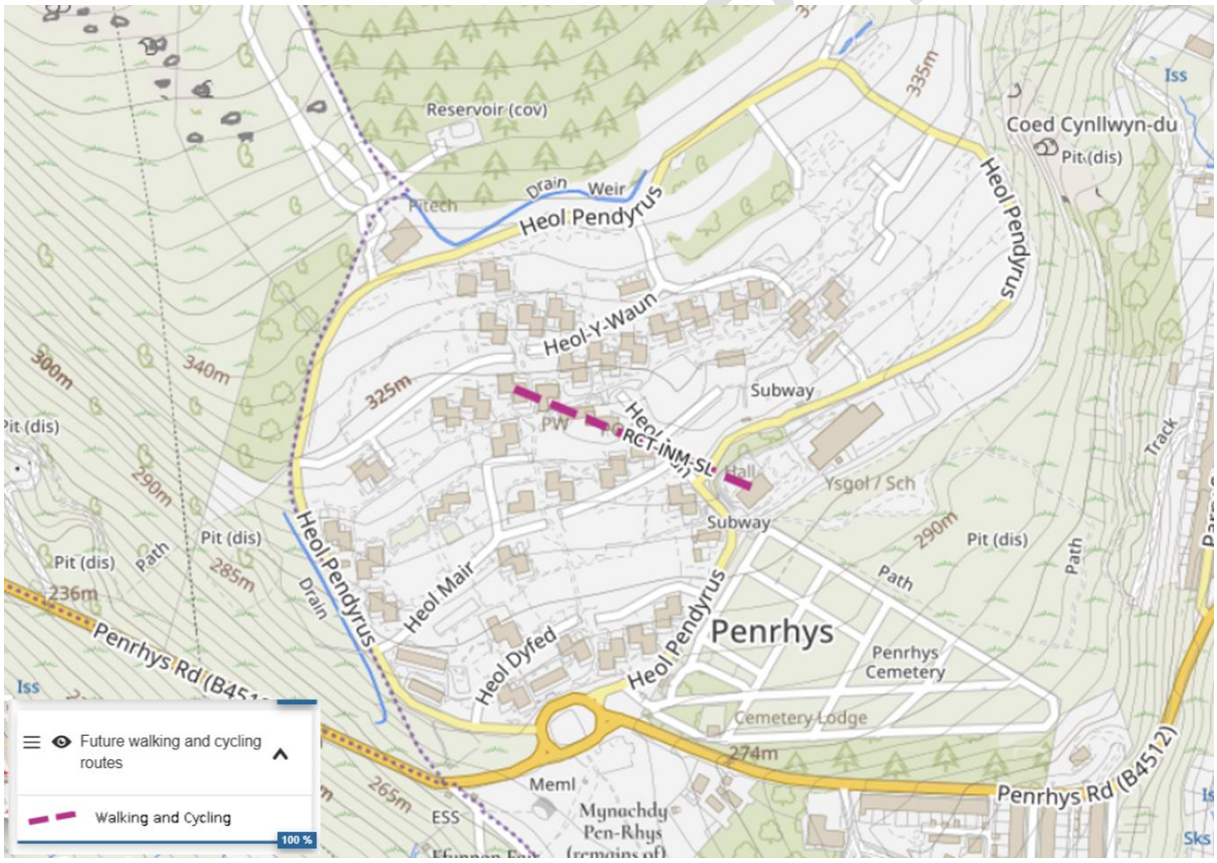
Active Travel Network Maps

2.31 The Active Travel Wales Act (2013) requires all local authorities to produce Active Travel Network Maps (ATNMs) setting out existing and future (proposed) active travel routes.

2.32 ATNMs cover footpaths and cycleways, as well as inclusive travel by mobility scooters, wheelchairs, and pushchairs. Facilities like crossings, steps, and public amenities (e.g., toilets) are also mapped. Routes identified in the maps are eligible for Welsh Government active travel funding. Inclusion within ATNMs is a prerequisite for investment. Each map is prepared and revised through public and stakeholder consultation, submitted to Welsh Ministers for approval, and reviewed on set cycles.

2.33 There is currently one route noted within Penrhys. This is 'RCT INM SL', a long-term walking and cycling route. It is shown within the online ATNM as a straight-line from Llanfair Uniting Church to Penrhys Primary School. This is an aspirational path and the exact route is not defined. The redevelopment of Penrhys can facilitate the creation of this route, as well as other, as the wider masterplan proposals come forward.

Figure 2-7: Active Travel Network Map extract (Source: DataMapWales)



Public Transport

Bus

2.34 The closest bus stop to the site is the 'Roundabout' bus stop, located at the site entrance roundabout, off Heol Pendyrus. The bus stop provides access to the 155, 170 and 172 bus

services, routing to locations including Aberdare, Clydach Vale and Blaenllechau. The bus stop has a sheltered seating area and a flag. **Table 2-2** sets out the current bus services.

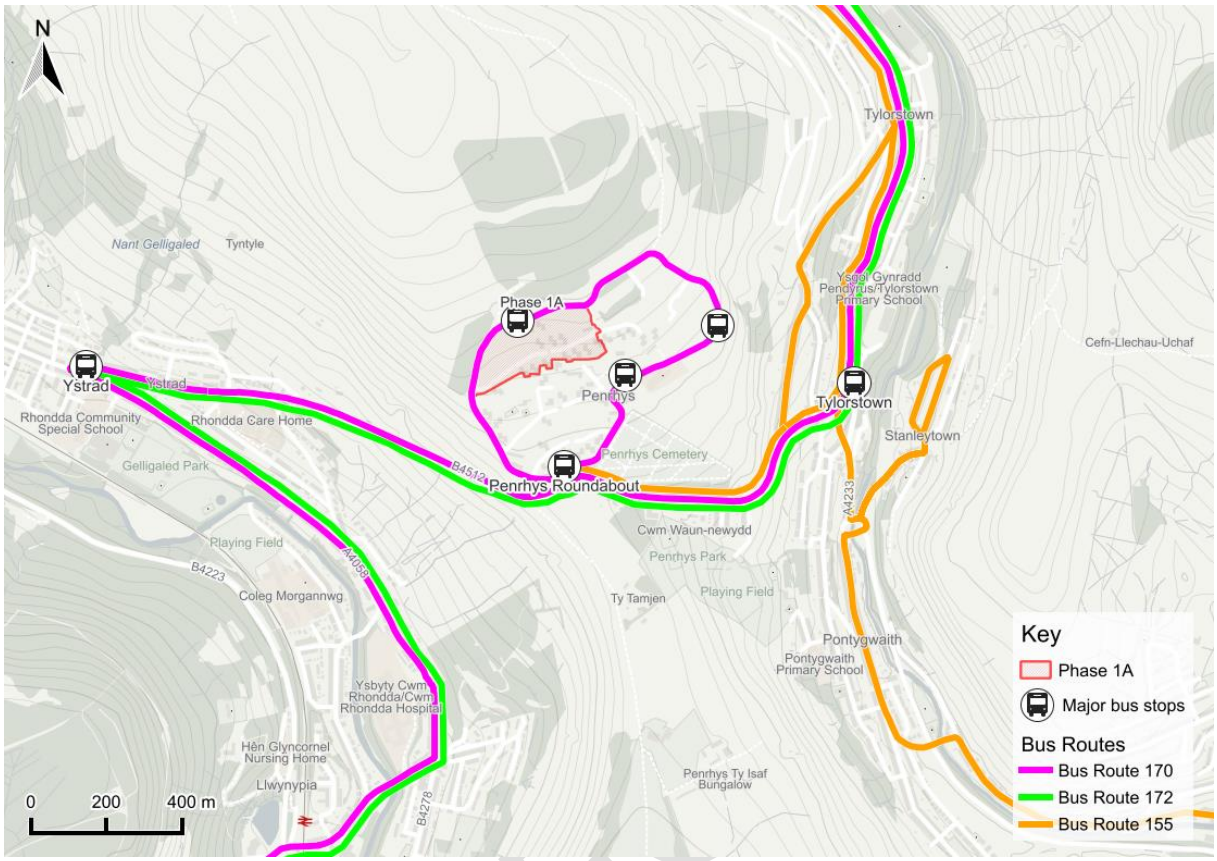
Table 2-2: Bus Services

No.	Route	First Bus	Last Bus	Ave. Frequency (mins)			Operator
				M-F	S	S	
Roundabout Bus Stop							
155	Porth - Pontygwaith - **Penrhys, Roundabout** - Ferndale - Blaenllechau	10:55	15:57	3x daily services		N/A	Stagecoach South Wales
	Blaenllechau - Ferndale **-** **Penrhys, Roundabout** - Pontygwaith - Porth	11:15	16:23	3x daily services		N/A	
170	Blaenllechau - Tylorstown - **Penrhys, Roundabout** - Tonypandy - Clydach Vale	08:13	18:12	60		N/A	Stagecoach South Wales
	Clydach Vale - Tonypandy - **Penrhys, Roundabout** - Tylorstown - Blaenllechau	08:38	17:37	60		N/A	
172	Aberdare - Tylorstown - **Penrhys, Roundabout** - Ystrad - Bridgend	05:28	18:48	60		5x daily services	Stagecoach South Wales
	Bridgend - Ystrad - **Penrhys Roundabout** - Tylorstown - Aberdare	08:08	21:23	60		5x daily services	

2.35 As shown at **Table 2-2**, the site has access to hourly bus services during the day, routing to key locations including Porth and Ystrad. These bus services provide a good level of connectivity to key locations where onward transport connections and local facilities including shops, railway stations and health care facilities are available.

2.36 **Figure 2-8** illustrates the local bus routes in the context of the site, which are a vital link for residents to travel to nearby retail, community facilities and railway stations.

Figure 2-8: Bus Routes



Rail

2.37 There are two railway stations within an accessible distance of the site, including Ystrad Rhondda and Llwynypia. Ystrad Rhondda is located approximately 1.8 km west of the site access, equating to a 24-minute walk or 8-minute cycle, with the return journey approximately 33 minutes by foot or 19 minutes by bike due to the gradients. Llwynypia is located approximately 2.4 km southwest of the site access, equating to a 31-minute walk or 10-minute cycle, or a 40-minute return journey by foot or 22 minutes by bike due to gradients.

2.38 Ystrad Rhondda has step-free access to all platforms. It has 6 cycle spaces available near the entrance. The station is managed by Transport for Wales. The station provides bi-hourly services to Cardiff Central and Treherbert.

2.39 Llwynypia railway station is classified as a Category B2 accessible station. It has 6 cycle storage spaces and 12 car parking spaces. The station is managed by Transport for Wales. The station provides bi-hourly services to Cardiff Central and Treherbert.

South Wales Metro

2.40 The South Wales Metro will improve transport options throughout the South Wales Valleys, though the changes will be gradual. There will be improved electrified Metro trains, offering a direct link to Cardiff and other key areas. Travel time to Cardiff and other locations will be reduced which will make travel more efficient. The frequency of trains remain half hourly, but the supporting infrastructure and improvement will increase the consistency, reliability and therefore attractiveness of travel by rail.

Local Highway Network

Heol Pendyrus

2.41 Heol Pendyrus is a two-way carriageway routing around the entirety of Penrhys village (the site). A footway is available along the carriageway at its southern end, near the B4512 roundabout junction and street lighting is available along its length. The road is subject to a 20mph speed limit and provides access to residential cul-de-sacs along its route as well as to a forest track used by National Resources Wales.

B4512 Penrhys Road West

2.42 The B4512 Penrhys Road West is a two-way carriageway routing towards Ystrad, joining with the A4058. It is accessed from the site via a roundabout. A continuous footway is available along its northern boundary for the entirety of its route from the site, and along its southern boundary starting approximately 850 m west of the site. Streetlighting is largely absent for the majority of its route and numerous trees are located on the footways.

2.43 The carriageway is subject to a 20 mph speed limit, with a short 30 mph section on approach to Penrhys. Speed regulating mechanisms are in place including speed cameras and associated signage.

B4512 Penrhys Road East

2.44 B4512 Penrhys Road East is a two-way carriageway routing towards Pontygwaith, Tylorstown and Porth. It is accessed from the site via a roundabout. A footway extends from the site, along its northern boundary, for approximately 50 m. A continuous footway with dropped kerbs and streetlighting is available along its northern boundary, providing access into Tylorstown. The carriageway is subject to a 30 mph speed limit for the most part. Speed regulating mechanisms are in place including speed cameras and associated signage.

Collision Analysis

2.45 A review has been undertaken of Personal Injury Collision (PIC) data for the local highway network using data sourced from CrashMap, an online database of PIC records. The records relate to PICs on public roads that are reported to the police and subsequently recorded, using the STATS19 collision reporting form. The most recently available five-year period has been analysed between 2019-2023.

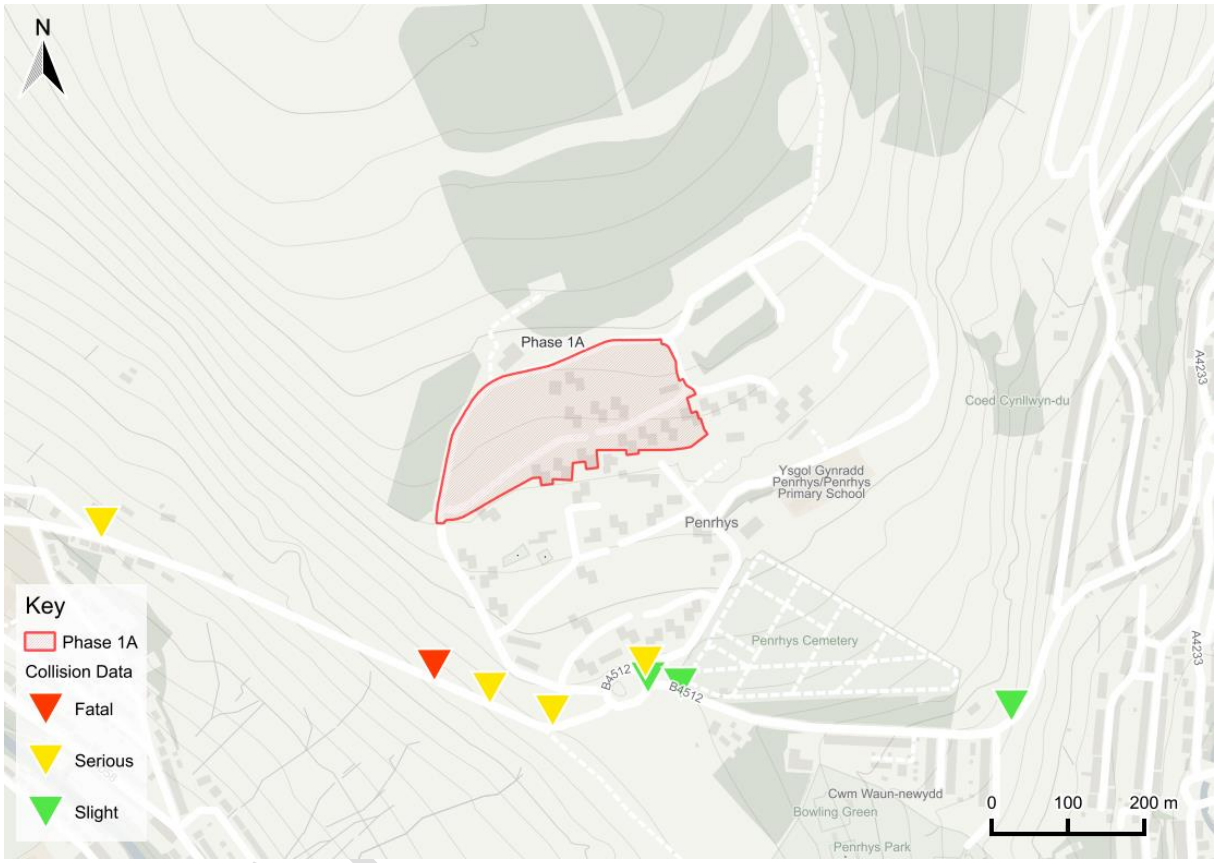
2.46 Collisions have been categorised into three levels of severity: slight, serious, and fatal. The definitions of these are set out below:

- **Slight Injury**: Injuries of a minor nature, such as sprains, bruises, or cuts not judged to be severe, or slight shock requiring only roadside attention (medical treatment is not a prerequisite for an injury to be defined as Slight);
- **Serious Injury**: Injuries for which a person is detained in hospital, as an in-patient, or any of the following injuries, whether or not a person is detained in hospital; fractures, concussion, internal injuries, severe cuts and lacerations, severe general shock requiring medical treatment and injuries which result in death 30 days after the collision. The Serious category, therefore, covers a very broad range of injuries; and

- **Fatal Injury**: Injuries which cause death either immediately or any time up to 30 days after the collision.

2.47 The locations of the PIC's are illustrated in **Figure 2-9**. The relevant Crashmap reports are contained within **Appendix C**.

Figure 2-9: PIC Map



2.48 A summary of collisions by year and severity is provided in **Table 2-3**.

Table 2.3: PIC Collision Summary

Year	Slight	Serious	Fatal	Total
2019	1	3	-	3
2020	1	-	1	2
2021		-	-	0
2022	1	-	-	1
2023	-	1	-	1
Total	**3**	**4**	**1**	**7**

2.49 Over the previous 5-year period, a total of 8 collisions have occurred within the study area, comprising three slight collisions, four serious collisions and 1 fatal collision. None of these collisions were reported to involve a vulnerable road user.

2.50 The fatal collision took place in 2020, along the B4512 / Penrhys Road involving one vehicle. The vehicle was an off-road motorcycle and the casualty was a 27 year old male. It occurred at 17:19 and the conditions were dry with daylight. The front of the vehicle collided with the kerb and the vehicle then collided with the crash barrier. There is no obvious causation factor and the highway is straight in this location. tour interpretation of this PIC is that there is no data to suggest any defect with the highway arrangements.

2.51 Two serious collisions occurred along the B4512 / Penrhys Road, approximately 200 – 250 m west of the site access roundabout. Both took place in 2019, with the first involving 1 vehicle and the second involving 2 vehicles.

2.52 The three slight collisions took place in 2018, 2019 and 2022. The 2018 collision took place on Heol Pendyrus and involved two vehicles. The second occurred on the site access roundabout involving 1 vehicle, and the last collision took place on the B4512 / Penrhys Road, involving 1 vehicle.

2.53 In summary, during the most recent five-year period there have been seven collisions in the vicinity of the site, with only one collision occurring at the site access roundabout, which does not suggest that the area is a collision hot spot. Whilst there has been a fatal collision, there is no information to suggest that this is caused by an issue on the existing highway and should be considered an unfortunate, isolated incident. Due to the low level of collisions taking place here, equating to less than one every 9 months on average, it is considered that there are no inherent safety issues on the local highway network. In any event, the internal highway network and the site access junction will be significantly upgraded as part of the wider site redevelopment, with some minor amendments forming part of this Phase 1A application also.

Existing Traffic Patterns

2.54 As discussed with RCTCBC highways and included within our Scoping Note, traffic surveys were undertaken in the following locations demonstrated in **Figure 2-10.**

2.55 These include the following locations:

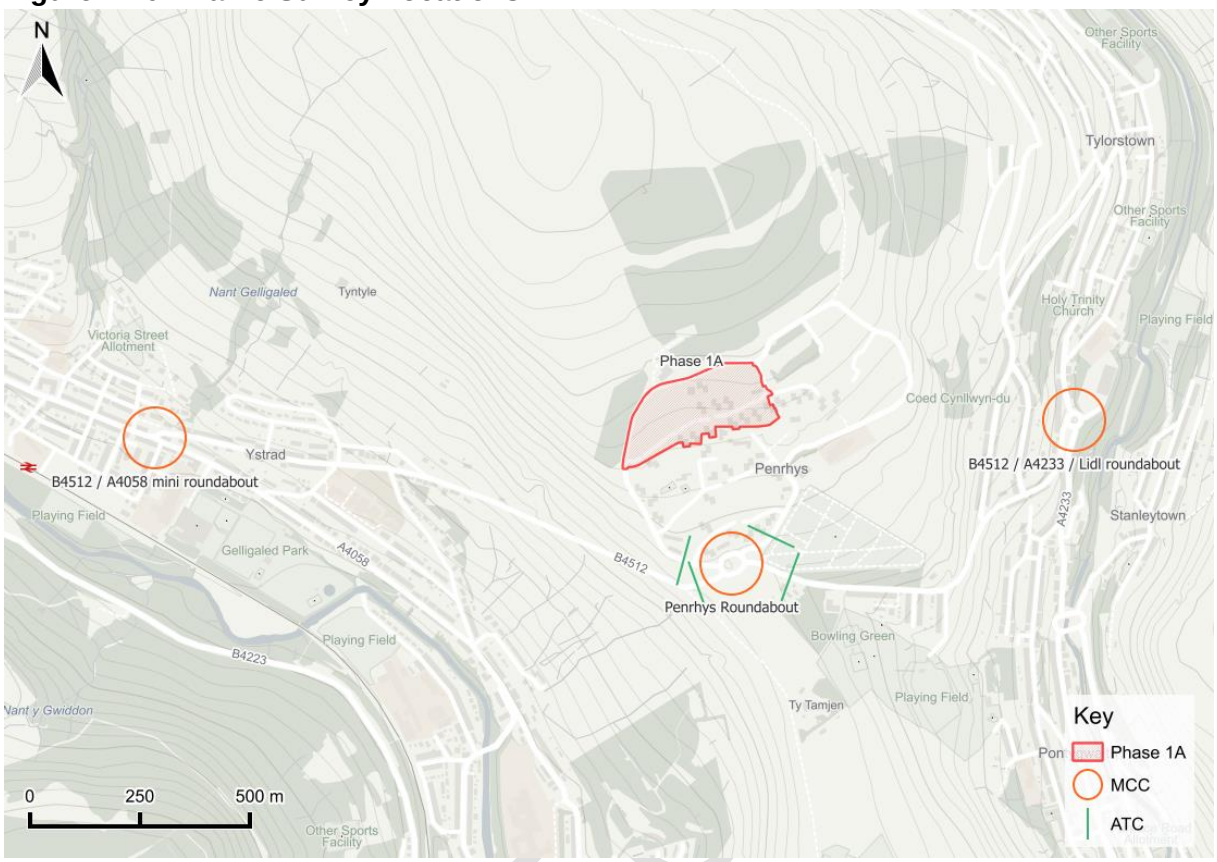
- Access Roundabout;
- ATCs along all arms of Penrhys Roundabout.

2.56 A Manual Classified Count (MCC) survey was undertaken at the main Penrhys site access roundabout. In addition, Automatic Traffic Counts (ATCs)were placed along all arms of the roundabout, allowing for an analysis of the vehicles leaving and entering the site over a 24 hour period. Details of these surveys are as follows:

- **MCC**: 06/03/2025 (0700-1000 / 1600-1900)
- **ATCs**: 05/03/2025 (24hr)

2.57 Surveys were also undertaken at the B4512 / A4058 mini roundabout and the B4512 / A4233 / Lidl roundabout

Figure 2-10: Traffic Survey Locations



2.58 The results of the ATC surveys along Heol Pendyrus allow for an accurate analysis of the existing levels of vehicles trips associated with the site. This is based on the entire Penrhys site, including:

- 220 occupied residential dwellings;
- Penrhys Primary School;
- Llanfair Uniting Church, Shop, Takeaway and other amenities.

2.59 The MCC survey includes vehicles travelling from Heol Pendyrus (west) to Heol Pendyrus (east) and vice versa, i.e., the vehicles which do not leave Penrhys and remain 'internal'.

2.60 These vehicles will be discounted from the vehicle trips. This can be done using a factor to uplift the observed 'internal' flows between 0700-1000 and 1600-1900 to cover a 24-hour period to align with the ATC.

2.61 The 'internal' flows as recorded by the MCC and the subsequent 24hr factor are set out in **Table 2.4**.

Table 2.4: MCC recorded vehicle 'internal' to Penrhys (07:00-10:00 and 16:00-19:00)

From:	Total Vehicles	Vehicles from one Penrhys arm to another	Percentage of Vehicles therefore 'Internal'
Heol Pendyrus (East)	167	10	6%
Heol Pendyrus (West)	198	16	8%
Total 'internal' vehicles	365	26	7%
To:	**Total Vehicles**	**Vehicles from one Penrhys arm to another**	**Percentage of Vehicles therefore 'Internal'**
Heol Pendyrus (East)	156	16	10%
Heol Pendyrus (West)	220	10	5%
Total 'internal' vehicles	376	26	7%

2.62 **Table 2.4** demonstrates that approximately 7% of existing vehicles generated by Penrhys are in fact 'internalised' and do not leave the site, other than to negotiate the site access roundabout to go from one arm of the ring road to the other.

2.63 The 24-hour observed trip generation for Penrhys, is, therefore, as set out in **Table 2.4**, based on the vehicles surveyed to be entering / existing both of the Heol Pendyrus arms. **Table 2.5** also accounts for the 7 % factor of all recorded movements in fact being internal to the site (i.e., going from Heol Pendyrus West to Heol Pendyrus East or vice versa) and these have been removed from the survey.

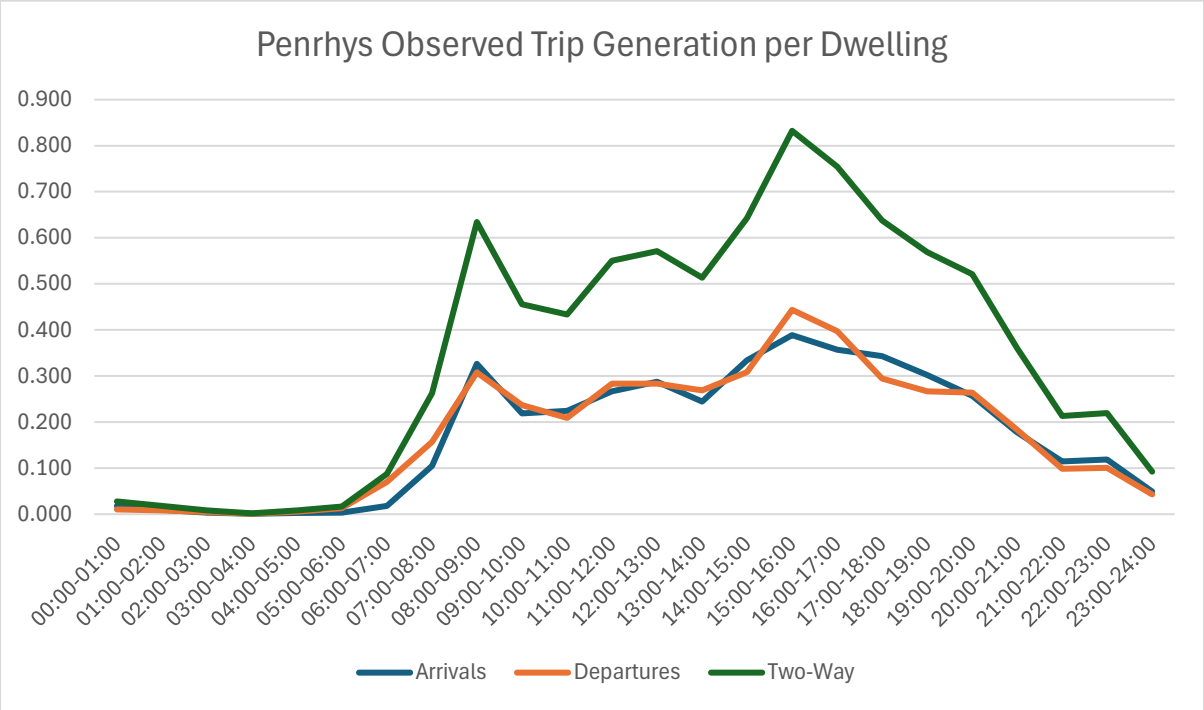
Table 2.5: Vehicle trips currently associated with Penrhys (entire site)

Time Period	Arrivals	Departures	Two-Way
00:00-01:00	4	2	6
01:00-02:00	2	2	4
02:00-03:00	1	1	2
03:00-04:00	0	0	0
04:00-05:00	1	1	2
05:00-06:00	1	3	3
06:00-07:00	4	14	17
07:00-08:00	21	31	52
08:00-09:00	65	62	127
09:00-10:00	44	47	91
10:00-11:00	45	42	87
11:00-12:00	53	57	110
12:00-13:00	57	57	114
13:00-14:00	49	54	103
14:00-15:00	67	62	129
15:00-16:00	78	89	166
16:00-17:00	71	79	151
17:00-18:00	69	59	128

Time Period	Arrivals	Departures	Two-Way
18:00-19:00	60	53	114
19:00-20:00	51	53	104
20:00-21:00	36	37	72
21:00-22:00	23	20	43
22:00-23:00	24	20	44
23:00-24:00	10	9	18
Total	**834**	**852**	**1686**

2.64 The existing two-way trips per dwelling are also set out visually in **Figure 2-11**.

Figure 2-11: Graph demonstrating Penrhys observed Trip Generation per dwelling



2.65 There is a clear spike in trips between 08:00-09:00 and at 16:00-17:00, which both broadly coincide with typical commuter peak hours and school drop off / pick up times and is to be expected.

2.66 It is noted that this trip generation exercise using the observed vehicle movements at the Penrhys access roundabout includes the 50 affordable units which will be re-allocated into Phase 1A. As such, the TRICS exercise in **Section 6** consider the remaining 71 market homes which will be new to the wider Penrhys site, and will need to be considered in terms of traffic impact.

Site Visit

2.67 A site visit was undertaken on 1st October on a typical weekday. This involved a comprehensive walk around the site and surrounding areas. The general condition of walking facilities on the site ring road were noted, as well as the current underpass provision and bus frequencies (in the middle of the day).

2.68 A second site visit undertaken in January 2025 included walking the route between Llwynypia railway station and Penrhys. All observations were typical of the expected conditions with vehicles maintaining the speed limit and some pedestrians present walking within the site.

Accessibility Summary

2.69 In summary, the site is located in Penrhys, accessed via a roundabout junction off the B4512. The site is located within a walkable and cyclable distance from a number of key facilities located in Ystrad, Pontygwaith and Tylorstown, however topography remains a barrier to active travel.

2.70 Footways provide walking routes throughout Penrhys. Moreover, footways are available along the B4512, routing into Ystrad and Pontygwaith, though there is a lack of pedestrian infrastructure at the existing access roundabout to provide good continuity of connectivity.

2.71 NCN Route 881 is located approximately 1.5 km east of the site, providing designated cycle routes towards Pontypridd and Route 47. Again, there are topographical constraints in connecting to these routes.

2.72 There are multiple bus stops located within the site, including the ‘Roundabout’ bus stop, located at the site entrance. Users of the site have hourly access to services 170 and 172 routing to locations including Bridgend, Aberdare and Ystrad within the day. Moreover, the site is located within a reasonable walk and cycle distance from Ystrad Rhondda and Llwynypia Railway Stations which provide bi-hourly rail services to Cardiff Central and Treherbert.

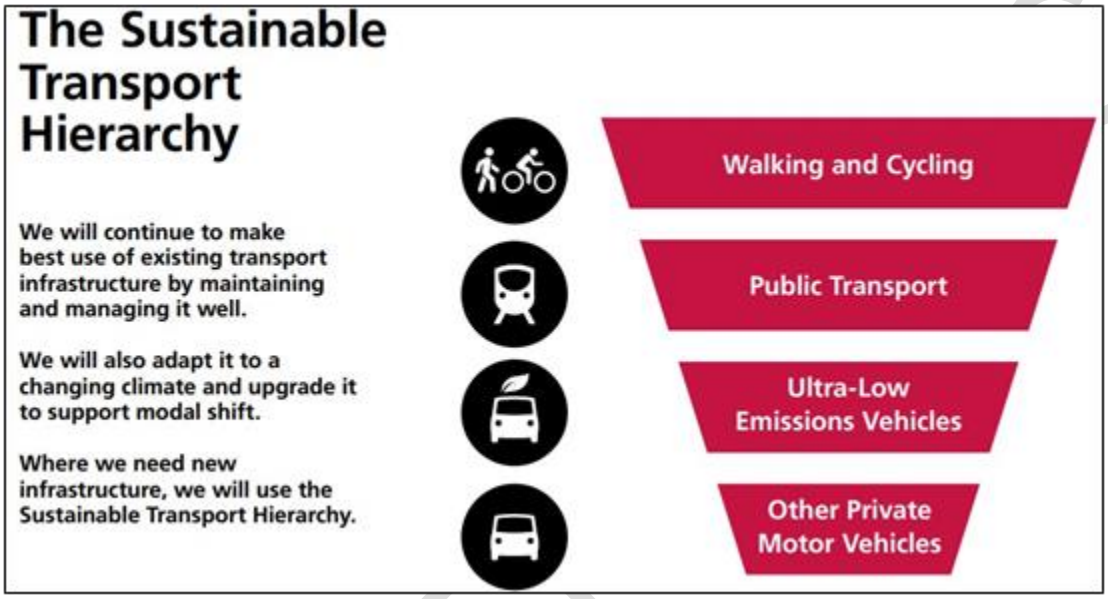
2.73 A review of the previous 5-years of collision data within the vicinity of the site access demonstrates that there are no inherent safety issues on the local highway network that may be exacerbated by the development proposals.

3.0 Planning Policy Context

Introduction

3.1 This section of the report outlines the relevant policies for development and transport in Wales, which are cognisant of one another and follow a common theme; moving towards carbon reduction in the promotion of communities, virtual and active mobility, followed by public transport with private vehicles at the bottom of the hierarchy. This is shown in **Figure 3-1.**

Figure 3-1: Sustainable Transport Hierarchy



National Policy

Planning Policy Wales (Edition 12) February 2024

3.1 Planning Policy Wales (Edition 12) (PPW12) outlines the land use planning policies of the Welsh Government with a presumption in favour of sustainable development. The primary objective of PPW12 is to:

"Ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales."

3.2 PPW12 sets out a transport hierarchy favouring active travel movements. This hierarchy is supported by a requirement for development proposals to maximise accessibility by active travel and public transport.

3.3 Section 3 of PPW highlights the significance of the planning system in decarbonisation and reducing the impacts of transport on climate change.

3.4 Regarding movement, and specifically accessibility, PPW states that:

"Good design is about avoiding the creation of car-based developments. It contributes to minimising the need to travel and reliance on the car, whilst maximising opportunities for people to make sustainable and healthy travel choices for their daily journeys".

3.5 Section 4 of PPW concerns Active and Social places. It asserts that Active and Social Places are those which provide well-connected cohesive communities. It further states that a 'Resilient Wales' is supported by promoting well-connected infrastructure.

3.6 Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset, before people have moved in and travel patterns have been established.

Future Wales: The National Plan 2040 (February 2021)

3.7 Future Wales: The National Plan 2040 is a National Development Framework for Wales. It influences all levels of the planning system in Wales and will help to shape strategic and Local Development Plans prepared by councils and national park authorities.

3.8 One of the main challenges facing Wales is climate change. The document highlights the importance of reducing emissions to protect well-being and to demonstrate global responsibility. The planning system needs to focus on delivering a decarbonised and resilient Wales through the places that are created, the energy generated and the natural resources and materials that are used and how people live and travel.

3.9 In keeping with the themes from Future Wales, the Welsh Government produced a document called 'COVID-19 Reconstructions: Challenges and Priorities' (October 2020). This document sets out how people are using and will continue to us places differently, travelling less and spending more time working from home. Welsh Government is encouraging an increase in remote working and has set a long-term ambition for 30% of the Welsh workforce to work away from a traditional office, beyond the covid-19 pandemic and for the long-term. This is intended to help town centres and urban areas reduce congestion and cut carbon emissions. The planning system must therefore respond to these changes an contribute to a sustainable recovery, shaping places around a vision for healthy and resilient places.

Wales Transport Strategy, Llwybr Newydd (May 2021)

3.10 This document is a strategy for the future of transport in Wales and sets out the ambitions for the next 20 years and Welsh Government's priorities for the next 5 years.

3.11 The long-term ambition for the strategy is for a transport system that contributes to a more equal and a healthier Wales and ensure that there are fewer physical, economic, social and attitudinal barriers that prevent people from walking, cycling or using public transport. Priorities include reducing the need to travel, growing public transport use; providing safe, accessible, well-maintained and managed transport infrastructure; making sustainable transport more attractive and affordable; and supporting innovations that deliver more sustainable choices.

Figure 3-2: Wales Transport Strategy Priorities and Ambitions

Technical Advice Note 18 (Transport)

3.12 The Technical Advice Note (TAN) 18 elaborates on the relationship between land use planning and transport infrastructure by outlining a range of key accessibility principles that should inform future patterns of development.

3.13 In the case of new residential development, sites that are accessible to jobs, shops and services by modes other than the car and are afforded sufficient capacity on public transport services are favoured.

3.14 TAN 18 advises that development plans should afford priority to the following:

- promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and leisure, or where such access will be provided as part of the scheme or is a firm proposal in the Regional Travel Plan;
- ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;
- include policies and standards on densities, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;
- encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20 mph zones and where appropriate, layouts that allow public transport to pass through easily; and
- Require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops.

Well-being of Future Generations (Wales) Act 2015

3.15 Wales faces several challenges now and, in the future, such as climate change, poverty, health inequalities and jobs and growth.

3.16 The Well-being of Future Generations Act puts in place seven well-being goals that will help to tackle these challenges. The Act makes it clear the listed public bodies must work to achieve all of the goals, not just one or two.

3.17 In terms of the impact of the goals on develop and travel, the first goal of 'A Prosperous Wales' recognises the need for an innovative, productive and low carbon society and is somewhat all- encompassing of the other goals and the need for sustainable travel options and low carbon communities.

Active Travel (Wales) Act 2013 (October 2013)

3.18 The Active Travel (Wales) Act aims to make it easier for people to walk and cycle in Wales and makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year. It creates new duties for highways authorities to consider the needs of walkers and cyclists and make better provision for them. It also requires both the WG and local authorities to promote walking and cycling as a mode of transport.

3.19 By connecting key sites such as workplaces, hospitals, schools and shopping areas with active travel routes, the Act will encourage people to rely less on their cars when making short journeys and make implementing successful Travel Plans easier.

Active Travel Act Guidance (July 2021)

3.20 The Active Travel Act Guidance was first published in July 2021 and is issued using the powers of the Welsh Ministers to give guidance under sections 2(6), 2(9), 3(4), 4(5), 5(2) and 7(2) of the Active Travel Act.

3.21 The act requires local authorities in Wales to produce maps of walking and cycling networks, and to deliver year on year active travel improvements along the mapped routes and their related facilities. These routes should be coherent, direct, safe, comfortable and attractive. The maps shall now be known as Active Travel Network Maps (ATNM) – showing existing routes and future routes which shall combine the Existing Routes Map and the Integrated Network Map required by the act.

3.22 As well as creating the infrastructure, the act includes provision for making people aware of the existing and future routes through the publication of the maps and for the promotion of active travel as a means of transport.

3.23 The active travel network is designed to serve everyday journeys. These are also known as utility journeys – trips with a purpose rather than purely for leisure. Examples of destinations which can be considered to form an everyday or utility journey include; school or other educational establishments, local shops, employment sites, healthcare facilities, and other destinations people travel to for a purpose.

3.24 **Table 3.1** is an extract from the guidance which provides a guide for network development in relation to reasonable distances that would be travelled by each respective mode for everyday journeys.

3.25 Two out of every three journeys are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For school children the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school.

3.26 The guidance further states that developments that do not adequately make provision for walking and cycling should not be approved. This may include adequate off-site improvements for pedestrians and cyclists using existing highways that are affected by the development. The site has the potential to provide excellent cycle links allowing for residents of the site to connect with the local area, as well as providing active travel benefits for the existing community.

Table 3.1: Active Travel Guidance

	Less than 1km	Up to 3km	Up to 5km	Up to 8km	Up to 12km	Up to 24km
	Many users	Many users	Some users	Few users	Few users	Few users
	Many users	Many users	Many users	Many users	Some users	Few users
	Many users	Many users	Many users	Many users	Some users	Some users

30% Work from Home Target

3.27 A Briefing Paper was published by the independent Wales Fiscal Analysis (WFA), a research body within Cardiff University's Wales Governance Centre in July 2020, two months before the Welsh Government announced its target of 30% working from home in September 2020.

3.28 The paper outlines how 39.9% of Welsh jobs could be done from home and 65.5% of employees have reported that they were able to produce more work per hour working from home during COVID- 19, and therefore they would like to continue working mainly from home in the future. This indicates that there is both potential and desire for a proportion of the population to continue working from home after COVID-19, whether that be full time or shared

between home working and a traditional work environment. As such, the Welsh Government aspiration of 30% working from home is both realistic and appears achievable.

3.29 A step-change in home working is already happening, with many large companies publicly reducing office or desk space for employees on the basis than many or all will continue to work flexibly in the UK (for example KPMG, HSBC, Lloyds Banking Group, Unilever).

Local Planning Policy

RCTCBC Local Development Plan (2006-2021)

3.30 RCTCBC Local Development Plan (LDP) was adopted in March 2011 and sets out the aims, vison, and objectives for the future of the county.

3.31 The LDP transport policies aim to deliver major road schemes, cycle network improvements, park and ride provision and rail network and station improvements. The main objective alongside this is to promote more sustainable forms of transport throughout RCTCBC.

RCTCBC Revised Local Development Plan (2022-2037)

3.32 The preparation of a revised LDP for the period of 2022-2037 is currently undergoing, the process began in April 2022 and this LDP will replace the current LDP of 2006-2021.

RCTCBC Electric Vehicle Charging Strategy (2021-2030)

3.33 The declared ‘Climate Emergency’ by the Welsh Government has required efforts to the next level and this includes the recognition for promoting a practical electric vehicle charging (EVC) network within Wales.

3.34 This EVC Strategy outlines several key principles that will empower the Council to advise, help and support individuals, or parties, which wish to make the switch from conventional vehicles to EVs. The Council intends to encourage EV uptake amongst residents, including those without access to off-street parking.

3.35 The strategy was published in 2022 and is providing strategy until 2030. Further to this, this year the ‘Electric Vehicle Charging Implementation Plan’ at RCTCBC was published providing guidance and advice on best practice to develop a comprehensive EV charging network.

3.36 In relation to Electric Vehicle Charging Infrastructure, the EVC references Policy 12 of Future Wales which states:

“Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points”.

3.37 However, it is further stated that it may be appropriate that some of the provision is ‘passive’ with the unnecessary underlying infrastructure provided to enable installation and activation in the future.

RCTCBC Supplementary Planning Guidance: Delivering Design and Placemaking: Access, Circulation & Parking Requirements (Adopted March 2011)

3.38 Penrhys lies within Zone 3 (Suburban or Near Urban) and as such, the following maximum car parking standards apply to the proposed residential development:

- Houses & apartments (1 or 2 Bedrooms) – maximum of 2 spaces
- Houses & apartments (3 or more Bedrooms) – maximum of 3 spaces
- Visitors – maximum of 1 space per 5 units

3.39 The SPG requires 1 long-stay cycle parking stand per 5 apartment bedrooms. No specific requirement for cycle parking standards is provided for houses, however it is assumed most bicycle storage is provided within dedicated garages. Whilst not specified in the SPG, it is good practice to provided dedicated secure bicycle storage (such as metal sheds) where houses are provided without garages.

Summary

3.40 The focus of transport and land use planning policy is on the development of sustainable travel measures, and the encouragement of development proposals which widen the accessibility to sustainable travel for site users.

3.41 The proposed development will accord with national and local policy and encourage sustainable travel to and from home, and ensure future provision for this.

3.42 Overall, the principles of the proposed development of this site comply with the transport related planning policies highlighted within this chapter, locally and nationally. The site will seek to encourage travel by non-car modes, particularly by public/shared travel modes (facilitated by electric buses), with the opportunity to travel via the foot/cycleway routes directly accessing the site. The proposals will also encourage and comply with electric vehicle charging spaces, by providing the appropriate amount to ensure the growth of electric vehicles is achievable.

3.43 With regard to the development of future phases, it is anticipated that the proposed commercial centre (including retail facilities) will be the next phase to be developed and that this will be to the south of the site adjacent to the existing main access roundabout. This would ensure that, as the wider site is developed, the existing offerings on site (the church, shop and takeaway for example) would remain accessible to residents of Phase 1A.

4.0 Development Proposals

4.1 Phase 1A is subject to a full planning application, and much consideration has been given to the sites layout in order to overcome topographical challenges, whilst promoting an inclusive development which champions active and sustainable and active travel, as well as safe access for vehicles. It has been developed cognisant of the emerging wider Penrhys regeneration masterplan, which has influenced the planning layout.

Overview of the Proposed Development

4.2 The development of Penrhys is split into phases. Initially, Phase 1A will comprise approximately 121 dwellings with the following housing mix:

- 50 Affordable Dwellings
- 71 Private / Market Dwellings

4.3 **Figure 4-1** demonstrates the site layout. As previously set out, this is also contained within **Appendix A**.

Figure 4-1: Site Layout

4.4 **Figure 4-1** illustrates the proposed active travel route running north-south through the centre of Phase 1A , connecting the north of Heol Pendyrus to the southernmost area of Phase 1A. As well as providing green space, it promotes an active travel connection through the heart of

the development which will also continue through the future phases to the south. The route will benefit from natural surveillance due to proposed properties overlooking the space, and will be a key route for safe and secure travel away from the main roads.

4.5 The internal highway layout primarily includes east-west routes in order to overcome the main change in gradient, which is from north to south. A central footpath is provided to allow a gradient-compliant active travel route which 'zig-zags' through the centre of the site. It is proposed to retain the existing Penrhys ring-road, but with additional formalised on-street parallel parking bays and some SUDS features to encourage lower vehicle speeds and to act as speed calming measures. The highways within the ring road are primarily new highways and are designed to accommodate two-way working between Standard Design Vehicles (SDVs) and Panel Vans, given the increase in delivery vehicles for online orders present in the five plus years since Covid-19. SDVs are typically slightly larger than a 'normal'' car. Refuse manoeuvres can be accommodated also, as well as fire tenders.

Main Site Access

4.6 The site will continue to be accessed from the B4512 Penrhys Road, where there is an existing roundabout connecting to Heol Pendyrus.

4.7 There are proposals associated with the wider development to improve this roundabout, though these do not form part of the Phase 1A proposals . There is limited space for a haul road during the construction period, and as such all construction vehicles will arrive via the roundabout. The roundabout improvements will therefore be one of the final elements of the scheme to come forward. However, the roundabout is a significant junction which is more than capable of serving Phase 1A, and later phases, until the junction improvements are introduced to improve active travel access as well as aesthetics.

4.8 The changes that will be proposed as a part of the wider outline proposal will include to downgrade the dominance of road space and rebalance movement of vehicles and non-vehicular users (primarily pedestrians). This will function as a gateway feature to the village as well as the Shrine of Our Lady of Penrhys.

4.9 Pedestrian infrastructure will be improved and prioritised with dropped kerbs, tactile paving and prominent formal crossing points, whilst the overall footprint of the junction may be reduced.

Phase 1A Access

4.10 Phase 1A will benefit from several access points using both existing and newly proposed highway junctions. These junctions are designed to accommodate the turning movements of standard design vehicles (SDVs), refuse vehicles and fire tenders. Junction visibility is provided for vehicles travelling at 20 mph, which is a 22 m Stopping Sight Distance (SSD) as advised by Manual for Streets (MfS), which the RCT Residential Design Guidance references. The highways are designed to naturally limit vehicles to these speeds.

4.11 The relevant drawings for these accesses including visibility splays and Swept Path Analysis (SPA) for SDVs (standard design vehicles) and refuse vehicles are contained within **Appendix D**.

Figure 4-2: Phase 1A Access Points

Access 1

4.12 Access 1 comprises the existing priority junction with Heol Pendyrus / Pen Tyntyla, realigned approximately 10 m to the south to provide a more level junction. It remains a simple priority junction and the levels remain consistent along the road as it routes from east to west. A footway will be provided along the northern side of the carriageway. This access also crosses the green corridor to connect to the street on the eastern side of Phase 1A. The intention is to connect to this street to the eastern phases as they come forward. At this point there may be an option to downgrade the highway crossing of the green corridor.

Access 2

4.13 Access 2 is a newly proposed junction to the north of Access 1. It will be a simple priority junction allowing access to the second row of dwellings. Footways will be provided along both side of the carriageway, with an uncontrolled crossing near the junction mouth.

Access 3

4.14 Access 3 is a simple priority junction allowing access to a car parking area serving the dwellings allocated as flats. The priority junction will be on a raised table which will act as a speed calming measure for vehicles travelling around the ring road.

Access 4

4.15 Access 4 is the retained junction of Heol Pendyrus / Heol-Y-Waun. This is again a simple priority junction, with Heol-Y-Waun subject to a gradient of approximately 1:7 in places. Options were explored to upgrade this route and adjust the gradient but these did not prove feasible. Following discussions with RCTCBC it is agreed to retain this road given that this route is not promoted for pedestrian access, as grade-compliant and inclusive options are being provided elsewhere within the site.

Pedestrian and Cycle Access

4.16 All existing, improved and proposed junctions within Phase 1A will include provision for active travel, primarily in the form of 2 m footways. Cycling can be accommodated on-road within the development as the design of the streetscape with low speeds and good forward visibility will lend itself to cycling. Relevant drawings demonstrating pedestrian infrastructure are included at **Appendix D**.

4.17 Within the site, crossings will be at-grade and are proposed to be facilitated through raised tables and appropriate uncontrolled crossing facilities, to promote the priority of movement by these modes.

4.18 Some locations will, due to existing topography constraints, not align with the RCTCBC Design Standards as set out in “Section – A: Residential Roads, Footpaths And Cycleway Standards”. It states within this document that “footway and footpath gradients will not usually exceed 1 in 12, however, where a development fronts an existing road and a footway is to be provided fronting the development, the gradient should not exceed 1 in 8”.

4.19 However, in most locations efforts have been made to align with this standard and provide an improvement where possible, so as to not provide the minimum gradients but to try and improve the existing situation.

4.20 The guidance further states that “steps are permitted on footpaths (not footways) where there is an alternative route for disabled pedestrians”. Stepped footpath arrangements are included within the site design in some locations, and there is an alternative route for disabled or impaired site users which takes a gradient-compliant path, and which also aligns with LTN 1/20 as shown in the site layout at **Appendix A**.

Proposed Active Travel Route

4.21 An active travel route is proposed to connect the north of Heol Pendyrus to the southernmost area of Phase 1A. This central landscaped area is illustrated in **Figure 4-3** and is shown within the site layout at **Appendix A**.

4.22 The route is compliant with the RCTCBC Design Guidance and with ‘Cycle Infrastructure Design, Local Transport Note 1/20, July 2020’ (LTN 1/20) in that most of the gradients do not exceed 5% (1:15). As per paragraph 10.8.23 of LTN 1/20, ramps of 5% (1:20) gradient and above are divided into sections that do not exceed 10m in length, and with intermediate resting places at least 2 m long.

4.23 LTN 1/20 states that an absolute maximum of 8% (1:12.5) should be used for ramps. The design is compliant with this parameter.

4.24 A stepped alternative is provided in a more direct straight line from north to south, along the eastern boundary of the landscaped area. This is to provide an alternative option for pedestrians who are not mobility impaired or who want to take a more direct route.

4.25 To the south, the active travel route connects onto the east-west street which borders the southern boundary of Phase 1A. Long-term this will tie into the wider masterplan with access continued through the green corridor to the south, however during Phase 1A a temporary access will be provided to connect to the south. This may be via temporary step & ramp arrangement. This is as per the southernmost arrow as indicated in **Figure 4-2**.

Figure 4-3: Phase 1A Active Travel Route and Central Landscaped Area

4.26 A temporary stepped and ramped connection from the street situated on the southern boundary of Phase 1A will be provided to connect residents with the existing footpath that currently runs north-south in Penrhys. Until this part of Penrhys is redeveloped in a subsequent phase, there will be a temporary need to overcome the level difference. This provision will ensure residents will be able to navigate around and out of the village during the period when only Phase 1A is constructed. As other phases are redeveloped then the green corridor will extend south from Phase 1A all the way through the village, which will overcome the level differences and provide a continuous, attractive and legible north-south route.

Car and Cycle Parking

4.27 Penrhys lies within Zone 3 (Suburban or Near Urban) and as such, the following maximum car parking standards apply to the proposed residential development:

- Houses & apartments (1 or 2 Bedrooms) – maximum of 2 spaces
- Houses & apartments (3 or more Bedrooms) – maximum of 3 spaces
- Visitors – maximum of 1 space per 5 units

4.28 The SPG requires 1 long-stay cycle parking stand per 5 apartment bedrooms. No specific requirement for cycle parking standards is provided for houses, however it is assumed most bicycle storage is provided within dedicated garages. Whilst not specified in the SPG, it is good practice to provided dedicated & secure bicycle storage (such as metal sheds) where houses are provided without garages.

4.29 Based on the proposed development of 121 residential dwellings, the proposed parking schedule is set out in **Table 4.1**. This is proposed based on the vision for a sustainable community, but cognisant of the fact that the site sits between the Rhondda Fawr and Rhondda Fach valleys and is elevated above these.

Table 4.1: Proposed Parking Schedule

Bedrooms	Max Persons	Proposed parking spaces per unit
2	3	1
3	4	1
3	5	2
4	6	2
4	7	3

4.30 The parking provision as proposed is below the maximum standards as per RCTCBC guidance, which is in keeping with the site's aspiration for an inclusive development which promotes sustainable modes. However, a realistic and appropriate level of parking is still provided for each dwelling considering the site's location.

Heol Pendyrus (the Ring Road)

4.31 It is not proposed to realign the ring road, however it is proposed to update and amend sections of the ring road to reduce vehicle speeds by creating build-out features and level differences, thereby improving the active travel user environment.

4.32 It provides vehicle drivers with a loop of the entire site and will have the benefit of keeping vehicles to the outskirts of the development as opposed to encouraging vehicles to drive into and through the quieter residential streets within Phase 1A. Drawings illustrating the proposed improvement schemes are contained within **Appendix D**.

4.33 Through pre-app discussions with RCTCBC it is acknowledged that there are some concerns with speeding vehicles along the ring road. The design of Phase 1A includes the following measures on the ring road to encourage slower speeds:

- On-street parking provided as parallel parking bays on the western and northern sides of the ring road;
- Small build-outs which protect the parallel parking bays and function as a narrowing feature;
- New bus stops;
- A raised table to the north at the junction which provides an informal pedestrian crossing location to access the natural mountainside to the north;
- Consistent footways along the 'inside' of the ring road adjacent to the development plots, which will also result in a more urban environment to encourage lower speeds.

4.34 Some SUDS features will be contained within the highway which will also create small build-outs adjacent to the proposed parallel parking bays, further downplaying the ring road and assisting in reducing vehicular speeds.

Bus Stops

4.35 There is an existing bus stop along Heol Pendyrus in the north of Phase 1A which is served by the 170 run by Stagecoach. This is known as 'Boilerhouse'. Although a designated stop, this has no provision by way of shelter, flagpole, on-road bus cage etc.

4.36 It is proposed to relocate the Boilerhouse bus stop 30 to the east as per the site layout, and to include an additional bus stop to the southwest of the site, a further 200m along Heol Pendyrus to the west from the Boilerhouse bus stop. These stops will benefit from bus cages and shelters and provide a sustainable option for residents of Phase 1A to travel away from the site via means other than private vehicle

Servicing and Delivery Vehicles

4.37 Phase 1A is designed to accommodate delivery and servicing vehicles.

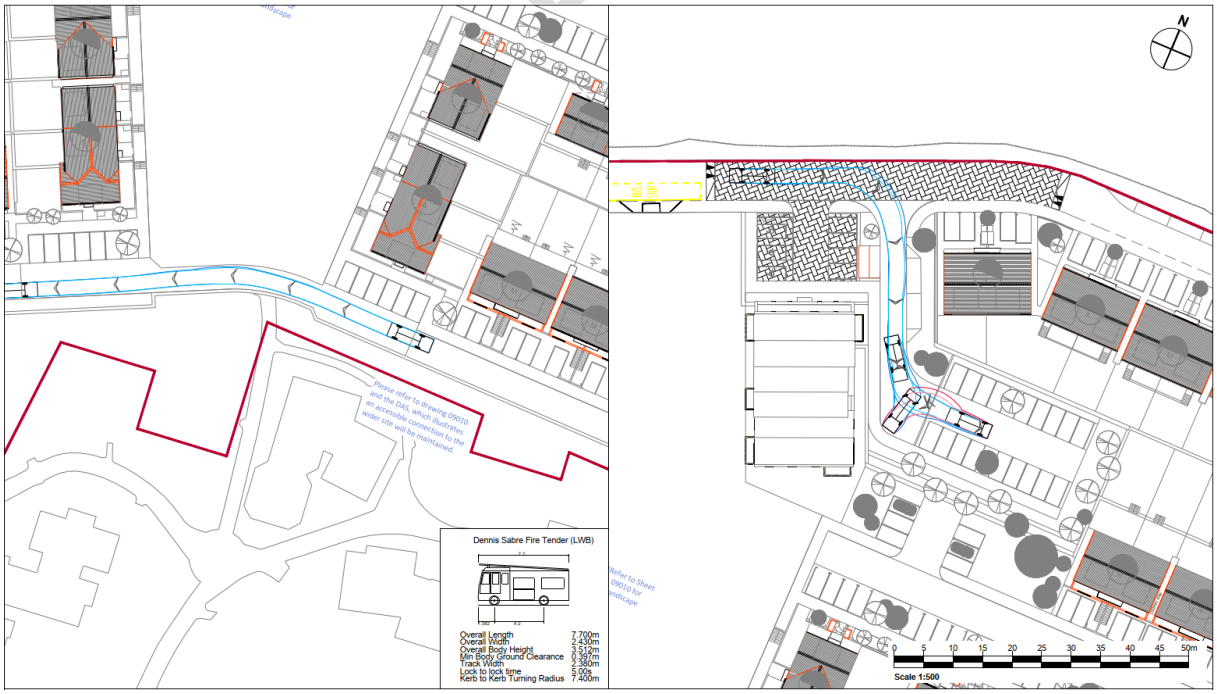
4.38 It is recognised that in 2025 many people shop online and, whilst this reduces overall vehicle trip generation, it results in an increase in the number of delivery vehicles accessing the site. Cognisant of this, all internal roads will be able to accommodate two-way movements with a panel van and an SDV as a minimum.

4.39 The drawings in **Appendix D** demonstrate the SPA for a 10.2m refuse vehicle and a fire tender. Each road internal to Phase 1A will allow for refuse vehicles to enter in a forward gear, turn around safely and exit in forward gear. The relevant SPAs are set out in **Figure 4-4**.

Figure 4-4: 10.2m Refuse Vehicle Swept Path Analysis

4.40 **Figure 4-5** demonstrates the SPA for a Fire Tender.

Figure 4-5: Fire Tender Swept Path Analysis



4.41 All SLR drawings, including SPAs, are contained within **Appendix D**.

Phase 1A Facilities

4.42 It is anticipated that the proposed commercial centre (including retail facilities) will be the next phase at Penrhys to be developed and that this will be to the south of the site adjacent to the existing main access roundabout. Until this phase is delivered and new amenities provided, the existing offerings on site (the church, shop and takeaway for example) would remain accessible to residents of Phase 1A.

5.0 Wider Site Mobility Strategy

5.1 The Mobility Strategy for the site encompasses proposals for Phase 1A, but will remain cognisant of the site as a whole including future phases.

5.2 This TA champions a vision-led approach to new development. It supports the objectives of national policy and moves away from the now outdated 'predict and provide' approach to planning for new development. This approach places focus instead on the vision and putting the measures in place to achieve that vision, it actively meeting the balance between crucial climate change targets and delivering much needed development and regeneration.

5.3 The strategy places a focus on current forward-thinking strategies to increase the liveability of the village, as well as future mobility solutions covering sustainability, climate change, social cohesion, virtual mobility, flexible streets, new technologies, smart economics, and pandemic resilience.

5.4 Placemaking plays a key role in any Mobility Strategy and the principles of how the wider masterplan will place local living at the highest priority will be included in this section.

5.5 Analysis of shifting and emerging trends to travel will be included in this section, with particular regard to the somewhat unique challenges the location offers.

5.6 At the heart of the strategy will be facilitating local living and the promotion of the '15-minute neighbourhood'. This is not intended to confine the future residents' movements on-site, but instead to develop a community in which the first call for retail, education and leisure can be within a walkable distance.

5.7 The existing community of Penrhys have, through a community engagement process, stated their desire to remain on the site and have reinforced the importance of the community spirit they feel, which is strongly linked to the Llanfair Uniting Church, which also acts a community centre and the primary school. When built upon, multiple benefits are evident including boosting local economies, improving people's health and wellbeing, increasing social connections in communities, and talking the climate change emergency.

5.8 Following Phase 1A, and as the wider site is developed, a commercial area will sit towards the front of the development (near to the main access roundabout) in combination with or nearby to the church and community centre whichever form they take. Mobility Hub-type elements will be included within this commercial area. This forms a focal point for people to meet, interact, work and spend time, and can provide a range of other facilities.

5.9 The aim for Phase 1A in alignment with the vision for the wider site is to facilitate better mobility by being accessible by active and public transport modes, offering safe and secure cycle parking, as well as elements such as a bicycle repair hub. Car club and carpooling space could be made available, as well as EV charging points and upgraded bus stops with high quality waiting facilities.

5.10 Whilst many of the proposals associated with the Mobility Strategy require the critical mass of the wider site for successful operation, measures which will help cement sustainable travel habits from the outset will be implemented within Phase 1A. This will support both existing residents and new residents within Phase 1A.

6.0 Phase 1A Trip Generation

Overview

6.1 To understand the development traffic effect of Phase 1A on the local highway network, a trip generation exercise was undertaken and is presented below.

Phase 1A Trip Generation

6.2 Given the site was designed for and has already accommodated a significantly higher number of houses in the past, it is expected that the internal and external road networks are suitable to accommodate the wider site proposals.

6.3 Phase 1A comprises approximately 121 dwellings with the following housing mix:

- 50 Affordable Dwellings (included within the observed trips exercise)
- 71 Private / Market Dwellings (included in the TRICS assessment below).

6.4 The critical mass of development to meaningfully internalise trips will therefore not exist in Phase 1A. The outline application for the wider site, however, will consider the effect of the commercial provision on linked and internalised trips. For Phase 1A, TRICS data has been used to forecast multi-modal trips associated with the site.

6.5 The TRICS assessment does not consider the 50 affordable dwellings to be re-allocated from the wider site into Phase 1A, as these are already accounted for in the surveys undertaken at the main Penrhys access roundabout. The TRICS assessment therefore considers solely the proposed 71 market dwellings.

TRICS Assessment for 71 market dwellings at Penrhys

6.6 TRICS is the industry standard in the UK and Ireland for estimating trip generation from new developments. It is a comprehensive database that provides trip generation data for a wide range of land uses based on real-life surveys across the UK and Ireland.

6.7 TRICS enables users to calculate how many trips are likely to be generated by a specific type and size of development, including travel by car, foot, cycle, and public transport. Users can filter results by location type, region, and other criteria to ensure relevance. The system supports evidence-based analysis by offering nationally consistent data, helping to inform transport planning, infrastructure design, and the promotion of sustainable travel behaviours.

6.8 To forecast the multi-modal trip generation associated with the development of 71 private dwellings at Phase 1A, the following parameters have been used as set out in **Table 6.6**. As noted, the 50 affordable units are already accounted for within the analysis of existing trips at Penrhys.

Table 6.1: TRICS Parameters – 71 Private Dwellings

Parameter	Selection
Survey Type	Multi-Modal
Land Use	03 Residential
Land Use Sub Category	Houses Privately Owned
Region	UK (exc. Greater London and Northern Ireland)
Location	Edge of Town / Neighbourhood Centre
Location Sub Category	Village / Out of Town
Days	Weekdays only
Number of units	20 - 120
Covid-19	Surveys affected by Covid-19 excluded

6.9 This section first sets out the total vehicle trip generation for the 71 private dwelling in Phase 1A, which is also the net trip generation. It then details the forecast multi-modal trip generation. All TRICS outputs are contained within **Appendix E**.

6.10 The forecast 12 hour (07:00-19:00) vehicular trip rates, based on the parameters in **Table 6.6**, are set out in **Table 6.7.**

Table 6.2: Forecast Phase 1A Vehicle Trip Rates (per dwelling)

Time Period	Arrivals	Departures	Two-Way
07:00-08:00	0.067	0.250	0.317
08:00-09:00	0.135	0.370	0.505
09:00-10:00	0.174	0.205	0.379
10:00-11:00	0.145	0.158	0.303
11:00-12:00	0.117	0.142	0.259
12:00-13:00	0.164	0.164	0.328
13:00-14:00	0.164	0.159	0.323
14:00-15:00	0.149	0.152	0.301
15:00-16:00	0.265	0.165	0.430
16:00-17:00	0.294	0.171	0.465
17:00-18:00	0.308	0.159	0.467
18:00-19:00	0.233	0.132	0.365
12hr	**2.215**	**2.227**	**4.442**

6.11 The trip generation associated with the 71 private dwellings as a part of Phase 1A has therefore been determined based on the trip rates set out in **Table 6.7**. The forecast trips are demonstrated in **Table 6.8**.

Table 6.3: Forecast Phase 1A Vehicle Trip Generation (71 Private Dwellings)

Time Period	Arrivals	Departures	Two-Way
07:00-08:00	5	18	23
08:00-09:00	10	26	36
09:00-10:00	12	15	27
10:00-11:00	10	11	22
11:00-12:00	8	10	18
12:00-13:00	12	12	23
13:00-14:00	12	11	23
14:00-15:00	11	11	21
15:00-16:00	19	12	31
16:00-17:00	21	12	33
17:00-18:00	22	11	33
18:00-19:00	17	9	26
12hr	**157**	**158**	**315**

6.12 **Table 6.8** demonstrates that the peak hours are forecast to be 08:00-09:00 with 36 two-way trips and 17:00-18:00 with 33 two-way trips.

6.13 This equates to approximately one additional vehicle on the highway network every two minutes.

Multi-Modal Trips

6.14 The TRICS trip generation exercise as set out in the section above was also undertaken for multi-modal trips. This is using the same parameters as set out in **Table 6.6**. The resultant trip rates and trip generation forecast for 71 private dwellings are set out in **Table 6.11** and **Table 6.12**.

Table 6.4: TRICS Forecast Multi-modal trip rates (Phase 1A – 71 private dwellings)

Mode	Two-Way Trips		
	08:00-09:00	17:00-18:00	12 hr
Walking	0.149	0.129	0.499
Cycling	0.009	0.005	0.065
Public Transport	0.026	0.013	0.065
Vehicles	0.505	0.467	4.442

Table 6.5: TRICS Forecast Multi-modal trips (Phase 1A – 71 private dwellings)

Mode	Two-Way Trips		
	08:00-09:00	17:00-18:00	12 hr
Walking	11	9	35
Cycling	1	0	5
Public Transport	2	1	5
Net Vehicles	36	33	315

6.15 Whilst the multi-modal TRICS assessment forecasts up to 35 pedestrians travelling by foot and 5 by bike, it is noted that the topography and location of Penrhys is unique and that many of these tips will instead occur by public transport or by private vehicle. Notwithstanding this, the long-term vision for Penrhys is to create a community where trips can be contained within the site where appropriate (i.e., for education, retail, etc), and the ambition is for these shorter trips to be made by active travel modes.

Highway Impact Assessment

6.16 A percentage impact assessment has been undertaken on the existing Penrhys roundabout in order to determine the impact of the development on this junction. The following assumptions have been made:

- Trips associated with Phase 1A have been distributed as per the observed distribution obtained from the MCC survey at Penrhys Roundabout;
- All Phase 1A trips have been distributed through Heol Pendyrus (west) rather than Heol Pendyrus (east).

Table 6.6: Percentage Impact Assessment in AM Peaks (Penrhys Roundabout)

Arm:	Base Flows	Development Flows	Junction Impact
	AM (07:00-08:00)		
Heol Pendyrus (North)	14	0	0%
B4512 Penrhys Road (East)	174	3	2%
Car Park	0	0	0%
B4512 Penrhys Road (West)	156	2	1%
Heol Pendyrus (West)	27	18	66%
TOTAL JUNCTION	**371**	**23**	**6.1%**
Arm:	**Base Flows**	**Development Flows**	**Junction Impact**
	AM (08:00-09:00)		
Heol Pendyrus (North)	32	0	0%
B4512 Penrhys Road (East)	318	6	2%
Car Park	2	0	0%
B4512 Penrhys Road (West)	224	3	2%
Heol Pendyrus (West)	40	26	66%
TOTAL JUNCTION	**616**	**36**	**5.8%**
Arm:	**Base Flows**	**Development Flows**	**Junction Impact**
	AM (09:00-10:00)		
Heol Pendyrus (North)	21	0	0%
B4512 Penrhys Road (East)	243	8	3%
Car Park	10	0	0%
B4512 Penrhys Road (West)	171	4	3%
Heol Pendyrus (West)	24	15	61%
TOTAL JUNCTION	**469**	**27**	**5.7%**

Table 6.7: Percentage Impact Assessment in PM Peaks (Penrhys Roundabout)

Arm:	Base Flows	Development Flows	Junction Impact
	PM (16:00-17:00)		
Heol Pendyrus (North)	51	0	0%
B4512 Penrhys Road (East)	255	13	5%
Car Park	8	0	0%
B4512 Penrhys Road (West)	290	7	3%
Heol Pendyrus (West)	30	12	40%
TOTAL JUNCTION	**634**	**33**	**5.2%**
Arm:	**Base Flows**	**Development Flows**	**Junction Impact**
	PM (17:00-18:00)		
Heol Pendyrus (North)	20	0	0%
B4512 Penrhys Road (East)	247	14	6%
Car Park	5	0	0%
B4512 Penrhys Road (West)	232	8	3%
Heol Pendyrus (West)	45	11	25%
TOTAL JUNCTION	**549**	**33**	**6.0%**
Arm:	**Base Flows**	**Development Flows**	**Junction Impact**
	PM (18:00-19:00)		
Heol Pendyrus (North)	29	0	0%
B4512 Penrhys Road (East)	229	14	6%
Car Park	3	0	0%
B4512 Penrhys Road (West)	189	8	4%
Heol Pendyrus (West)	32	9	29%
TOTAL JUNCTION	**482**	**31**	**6.5%**

6.17 The highest impact on any one arm is on Heol Pendyrus west, i.e., the arm via which all Phase 1A is forecast to route. This is a maximum impact of 66% in the AM peak between the hours ta 07:00-08:00. However, the overall traffic flows from this arm remain objectively low (45 vehicles movements during the one-hour period), which equates to less than one vehicle every minute.

6.18 Overall, the greatest impact on the whole junction is during the 18:00-19:00 period, with Phase 1A having a total junction impact of 6.5%. Again, there are no existing capacity issues at this junction, and the highest forecast net development trips are just 36 two-way vehicles (from 08:00-09:00), or approximately one vehicle every two minutes on average.

6.19 It is not expected that this level of vehicular trip generation will have any perceptible impact on the local highway network, including the main Penrhys roundabout or on the B4512 / A4048 mini roundabout to the west or the Lidl roundabout to the east.

Summary

6.20 When considering the net trip generation of Phase 1A, it is concluded that the most appropriate method for forecasting vehicle and multi-modal trips is using the TRICS exercise as set out in the chapter above.

6.21 The forecast trip generation associated with Phase 1A is therefore as set out in **Table 6.12**. In terms of development traffic movements, the forecast is 36 additional two-way trips during the AM peak, 33 additional two-way trips during the PM peak, and 297 additional two-way trips from 07:00-19:00.

6.22 The low quantum of traffic and development traffic effect does not require detailed junction capacity assessment. In addition to this, significant improvements are being developed for the site access junction, which will be thoroughly tested and will accompany a future application, for a subsequent phase.

7.0 Summary and Conclusion

Summary

7.1 SLR Consulting Ltd is appointed by Trivallis to provide highways and transport advice in relation to the proposed regeneration of the existing community of Penrhys, Rhondda Cynon Taff.

7.2 It is proposed to redevelop the entire Penrhys village, in Rhondda Cynon Taff, to create a highly sustainable, safe and desirable place to live. The new development will aim to promote local living, reducing the need to travel off site and where that needs to take place, to do so by sustainable means.

7.3 The development will be a mix of private and affordable properties, with a strong focus on social housing and keeping the strong existing community spirit. This Transport Assessment was developed to support the application for 121 new homes in the first phase (known as Phase 1A) of the redevelopment proposals.

7.4 This Transport Assessment summarises the existing and proposed accessibility credentials of the site and provides an analysis of the forecast trip generation and its impact on the local highway network.

7.5 The new development will provide 50 affordable dwellings and 71 private / open market dwellings. The 50 affordable properties will be used to re-house part of the existing Penrhys community, allowing for further site clearance and future phases to be planned.

7.6 Active travel is accommodated throughout Phase 1A and were designed cognisant of connecting to future phases to the east and south. A central north-south green corridor accommodates a new gradient-compliant active travel route through the site, allowing for residents to choose either a fast a direct route or a gentler route which overcomes the topography of Penrhys gradually. The intention is to create a community with strong placemaking and local living at its core, promoting social inclusion for future and existing residents.

7.7 Th site benefits from access to existing bus services 170 and 172 which connect Penrhys to Bridgend, Aberdare and Ystrad and other key regional destinations.

7.8 The site is located within a walkable and cyclable distance from a number of key facilities located in Ystrad, Pontygwaith and Tylorstown. The site is located within a reasonable walk and cycle distance from Ystrad Rhondda and Llwynypia Railway Stations which provide bi-hourly rail services to Cardiff Central and Treherbert.

7.9 A review of the previous 5-years of collision data within the vicinity of the site access demonstrates that there are no inherent safety issues on the local highway network that may be exacerbated by the development proposals.

7.10 The principles of the proposed development of this site comply with the transport related planning policies highlighted within this report, locally and nationally. The site will seek to encourage travel by non-car modes, with the opportunity to travel via the foot/cycleway route directly accessing the site. The proposals will also encourage and comply with electric vehicle

charging spaces, by providing the appropriate amount to ensure the growth of electric vehicles is achievable.

7.11 It is proposed to retain the Penrhys outer ring-road, but with additional formalised on-street parallel parking bays and some SUDS features contained within build outs to encourage lower vehicle speeds and acting as natural traffic calming measures. The development streets are designed to promote active travel use for day to day living, maximise natural surveillance and accommodate the day-to-day vehicle movements.

7.12 A development traffic effect exercise has been undertaken and the 71 new open-market homes proposed in Phase 1A trip generation associated is forecast to be 36 two-way trips in the AM weekday commuter peak period (08:00-09:00) and 33 two-way trips in the PM peak period (17:00-18:00). This relatively small forecast increase in traffic is not considered to be significant and equates to approximately one additional vehicle on the highway network every two minutes, on average. The 50 affordable properties will rehouse existing Penrhys residents so will not generate any more vehicle movements than it does currently.

Conclusion

7.13 Phase 1A is the first step of the wider proposals to regenerate the existing Penrhys community. It will set the foundations for a sustainable community which prioritises active and sustainable travel, especially within the site itself. As the wider site comes forward, residents will be able to not only walk and cycle to existing facilities such as the church and primary school, but also the commercial, community and leisure areas which will come forward in subsequent phases.

7.14 The site is compliant with policy in that it aims to regenerate an existing community and places an emphasis on active travel, cognisant of its unique location between the Rhondda Fawr and Rhondda Fach valleys. The forecast vehicle trip generation associated with the site will not have any perceptible impact on the local or wider highway network.

Appendix A Site Layout

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

SLR Project No.: 407.064582.00001

9 September 2025

Appendix B Scoping Note

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

SLR Project No.: 407.064582.00001

9 September 2025

STATUS	REV	DATE	DESCRIPTION
PL	PL2	03.09.2025	PAC Submission

CLIENT
Trivallis

REVISED BY
SAH

CHECKED BY
JP

ORIGINATOR NO
156757

CONSULTANT
STRIDE TREGLOWN
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PROJECT
Penrhys Residential
Penrhys,
Ferndale,
Rhondda Cynon Taf

DRAWING TITLE
Proposed Phase 1A - Illustrative Site Plan

STATUS CODE
PLANNING

SCALE
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PL_PL2

Scoping Note

Penrhys Regeneration

Trivallis

Prepared by:

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SLR Project No.: 407.064582.00001

9 January 2025

Revision: V2

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
V1	27th November 2024	JH	EH	MR
V2	7th January 2024	JH	EH	MR

Basis of Report

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Appendices

1.0 Introduction

Overview

1.1 SLR Consulting Ltd is instructed by Trivallis to provide highways and transport advice in relation to the proposed regeneration of Penrhys, Rhondda Cynon Taff (RCT).

1.2 This report takes the form of a Scoping Note, with the aim of agreeing a methodology and a scope of works for the highways and transport element of the application.

1.3 SLR propose to produce a Transport Assessment to support the full planning application for Phase 1A of the proposals. This will contain details as below:

1. Introduction
2. Existing Conditions
3. Policy Context
4. Development Proposals
5. Mobility Strategy
6. Trip Generation Methodology
7. Highway Network Analysis
8. Summary

1.4 Further details are set out within this Scoping Note.

1.5 The site-wide masterplan is being developed in tandem with the application for Phase 1A, to ensure a cohesive design and assessment for the entire site. In terms of transport impacts therefore, it is proposed to derive and set out the impact of Phase 1A and the mobility measures which will be implemented to encourage sustainable travel, whilst remaining cognisant of the impacts of the wider site.

1.6 As such, sustainable travel measures will be introduced in a phased manner, beginning with Phase 1A which will eventually serve the whole site once regenerated.

Site History

1.7 Penrhys was built between 1966-1969 with 951 homes and was the largest public sector housing venture in Wales. It contained a mixture of private and affordable housing.

1.8 By 1990s the Local Authority had begun a relocation programme for Penrhys with many of the original buildings being demolished once the tenants had been relocated. Less than 300 buildings remain in the village today.

1.9 The village is approximately 24 hectares. Much of the site is now cleared and represents a significant brownfield development opportunity, part of which will need to include the demolition and replacement of the remaining homes.

Pre-Application Engagement

1.10 SLR have met with RCT Highways Officers twice up to issue of this Scoping Note.

1.11 The first meeting was the 17th of September as part of a wider meeting with RCT Officers covering a number of disciplines relating to the regeneration of Penrhys at which highways and transport was discussed briefly. The second meeting was with Officers Alun Rees and Tim Phillips on the 5th of November, and covered highways and transport matters only. Following this meeting it was agreed to prepare a TA Scoping Note to agree the scope of assessment moving forward.

Scoping Note Structure

1.12 The Scoping Note is structured as follows:

- **Section 2** – **Existing Conditions**: a brief overview of the site in the context of sustainable transport and the local highway network.
- **Section 3** – **Planning Policy Context**: a review of the site against national and local policy;
- **Section 4** – **Development Proposals**: sets out details of the proposed development;
- **Section 5 - Mobility Strategy**: examines the strategy to reduce trips by private vehicle and encourage sustainable travel and active modes;
- **Section 6** – **Trip Generation Methodology:** a breakdown of the trip generation methodology used to derive the forecasted trip demand for the proposed development. A net trip generation will also be prepared;
- **Section 7** – **Highway Network Analysis**: sets out the percentage impact, and which junctions are proposed to be analysed in terms of capacity;
- **Section 8** – **Summary and Next Steps**: summarises and concludes the report.

2.0 Existing Conditions

2.1 This section will set out the existing accessibility to the site, include a review of Personal Injury Collision data for the local highway network, and outline baseline travel habits and observed traffic flows.

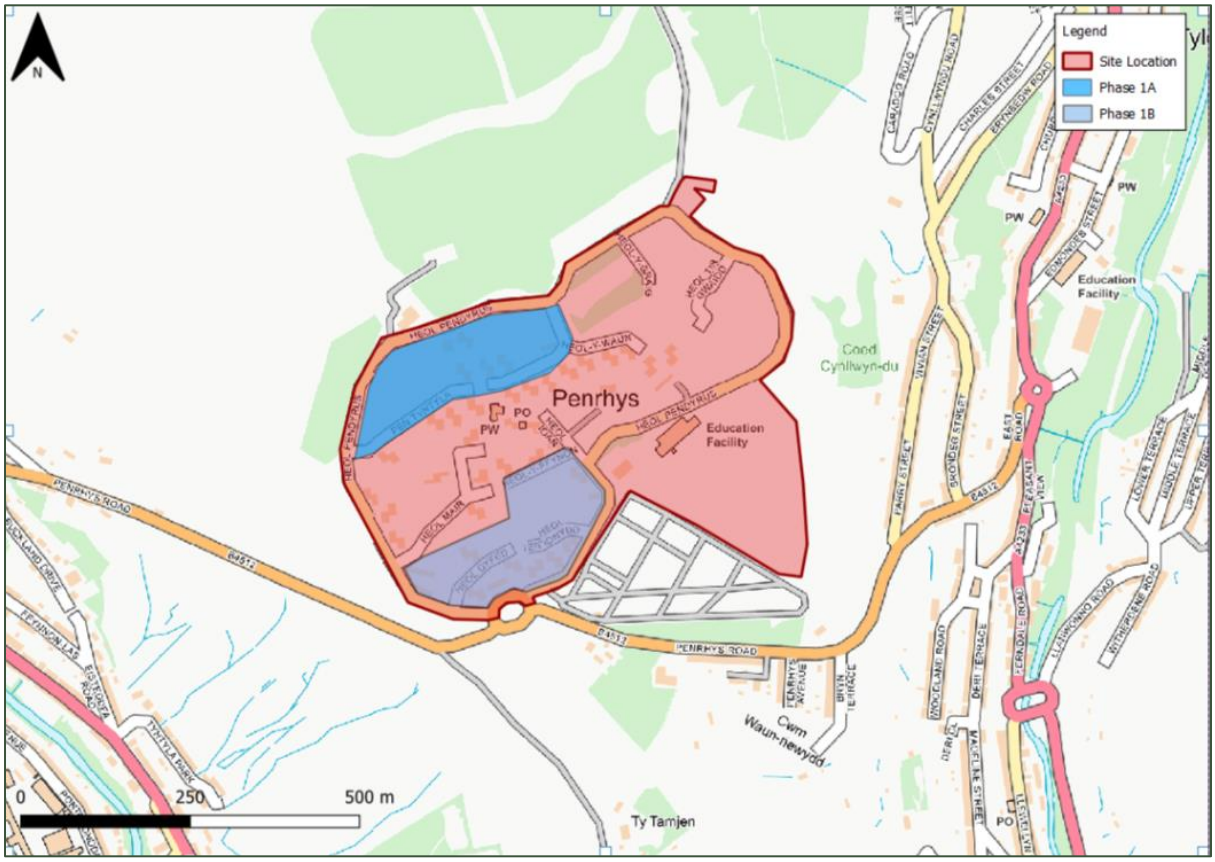
2.2 A brief overview of the existing conditions is contained in this report.

Site Location

2.3 The site is located In Penrhys, Ferndale, approximately 1.5km east of Ystrad and 1km west of Pontygwaith. The site currently comprises residential properties and is bounded by the B4512 to the south and green space to the north, east and west. National Resources Wales owns and operates to the north of the site.

2.4 The site location is illustrated in **Figure 2-1**. Phase 1A comprises the northwest area of Penrhys as shown and the total area currently includes future phases that may not come forward.

Figure 2-1: Site Location



Site Access

2.5 The site is accessed via a large roundabout junction with Penrhys Road (B4512) and Heol Pendyrus. As existing, there are no designated pedestrian crossing points located at the

junction. A stepped pedestrian footpath is located directly adjacent to the roundabout, providing access to the residential roads north of the access, as well as footways on the northern side of the roundabout. Dropped kerbs and tactile paving are not present on any of the roundabout arms.

Local Facilities

2.6 The site currently contains a primary school which serves the site only, a childcare centre (Children and Family Centre), a play area, a local convenience store, and a fast-food restaurant. Moreover, three bus stops are currently provided on site, including the 'Roundabout', the 'Boilerhouse' and 'Penrhys Youth Club' bus stops. The on-site church forms the heart of the current community and serves as both a church and community centre.

2.7 Other amenities are located in the valleys either side of Penrhys, and whilst are within reasonable walking distance based on a horizontal alignment, involve steep gradients which will inflate the walking times. The journey times below have therefore been calculated using the Google Maps journey planning tool to provide a more accurate indication of journey times. This means that journey times from these facilities back to Penrhys are likely to be longer than the other direction.

2.8 The amenities available are shown at **Table 2-1** and in **Table 2-2**. All distances are taken from the access roundabout in **Table 2-1**, i.e., the lowest point of the site, and given the topography of the site itself, distances and journey times have also been considered from Heol-Y-Waun in **Table 2-2**, one of the highest points of the site.

Table 2-1: Local Amenities to/from Penrhys Roundabout

Amenity Type	Amenity	Distance (m)	Journey Time from Penrhys Roundabout (minutes)		Journey Time to Penrhys Roundabout (minutes)	
			Walk	Cycle	Walk	Cycle
Public Transport						
Bus Stop	Roundabout	Within Penrhys	-	-	-	-
	Boilerhouse	Within Penrhys	-	-	-	-
	Penrhys Youth Club	Within Penrhys	-	-	-	-
Railway Station	Ystrad Rhondda	1800	24	8	33	19
	Llwynypia	2400	31	10	40	22
Leisure						
Park	Penrhys Play Area	Within Penrhys	-	-	-	-
Rugby Club	Tylorstown Rugby Club	550	7	2	7	2
Bowls Club	Penrhys Bowls Club	700	8	3	8	3
Golf Club	Rhondda Golf Club	900	11	3	11	3

Amenity Type	Amenity	Distance (m)	Journey Time from Penrhys Roundabout (minutes)		Journey Time to Penrhys Roundabout (minutes)	
			Walk	Cycle	Walk	Cycle
Retail						
Convenience Store	Local Convenience Store	Within Penrhys	-	-	-	-
Takeaway	New York Pizza	Within Penrhys	-	-	-	-
Convenience Store	Morrisons Daily	1600	19	6	26	15
Supermarket	Lidl	1400	17	5	23	13
Education						
Childcare	Penrhys Children and Family Centre	Within Penrhys	-	-	-	-
Primary School	Penrhys Primary School	Within Penrhys	-	-	-	-
	Pontygwaith Primary School	1500	20	7	28	15
College	Coleg Cymoedd Rhondda Campus	1700	22	7	32	20
Religion						
Church	Llanfair Uniting Church	Within Penrhys	-	-	-	-
Health						
Surgery	Tylorstown Surgery	1400	17	5	22	15
Pharmacy	Sheppard Pharmacy Ystrad	1400	17	5	22	15
Hospital	Ysbyty Cwm Rhondda Hospital	1800	22	7	33	19

Table 2-2: Local Amenities to/from Heol-Y-Waun

Amenity Type	Amenity	Distance (m)	Journey Time from Heol-Y-Waun (minutes)		Journey Time to Heol-Y-Waun (minutes)	
			Walk	Cycle	Walk	Cycle
Public Transport						
Bus Stop	Roundabout	Within Penrhys	-	-	-	-
	Boilerhouse	Within Penrhys	-	-	-	-
	Penrhys Youth Club	Within Penrhys	-	-	-	-
Railway Station	Ystrad Rhondda	1800	33	9	43	24
	Llwynypia	2400	40	12	51	27

Amenity Type	Amenity	Distance (m)	Journey Time from Heol-Y-Waun (minutes)		Journey Time to Heol-Y-Waun (minutes)	
			Walk	Cycle	Walk	Cycle
Leisure						
Park	Penrhys Play Area	Within Penrhys	-	-	-	-
Rugby Club	Tylorstown Rugby Club	750	10	3	14	8
Bowls Club	Penrhys Bowls Club	900	13	5	16	10
Golf Club	Rhondda Golf Club	1500	21	6	23	9
Retail						
Convenience Store	Local Convenience Store	Within Penrhys	-	-	-	-
Takeaway	New York Pizza	Within Penrhys	-	-	-	-
Convenience Store	1800	26	8	36	20	15
Supermarket	1600	23	6	31	18	13
Education						
Childcare	Penrhys Children and Family Centre	Within Penrhys	-	-	-	-
Primary School	Penrhys Primary School	Within Penrhys	-	-	-	-
	Pontygwaith Primary School	2000	29	9	37	20
College	Coleg Cymoedd Rhondda Campus	2300	32	9	43	25
Religion						
Church	Llanfair Uniting Church	Within Penrhys	-	-	-	-
Health						
Surgery	Tylorstown Surgery	1600	23	7	31	20
Pharmacy	Sheppard Pharmacy Ystrad	1600	23	7	31	20
Hospital	Ysbyty Cwm Rhondda Hospital	2400	33	9	44	24

2.9 As shown at **Table 2-1** and **Table 2-2**, there are a number of facilities already available on site including Penrhys Primary School. Additionally, the site is located within walking distance of a number of leisure facilities including the Rhondda Golf Cub and Tylorstown Rugby Club.

2.10 The walk and cycle times demonstrate that there are many key facilities within a reasonable walking distance (3.2km) from the middle of the site, including Ystrad Rhondda Railway Station, Lidl supermarket and Pontygwaith Primary School. However the gradient of the

route should be taken into account and this may prove a barrier to movement to travel by foot and bike.

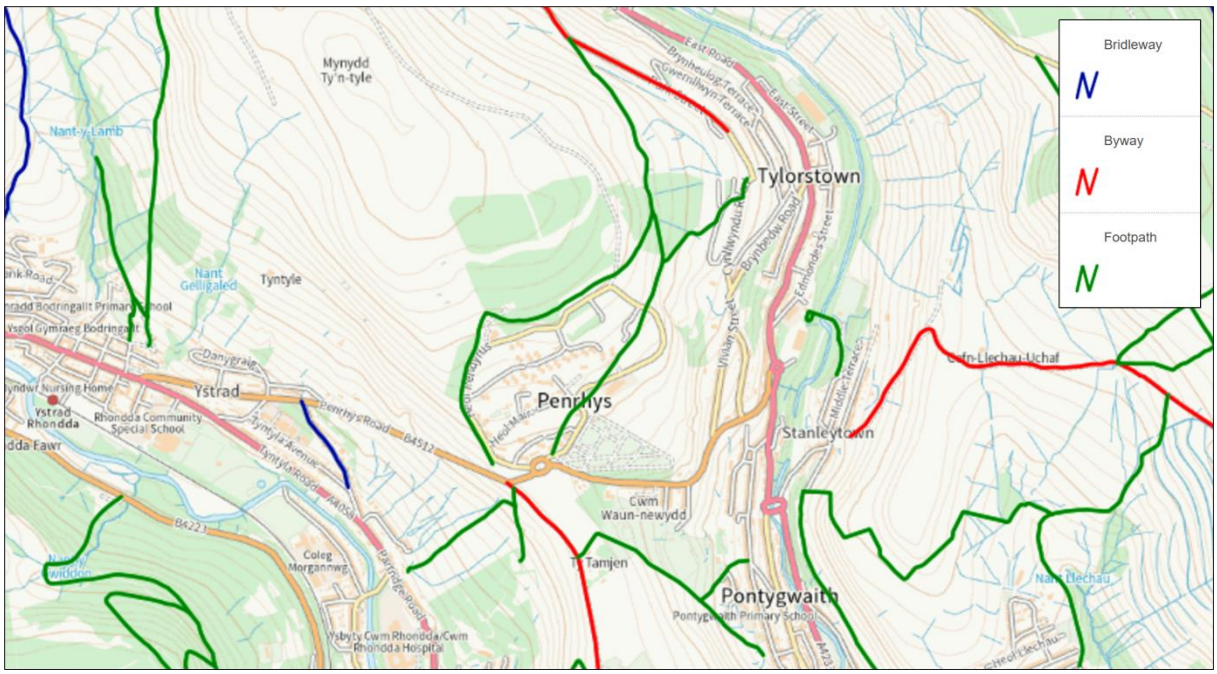
2.11 Additionally, facilities within Ystrad, Pontygwaith and Tylorstown are accessible within a reasonable everyday cycle distance (5km), including Coleg Cymoedd Rhondda Campus, Llwynypia railway station and Ysbyty Cwm Rhondda Hospital. Again, the topography of the local area may discourage some journeys by foot and bike due to the steep gradients on the return journey.

Walking and Cycling

2.12 Footways are available immediately north of the site access roundabout junction, routing to the Heol Dyfed and Heol Teifionydd cul-de-sacs. A footway routing through the centre of Penrhys village is available via steps from Heol Pendyyrus at the southern boundary of the village. Further footways are located off the central footway, providing access to residential areas throughout the village.

2.13 The site proposals will alter the internal site layout, including active travel as a key feature and prioritising movement between different areas of Penrhys. The ring road will remain with improvements.

Figure 2-2: Rhondda Cynon Taf Public Rights of Way (PRoW) Map



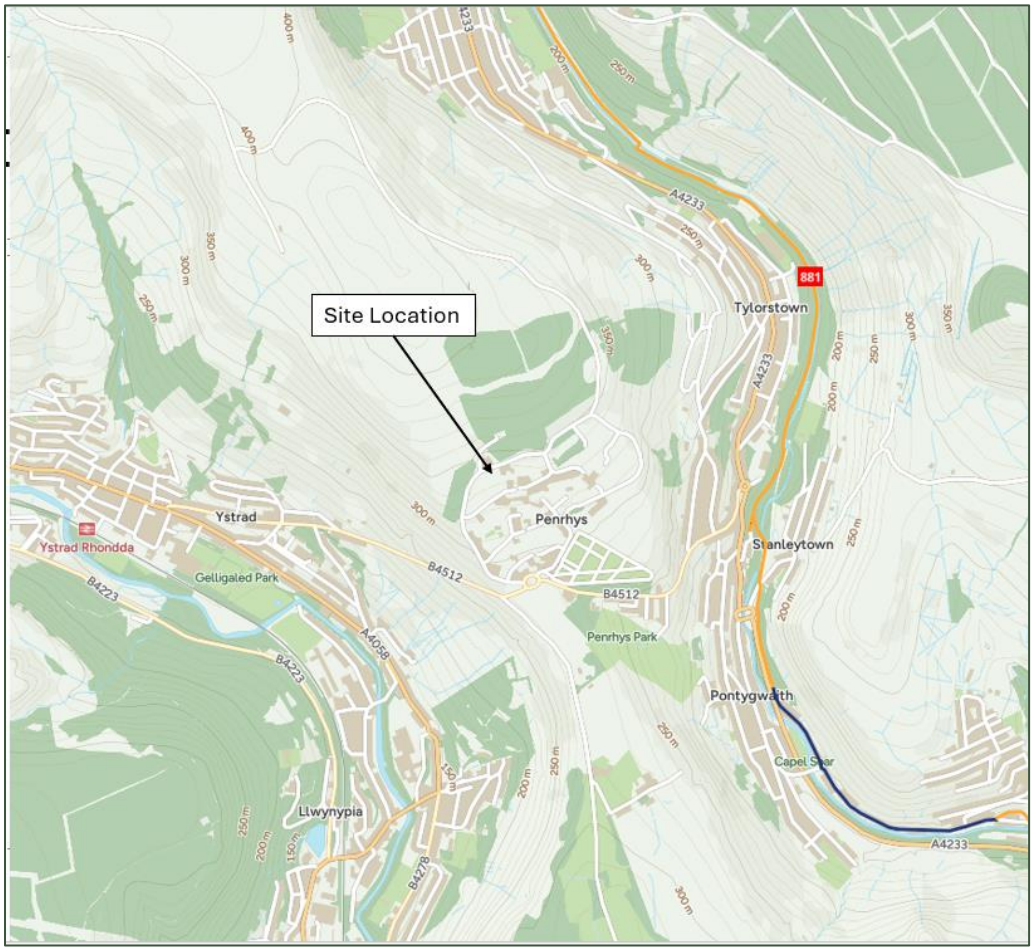
2.14 **Figure 2-2** identifies a shared use path routing directly through the centre of the site. This is not apparent on the ground however and is shown to dissect buildings on this plan.

2.15 Other PRoWs surround the site connecting it with the countryside to the north and east.

2.16 Additionally, the National Cycle Network (NCN) route 881 is located approximately 1.5km east of the site. This is labelled as a shared use and cycle active travel route within **Figure 2-3**. Route 881 is available from Pontypridd, routing through Porth and joining Route 47

south of the Lluest-Wen Reservoir. Gradient should be considered when accessing this route as the return journey is uphill which may dissuade residents from travelling by active modes.

Figure 2-3: NCN 881



2.17 There is currently no dedicated cycling infrastructure in direct vicinity of the site.

Public Transport

Bus

2.18 The closest bus stop to the site is the ‘Roundabout’ bus stop, located at the site entrance roundabout, off Heol Pendyrus. The bus stop provides access to the 155, 170 and 172 bus services, routing to locations including Aberdare, Clydach Vale and Blaenllechau. The bus stop has a sheltered seating area and a flag. **Table 2-3** sets out the current bus services.

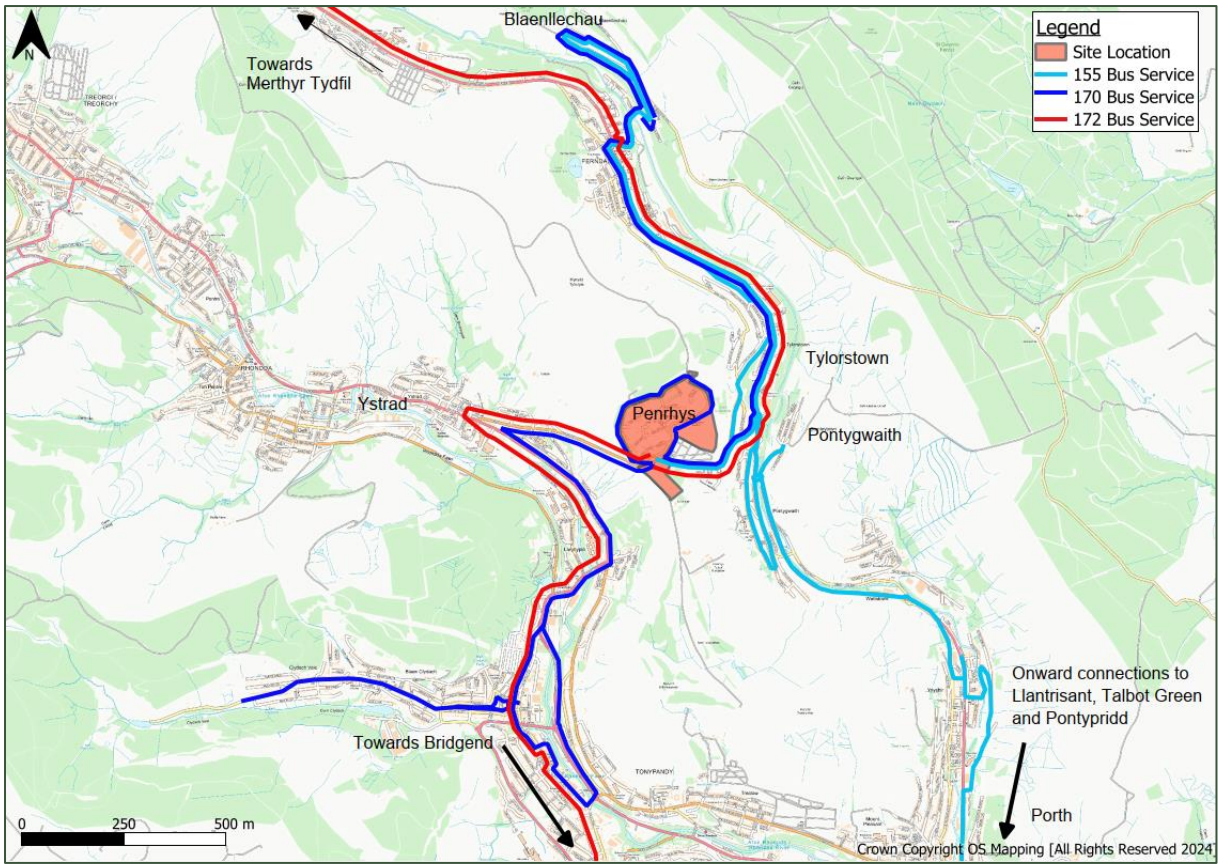
Table 2-3: Bus Services

No.	Route	First Bus	Last Bus	Ave. Frequency (mins)			Operator
				M-F	S	S	
Roundabout Bus Stop							
155	Porth - Pontygwaith - **Penrhys, Roundabout** - Ferndale - Blaenllechau	10:55	15:57	3x daily services		N/A	Stagecoach South Wales
	Blaenllechau - Ferndale **- Penrhys, Roundabout** - Pontygwaith - Porth	11:15	16:23	3x daily services		N/A	
170	Blaenllechau - Tylorstown - **Penrhys, Roundabout** - Tonypandy - Clydach Vale	08:13	18:12	60		N/A	Stagecoach South Wales
	Clydach Vale - Tonypandy - **Penrhys, Roundabout** - Tylorstown - Blaenllechau	08:38	17:37	60		N/A	
172	Aberdare - Tylorstown - **Penrhys, Roundabout** - Ystrad - Bridgend	05:28	18:48	60		5x daily services	Stagecoach South Wales
	Bridgend - Ystrad - **Penrhys Roundabout** - Tylorstown - Aberdare	08:08	21:23	60		5x daily services	

2.19 As shown at **Table 2-3**, the site has access to hourly bus services during the day, routing to key locations including Porth and Ystrad. Whilst these bus services provide a good level of connectivity to key locations where onward transport connections and local facilities including shops, railway stations and health care facilities are available, they do not provide a frequent service to accommodate many working patterns.

2.20 **Figure 2-4** illustrates the local bus routes in the context of the site.

Figure 2-4: Bus Routes



Rail

2.21 There are two railway stations within an accessible distance of the site, including Ystrad Rhondda and Llwynypia. Ystrad Rhondda is located approximately 1.8km west of the site access, equating to a 24-minute walk or 8 minute cycle, with the return journey approximately 33 minutes by foot or 19 minutes by bike due to the gradients. Llwynypia is located approximately 2.4km southwest of the site access, equating to a 31-minute walk or 10-minute cycle, or a 40 minute return journey by foot or 22 minutes by bike due to gradients.

2.22 Ystrad Rhondda has step-free access to all platforms. It has 6 cycle spaces available near the entrance. The station is managed by Transport for Wales. The station provides bi-hourly services to Cardiff Central and Treherbert.

2.23 Llwynypia railway station is classified as a Category B2 accessible station. It has 6 cycle storage spaces and 12 car parking spaces. The station is managed by Transport for Wales. The station provides bi-hourly services to Cardiff Central and Treherbert.

South Wales Metro

2.24 The South Wales Metro will improve transport options throughout the South Wales Valleys, though the changes will be gradual. There will be improved electrified Metro trains, offering a direct link to Cardiff and other key areas. Travel time to Cardiff and other locations will be reduced which will make travel more efficient.

Local Highway Network

Heol Pendyrus

2.25 Heol Pendyrus is a two-way carriageway routing around the entirety of Penrhys village (the site). A footway is available along the carriageway at its southern end, near the B4512 roundabout junction and streetlighting is available along its length. The road is subject to a 20mph speed limit and provides access to residential cul-de-sacs along its route as well as to a forest track used by National Resources Wales.

B4512 Penrhys Road West

2.26 The B4512 Penrhys Road West is a two-way carriageway routing towards Ystrad, joining with the A4058. It is accessed from the site via a roundabout . A continuous footway is available along its northern boundary for the entirety of its route from the site, and along its southern boundary starting approximately 850m west of the site. Streetlighting is largely absent for the majority of its route and numerous trees are located on the footways along its route.

2.27 The carriageway is subject to a 20mph speed limit, with a short 30mph section on approach to Penrhys. Speed regulating mechanisms are in place including speed cameras and associated signage.

B4512 Penrhys Road East

2.28 B4512 Penrhys Road East is a two-way carriageway routing towards Pontygwaith, Tylorstown and Porth. It is accessed from the site via a roundabout. A footway extends from the site, along its northern boundary, for approximately 50m. A continuous footway with dropped kerbs and streetlighting is available along its northern boundary, providing access into Tylorstown. The carriageway is subject to a 30mph speed limit for the most part. Speed regulating mechanisms are in place including speed cameras and associated signage.

Collision Analysis

2.29 A review has been undertaken of Personal Injury Collision (PIC) data for the local highway network using data sourced from CrashMap, an online database of PIC records. The records relate to PICs on public roads that are reported to the police and subsequently recorded, using the STATS19 collision reporting form. The most recently available five-year period has been analysed between 2018-2022.

2.30 Collisions have been categorised into three levels of severity: slight, serious, and fatal. The definitions of these are set out below:

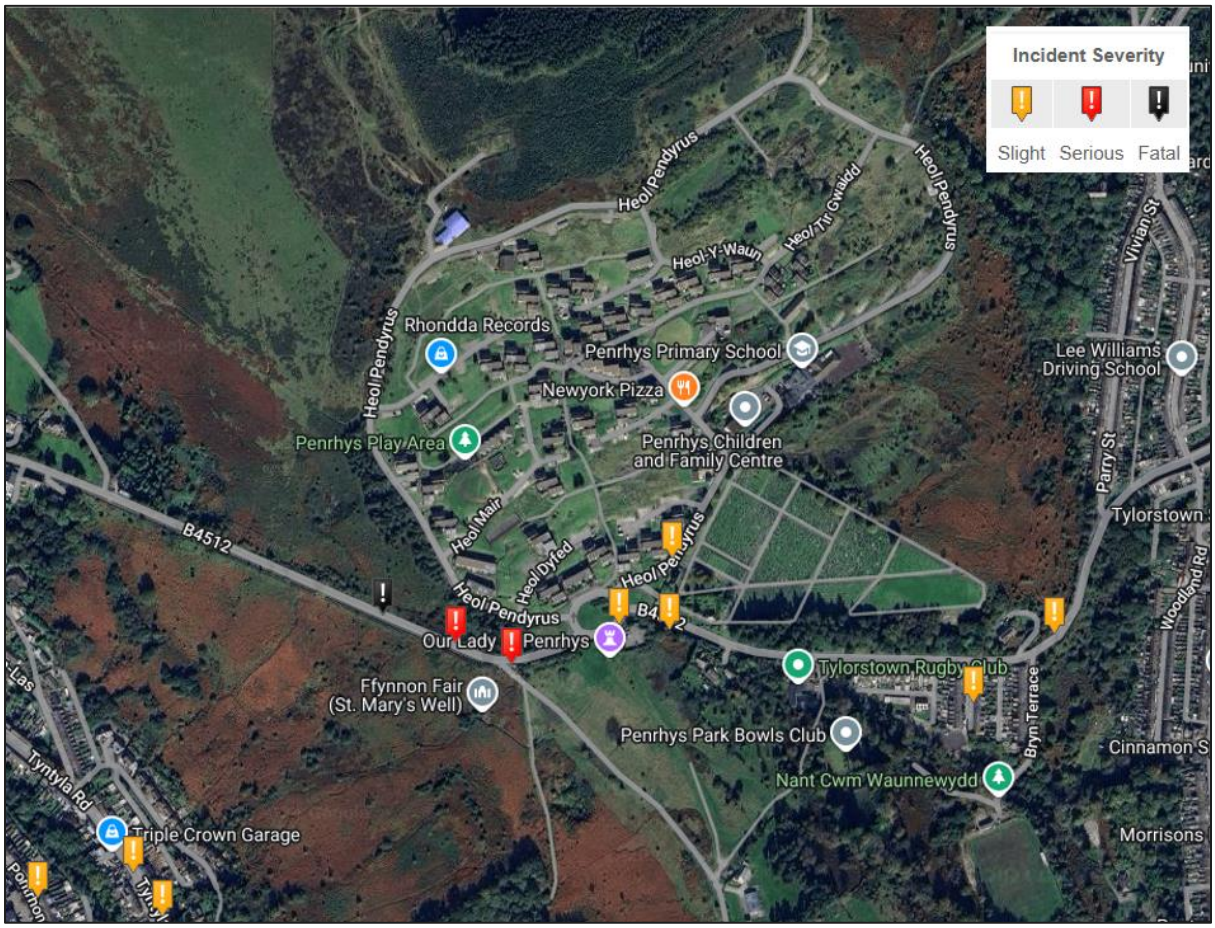
- **Slight Injury**: Injuries of a minor nature, such as sprains, bruises, or cuts not judged to be severe, or slight shock requiring only roadside attention (medical treatment is not a prerequisite for an injury to be defined as Slight);
- **Serious Injury**: Injuries for which a person is detained in hospital, as an in-patient, or any of the following injuries, whether or not a person is detained in hospital; fractures, concussion, internal injuries, severe cuts and lacerations, severe general shock

requiring medical treatment and injuries which result in death 30 days after the collision. The Serious category, therefore, covers a very broad range of injuries; and

- **Fatal Injury**: Injuries which cause death either immediately or any time up to 30 days after the collision.

2.31 The locations of the PIC are illustrated in **Figure 2-5**.

Figure 2-5: PIC Map



2.32 A summary of collisions by year and severity is provided in **Table 2-4**.

Table 2.4: PIC Collision Summary

Year	Slight	Serious	Fatal	Total
2018	1	-	-	1
2019	1	2	-	3
2020	1	-	1	2
2021		-	-	0
2022	1	-	-	1
Total	4	2	1	**7**

2.33 Over the previous 5-year period, a total of 7 collisions have occurred within the study area, comprising 4 slight collisions, 2 serious collisions and 1 fatal collision. None of these collisions were reported to involve a vulnerable road user.

2.34 The fatal collision took place in 2020, along the B4512 / Penrhys Road involving one vehicle.

2.35 The two serious collisions occurred along the B4512 / Penrhys Road, approximately 200 – 250m west of the site access roundabout. Both took place in 2019, with the first involving 1 vehicle and the second involving 2 vehicles.

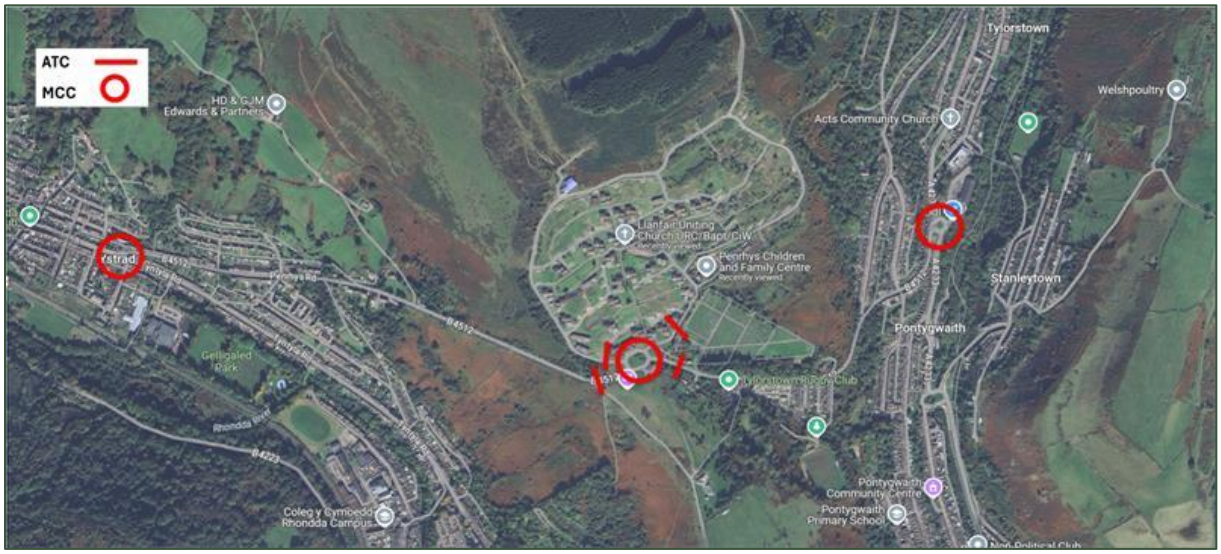
2.36 The three slight collisions took place in 2018, 2019 and 2022. The 2018 collision took place on Heol Pendyrus and involved two vehicles. The second occurred on the site access roundabout involving 1 vehicle, and the last collision took place on the B4512 / Penrhys Road, involving 1 vehicle.

2.37 In summary, during the most recent five-year period there have been seven collisions in the vicinity of the site, with only one collision occurring at the site access roundabout. None of these collisions were reported to have involved a vulnerable road user. Whilst there has been a fatal collision, there is no information to suggest that this was not an isolated incident. Due to the low level of collisions taking place here, equating to less than one every 9 months, it is considered that there are no inherent safety issues on the local highway network.

Observed Baseline Traffic Surveys

2.38 Traffic surveys are proposed to be undertaken in the following locations shown in **Figure 2-6.**

Figure 2-6: Proposed Survey Locations



2.39 These include the following locations:

- Access Roundabout;

- B4512 / A4058 mini roundabout; and
- B4512 / A4233 / Lidl roundabout.
- ATCs along all arms of Penrhys Roundabout

Site Visit

2.40 A site visit was undertaken on 1st October on a typical weekday. This involved a comprehensive walk around the site and surrounding areas. The general condition of walking facilities on the site ring road were noted, as well as the current underpass provision and bus frequencies (in the middle of the day).

2.41 A second visit included walking the route between Llwynypia railway station and Penrhys.

Accessibility Summary

2.42 In summary, the site is located in Penrhys, accessed via a roundabout junction off the B4512. The site is located within a walkable and cyclable distance from a number of key facilities located in Ystrad, Pontygwaith and Tylorstown, however topography remains a barrier to active travel.

2.43 Footways provide walking routes throughout Penrhys. Moreover, footways are available along the B4512, routing into Ystrad and Pontygwaith, though there is a lack of pedestrian infrastructure at the existing access roundabout to provide good continuity of connectivity.

2.44 NCN Route 881 is located approximately 1.5km east of the site, providing designated cycle routes towards Pontypridd and Route 47. Again, there are topographical constraints in connecting to these routes.

2.45 There are multiple bus stops located within the site, including the ‘Roundabout’ bus stop, located at the site entrance. Users of the site have hourly access to services 170 and 172 routing to locations including Bridgend, Aberdare and Ystrad within the day. Moreover, the site is located within a reasonable walk and cycle distance from Ystrad Rhondda and Llwynypia Railway Stations which provide bi-hourly rail services to Cardiff Central and Treherbert.

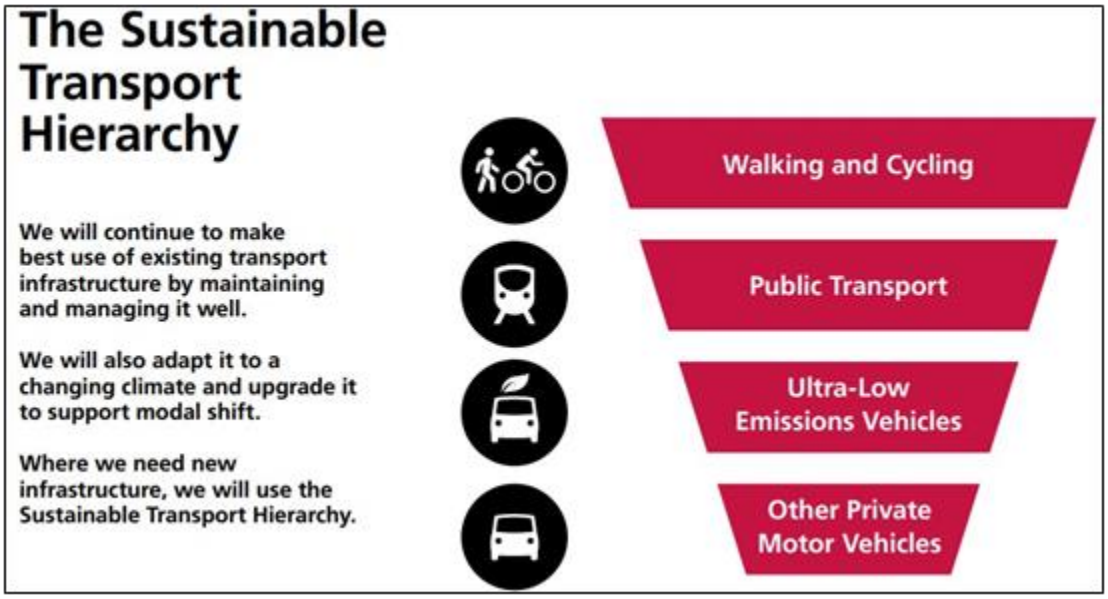
2.46 A review of the previous 5-years of collision data within the vicinity of the site access demonstrates that there are no inherent safety issues on the local highway network that may be exacerbated by the development proposals.

3.0 Planning Policy Context

Introduction

3.1 This section of the report outlines the relevant policies for development and transport in Wales, which are cognisant of one another and follow a common theme; moving towards carbon reduction in the promotion of communities, virtual and active mobility, followed by public transport with private vehicles at the bottom of the hierarchy. This is shown in **Figure 3.1.**

Figure 3.1 – Sustainable Transport Hierarchy



National Policy

Planning Policy Wales (Edition 12) February 2024

3.1 Planning Policy Wales (Edition 12) (PPW12) outlines the land use planning policies of the Welsh Government with a presumption in favour of sustainable development. The primary objective of PPW12 is to:

"Ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales."

3.2 PPW12 sets out a transport hierarchy favouring active travel movements. This hierarchy is supported by a requirement for development proposals to maximise accessibility by active travel and public transport.

3.3 Section 3 of PPW highlights the significant of the planning system in decarbonisation and reducing the impacts of climate change.

3.4 Regarding movement, and specifically accessibility, PPW states that:

"Good design is about avoiding the creation of car-based developments. It contributes to minimising the need to travel and reliance on the car, whilst maximising opportunities for people to make sustainable and healthy travel choices for their daily journeys".

3.5 Section 4 of PPW concerns Active and Social places. It asserts that Active and Social Places are those which provide well-connected cohesive communities. It further states that a 'Resilient Wales' is supported by promoting well-connected infrastructure.

3.6 Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset, before people have moved in and travel patterns have been established.

Future Wales: The National Plan 2040 (February 2021)

3.7 Future Wales: The National Plan 2040 is a National Development Framework for Wales. It influences all levels of the planning system in Wales and will help to shape strategic and Local Development Plans prepared by councils and national park authorities.

3.8 One of the main challenges facing Wales is climate change. The document highlights the importance of reducing emissions to protect well-being and to demonstrate global responsibility. The planning system needs to focus on delivering a decarbonised and resilient Wales through the places that are created, the energy generated and the natural resources and materials that are used and how people live and travel.

3.9 In keeping with the themes within Future Wales, Welsh Government have produced a document called 'COVID-19 Reconstructions: Challenges and Priorities' (October 2020). This document sets out how people are using and will continue to us places differently, travelling less and spending more time working from home. Welsh Government is encouraging an increase in remote working and has set a long-term ambition for 30% of the Welsh workforce to work away from a traditional office, beyond the covid-19 pandemic and for the long-term. This is intended to help town centres and urban areas reduce congestion and cut carbon emissions. The planning system must therefore respond to these changes an contribute to a sustainable recovery, shaping places around a vision for healthy and resilient places.

Wales Transport Strategy, Llwybr Newydd (May 2021)

3.10 This document is a strategy for the future of transport in Wales and sets out the ambitions for the next 20 years and Welsh Government's priorities for the next 5 years.

3.11 The long-term ambition for the strategy is for a transport system that contributes to a more equal and a healthier Wales and ensure that there are fewer physical, economic, social and attitudinal barriers that prevent people from walking, cycling or using public transport. Priorities include growing public transport use; providing safe, accessible, well-maintained and managed transport infrastructure; making sustainable transport more attractive and affordable; and supporting innovations that deliver more sustainable choices.

Figure 3.2 – Wales Transport Strategy Priorities and Ambitions

Technical Advice Note 18 (Transport)

3.12 The Advice Note (TAN 18) elaborates on the relationship between land use planning and transport infrastructure by outlining a range of key accessibility principles that should inform future patterns of development.

3.13 In the case of new residential development, sites that are accessible to jobs, shops and services by modes other than the car and are afforded sufficient capacity on public transport services are favoured.

3.14 TAN 18 advises that development plans should afford priority to the following:

- promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and leisure, or where such access will be provided as part of the scheme or is a firm proposal in the Regional Travel Plan;
- ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;
- include policies and standards on densities, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;
- encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20 mph zones and where appropriate, layouts that allow public transport to pass through easily; and
- Require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops.

Well-being of Future Generations (Wales) Act 2015

3.15 Wales faces several challenges now and, in the future, such as climate change, poverty, health inequalities and jobs and growth.

3.16 The Well-being of Future Generations Act puts in place seven well-being goals that will help to tackle these challenges. The Act makes it clear the listed public bodies must work to achieve all of the goals, not just one or two.

3.17 In terms of the impact of the goals on develop and travel, the first goal of 'A Prosperous Wales' recognises the need for an innovative, productive and low carbon society and is somewhat all- encompassing of the other goals and the need for sustainable travel options and low carbon communities.

Active Travel (Wales) Act 2013 (October 2013)

3.18 The Active Travel (Wales) Act aims to make it easier for people to walk and cycle in Wales and makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year. It creates new duties for highways authorities to consider the needs of walkers and cyclists and make better provision for them. It also requires both the WG and local authorities to promote walking and cycling as a mode of transport.

3.19 By connecting key sites such as workplaces, hospitals, schools and shopping areas with active travel routes, the Act will encourage people to rely less on their cars when making short journeys and make implementing successful Travel Plans easier.

Active Travel Act Guidance (July 2021)

3.20 The Active Travel Act Guidance was first published in July 2021 and is issued using the powers of the Welsh Ministers to give guidance under sections 2(6), 2(9), 3(4), 4(5), 5(2) and 7(2) of the Active Travel Act.

3.21 The act requires local authorities in Wales to produce maps of walking and cycling networks, and to deliver year on year active travel improvements along the mapped routes and their related facilities. These routes should be coherent, direct, safe, comfortable and attractive. The maps shall now be known as Active Travel Network Maps (ATNM) – showing existing routes and future routes which shall combine the Existing Routes Map and the Integrated Network Map required by the act.

3.22 As well as creating the infrastructure, the act includes provision for making people aware of the existing and future routes through the publication of the maps and for the promotion of active travel as a means of transport.

3.23 The active travel network is designed to serve everyday journeys. These are also known as utility journeys – trips with a purpose rather than purely for leisure. Examples of destinations which can be considered to form an everyday or utility journey include; school or other educational establishments, local shops, employment sites, healthcare facilities, and other destinations people travel to for a purpose.

3.24 **Table 3.1** is an extract from the guidance which provides a guide for network development in relation to reasonable distances that would be travelled by each respective mode for everyday journeys.

3.25 Two out of every three journeys are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For school children the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school.

3.26 The guidance further states that developments that do not adequately make provision for walking and cycling should not be approved. This may include adequate off-site improvements for pedestrians and cyclists using existing highways that are affected by the development. The site has the potential to provide excellent cycle links allowing for residents of the site to connect with the local area, as well as providing active travel benefits for the existing community.

Table 3.1 – Active Travel Guidance

	Less than 1km	Up to 3km	Up to 5km	Up to 8km	Up to 12km	Up to 24km
	Many users	Many users	Some users	Few users	Few users	Few users
	Many users	Many users	Many users	Many users	Some users	Few users
	Many users	Many users	Many users	Many users	Some users	Some users

30% Work from Home Target

3.27 A Briefing Paper was published by the independent Wales Fiscal Analysis (WFA), a research body within Cardiff University's Wales Governance Centre in July 2020, two months before the Welsh Government announced its target of 30% working from home in September 2020.

3.28 The paper outlines how 39.9% of Welsh jobs could be done from home and 65.5% of employees have reported that they were able to produce more work per hour working from home during COVID- 19, and therefore they would like to continue working mainly from home in the future. This indicates that there is both potential and desire for a proportion of the population to continue working from home after COVID-19, whether that be full time or shared

between home working and a traditional work environment. As such, the Welsh Government aspiration of 30% working from home is both realistic and appears achievable.

3.29 A step-change in home working is already happening, with many large companies publicly reducing office or desk space for employees on the basis than many or all will continue to work flexibly in the UK (for example KPMG, HSBC, Lloyds Banking Group, Unilever).

Local Planning Policy

RCTCBC Local Development Plan (2006-2021)

3.30 RCTCBC Local Development Plan (LDP) was adopted in March 2011 and sets out the aims, vison, and objectives for the future of the county.

3.31 The LDP transport policies aim to deliver major road schemes, cycle network improvements, park and ride provision and rail network and station improvements. The main objective alongside this is to promote more sustainable forms of transport throughout RCTCBC.

RCTCBC Revised Local Development Plan (2022-2037)

3.32 The preparation of a revised LDP for the period of 2022-2037 is currently undergoing, the process began in April 2022 and this LDP will replace the current LDP of 2006-2021.

RCTCBC Electric Vehicle Charging Strategy (2021-2030)

3.33 The declared ‘Climate Emergency’ by the Welsh Government has required efforts to the next level and this includes the recognition for promoting a practical electric vehicle charging (EVC) network within Wales.

3.34 This EVC Strategy outlines several key principles that will empower the Council to advise, help and support individuals, or parties, which wish to make the switch from conventional vehicles to EVs. The Council intends to encourage EV uptake amongst residents, including those without access to off-street parking.

3.35 The strategy was published in 2022 and is providing strategy until 2030. Further to this, this year the ‘Electric Vehicle Charging Implementation Plan’ at RCTCBC was published providing guidance and advice on best practice to develop a comprehensive EV charging network.

3.36 In relation to Electric Vehicle Charging Infrastructure, the EVC references Policy 12 of Future Wales which states:

“*Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points”.*

3.37 However, it is further stated that it may be appropriate that some of the provision is ‘passive’ with the unnecessary underlying infrastructure provided to enable installation and activation in the future.

RCTCBC Supplementary Planning Guidance: Delivering Design and Placemaking: Access, Circulation & Parking Requirements (Adopted March 2011)

3.38 Penrhys lies within Zone 3 (Suburban or Near Urban) and as such, the following maximum car parking standards apply to the proposed residential development:

- Houses & apartments (1 or 2 Bedrooms) – maximum of 2 spaces
- Houses & apartments (3 or more Bedrooms) – maximum of 3 spaces
- Visitors – maximum of 1 space per 5 units

3.39 The SPG requires 1 long-stay cycle parking stand per 5 apartment bedrooms. No specific requirement for cycle parking standards is provided for houses, however it is assumed most bicycle storage is provided within dedicated garages. Whilst not specified in the SPG, it is good practice to provided dedicated secure bicycle storage (such as metal sheds) where houses are provided without garages.

Summary

3.40 The focus of transport and land use planning policy is on the development of sustainable travel measures, and the encouragement of development proposals which widen the accessibility to sustainable travel for site users.

3.41 The proposed development has the potential to accord with national and local policy and encourage sustainable travel to and from home, and ensure future provision for this.

3.42 Overall, the principles of the proposed development of this site comply with the transport related planning policies highlighted within this chapter, locally and nationally. The site will seek to encourage travel by non-car modes, particularly by public/shared travel modes (facilitated by electric buses), with the opportunity to travel via the foot/cycleway routes directly accessing the site. The proposals will also encourage and comply with electric vehicle charging spaces, by providing the appropriate amount to ensure the growth of electric vehicles is achievable.

4.0 Development Proposals

4.1 This section of the TA will set out the development proposals for the following distinct phases:

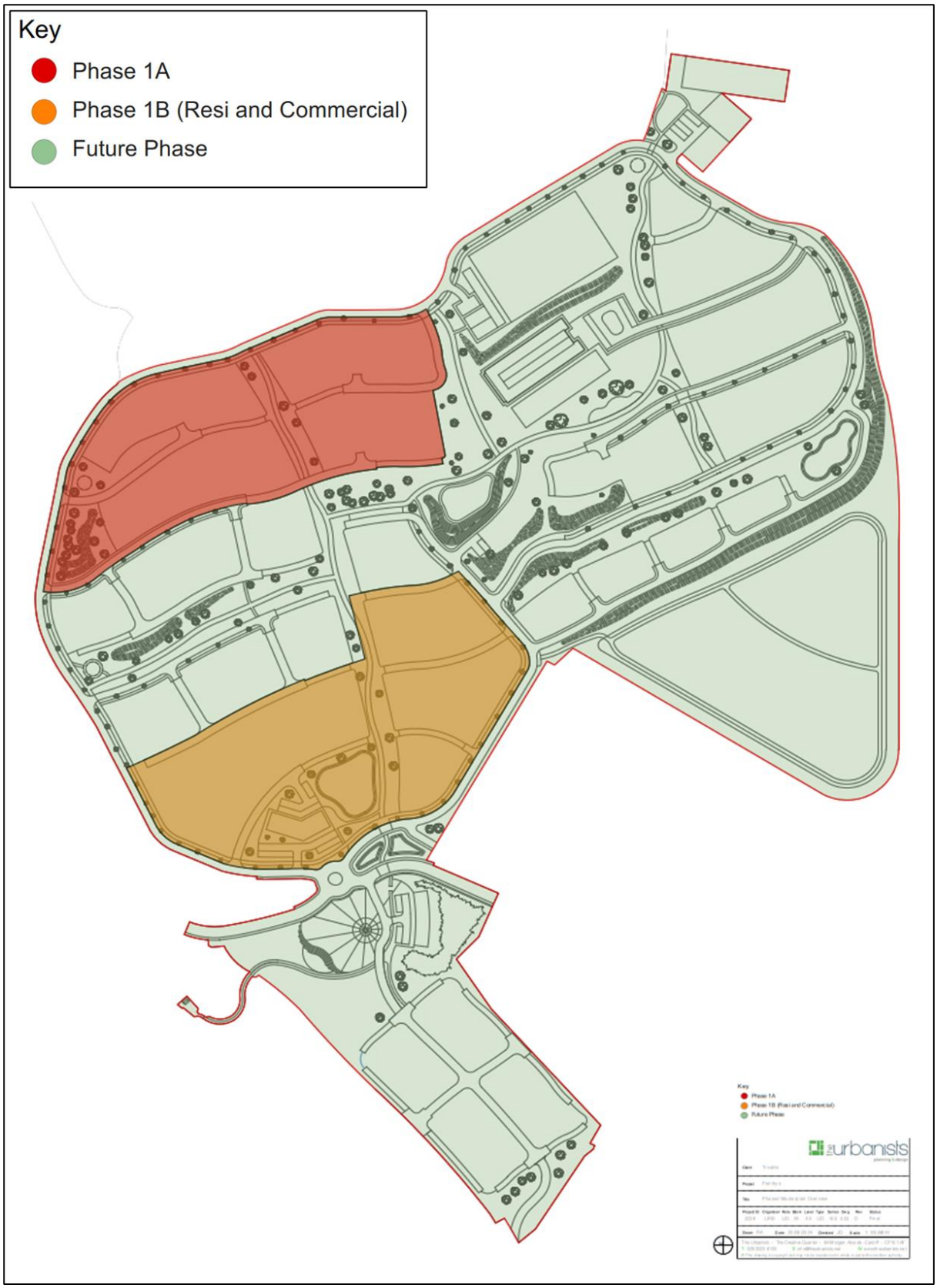
- Phase 1A – this is the phase subject to the full planning application for which this TA will support; and
- The wider site masterplan – whilst not subject to the current planning application it is important that the individual phases do not come forward in a disjoined approach. Therefore, whilst the masterplan will continue to evolve post-application for Phase 1A, the principles will be set out in this TA.

Overview of the Proposed Development

4.2 The development of the site will be split into phases. Initially, Phase 1A will comprise approximately 109 dwellings.

4.3 **Figure 4.1** below sets out the indicative site layout at this stage, with the **red** section as Phase 1A and the **orange** section as Phase 1B. Phase 1A is subject to the current planning application. This is also included at **Appendix A**.

Figure 4-1: Site Layout



Site Access

4.4 The site will continue to be accessed from the B4512 Penrhys Road, where there is an existing roundabout connecting to Heol Pendyrus.

4.5 Significant changes are proposed at this junction to downgrade the dominance of road space and rebalance movement of vehicles and non-vehicular users (primarily pedestrians). This will act as a gateway feature to the village as well as the Shrine of Our Lady of Penrhys.

4.6 Pedestrian infrastructure will be improved and prioritised, whilst the overall footprint of the junction may be reduced.

Pedestrian and Cycle Access

4.7 Pedestrian and cycle access within the site masterplan will be priorities, with improvements made to the crossing facilities for the on-site school as well as along other key desire lines. Crossings will be at-grade and are proposed to be facilitated through raised tables and appropriate controlled crossing facilities, to impress the priority of movement by these modes.

4.8 Appropriate and attractive footways will be added alongside the ring road which will remain, and new infrastructure will be direct with natural surveillance. Currently the village has a lot of steps which makes movement for mobility impaired users difficult. The masterplan will aim to reduce instances of step only access to increase the propensity for existing and new residents to move freely around the site by active travel modes.

Car and Cycle Parking

4.9 Penrhys lies within Zone 3 (Suburban or Near Urban) and as such, the following maximum car parking standards apply to the proposed residential development:

- Houses & apartments (1 or 2 Bedrooms) – maximum of 2 spaces
- Houses & apartments (3 or more Bedrooms) – maximum of 3 spaces
- Visitors – maximum of 1 space per 5 units

4.10 The SPG requires 1 long-stay cycle parking stand per 5 apartment bedrooms. No specific requirement for cycle parking standards is provided for houses, however it is assumed most bicycle storage is provided within dedicated garages. Whilst not specified in the SPG, it is good practice to provided dedicated secure bicycle storage (such as metal sheds) where houses are provided without garages.

Servicing and Delivery Vehicles

4.11 Details of servicing and delivery vehicles will be provided, and the proposed road network will be checked through the design process.

Golf Club Access

4.12 It is noted that RCTCBC have raised the access to Rhondda Golf Club and potential improvements here. Discussion and potential redesign of this will be included in the TA.

5.0 Mobility Strategy

5.1 This section will set out the proposed Mobility Strategy for the site, which will encompass proposals for Phase 1A, but will remain cognisant of the site as a whole including future phases.

5.2 A vision-led approach will be implemented within the TA. This supports the objectives of national policy, and moves away from the now outdated 'predict and provide' approach to planning for new development. This approach places focus instead on the vision and putting the measures in place to achieve that vision, it actively meeting the balance between crucial climate change targets and delivering much needed development and regeneration.

5.3 The strategy will place a focus on current forward-thinking strategies to increase the liveability of the village, as well as future mobility solutions covering sustainability, climate change, social cohesion, virtual mobility, flexible streets, new technologies, smart economics, and pandemic resilience.

5.4 What is clear is that for existing residents at Penrhys, multiple sustainable transport options will need to be provided to build in resilience to the transport network supporting the community.

5.5 Placemaking plays a key role in any Mobility Strategy and the principles of how the wider masterplan will place local living at the highest priority will be included in this section.

5.6 Analysis of shifting and emerging trends to travel will be included in this section, with particular regard to the somewhat unique challenges the location offers.

5.7 As mentioned, at the heart of the strategy will be facilitating local living which will be done through building in the 15-minute neighbourhood concept. The existing community is already an excellent example of a thriving community with high levels of social inclusion, features of a successful 15-minute neighbourhood. When built upon, multiple benefits are evidence including boosting local economies, improving people's health and wellbeing, increasing social connections in communities, and talking the climate change emergency.

5.8 Following Phase 1A, and as the wider site is development, a Mobility Hub will sit within the village centre, in combination with or nearby to the church and community centre whichever form they take. This forms a focal point for people to meet, interact, work and spend time, and can provide a range of other facilities. It facilitates better mobility by being highly accessible by active and public transport modes, offering safe and secure cycle parking, as well as a bicycle repair hub. Car club and carpooling space could be made available, as well as EV charging points and a bus stop with high quality waiting facilities.

5.9 Whilst many of the proposals associated with the Mobility Strategy require the critical mass of the wider site for successful operation, measures which will help cement sustainable travel habits from the outset will be implemented within Phase 1A. This will support both existing residents and new residents within Phase 1A.

6.0 Trip Generation Methodology

6.1 In order to establish the effect of the proposed development on the local highway network, a trip generation exercise will be undertaken.

Phase 1A

6.2 While the critical mass to meaningfully internalise trips will not exist in this phase, a TRICS based assessment will be used as follows.

6.3 The TRICS assessment will use total people trip rates, disaggregated by journey purpose obtained from the NTS database. A proportion of primary school trips will be internalised as well as a small proportion of trips for commuting and leisure/retail purposes where work from home is expected, and leisure/retail trips are anticipated to remain within the site.

6.4 There will be significant differences between phases in terms of housing mix. Given that Phase 1A will comprise predominantly affordable housing, it is proposed to use the following TRICS Category:

- “03/L - Mixed Affordable Housing (Flats & Houses) (use class C3)
  - Housing developments where at least 75% of units are non-privately owned. Of the total number of units, less than 75% must be houses (sum of "non-split" terraced, detached, semi-detached, bungalows, etc), and less than 75% must be flats (sum of flats in blocks and "split" houses). "Non-privately owned" may be council rented or housing association rented. The TRICS definition of a privately owned dwelling is a dwelling at which residents have any degree of equity, or a dwelling that is owned by a private landlord and rented at market rates. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms.”

6.5 It is noted that should the housing mix change then the TRICS trip rates will change also to accurately reflect the proposals.

6.6 TRICS category “03/L - Mixed Affordable Housing (Flats & Houses) (use class C3)” will also be used for the existing development, as set out later in this section.

6.7 Census travel to work mode split data will be applied to the resultant external trips to derive a vehicular trip demand for this phase of the site.

Net Trip Generation

6.8 Given the site was designed and has already accommodated a significantly higher number of houses in the past, it is expected that the internal and external road networks are suitable to accommodate the wider site proposals.

6.9 As such, the same exercise as above will be undertaken to establish the likely trip characteristics of this phase of the site should it still be operating at its full capacity, and as entirely new trips (minus the existing occupation). A comparison of these external vehicular trips will be made to understand the net impact on the highway network

6.10 For the net trip generation, the following TRICS category will be used:

- “03/B - Affordable/Local Authority Houses (use class C3)
    - Housing developments where at least 75% of units are non-privately owned. Of the total number of units, 75% must also be houses (sum of "non-split" terraced, detached, semi-detached, bungalows, etc), with no more than 25% of the total units being flats. "Non-privately owned" may be council rented or housing association rented. The TRICS definition of a privately owned dwelling is a dwelling at which residents have any degree of equity, or a dwelling that is owned by a private landlord and rented at market rates. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms.”

7.0 Highway Impact Assessment

7.1 This section of the TA will establish the likely distribution of external vehicular trips on the existing road network, the principle and application of growth in testing that network, a percentage impact of net new trips on the identified study area (Section 2) will be undertaken. Junctions which are demonstrated to experience an impact of 5% or higher on any one arm will be investigated further through individual junction modelling.

7.2 This section will establish the impact of the wider site (in full), and where appropriate the impact of only Phase 1A.

Census Distribution

7.3 External vehicular distribution will be determined by Census 'Location of usual residence and place of work by method of travel to work (MSOA) level', to understand where people work who live in this area.

7.4 This will be compared at the site access junction to observed turning counts to confirm distribution of east and west movements.

Percentage Impact Assessment

7.5 A percentage impact assessment will be undertaken on the following junctions, using the net trip demand:

- Access Roundabout;
- B4512 / A4058 mini roundabout; and
- B4512 / A4233 / Lidl roundabout.

7.6 Junctions which are demonstrated to experience an impact in excess of 5% on any arm, in the peak AM and PM periods, will be modelled.

Traffic Growth

7.7 Traffic growth is not linear and does not necessarily correlate with strategic or otherwise development coming forward. Traffic is a function of roadspace which plays a greater role in influencing likely growth on the highway network.

7.8 As such, it is proposed to undertake an assessment of the historic traffic levels on the network, where historic data is available for comparison. This will provide an understanding on whether this part of the highway network is susceptible to growth in this manner.

7.9 The proposed years of assessment are 2026 (anticipated opening year) and 2036 (10 years post opening year).

7.10 If growth is deemed applicable, it is proposed to consult the TEMPro database to derive appropriate growth factors for the above years.

Committed Developments

7.11 At this time there are no identified committed developments, and we would welcome advice from RCTCBC on whether any should be included in this assessment.

Junction Modelling Assessments

7.12 The site access will be modelled using the gross trip demand and derived distribution.

7.13 Other junctions will be modelling individually if they meet the criteria set out above. All assessments will be undertaken using Junctions 10 (ARCADY/PICADY) and LinSig as appropriate (currently no identified signal-controlled junctions).

7.14 It is proposed to assess the peak periods of 07:00-10:00 and 16:00-19:00.

Potential Mitigation

7.15 Whilst the test to determining the suitability of new development is not hinged on a pass or fail modelling assessment, if issues on the local highway network are identified, then suitable mitigation measures will be discussed with RCTCBC and included within the development proposals.

The Wider Site

7.16 In terms of the wider site, a more bespoke approach will be required in order to accurately forecast the vehicle movements which will be associated with the site. This will be addressed in more detail as the subsequent phases come forward. For residential sites of this scale, SLR has developed a market-leading vision-led tool calibrated to better reflect local site characteristics and to accurately estimate key inputs for strategic residential developments.

7.17 Based on the placemaking and mobility principles of the vision, the tool includes a comprehensive validation exercise which has been undertaken to derive a total trip generation which is realistic and based on credible and reliable data sources including ONS, NTS and Census. The tool also forecasts the health, economic and carbon benefits of the V&V approach to a scheme of this size.

7.18 The above described method provides a ‘backcasting’ framework to settlement design enabling the masterplanner to quantify and understand (validate) the full impacts of placemaking and mobility components and allowing them to select and design these in a manner that aligns with the Vision.

8.0 Summary and next steps

Overview of The Scoping Note

8.1 SLR Consulting Ltd is instructed by Trivallis to provide highways and transport advice in relation to the proposed regeneration of Penrhys, Rhondda Cynon Taff (RCT).

8.2 This report takes the form of a Scoping Note, with the aim of agreeing a methodology and a scope of works for the highways and transport element of the application.

Existing Situation

8.3 The site is accessible by active travel, though topographical constraints currently present a barrier to movement in this regard. In terms of sustainable travel, therefore, bus connectivity presents the more attractive opportunity for travel to and from Ystrad, Pontygwaith, Tylorstown and other local areas. Existing residents of the site have hourly access to services 170 and 172 routing to locations including Bridgend, Aberdare and Ystrad during the day. These services do not run early in the morning or evening to accommodate typical working patterns.

8.4 The site is located within a reasonable walk and cycle distance from Ystrad Rhondda Railway Station which provides bi-hourly rail services to Cardiff Central and Treherbert. However, topography plays a significant part in accessibility and, regardless of distance, the gradients in travelling to the site may deter current residents from walking or cycling given the current provision of suitable infrastructure.

Planning Policy

8.5 The principles of the proposed development of this site comply with the transport related planning policies highlighted within this report, locally and nationally. The site will seek to encourage travel by non-car modes, with the opportunity to travel via the foot/cycleway route directly accessing the site. The proposals will also encourage and comply with electric vehicle charging spaces, by providing the appropriate amount to ensure the growth of electric vehicles is achievable.

Development Proposals

8.6 The development of the site will be split into phases. Initially, Phase 1A will comprise approximately 109 dwellings.

8.7 The full proposed development comprises around 1,000 homes with a range of tenure and typology. A new village centre will be provided, along with the development of a new primary school. Community facilities including the existing (redeveloped) church at the heart of the village, and a Mobility Hub will be incorporated within the wider masterplan.

8.8 Phase 1A is subject to the current planning application and this will form the basis for all assessment.

Mobility Strategy

8.9 A vision-led approach will be implemented within the TA. This supports the objectives of national policy, and moves away from the now outdated 'predict and provide' approach to planning for new development. A phased approach will be used beginning with Phase 1A and the provision of active travel infrastructure, with the strategy developing further in line with the subsequent phases.

8.10 Following Phase 1A and as the wider site is developed, a Mobility Hub will sit within the village centre, in combination with or nearby to the church and community centre whichever form they take. It facilitates better mobility by being highly accessible by active and public transport modes, offering safe and secure cycle parking, as well as a bicycle repair hub. Car club and carpooling space could be made available, as well as EV charging points and a bus stop with high quality waiting facilities.

Trip Generation

8.11 To derive the trip generation for

8.12 phase 1A it is proposed to undertake a TRICS assessment using total people trip rates, disaggregated by journey purpose obtained from the NTS database. A proportion of primary school trips will be internalised as well as a small proportion of trips for commuting and leisure/retail purposes where work from home is expected, and leisure/retail trips are anticipated to remain within the site.

Highway Effect

8.13 It is proposed to undertake vehicle turning count surveys at the following junctions:

- Access Roundabout
- B4512 / A4058 mini roundabout
- B4512 / A4233 / Lidl roundabout

8.14 It is further proposed to undertake ATC surveys along all arms of the existing access roundabout in order to obtain AADT and AAWT data, and assess current speeds on these links.

8.15 Census travel to work mode split data will be applied to the external trips to derive a vehicular trip demand for this phase of the site. This will allowed for percentage impact assessments at the relevant junctions. Junctions which are demonstrated to experience an impact in excess of 5% on any arm, in the peak AM and PM periods, will be modelled using appropriate software.

Next steps

8.16 Advice is sought from RCT on the contents of this Scoping Note to be considered and implemented in any future application.

Scoping Note Appendix A Site Layout

Scoping Note

Penrhys RegenerationTrivallis

SLR Project No.: 407.064582.00001

9 January 2025

Key

- Phase 1A
- Phase 1B (Resi and Commercial)
- Future Phase

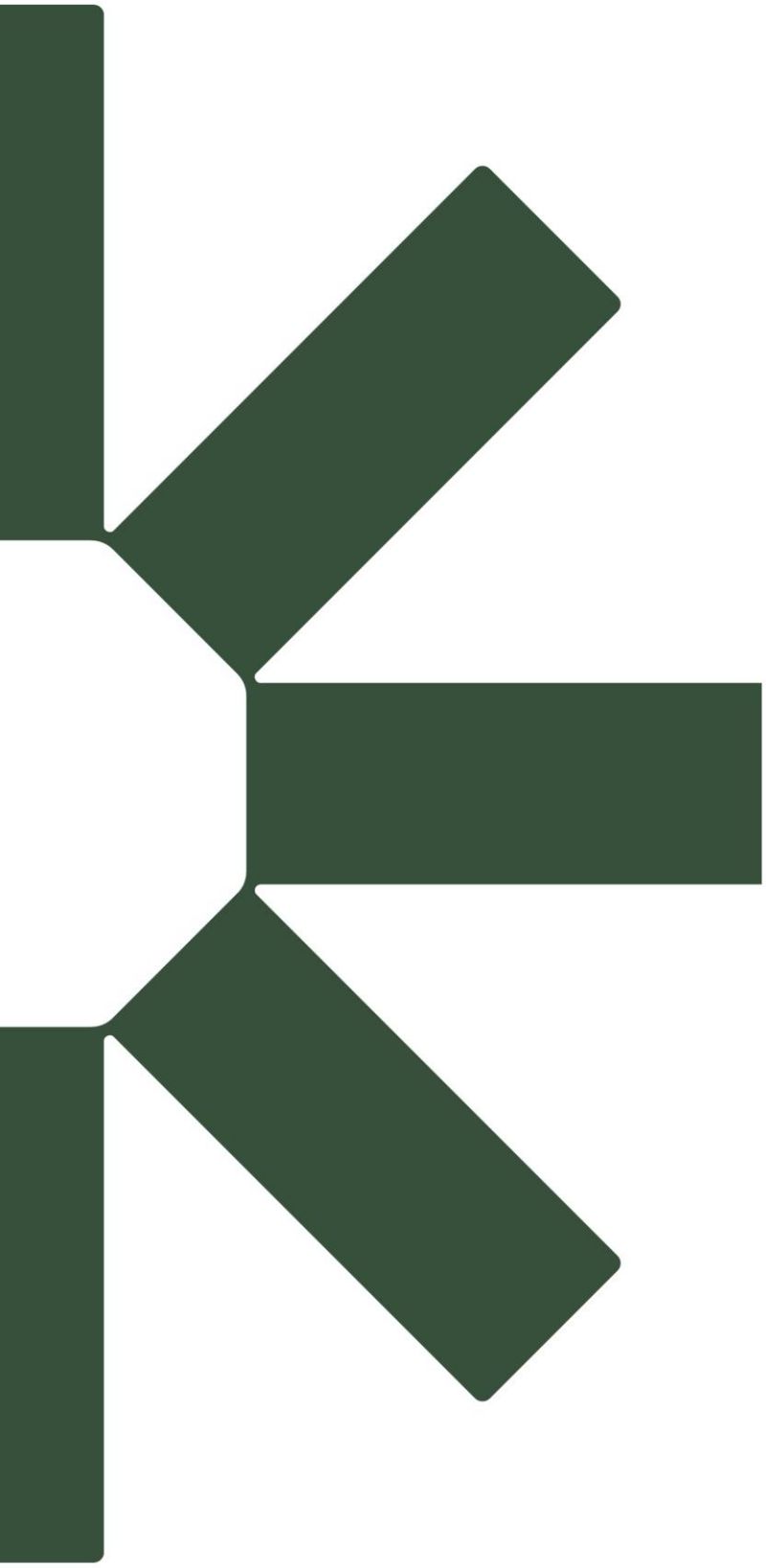
the urbanists
planning & design

Client	Trivallis
Project	Penrhys
Title	Phased Masterplan Overview

Project ID	Organiser	Role	Block	Level	Type	Series	Dwg	Rev.	Status
2238	URB	UD	XX	XX	UD	100	003	D	Final

Drawn RA Date 20/08/2024 Checked JD Scale 1:1250@A1

The Urbanists - The Creative Quarter - 8A Morgan Arcade - Cardiff - CF10 1AF
T: 029 2023 6133 E: info@theurbanists.net W: www.theurbanists.net



Making Sustainability Happen

Appendix C Collison Data

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

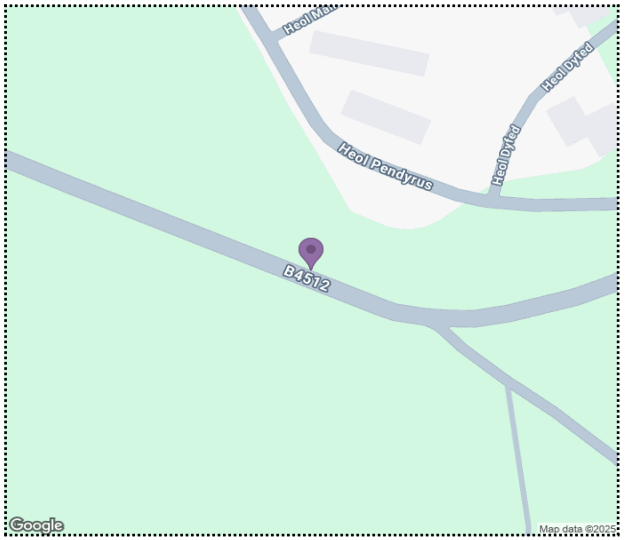
SLR Project No.: 407.064582.00001

9 September 2025

crashmap.co.uk

Validated Data

Crash Date:	Sunday, March 17, 2019	**Time of Crash:**	21:03:00	**Crash Reference:**	2019621900371
Highest Injury Severity:	Serious	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	2
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300047 194631
Weather Description:	Raining with high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



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Validated Data

Crash Date: Sunday, March 17, 2019 **Time of Crash:** 21:03:00 **Crash Reference:** 2019621900371

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes maximum gross weight (mgw) and under	12	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Back	Unknown	None	None
2	Car (excluding private hire cars 2005 onwards)	15	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Serious	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

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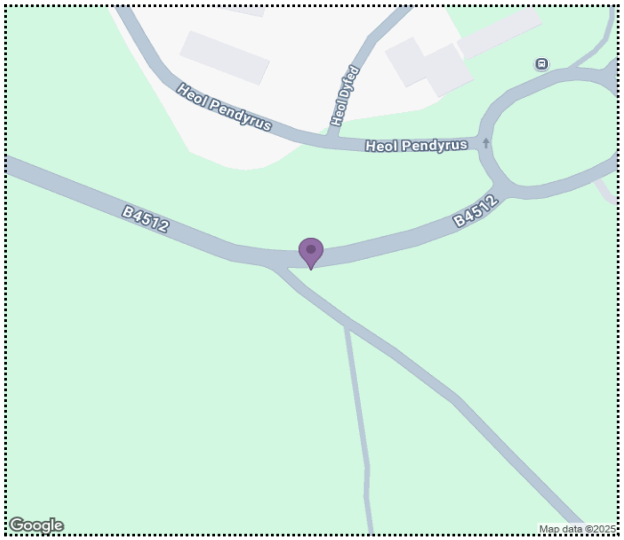
crashmap.co.uk

Validated Data

Crash Date:	Wednesday, April 3, 2019	**Time of Crash:**	01:52:00	**Crash Reference:**	2019621900438
Highest Injury Severity:	Serious	**Road Number:**	B4512	**Casualties:**	2
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300109 194605
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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Validated Data

Crash Date: Wednesday, April 3, 2019 **Time of Crash:** 01:52:00 **Crash Reference:** 2019621900438

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	16	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a left hand bend	Front	Unknown	Kerb	Other permanent object

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other
1	2	Serious	Vehicle or pillion passenger	Male	46 - 55	Unknown or other	Unknown or other

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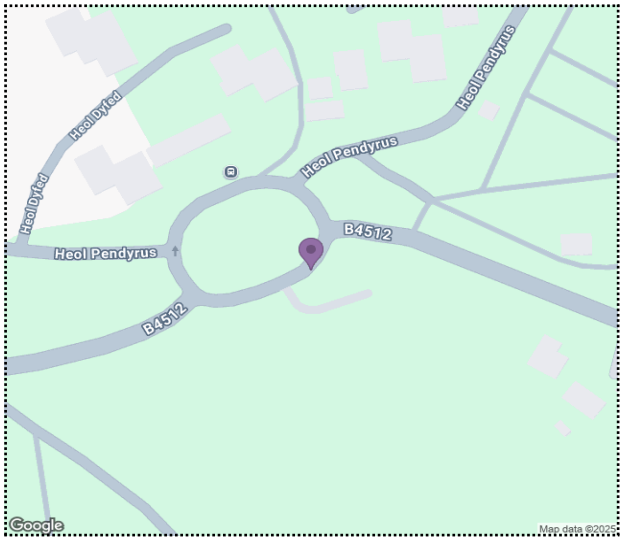
Validated Data

Crash Date:	Saturday, May 4, 2019	**Time of Crash:**	16:08:00	**Crash Reference:**	2019621900625
Highest Injury Severity:	Slight	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300230 194648
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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Validated Data

Crash Date: Saturday, May 4, 2019 **Time of Crash:** 16:08:00 **Crash Reference:** 2019621900625

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes maximum gross weight (mgw) and under	3	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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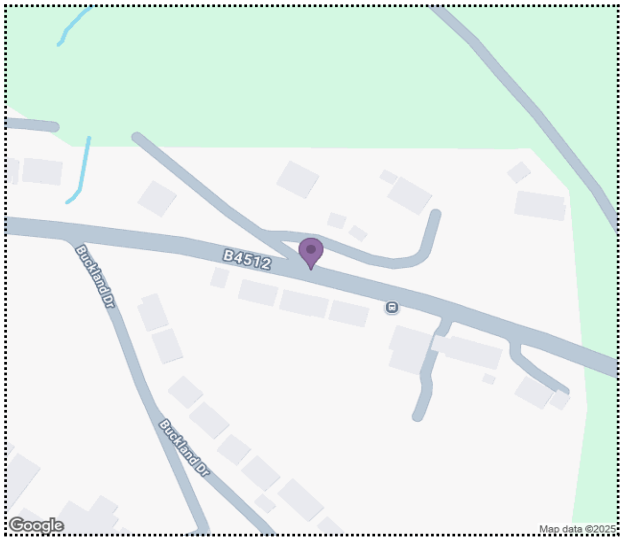
Validated Data

Crash Date:	Tuesday, October 15, 2019	**Time of Crash:**	12:00:00	**Crash Reference:**	2019621901323
Highest Injury Severity:	Serious	**Road Number:**	B4512	**Casualties:**	2
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	2
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	299515 194860
Weather Description:	Raining with high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

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Crash Date: Tuesday, October 15, 2019 **Time of Crash:** 12:00:00 **Crash Reference:** 2019621901323

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	17	Unknown	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Car (excluding private hire cars 2005 onwards)	7	Male	46 - 55	Vehicle is in the act of turning left	Nearside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	2	Slight	Vehicle or pillion passenger	Male	26 - 35	Unknown or other	Unknown or other
2	1	Serious	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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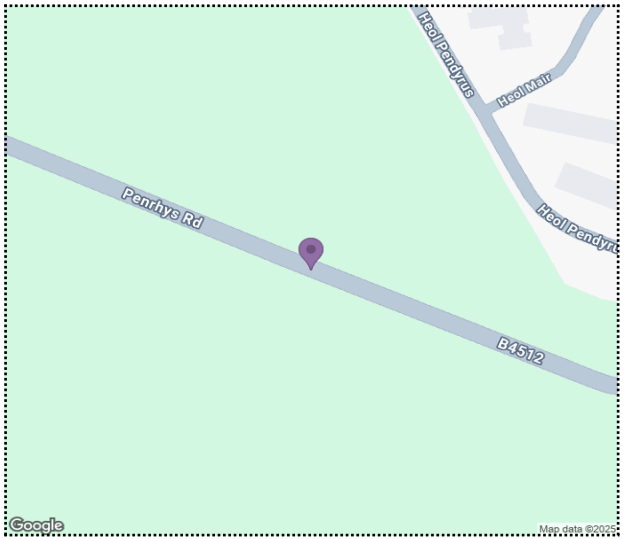
crashmap.co.uk

Validated Data

Crash Date:	Sunday, September 6, 2020	**Time of Crash:**	17:19:00	**Crash Reference:**	2020622000795
Highest Injury Severity:	Fatal	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	299965 194663
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date: Sunday, September 6, 2020 **Time of Crash:** 17:19:00 **Crash Reference:** 2020622000795

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle over 125cc and up to 500cc (2005 onwards)	-1	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	Kerb	Nearside or offside crash barrier

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Fatal	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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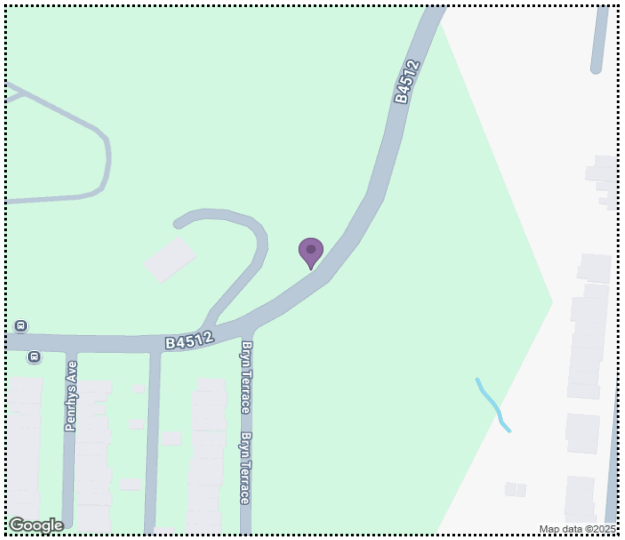
crashmap.co.uk

Validated Data

Crash Date:	Thursday, December 24, 2020	**Time of Crash:**	14:48:00	**Crash Reference:**	2020622001118
Highest Injury Severity:	Slight	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300717 194628
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date: Thursday, December 24, 2020 **Time of Crash:** 14:48:00 **Crash Reference:** 2020622001118

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	13	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	Telegraph pole/Electricity pole

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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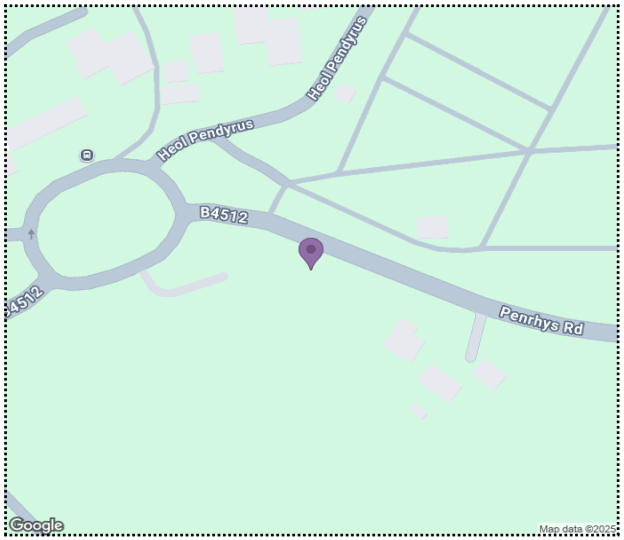
crashmap.co.uk

Validated Data

Crash Date:	Monday, August 1, 2022	**Time of Crash:**	23:40:00	**Crash Reference:**	2022622200612
Highest Injury Severity:	Slight	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300285 194640
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

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Validated Data

Crash Date: Monday, August 1, 2022 **Time of Crash:** 23:40:00 **Crash Reference:** 2022622200612

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	15	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Back	Unknown	None	Telegraph pole/Electricity pole

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

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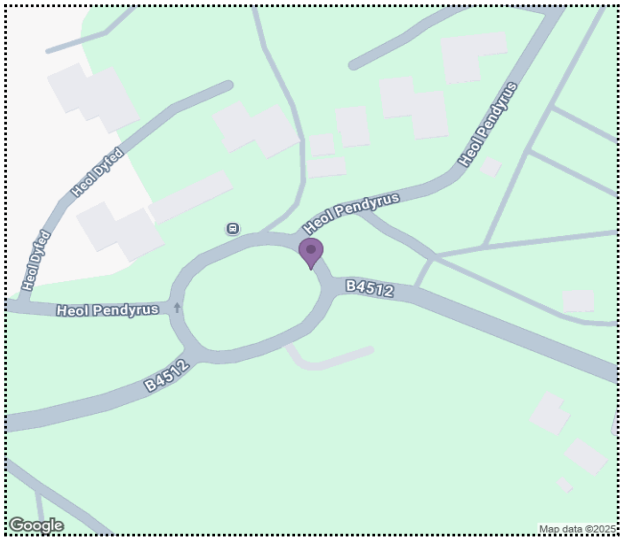
crashmap.co.uk

Validated Data

Crash Date:	Monday, January 16, 2023	**Time of Crash:**	17:04:00	**Crash Reference:**	2023622300225
Highest Injury Severity:	Serious	**Road Number:**	B4512	**Casualties:**	1
Highway Authority:	Rhondda, Cynon, Taff			**Vehicles:**	1
Local Authority:	Rhondda Cynon Taf			**OS Grid Reference:**	300229 194672
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date: Monday, January 16, 2023 **Time of Crash:** 17:04:00 **Crash Reference:** 2023622300225

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	-1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Did not impact	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Male	36 - 45	In carriageway, not crossing	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

Appendix D SLR Drawings

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

SLR Project No.: 407.064582.00001

9 September 2025

PARKING BAYS SHOWN AS 2.4M X 4.8M.
RCT AND WALES SPG PARKING STANDARDS ARE SHOWN AT 2.6M X 4.8M.
PARALLEL BAYS ADJACENT TO HIGHWAY TO BE 2M X 6M.

PROPOSED RAISED SECTION OF CARRIAGEWAY TO INCLUDE PROPOSED PARKING AREA.

PROPOSED BUS CAGE AND INDICATIVE BUS SHELTER LOCATION.

REFER TO SHEET 09010 FOR LANDSCAPE AND ACTIVE TRAVEL ROUTE.

EXISTING FOOTPATH TO REMAIN AS LINK TO EXISTING DEVELOPMENT.

TEMPORARY TURNING HEAD DURING PHASING.

Please refer to drawing 09010 and the DAS which illustrates an accessible connection to the wider site will be maintained.

N

0 10 20 30 40 50 60 70 80 90 100m

Scale 1:1,000

09/09/2025

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SLR

www.slrconsulting.com

Client: TRIVALLIS

Project: PENRHYS REGENERATION

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
KR	KR	JH	EH
Date: 13.01.25	Date: 13.01.25	Date: 13.01.25	Date: 13.01.25

Drawing Title: PHASE 1A MASTERPLAN REVIEW

Drawing Number: **SK10** Rev.: **J**

Scale: 1:1000 @ A3

SLR Project No.: 407.064582.00001

Rev	Amendments	Date	By	Chk	Auth
J	REVISED MASTERPLAN	09.09.25	KR	JH	
H	REVISED MASTERPLAN	03.09.25	KR	JH	
G	REVISED MASTERPLAN	28.08.25	KR	JH	
F	REVISED JUNCTION ARRANGEMENT	27.08.25	KR	JH	
E	REVISED MASTERPLAN	13.08.25	KR	JH	
D	ADDITIONAL REVISIONS	15.07.25	KR	JH	
C	REVISED MASTERPLAN.	07.07.25	KR	JH	
B	REVISED MASTERPLAN.	20.06.25	KR	JH	
A	REVISED MASTERPLAN.	03.06.25	KR	JH	

Rev	Amendments	Date	By	Chk	Auth

Notes:

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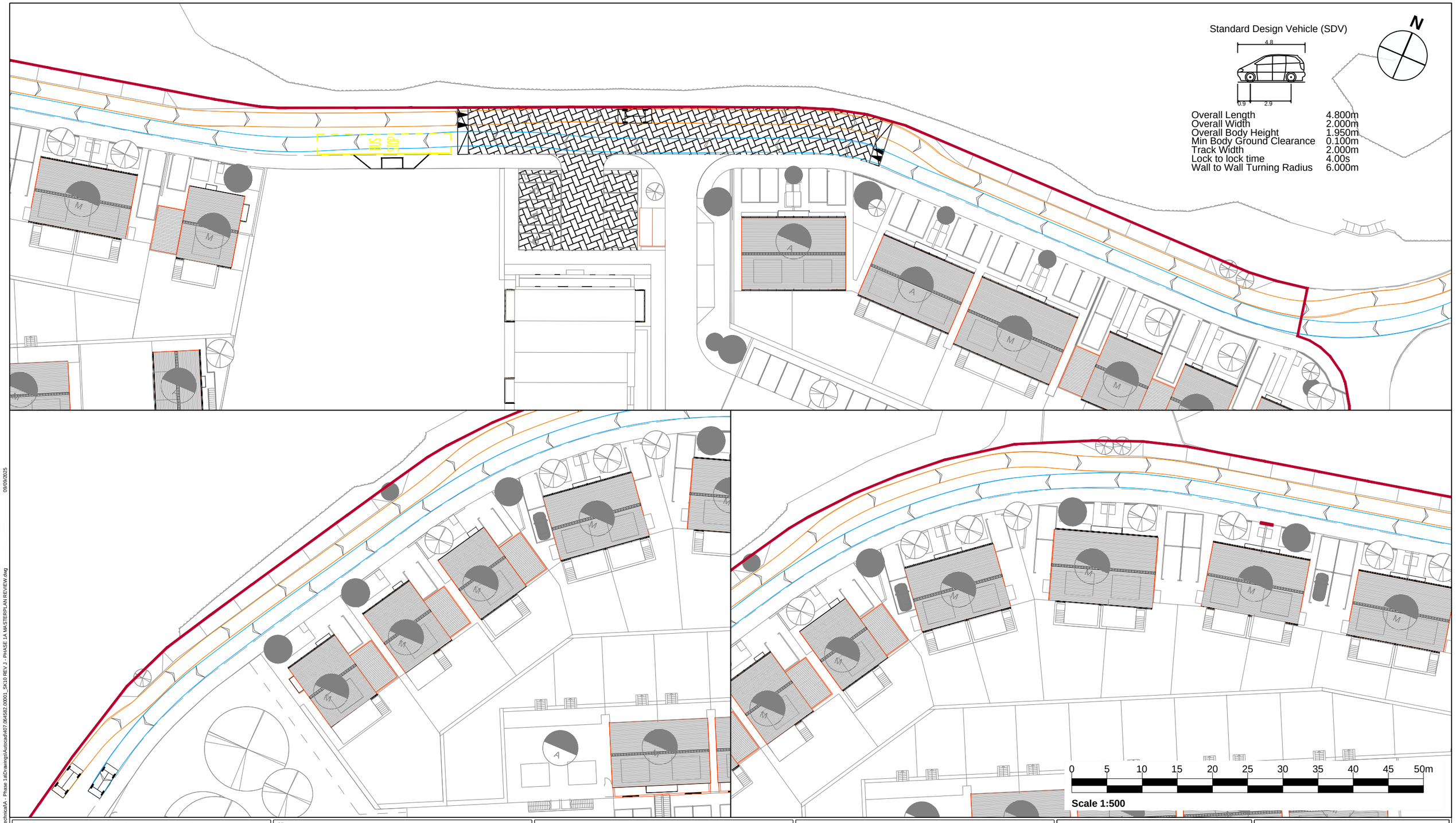
Legend:

2.4M X 25M VISIBILITY SPLAY - BASED ON 20MPH MFS



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www.slrconsulting.com

Client: TRIVALLIS

Project: PENRHYS REGENERATION

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
KR	KR	JH	EH
Date 13.01.25	Date 13.01.25	Date 13.01.25	Date 13.01.25

Drawing Title: PHASE 1A MASTERPLAN REVIEW
STANDARD DESIGN VEHICLE
TWO WAY WORKING - RING ROAD

Drawing Number: **SK10_A05** Rev. **C**

Scale: 1:500 @ A3

SLR Project No.: 407.064582.00001

Rev	Amendments	Date	By	Chk	Auth
C	REVISED MASTERPLAN	09.09.25	KR	JH	
B	REVISED MASTERPLAN	03.09.25	KR	JH	
A	REVISED MASTERPLAN	28.08.25	KR	JH	

Notes:
1.

Legend:

09/09/2025

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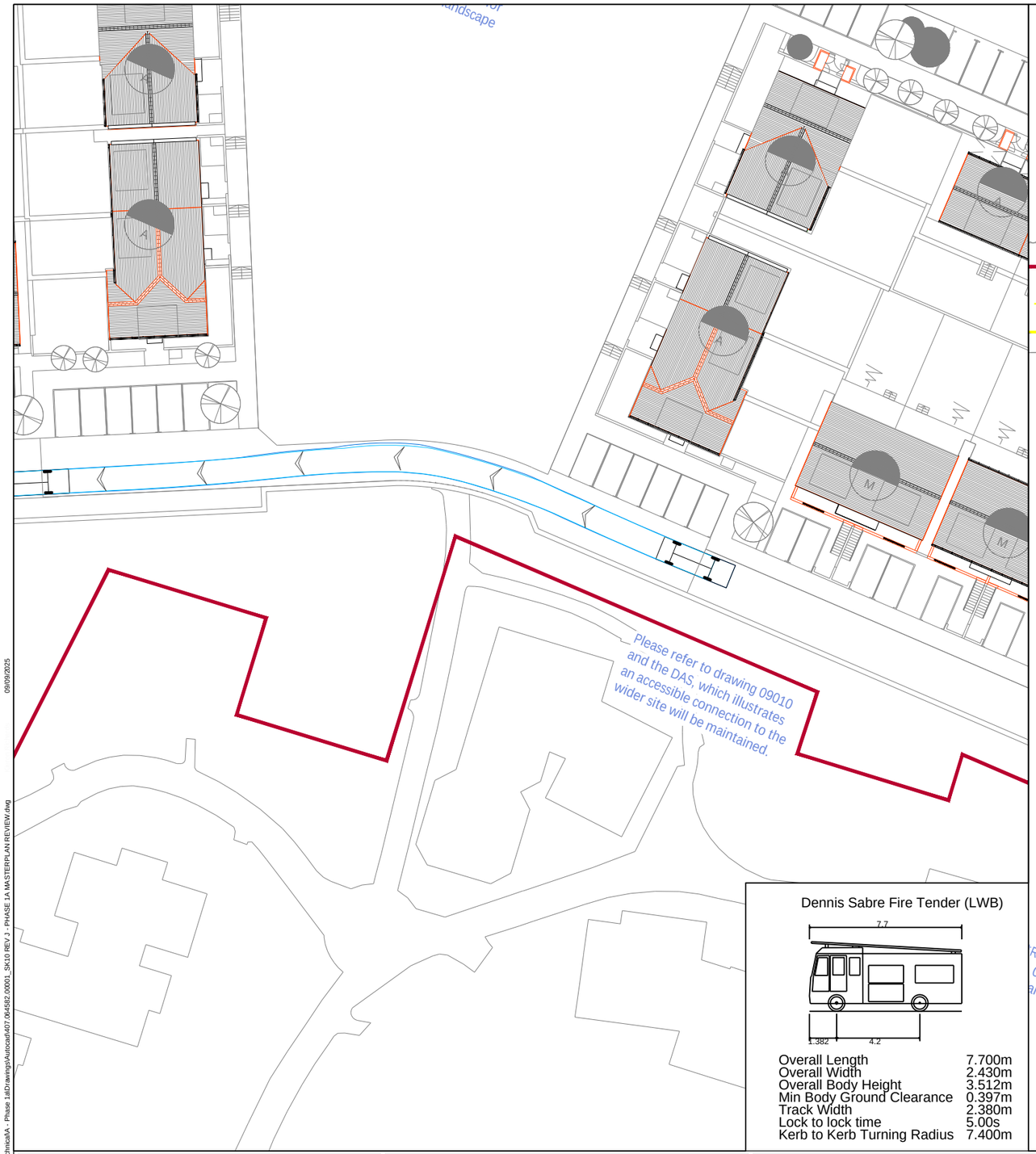
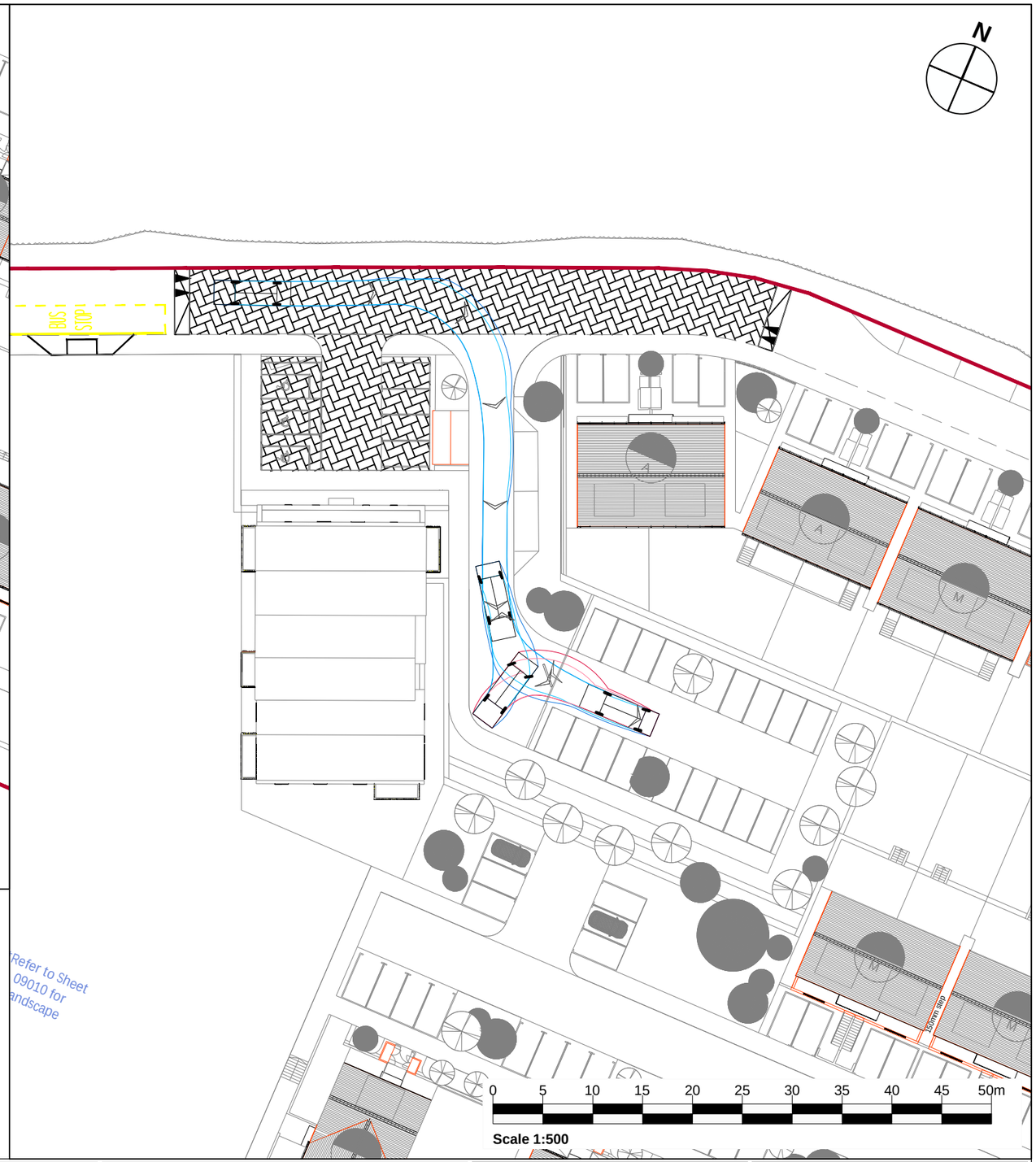


Dennis Sabre Fire Tender (LWB)

Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m



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Client: TRIVALLIS

Project: PENRHYS REGENERATION

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
KR	KR	JH	EH
Date: 13.01.25	Date: 13.01.25	Date: 13.01.25	Date: 13.01.25

Drawing Title: PHASE 1A MASTERPLAN REVIEW
FIRE TENDER
EMERGENCY SERVICING

Drawing Number: **SK10_A03** | Rev.: **F** | Scale: 1:500 @ A3 | SLR Project No.: 407.064582.00001

Rev	Amendments	Date	By	Chk	Auth
F	REVISED MASTERPLAN.	98.09.25	KR	JH	
E	REVISED MASTERPLAN.	03.09.25	KR	JH	
D	REVISED MASTERPLAN.	28.08.25	KR	JH	
C	REVISED MASTERPLAN.	13.08.25	KR	JH	
B	REVISED MASTERPLAN.	07.07.25	KR	JH	
A	REVISED MASTERPLAN.	20.06.25	KR	JH	

Rev	Amendments	Date	By	Chk	Auth

Notes:
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Legend:

09/09/2025

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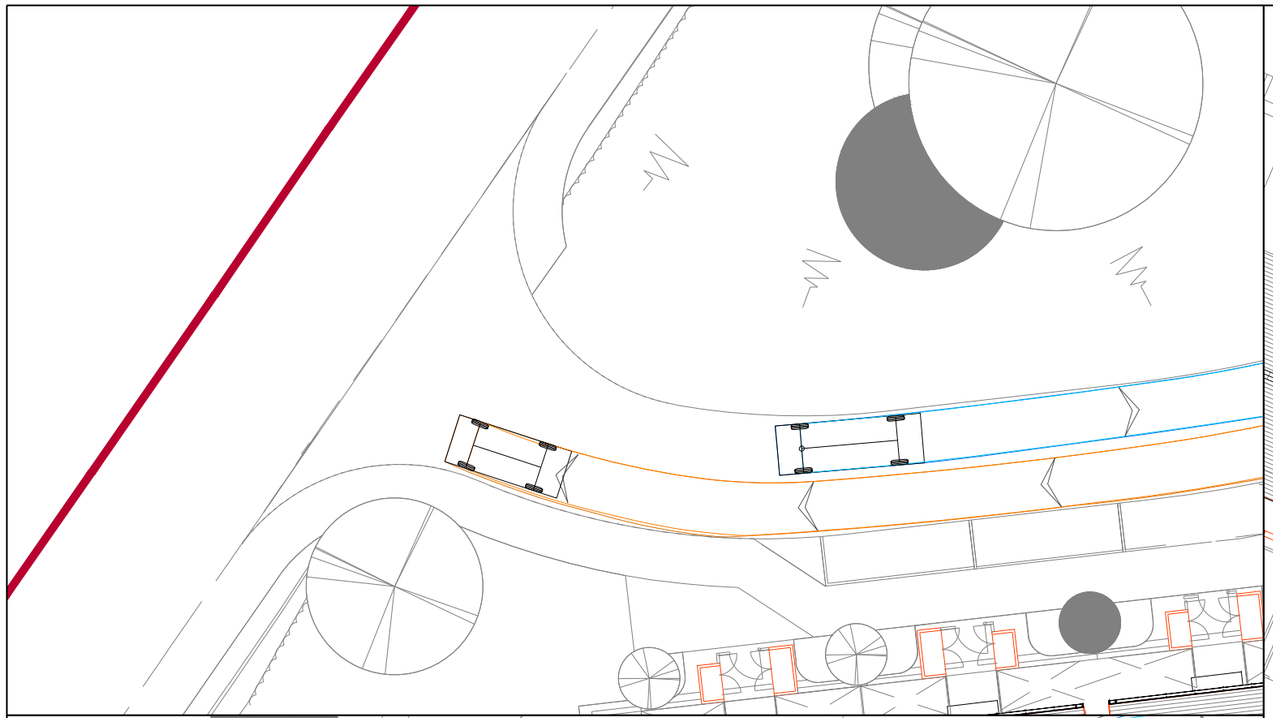

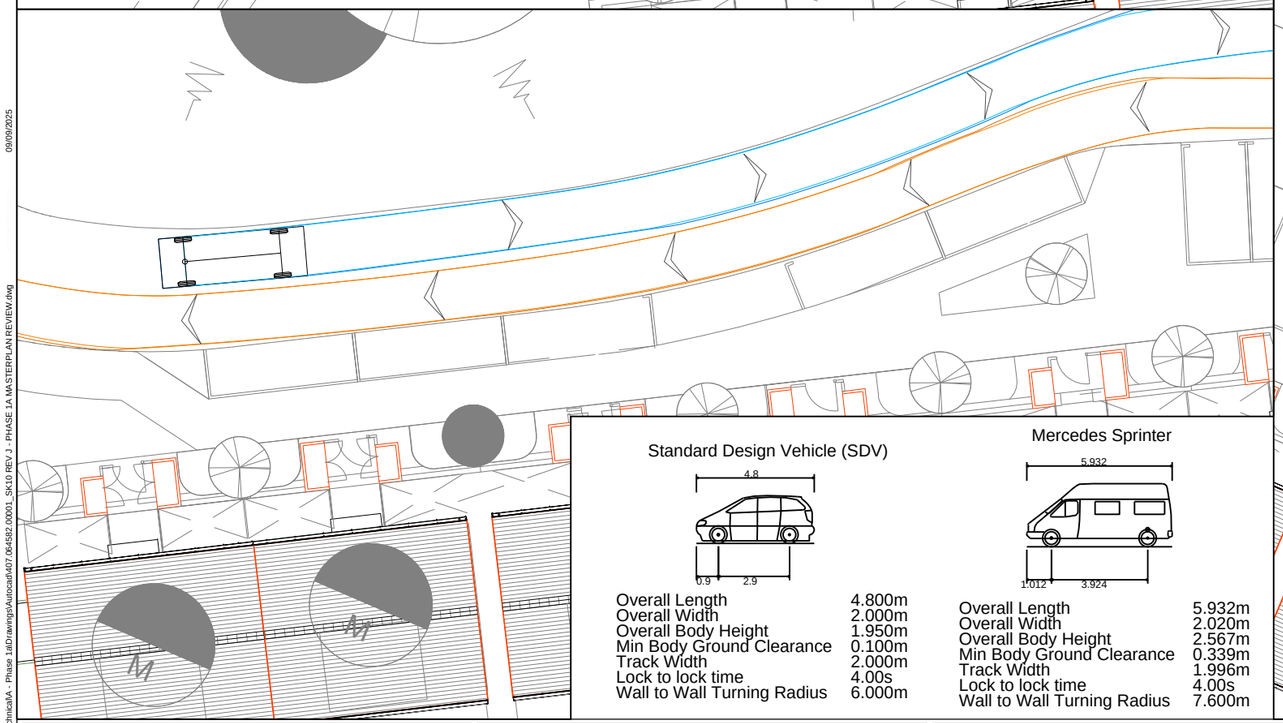

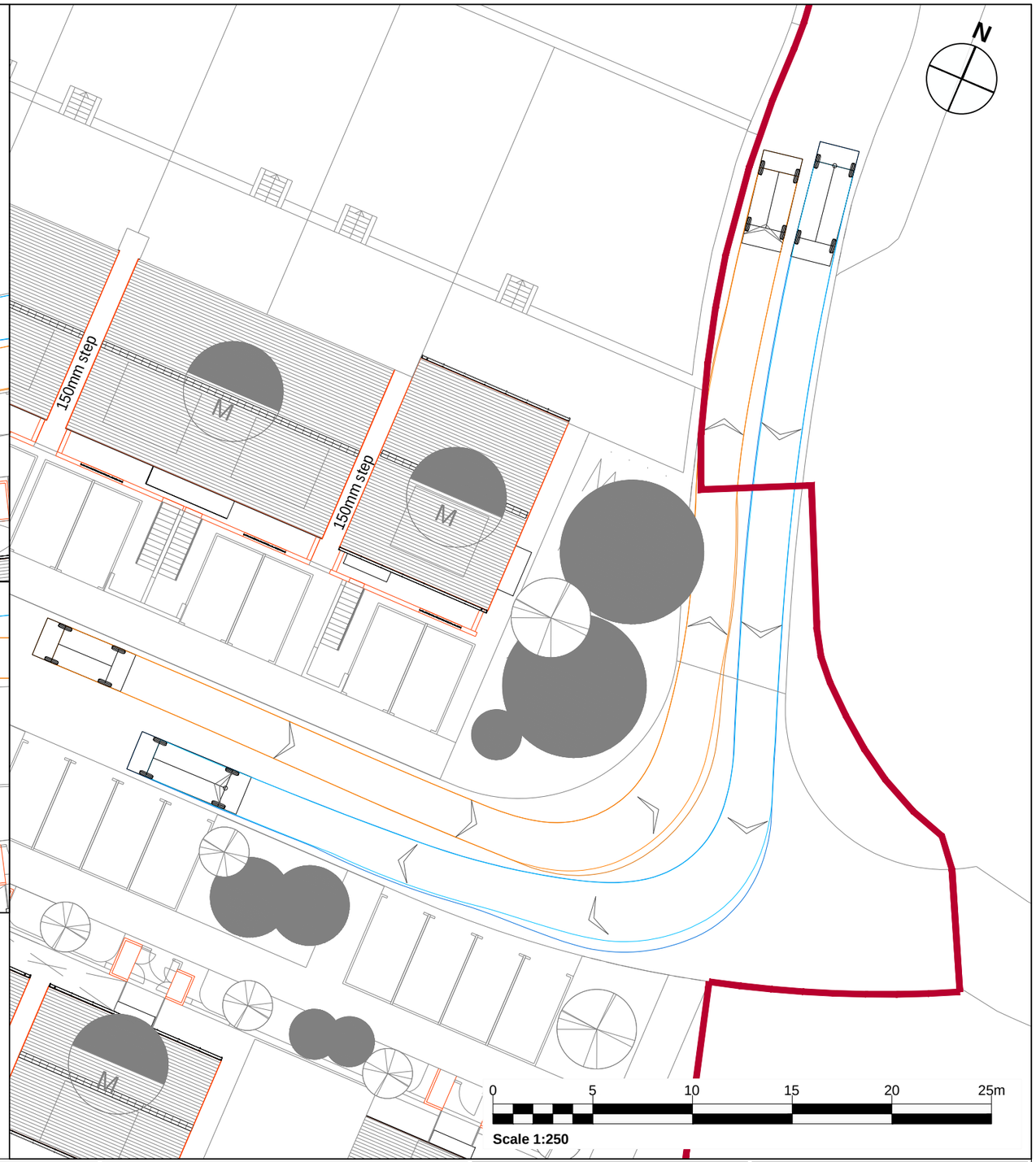

Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

Mercedes Sprinter

Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

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Client: TRIVALLIS

Project: PENRHYS REGENERATION

Drawing Status & Suitability Code:

Designed	Drawn	Checked	Authorised
KR	KR	JH	EH
Date	Date	Date	Date
13.01.25	13.01.25	13.01.25	13.01.25

Drawing Title: PHASE 1A MASTERPLAN REVIEW
PANEL VAN AND STANDARD DESIGN VEHICLE
TWO WAY WORKING

Drawing Number: **SK10_A02** | Rev.: **F** | Scale: 1:250 @ A3 | SLR Project No.: 407.064582.00001

Rev	Amendments	Date	By	Chk	Auth
F	REVISED MASTERPLAN.	09.09.25	KR	JH	
E	REVISED MASTERPLAN.	28.08.25	KR	JH	
D	REVISED MASTERPLAN.	13.08.25	KR	JH	
C	REVISED MASTERPLAN.	07.07.25	KR	JH	
B	REVISED MASTERPLAN.	20.06.25	KR	JH	
A	REVISED MASTERPLAN.	03.06.25	KR	JH	

Rev	Amendments	Date	By	Chk	Auth

Notes:

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Legend:

09/09/2025

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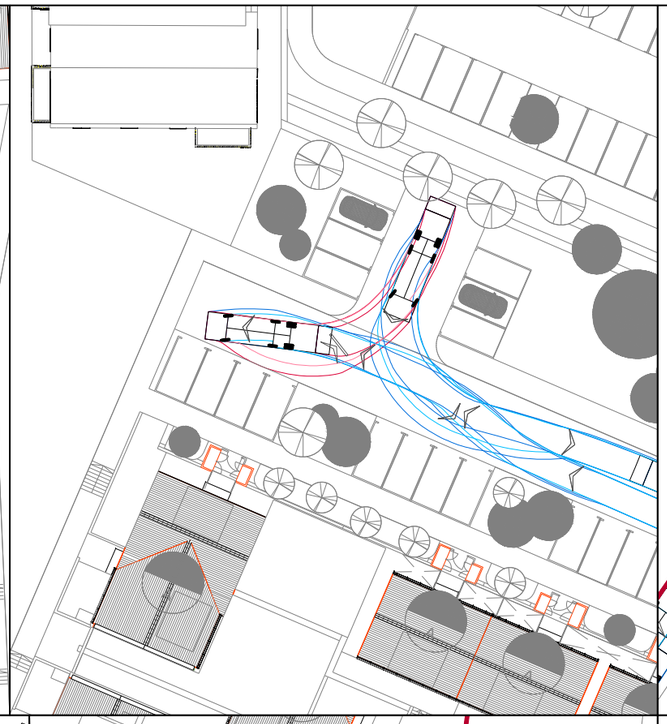
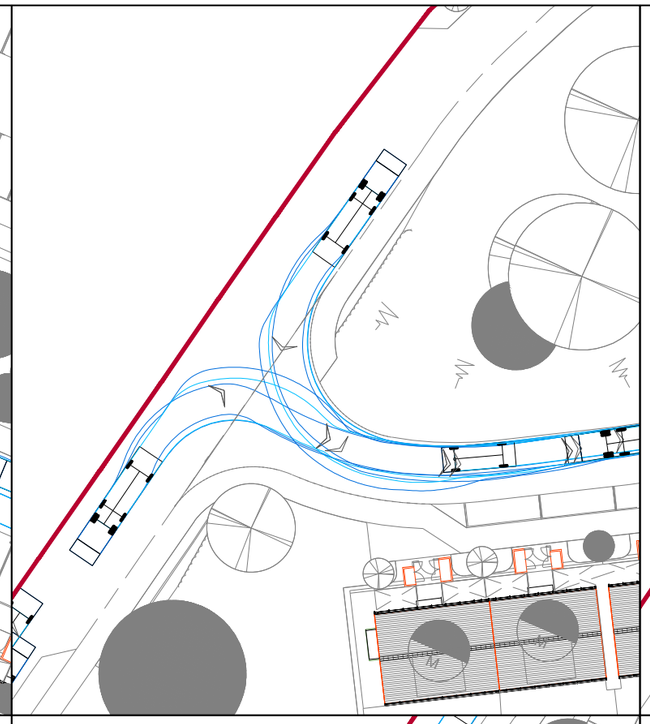
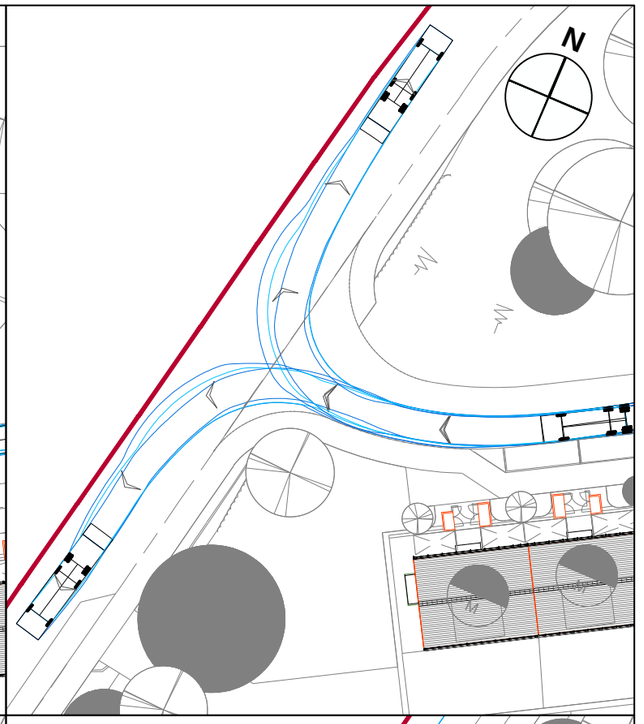
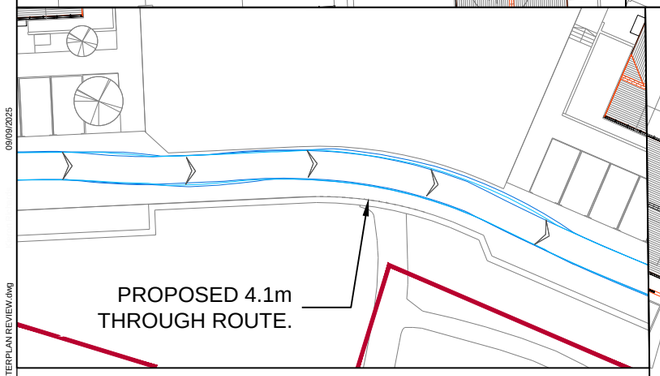
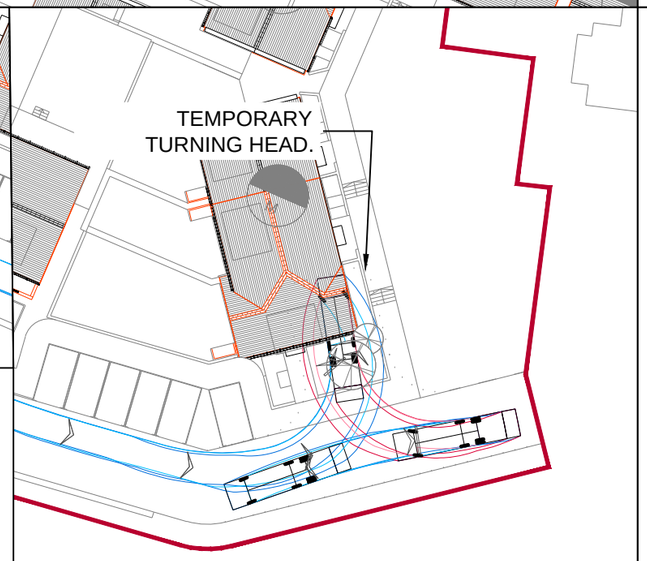
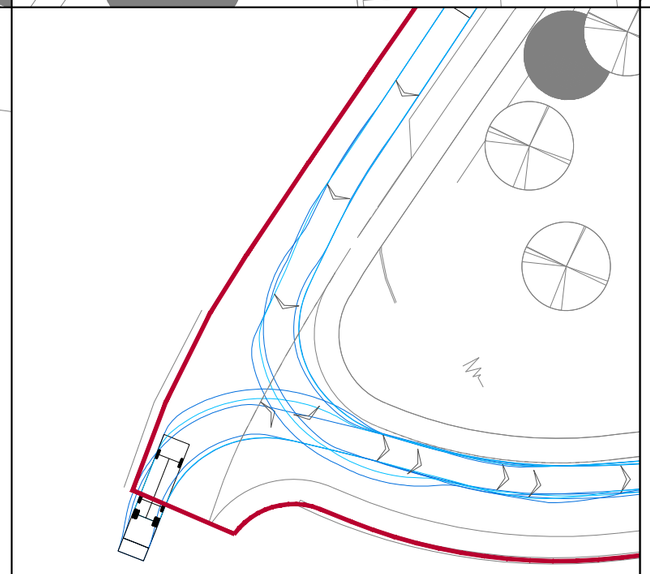


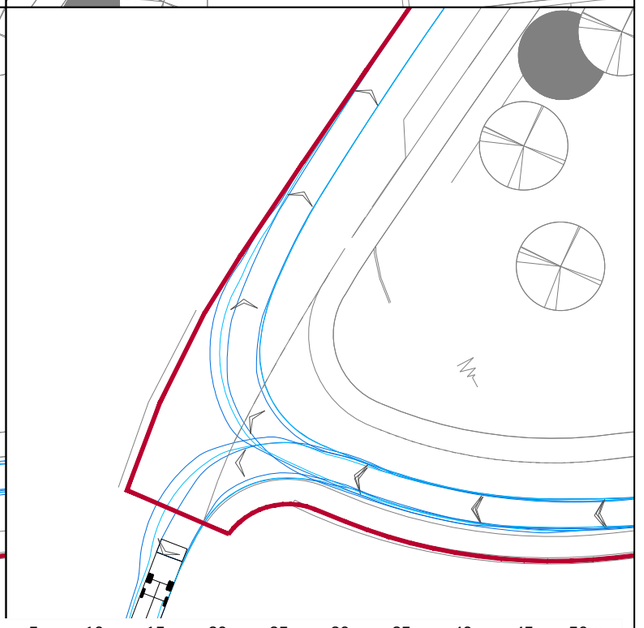








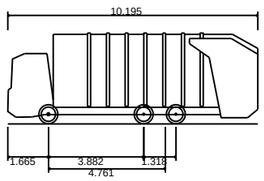




0 5 10 15 20 25 30 35 40 45 50m

Scale 1:500

Phoenix 2-17N (with Elite 2 6x2 ML chassis)



Overall Length	10.195m
Overall Width	2.230m
Overall Body Height	3.699m
Min Body Ground Clearance	0.251m
Track Width	2.200m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.000m

SLR

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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
KR	KR	JH	EH
Date	Date	Date	Date
13.01.25	13.01.25	13.01.25	13.01.25

Drawing Number: **SK10_A01** | Rev.: **H**

Client: TRIVALLIS

Project: PENRHYS REGENERATION

Drawing Title: PHASE 1A MASTERPLAN REVIEW
10.2M REFUSE VEHICLE
SERVICING

Scale: 1:500 @ A3

SLR Project No.: 407.064582.00001

Rev	Amendments	Date	By	Chk	Auth
H	REVISED MASTERPLAN.	09.09.25	KR	JH	
G	REVISED MASTERPLAN.	03.09.25	KR	JH	
F	REVISED MASTERPLAN.	28.08.25	KR	JH	
E	REVISED JUNCTION.	27.08.25	KR	JH	
D	REVISED MASTERPLAN.	13.08.25	KR	JH	
C	REVISED MASTERPLAN.	07.07.25	KR	JH	
B	REVISED MASTERPLAN.	20.06.25	KR	JH	
A	REVISED MASTERPLAN.	03.06.25	KR	JH	

Rev	Amendments	Date	By	Chk	Auth

Notes:

1.

Legend:

09/09/2025

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Appendix E Survey Data

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

SLR Project No.: 407.064582.00001

9 September 2025

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	1	2	1	4	4	1	1	1	2
01:00	1	0	1	4	4	3	0	1	2
02:00	1	0	0	2	0	1	1	1	1
03:00	0	1	0	3	0	0	0	0	1
04:00	0	1	1	0	1	2	1	1	1
05:00	1	0	2	2	2	2	3	2	2
06:00	8	9	11	5	2	12	9	10	8
07:00	22	26	17	3	2	17	24	21	16
08:00	41	40	39	16	14	32	35	37	31
09:00	26	23	25	27	10	20	20	23	22
10:00	24	22	26	22	25	18	23	23	23
11:00	30	35	29	27	34	30	29	31	31
12:00	32	21	33	33	42	29	35	30	32
13:00	34	40	29	36	22	24	24	30	30
14:00	27	36	41	19	22	29	39	34	30
15:00	39	32	52	33	23	46	32	40	37
16:00	36	30	41	30	35	23	36	33	33
17:00	34	44	45	34	36	35	31	38	37
18:00	33	31	40	39	28	25	32	32	33
19:00	31	30	30	28	19	35	36	32	30
20:00	23	19	25	17	27	22	25	23	23
21:00	10	19	13	11	24	6	8	11	13
22:00	2	12	16	6	3	5	8	9	7
23:00	2	2	13	6	4	3	5	5	5
Total 12H(7-19)	378	380	417	319	293	328	360	373	354
16H(6-22)	450	457	496	380	365	403	438	449	427
18H(6-24)	454	471	525	392	372	411	451	462	439
24H(0-24)	458	475	530	407	383	420	457	468	447
AM Peak	08:00	08:00	08:00	09:00	11:00	08:00	08:00	08:00	08:00
	41	40	39	27	34	32	35	37	31
PM Peak	15:00	17:00	15:00	18:00	12:00	15:00	14:00	15:00	17:00
	39	44	52	39	42	46	39	40	37

Paul Castle Associates

Direction: Westbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	2	4	4	4	4	1	3	3	3
01:00	3	2	0	4	8	2	1	2	3
02:00	0	0	0	4	1	1	1	0	1
03:00	0	1	0	0	1	0	0	0	0
04:00	0	0	0	0	0	1	2	1	0
05:00	1	0	2	0	0	0	0	1	0
06:00	3	1	3	3	2	0	5	2	2
07:00	6	12	6	3	4	10	14	10	8
08:00	28	25	26	8	8	28	20	25	20
09:00	32	32	29	10	17	28	32	31	26
10:00	29	19	23	16	24	18	35	25	23
11:00	37	22	34	27	30	29	28	30	30
12:00	31	46	33	38	34	27	31	34	34
13:00	31	28	29	31	22	26	26	28	28
14:00	27	32	36	39	32	25	44	33	34
15:00	60	39	57	38	30	54	44	51	46
16:00	45	56	54	37	40	38	57	50	47
17:00	49	48	46	29	34	49	44	47	43
18:00	39	44	39	33	41	43	37	40	39
19:00	32	36	33	21	20	28	40	34	30
20:00	21	29	25	17	26	21	24	24	23
21:00	18	18	18	21	24	10	16	16	18
22:00	12	21	25	12	14	10	9	15	15
23:00	3	3	20	7	8	4	5	7	7
Total 12H(7-19)	414	403	412	309	316	375	412	403	377
16H(6-22)	488	487	491	371	388	434	497	479	451
18H(6-24)	503	511	536	390	410	448	511	502	473
24H(0-24)	509	518	542	402	424	453	518	508	481
AM Peak	11:00	09:00	11:00	11:00	11:00	11:00	10:00	09:00	11:00
	37	32	34	27	30	29	35	31	30
PM Peak	15:00	16:00	15:00	14:00	18:00	15:00	16:00	15:00	16:00
	60	56	57	39	41	54	57	51	47

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	3	6	5	8	8	2	4	4	5
01:00	4	2	1	8	12	5	1	3	5
02:00	1	0	0	6	1	2	2	1	2
03:00	0	2	0	3	1	0	0	0	1
04:00	0	1	1	0	1	3	3	2	1
05:00	2	0	4	2	2	2	3	2	2
06:00	11	10	14	8	4	12	14	12	10
07:00	28	38	23	6	6	27	38	31	24
08:00	69	65	65	24	22	60	55	63	51
09:00	58	55	54	37	27	48	52	53	47
10:00	53	41	49	38	49	36	58	47	46
11:00	67	57	63	54	64	59	57	61	60
12:00	63	67	66	71	76	56	66	64	66
13:00	65	68	58	67	44	50	50	58	57
14:00	54	68	77	58	54	54	83	67	64
15:00	99	71	109	71	53	100	76	91	83
16:00	81	86	95	67	75	61	93	83	80
17:00	83	92	91	63	70	84	75	85	80
18:00	72	75	79	72	69	68	69	73	72
19:00	63	66	63	49	39	63	76	66	60
20:00	44	48	50	34	53	43	49	47	46
21:00	28	37	31	32	48	16	24	27	31
22:00	14	33	41	18	17	15	17	24	22
23:00	5	5	33	13	12	7	10	12	12
Total 12H(7-19)	792	783	829	628	609	703	772	776	731
16H(6-22)	938	944	987	751	753	837	935	928	878
18H(6-24)	957	982	1061	782	782	859	962	964	912
24H(0-24)	967	993	1072	809	807	873	975	976	928
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	10:00	08:00	11:00
	69	65	65	54	64	60	58	63	60
PM Peak	15:00	17:00	15:00	18:00	12:00	15:00	16:00	15:00	15:00
	99	92	109	72	76	100	93	91	83

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	458	401	37	0	20
Thu 6 Mar 2025	475	417	39	0	19
Fri 7 Mar 2025	530	480	38	0	12
Sat 8 Mar 2025	407	372	17	1	17
Sun 9 Mar 2025	383	365	18	0	0
Mon 10 Mar 2025	420	364	36	0	20
Tue 11 Mar 2025	457	402	35	0	20
5 Day Ave.	468	413	37	0	18
7 Day Ave.	447	400	31	0	15

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	87.6%	8.1%	0.0%	4.4%
Thu 6 Mar 2025	100.0%	87.8%	8.2%	0.0%	4.0%
Fri 7 Mar 2025	100.0%	90.6%	7.2%	0.0%	2.3%
Sat 8 Mar 2025	100.0%	91.4%	4.2%	0.2%	4.2%
Sun 9 Mar 2025	100.0%	95.3%	4.7%	0.0%	0.0%
Mon 10 Mar 2025	100.0%	86.7%	8.6%	0.0%	4.8%
Tue 11 Mar 2025	100.0%	88.0%	7.7%	0.0%	4.4%
5 Day Ave.	100.0%	88.2%	7.9%	0.0%	3.9%
7 Day Ave.	100.0%	89.5%	7.0%	0.0%	3.5%

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Direction: Westbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	509	455	52	0	2
Thu 6 Mar 2025	518	447	69	0	2
Fri 7 Mar 2025	542	480	61	0	1
Sat 8 Mar 2025	402	377	25	0	0
Sun 9 Mar 2025	424	404	18	2	0
Mon 10 Mar 2025	453	372	78	0	3
Tue 11 Mar 2025	518	460	56	0	2
5 Day Ave.	508	443	63	0	2
7 Day Ave.	481	428	51	0	1

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	89.4%	10.2%	0.0%	0.4%
Thu 6 Mar 2025	100.0%	86.3%	13.3%	0.0%	0.4%
Fri 7 Mar 2025	100.0%	88.6%	11.3%	0.0%	0.2%
Sat 8 Mar 2025	100.0%	93.8%	6.2%	0.0%	0.0%
Sun 9 Mar 2025	100.0%	95.3%	4.2%	0.5%	0.0%
Mon 10 Mar 2025	100.0%	82.1%	17.2%	0.0%	0.7%
Tue 11 Mar 2025	100.0%	88.8%	10.8%	0.0%	0.4%
5 Day Ave.	100.0%	87.2%	12.4%	0.0%	0.4%
7 Day Ave.	100.0%	89.0%	10.7%	0.1%	0.3%

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Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	967	856	89	0	22
Thu 6 Mar 2025	993	864	108	0	21
Fri 7 Mar 2025	1072	960	99	0	13
Sat 8 Mar 2025	809	749	42	1	17
Sun 9 Mar 2025	807	769	36	2	0
Mon 10 Mar 2025	873	736	114	0	23
Tue 11 Mar 2025	975	862	91	0	22
5 Day Ave.	976	856	100	0	20
7 Day Ave.	928	828	83	0	17

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	88.5%	9.2%	0.0%	2.3%
Thu 6 Mar 2025	100.0%	87.0%	10.9%	0.0%	2.1%
Fri 7 Mar 2025	100.0%	89.6%	9.2%	0.0%	1.2%
Sat 8 Mar 2025	100.0%	92.6%	5.2%	0.1%	2.1%
Sun 9 Mar 2025	100.0%	95.3%	4.5%	0.2%	0.0%
Mon 10 Mar 2025	100.0%	84.3%	13.1%	0.0%	2.6%
Tue 11 Mar 2025	100.0%	88.4%	9.3%	0.0%	2.3%
5 Day Ave.	100.0%	87.7%	10.3%	0.0%	2.1%
7 Day Ave.	100.0%	89.2%	8.9%	0.0%	1.8%

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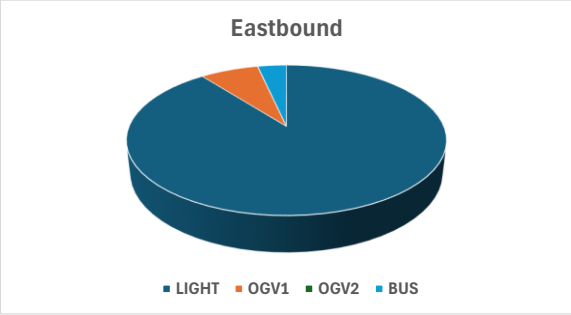

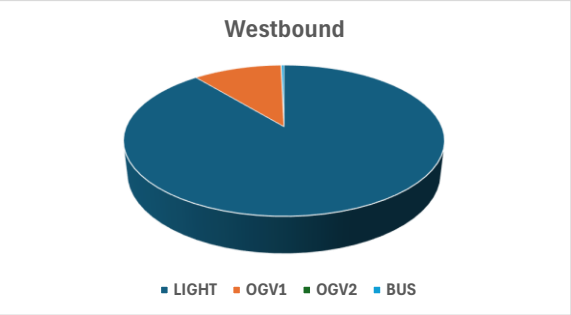

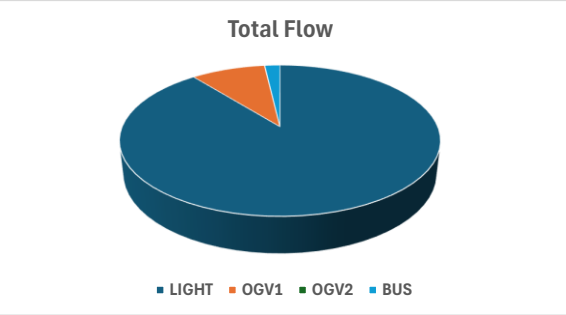

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	458	27.8	21.9	5.7	4	67	67	191	100	28	0	1	0	0	0	0
Thu 6 Mar 2025	475	27.6	22.2	5.2	4	53	69	207	123	19	0	0	0	0	0	0
Fri 7 Mar 2025	530	27.7	21.8	5.7	9	71	93	206	126	19	6	0	0	0	0	0
Sat 8 Mar 2025	407	28.2	22.5	5.6	3	52	58	149	124	20	1	0	0	0	0	0
Sun 9 Mar 2025	383	28.3	22.4	5.7	3	48	60	143	104	23	2	0	0	0	0	0
Mon 10 Mar 2025	420	27.8	21.7	5.9	4	71	62	157	102	22	2	0	0	0	0	0
Tue 11 Mar 2025	457	27.7	21.8	5.7	6	54	96	170	108	20	1	2	0	0	0	0
5 Day Ave.	468	27.7	21.9	5.6	5	63	77	186	112	22	2	1	0	0	0	0
7 Day Ave.	447	27.9	22.0	5.6	5	59	72	175	112	22	2	0	0	0	0	0

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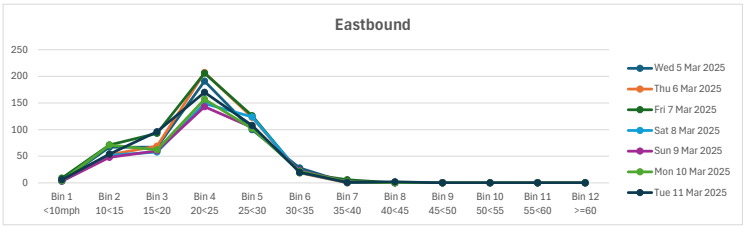

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	509	26.9	21.5	5.2	4	59	112	212	107	12	3	0	0	0	0	0
Thu 6 Mar 2025	518	27.3	21.9	5.2	5	48	103	238	106	13	2	2	1	0	0	0
Fri 7 Mar 2025	542	26.6	21.3	5.1	7	64	117	238	101	14	1	0	0	0	0	0
Sat 8 Mar 2025	402	27.5	22.3	5.0	3	26	91	171	92	15	4	0	0	0	0	0
Sun 9 Mar 2025	424	27.1	22.0	5.0	2	32	106	174	94	12	4	0	0	0	0	0
Mon 10 Mar 2025	453	27.1	21.4	5.5	5	58	111	157	110	7	5	0	0	0	0	0
Tue 11 Mar 2025	518	27.1	21.6	5.3	8	55	108	217	112	14	4	0	0	0	0	0
5 Day Ave.	508	27.0	21.5	5.3	6	57	110	212	107	12	3	0	0	0	0	0
7 Day Ave.	481	27.1	21.7	5.2	5	49	107	201	103	12	3	0	0	0	0	0

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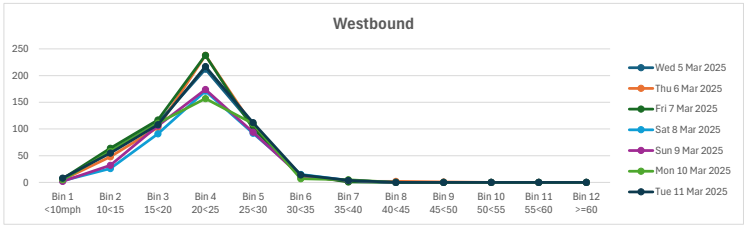

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	967	27.3	21.7	5.4	8	126	179	403	207	40	3	1	0	0	0	0
Thu 6 Mar 2025	993	27.5	22.1	5.2	9	101	172	445	229	32	2	2	1	0	0	0
Fri 7 Mar 2025	1072	27.1	21.5	5.4	16	135	210	444	227	33	7	0	0	0	0	0
Sat 8 Mar 2025	809	27.9	22.4	5.3	6	78	149	320	216	35	5	0	0	0	0	0
Sun 9 Mar 2025	807	27.7	22.2	5.3	5	80	166	317	198	35	6	0	0	0	0	0
Mon 10 Mar 2025	873	27.4	21.5	5.7	9	129	173	314	212	29	7	0	0	0	0	0
Tue 11 Mar 2025	975	27.4	21.7	5.5	14	109	204	387	220	34	5	2	0	0	0	0
5 Day Ave.	976	27.3	21.7	5.4	11	120	188	399	219	34	5	1	0	0	0	0
7 Day Ave.	928	27.5	21.9	5.4	10	108	179	376	216	34	5	1	0	0	0	0

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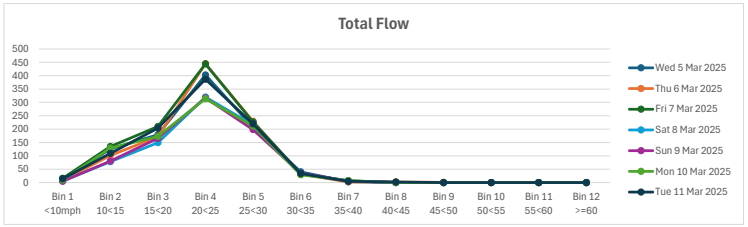


Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	54	27.7	22.2	5.3	0	5	11	25	8	5	0	0	0	0	0	0
Thu 6 Mar 2025	57	26.2	20.7	5.4	2	6	17	18	14	0	0	0	0	0	0	0
Fri 7 Mar 2025	55	26.7	21.1	5.4	1	7	12	23	10	2	0	0	0	0	0	0
Sat 8 Mar 2025	49	28.4	22.4	5.8	1	6	6	19	14	3	0	0	0	0	0	0
Sun 9 Mar 2025	59	28.7	24.2	4.3	0	2	5	27	21	4	0	0	0	0	0	0
Mon 10 Mar 2025	48	25.2	19.5	5.5	0	13	12	15	7	1	0	0	0	0	0	0
Tue 11 Mar 2025	52	24.9	20.4	4.4	0	6	17	22	7	0	0	0	0	0	0	0
5 Day Ave.	53	26.1	20.8	5.2	1	7	14	21	9	2	0	0	0	0	0	0
7 Day Ave.	53	26.8	21.5	5.1	1	6	11	21	12	2	0	0	0	0	0	0

Paul Castle Associates

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	66	26.9	21.1	5.6	1	8	19	22	14	1	1	0	0	0	0	0
Thu 6 Mar 2025	41	25.6	21.2	4.3	0	3	13	17	8	0	0	0	0	0	0	0
Fri 7 Mar 2025	57	26.5	20.4	5.9	1	11	15	16	12	2	0	0	0	0	0	0
Sat 8 Mar 2025	43	27.3	21.9	5.2	2	1	10	18	11	1	0	0	0	0	0	0
Sun 9 Mar 2025	54	28.3	23.1	5.0	0	2	11	23	16	0	2	0	0	0	0	0
Mon 10 Mar 2025	47	26.9	20.3	6.4	1	9	14	13	8	0	2	0	0	0	0	0
Tue 11 Mar 2025	63	26.4	21.4	4.9	1	4	19	24	14	1	0	0	0	0	0	0
5 Day Ave.	55	26.5	20.9	5.4	1	7	16	18	11	1	1	0	0	0	0	0
7 Day Ave.	53	26.8	21.3	5.3	1	5	14	19	12	1	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	120	27.2	21.6	5.5	1	13	30	47	22	6	1	0	0	0	0	0
Thu 6 Mar 2025	98	26.0	20.9	4.9	2	9	30	35	22	0	0	0	0	0	0	0
Fri 7 Mar 2025	112	26.6	20.8	5.6	2	18	27	39	22	4	0	0	0	0	0	0
Sat 8 Mar 2025	92	27.9	22.2	5.5	3	7	16	37	25	4	0	0	0	0	0	0
Sun 9 Mar 2025	113	28.5	23.7	4.6	0	4	16	50	37	4	2	0	0	0	0	0
Mon 10 Mar 2025	95	26.0	19.9	6.0	1	22	26	28	15	1	2	0	0	0	0	0
Tue 11 Mar 2025	115	25.7	20.9	4.6	1	10	36	46	21	1	0	0	0	0	0	0
5 Day Ave.	108	26.3	20.8	5.3	1	14	30	39	20	2	1	0	0	0	0	0
7 Day Ave.	106	26.9	21.4	5.2	1	12	26	40	23	3	1	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	66	28.2	21.7	6.2	3	11	4	27	18	3	0	0	0	0	0	0
Thu 6 Mar 2025	68	27.6	22.6	4.8	0	6	9	33	17	3	0	0	0	0	0	0
Fri 7 Mar 2025	93	26.1	20.0	5.9	3	21	16	34	17	2	0	0	0	0	0	0
Sat 8 Mar 2025	52	29.1	22.4	6.5	0	10	9	9	20	4	0	0	0	0	0	0
Sun 9 Mar 2025	45	26.8	22.1	4.6	1	2	9	21	12	0	0	0	0	0	0	0
Mon 10 Mar 2025	75	27.0	21.2	5.6	1	13	11	31	17	2	0	0	0	0	0	0
Tue 11 Mar 2025	71	28.0	21.7	6.0	2	10	11	27	16	5	0	0	0	0	0	0
5 Day Ave.	75	27.4	21.5	5.7	2	12	10	30	17	3	0	0	0	0	0	0
7 Day Ave.	67	27.6	21.7	5.7	1	10	10	26	17	3	0	0	0	0	0	0

Paul Castle Associates

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	87	26.2	21.4	4.6	2	6	20	41	18	0	0	0	0	0	0	0
Thu 6 Mar 2025	71	27.0	22.3	4.5	0	6	11	35	18	1	0	0	0	0	0	0
Fri 7 Mar 2025	93	25.7	20.3	5.2	2	16	20	40	14	1	0	0	0	0	0	0
Sat 8 Mar 2025	77	27.8	22.6	5.0	0	5	16	34	16	6	0	0	0	0	0	0
Sun 9 Mar 2025	62	27.0	21.9	4.9	0	7	11	27	16	1	0	0	0	0	0	0
Mon 10 Mar 2025	79	26.7	21.7	4.8	0	9	16	34	19	1	0	0	0	0	0	0
Tue 11 Mar 2025	88	27.8	21.8	5.8	2	12	9	45	15	3	2	0	0	0	0	0
5 Day Ave.	84	26.7	21.5	5.0	1	10	15	39	17	1	0	0	0	0	0	0
7 Day Ave.	80	26.9	21.7	5.0	1	9	15	37	17	2	0	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	153	27.1	21.5	5.4	5	17	24	68	36	3	0	0	0	0	0	0
Thu 6 Mar 2025	139	27.3	22.5	4.6	0	12	20	68	35	4	0	0	0	0	0	0
Fri 7 Mar 2025	186	25.9	20.1	5.5	5	37	36	74	31	3	0	0	0	0	0	0
Sat 8 Mar 2025	129	28.4	22.5	5.6	0	15	25	43	36	10	0	0	0	0	0	0
Sun 9 Mar 2025	107	26.9	22.0	4.7	1	9	20	48	28	1	0	0	0	0	0	0
Mon 10 Mar 2025	154	26.8	21.5	5.2	1	22	27	65	36	3	0	0	0	0	0	0
Tue 11 Mar 2025	159	27.9	21.8	5.9	4	22	20	72	31	8	2	0	0	0	0	0
5 Day Ave.	158	27.0	21.5	5.3	3	22	25	69	34	4	0	0	0	0	0	0
7 Day Ave.	147	27.2	21.7	5.3	2	19	25	63	33	5	0	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

05/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	1	1	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	0	1	0	0
06:00	8	6	2	0	0
07:00	22	17	5	0	0
08:00	41	31	8	0	2
09:00	26	25	0	0	1
10:00	24	17	5	0	2
11:00	30	26	1	0	3
12:00	32	29	1	0	2
13:00	34	31	1	0	2
14:00	27	22	3	0	2
15:00	39	31	6	0	2
16:00	36	32	2	0	2
17:00	34	31	2	0	1
18:00	33	32	0	0	1
19:00	31	31	0	0	0
20:00	23	23	0	0	0
21:00	10	10	0	0	0
22:00	2	2	0	0	0
23:00	2	2	0	0	0
Total 12H(7-19)	378	324	34	0	20
16H(6-22)	450	394	36	0	20
18H(6-24)	454	398	36	0	20
24H(0-24)	458	401	37	0	20
AM Peak	08:00	08:00	08:00	00:00	11:00
	41	31	8	0	3
PM Peak	15:00	16:00	15:00	12:00	12:00
	39	32	6	0	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	3	3	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	0	1	0	0
06:00	3	2	1	0	0
07:00	6	4	2	0	0
08:00	28	19	9	0	0
09:00	32	28	4	0	0
10:00	29	24	5	0	0
11:00	37	36	1	0	0
12:00	31	28	3	0	0
13:00	31	26	4	0	1
14:00	27	24	2	0	1
15:00	60	47	13	0	0
16:00	45	41	4	0	0
17:00	49	46	3	0	0
18:00	39	39	0	0	0
19:00	32	32	0	0	0
20:00	21	21	0	0	0
21:00	18	18	0	0	0
22:00	12	12	0	0	0
23:00	3	3	0	0	0
Total 12H(7-19)	414	362	50	0	2
16H(6-22)	488	435	51	0	2
18H(6-24)	503	450	51	0	2
24H(0-24)	509	455	52	0	2
AM Peak	11:00	11:00	08:00	00:00	00:00
	37	36	9	0	0
PM Peak	15:00	15:00	15:00	12:00	13:00
	60	47	13	0	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	3	3	0	0	0
01:00	4	4	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	0	2	0	0
06:00	11	8	3	0	0
07:00	28	21	7	0	0
08:00	69	50	17	0	2
09:00	58	53	4	0	1
10:00	53	41	10	0	2
11:00	67	62	2	0	3
12:00	63	57	4	0	2
13:00	65	57	5	0	3
14:00	54	46	5	0	3
15:00	99	78	19	0	2
16:00	81	73	6	0	2
17:00	83	77	5	0	1
18:00	72	71	0	0	1
19:00	63	63	0	0	0
20:00	44	44	0	0	0
21:00	28	28	0	0	0
22:00	14	14	0	0	0
23:00	5	5	0	0	0
Total 12H(7-19)	792	686	84	0	22
16H(6-22)	938	829	87	0	22
18H(6-24)	957	848	87	0	22
24H(0-24)	967	856	89	0	22
AM Peak	08:00	11:00	08:00	00:00	11:00
	69	62	17	0	3
PM Peak	15:00	15:00	15:00	12:00	13:00
	99	78	19	0	3

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

06/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	1	0	1	0	0
04:00	1	0	1	0	0
05:00	0	0	0	0	0
06:00	9	8	1	0	0
07:00	26	20	5	0	1
08:00	40	31	5	0	4
09:00	23	21	0	0	2
10:00	22	19	2	0	1
11:00	35	30	4	0	1
12:00	21	18	2	0	1
13:00	40	36	2	0	2
14:00	36	32	2	0	2
15:00	32	27	4	0	1
16:00	30	28	1	0	1
17:00	44	40	2	0	2
18:00	31	26	4	0	1
19:00	30	28	2	0	0
20:00	19	19	0	0	0
21:00	19	19	0	0	0
22:00	12	11	1	0	0
23:00	2	2	0	0	0
Total					
12H(7-19)	380	328	33	0	19
16H(6-22)	457	402	36	0	19
18H(6-24)	471	415	37	0	19
24H(0-24)	475	417	39	0	19
AM Peak	08:00	08:00	07:00	00:00	08:00
	40	31	5	0	4
PM Peak	17:00	17:00	15:00	12:00	13:00
	44	40	4	0	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	2	2	0	0	0
02:00	0	0	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	1	1	0	0	0
07:00	12	10	2	0	0
08:00	25	15	10	0	0
09:00	32	26	6	0	0
10:00	19	12	7	0	0
11:00	22	17	5	0	0
12:00	46	42	4	0	0
13:00	28	26	1	0	1
14:00	32	27	4	0	1
15:00	39	31	8	0	0
16:00	56	51	5	0	0
17:00	48	42	6	0	0
18:00	44	39	5	0	0
19:00	36	32	4	0	0
20:00	29	28	1	0	0
21:00	18	18	0	0	0
22:00	21	20	1	0	0
23:00	3	3	0	0	0
Total					
12H(7-19)	403	338	63	0	2
16H(6-22)	487	417	68	0	2
18H(6-24)	511	440	69	0	2
24H(0-24)	518	447	69	0	2
AM Peak	09:00	09:00	08:00	00:00	00:00
	32	26	10	0	0
PM Peak	16:00	16:00	15:00	12:00	13:00
	56	51	8	0	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	6	6	0	0	0
01:00	2	2	0	0	0
02:00	0	0	0	0	0
03:00	2	1	1	0	0
04:00	1	0	1	0	0
05:00	0	0	0	0	0
06:00	10	9	1	0	0
07:00	38	30	7	0	1
08:00	65	46	15	0	4
09:00	55	47	6	0	2
10:00	41	31	9	0	1
11:00	57	47	9	0	1
12:00	67	60	6	0	1
13:00	68	62	3	0	3
14:00	68	59	6	0	3
15:00	71	58	12	0	1
16:00	86	79	6	0	1
17:00	92	82	8	0	2
18:00	75	65	9	0	1
19:00	66	60	6	0	0
20:00	48	47	1	0	0
21:00	37	37	0	0	0
22:00	33	31	2	0	0
23:00	5	5	0	0	0
Total					
12H(7-19)	783	666	96	0	21
16H(6-22)	944	819	104	0	21
18H(6-24)	982	855	106	0	21
24H(0-24)	993	864	108	0	21
AM Peak	08:00	09:00	08:00	00:00	08:00
	65	47	15	0	4
PM Peak	17:00	17:00	15:00	12:00	13:00
	92	82	12	0	3

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

07/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	1	0	1	0	0
05:00	2	1	1	0	0
06:00	11	9	2	0	0
07:00	17	13	3	0	1
08:00	39	34	3	0	2
09:00	25	23	1	0	1
10:00	26	23	2	0	1
11:00	29	26	2	0	1
12:00	33	29	3	0	1
13:00	29	25	3	0	1
14:00	41	37	3	0	1
15:00	52	45	7	0	0
16:00	41	38	2	0	1
17:00	45	43	1	0	1
18:00	40	38	1	0	1
19:00	30	30	0	0	0
20:00	25	23	2	0	0
21:00	13	13	0	0	0
22:00	16	15	1	0	0
23:00	13	13	0	0	0
Total 12H(7-19)	417	374	31	0	12
16H(6-22)	496	449	35	0	12
18H(6-24)	525	477	36	0	12
24H(0-24)	530	480	38	0	12
AM Peak	08:00	08:00	07:00	00:00	08:00
	39	34	3	0	2
PM Peak	15:00	15:00	15:00	12:00	12:00
	52	45	7	0	1

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	1	1	0	0
06:00	3	3	0	0	0
07:00	6	3	3	0	0
08:00	26	16	10	0	0
09:00	29	24	5	0	0
10:00	23	21	2	0	0
11:00	34	30	4	0	0
12:00	33	28	4	0	1
13:00	29	24	5	0	0
14:00	36	27	9	0	0
15:00	57	46	11	0	0
16:00	54	51	3	0	0
17:00	46	45	1	0	0
18:00	39	38	1	0	0
19:00	33	32	1	0	0
20:00	25	24	1	0	0
21:00	18	18	0	0	0
22:00	25	25	0	0	0
23:00	20	20	0	0	0
Total 12H(7-19)	412	353	58	0	1
16H(6-22)	491	430	60	0	1
18H(6-24)	536	475	60	0	1
24H(0-24)	542	480	61	0	1
AM Peak	11:00	11:00	08:00	00:00	00:00
	34	30	10	0	0
PM Peak	15:00	16:00	15:00	12:00	12:00
	57	51	11	0	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	5	5	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	1	0	1	0	0
05:00	4	2	2	0	0
06:00	14	12	2	0	0
07:00	23	16	6	0	1
08:00	65	50	13	0	2
09:00	54	47	6	0	1
10:00	49	44	4	0	1
11:00	63	56	6	0	1
12:00	66	57	7	0	2
13:00	58	49	8	0	1
14:00	77	64	12	0	1
15:00	109	91	18	0	0
16:00	95	89	5	0	1
17:00	91	88	2	0	1
18:00	79	76	2	0	1
19:00	63	62	1	0	0
20:00	50	47	3	0	0
21:00	31	31	0	0	0
22:00	41	40	1	0	0
23:00	33	33	0	0	0
Total 12H(7-19)	829	727	89	0	13
16H(6-22)	987	879	95	0	13
18H(6-24)	1061	952	96	0	13
24H(0-24)	1072	960	99	0	13
AM Peak	08:00	11:00	08:00	00:00	08:00
	65	56	13	0	2
PM Peak	15:00	15:00	15:00	12:00	12:00
	109	91	18	0	2

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

08/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	4	4	0	0	0
02:00	2	2	0	0	0
03:00	3	3	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	5	5	0	0	0
07:00	3	3	0	0	0
08:00	16	13	1	0	2
09:00	27	23	2	0	2
10:00	22	19	1	0	2
11:00	27	25	1	0	1
12:00	33	28	2	1	2
13:00	36	33	1	0	2
14:00	19	16	1	0	2
15:00	33	31	1	0	1
16:00	30	29	1	0	0
17:00	34	32	0	0	2
18:00	39	37	1	0	1
19:00	28	27	1	0	0
20:00	17	14	3	0	0
21:00	11	11	0	0	0
22:00	6	6	0	0	0
23:00	6	5	1	0	0
Total					
12H(7-19)	319	289	12	1	17
16H(6-22)	380	346	16	1	17
18H(6-24)	392	357	17	1	17
24H(0-24)	407	372	17	1	17
AM Peak	09:00	11:00	09:00	00:00	08:00
	27	25	2	0	2
PM Peak	18:00	18:00	20:00	12:00	12:00
	39	37	3	1	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	4	4	0	0	0
02:00	4	3	1	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	3	3	0	0	0
07:00	3	3	0	0	0
08:00	8	7	1	0	0
09:00	10	9	1	0	0
10:00	16	16	0	0	0
11:00	27	24	3	0	0
12:00	38	36	2	0	0
13:00	31	30	1	0	0
14:00	39	37	2	0	0
15:00	38	38	0	0	0
16:00	37	32	5	0	0
17:00	29	29	0	0	0
18:00	33	28	5	0	0
19:00	21	21	0	0	0
20:00	17	17	0	0	0
21:00	21	21	0	0	0
22:00	12	8	4	0	0
23:00	7	7	0	0	0
Total					
12H(7-19)	309	289	20	0	0
16H(6-22)	371	351	20	0	0
18H(6-24)	390	366	24	0	0
24H(0-24)	402	377	25	0	0
AM Peak	11:00	11:00	11:00	00:00	00:00
	27	24	3	0	0
PM Peak	14:00	15:00	16:00	12:00	12:00
	39	38	5	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	8	8	0	0	0
01:00	8	8	0	0	0
02:00	6	5	1	0	0
03:00	3	3	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	8	8	0	0	0
07:00	6	6	0	0	0
08:00	24	20	2	0	2
09:00	37	32	3	0	2
10:00	38	35	1	0	2
11:00	54	49	4	0	1
12:00	71	64	4	1	2
13:00	67	63	2	0	2
14:00	58	53	3	0	2
15:00	71	69	1	0	1
16:00	67	61	6	0	0
17:00	63	61	0	0	2
18:00	72	65	6	0	1
19:00	49	48	1	0	0
20:00	34	31	3	0	0
21:00	32	32	0	0	0
22:00	18	14	4	0	0
23:00	13	12	1	0	0
Total					
12H(7-19)	628	578	32	1	17
16H(6-22)	751	697	36	1	17
18H(6-24)	782	723	41	1	17
24H(0-24)	809	749	42	1	17
AM Peak	11:00	11:00	11:00	00:00	08:00
	54	49	4	0	2
PM Peak	18:00	15:00	16:00	12:00	12:00
	72	69	6	1	2

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

09/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	4	4	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	1	1	0	0	0
05:00	2	2	0	0	0
06:00	2	1	1	0	0
07:00	2	2	0	0	0
08:00	14	13	1	0	0
09:00	10	10	0	0	0
10:00	25	24	1	0	0
11:00	34	32	2	0	0
12:00	42	38	4	0	0
13:00	22	22	0	0	0
14:00	22	20	2	0	0
15:00	23	23	0	0	0
16:00	35	32	3	0	0
17:00	36	36	0	0	0
18:00	28	26	2	0	0
19:00	19	18	1	0	0
20:00	27	27	0	0	0
21:00	24	23	1	0	0
22:00	3	3	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	293	278	15	0	0
16H(6-22)	365	347	18	0	0
18H(6-24)	372	354	18	0	0
24H(0-24)	383	365	18	0	0
AM Peak	11:00	11:00	11:00	00:00	00:00
	34	32	2	0	0
PM Peak	12:00	12:00	12:00	12:00	12:00
	42	38	4	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	8	8	0	0	0
02:00	1	1	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	2	1	1	0	0
07:00	4	4	0	0	0
08:00	8	8	0	0	0
09:00	17	17	0	0	0
10:00	24	22	2	0	0
11:00	30	26	3	1	0
12:00	34	33	1	0	0
13:00	22	22	0	0	0
14:00	32	31	1	0	0
15:00	30	28	2	0	0
16:00	40	36	3	1	0
17:00	34	33	1	0	0
18:00	41	39	2	0	0
19:00	20	18	2	0	0
20:00	26	26	0	0	0
21:00	24	24	0	0	0
22:00	14	14	0	0	0
23:00	8	8	0	0	0
Total					
12H(7-19)	316	299	15	2	0
16H(6-22)	388	368	18	2	0
18H(6-24)	410	390	18	2	0
24H(0-24)	424	404	18	2	0
AM Peak	11:00	11:00	11:00	11:00	00:00
	30	26	3	1	0
PM Peak	18:00	18:00	16:00	16:00	12:00
	41	39	3	1	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	8	8	0	0	0
01:00	12	12	0	0	0
02:00	1	1	0	0	0
03:00	1	1	0	0	0
04:00	1	1	0	0	0
05:00	2	2	0	0	0
06:00	4	2	2	0	0
07:00	6	6	0	0	0
08:00	22	21	1	0	0
09:00	27	27	0	0	0
10:00	49	46	3	0	0
11:00	64	58	5	1	0
12:00	76	71	5	0	0
13:00	44	44	0	0	0
14:00	54	51	3	0	0
15:00	53	51	2	0	0
16:00	75	68	6	1	0
17:00	70	69	1	0	0
18:00	69	65	4	0	0
19:00	39	36	3	0	0
20:00	53	53	0	0	0
21:00	48	47	1	0	0
22:00	17	17	0	0	0
23:00	12	12	0	0	0
Total					
12H(7-19)	609	577	30	2	0
16H(6-22)	753	715	36	2	0
18H(6-24)	782	744	36	2	0
24H(0-24)	807	769	36	2	0
AM Peak	11:00	11:00	11:00	11:00	00:00
	64	58	5	1	0
PM Peak	12:00	12:00	16:00	16:00	12:00
	76	71	6	1	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

10/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	3	3	0	0	0
02:00	1	0	1	0	0
03:00	0	0	0	0	0
04:00	2	0	2	0	0
05:00	2	2	0	0	0
06:00	12	10	2	0	0
07:00	17	13	3	0	1
08:00	32	27	3	0	2
09:00	20	17	1	0	2
10:00	18	16	1	0	1
11:00	30	25	2	0	3
12:00	29	23	4	0	2
13:00	24	21	1	0	2
14:00	29	27	1	0	1
15:00	46	39	6	0	1
16:00	23	21	1	0	1
17:00	35	29	4	0	2
18:00	25	23	1	0	1
19:00	35	33	2	0	0
20:00	22	21	1	0	0
21:00	6	5	0	0	1
22:00	5	5	0	0	0
23:00	3	3	0	0	0
Total 12H(7-19)	328	281	28	0	19
16H(6-22)	403	350	33	0	20
18H(6-24)	411	358	33	0	20
24H(0-24)	420	364	36	0	20
AM Peak	08:00	08:00	07:00	00:00	11:00
	32	27	3	0	3
PM Peak	15:00	15:00	15:00	12:00	12:00
	46	39	6	0	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	2	2	0	0	0
02:00	1	0	1	0	0
03:00	0	0	0	0	0
04:00	1	0	1	0	0
05:00	0	0	0	0	0
06:00	0	0	0	0	0
07:00	10	6	4	0	0
08:00	28	19	9	0	0
09:00	28	26	2	0	0
10:00	18	14	4	0	0
11:00	29	22	5	0	2
12:00	27	21	6	0	0
13:00	26	19	7	0	0
14:00	25	23	1	0	1
15:00	54	44	10	0	0
16:00	38	32	6	0	0
17:00	49	40	9	0	0
18:00	43	35	8	0	0
19:00	28	24	4	0	0
20:00	21	20	1	0	0
21:00	10	10	0	0	0
22:00	10	10	0	0	0
23:00	4	4	0	0	0
Total 12H(7-19)	375	301	71	0	3
16H(6-22)	434	355	76	0	3
18H(6-24)	448	369	76	0	3
24H(0-24)	453	372	78	0	3
AM Peak	11:00	09:00	08:00	00:00	11:00
	29	26	9	0	2
PM Peak	15:00	15:00	15:00	12:00	14:00
	54	44	10	0	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	5	5	0	0	0
02:00	2	0	2	0	0
03:00	0	0	0	0	0
04:00	3	0	3	0	0
05:00	2	2	0	0	0
06:00	12	10	2	0	0
07:00	27	19	7	0	1
08:00	60	46	12	0	2
09:00	48	43	3	0	2
10:00	36	30	5	0	1
11:00	59	47	7	0	5
12:00	56	44	10	0	2
13:00	50	40	8	0	2
14:00	54	50	2	0	2
15:00	100	83	16	0	1
16:00	61	53	7	0	1
17:00	84	69	13	0	2
18:00	68	58	9	0	1
19:00	63	57	6	0	0
20:00	43	41	2	0	0
21:00	16	15	0	0	1
22:00	15	15	0	0	0
23:00	7	7	0	0	0
Total 12H(7-19)	703	582	99	0	22
16H(6-22)	837	705	109	0	23
18H(6-24)	859	727	109	0	23
24H(0-24)	873	736	114	0	23
AM Peak	08:00	11:00	08:00	00:00	11:00
	60	47	12	0	5
PM Peak	15:00	15:00	15:00	12:00	12:00
	100	83	16	0	2

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

11/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	0	0	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	1	0	1	0	0
05:00	3	2	1	0	0
06:00	9	7	2	0	0
07:00	24	17	5	0	2
08:00	35	30	2	0	3
09:00	20	16	2	0	2
10:00	23	19	2	0	2
11:00	29	26	1	0	2
12:00	35	32	2	0	1
13:00	24	20	2	0	2
14:00	39	34	4	0	1
15:00	32	26	4	0	2
16:00	36	34	2	0	0
17:00	31	28	1	0	2
18:00	32	30	1	0	1
19:00	36	36	0	0	0
20:00	25	24	1	0	0
21:00	8	7	1	0	0
22:00	8	7	1	0	0
23:00	5	5	0	0	0
Total					
12H(7-19)	360	312	28	0	20
16H(6-22)	438	386	32	0	20
18H(6-24)	451	398	33	0	20
24H(0-24)	457	402	35	0	20
AM Peak	08:00	08:00	07:00	00:00	08:00
	35	30	5	0	3
PM Peak	14:00	19:00	14:00	12:00	13:00
	39	36	4	0	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	3	3	0	0	0
01:00	1	1	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	2	1	1	0	0
05:00	0	0	0	0	0
06:00	5	5	0	0	0
07:00	14	9	5	0	0
08:00	20	16	4	0	0
09:00	32	24	8	0	0
10:00	35	30	4	0	1
11:00	28	25	2	0	1
12:00	31	27	4	0	0
13:00	26	25	1	0	0
14:00	44	35	9	0	0
15:00	44	36	8	0	0
16:00	57	52	5	0	0
17:00	44	44	0	0	0
18:00	37	36	1	0	0
19:00	40	39	1	0	0
20:00	24	23	1	0	0
21:00	16	15	1	0	0
22:00	9	8	1	0	0
23:00	5	5	0	0	0
Total					
12H(7-19)	412	359	51	0	2
16H(6-22)	497	441	54	0	2
18H(6-24)	511	454	55	0	2
24H(0-24)	518	460	56	0	2
AM Peak	10:00	10:00	09:00	00:00	10:00
	35	30	8	0	1
PM Peak	16:00	16:00	14:00	12:00	12:00
	57	52	9	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	1	1	0	0	0
02:00	2	2	0	0	0
03:00	0	0	0	0	0
04:00	3	1	2	0	0
05:00	3	2	1	0	0
06:00	14	12	2	0	0
07:00	38	26	10	0	2
08:00	55	46	6	0	3
09:00	52	40	10	0	2
10:00	58	49	6	0	3
11:00	57	51	3	0	3
12:00	66	59	6	0	1
13:00	50	45	3	0	2
14:00	83	69	13	0	1
15:00	76	62	12	0	2
16:00	93	86	7	0	0
17:00	75	72	1	0	2
18:00	69	66	2	0	1
19:00	76	75	1	0	0
20:00	49	47	2	0	0
21:00	24	22	2	0	0
22:00	17	15	2	0	0
23:00	10	10	0	0	0
Total					
12H(7-19)	772	671	79	0	22
16H(6-22)	935	827	86	0	22
18H(6-24)	962	852	88	0	22
24H(0-24)	975	862	91	0	22
AM Peak	10:00	11:00	07:00	00:00	08:00
	58	51	10	0	3
PM Peak	16:00	16:00	14:00	12:00	13:00
	93	86	13	0	2

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

05/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
06:00	8	29.6	23.1	6.2	0	1	1	3	2	1	0	0	0	0	0	0
07:00	22	27.7	22.7	4.8	0	2	3	9	8	0	0	0	0	0	0	0
08:00	41	25.8	20.8	4.8	0	5	11	20	3	2	0	0	0	0	0	0
09:00	26	26.6	21.9	4.5	0	2	6	11	7	0	0	0	0	0	0	0
10:00	24	27.2	21.5	5.5	0	3	6	10	3	2	0	0	0	0	0	0
11:00	30	28.1	22.8	5.1	0	2	5	15	5	3	0	0	0	0	0	0
12:00	32	28.9	22.5	6.2	0	6	3	11	9	3	0	0	0	0	0	0
13:00	34	29.1	23.8	5.1	0	2	4	15	9	4	0	0	0	0	0	0
14:00	27	28.6	21.6	6.8	1	6	1	10	7	2	0	0	0	0	0	0
15:00	39	27.9	21.8	6.0	2	5	3	17	11	1	0	0	0	0	0	0
16:00	36	28.5	22.4	5.9	0	5	3	20	6	1	0	1	0	0	0	0
17:00	34	26.6	21.2	5.3	0	6	6	13	9	0	0	0	0	0	0	0
18:00	33	28.8	22.5	6.1	1	4	4	11	11	2	0	0	0	0	0	0
19:00	31	26.2	19.9	6.0	0	10	2	15	2	2	0	0	0	0	0	0
20:00	23	29.8	22.5	7.1	0	5	3	6	5	4	0	0	0	0	0	0
21:00	10	27.0	21.0	5.8	0	2	2	3	3	0	0	0	0	0	0	0
22:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
23:00	2	37.2	22.5	14.1	0	1	0	0	0	1	0	0	0	0	0	0
Total																
2H(10-12)	54	27.7	22.2	5.3	0	5	11	25	8	5	0	0	0	0	0	0
2H(14-16)	66	28.2	21.7	6.2	3	11	4	27	18	3	0	0	0	0	0	0
12H(7-19)	378	27.8	22.1	5.5	4	48	55	162	88	20	0	1	0	0	0	0
24H(0-24)	458	27.8	21.9	5.7	4	67	67	191	100	28	0	1	0	0	0	0
AM Peak	08:00	06:00	06:00	06:00	00:00	08:00	08:00	08:00	07:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	41	29.6	23.1	6.2	0	5	11	20	8	3	0	0	0	0	0	0
PM Peak	15:00	23:00	13:00	23:00	15:00	19:00	17:00	16:00	15:00	13:00	12:00	16:00	12:00	12:00	12:00	12:00
	39	37.2	23.8	14.1	2	10	6	20	11	4	0	1	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
01:00	3	22.7	17.5	5.0	0	1	1	1	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
06:00	3	22.5	22.5	0.0	0	0	0	3	0	0	0	0	0	0	0	0
07:00	6	25.1	20.8	4.1	0	1	0	5	0	0	0	0	0	0	0	0
08:00	28	27.0	22.5	4.3	0	1	6	14	6	1	0	0	0	0	0	0
09:00	32	25.4	20.2	5.1	0	5	12	8	7	0	0	0	0	0	0	0
10:00	29	25.8	20.6	5.0	1	3	7	13	5	0	0	0	0	0	0	0
11:00	37	27.7	21.4	6.0	0	5	12	9	9	1	1	0	0	0	0	0
12:00	31	27.1	21.5	5.4	0	5	6	10	10	0	0	0	0	0	0	0
13:00	31	26.2	20.6	5.4	0	5	9	12	3	2	0	0	0	0	0	0
14:00	27	26.8	21.9	4.7	0	2	7	10	8	0	0	0	0	0	0	0
15:00	60	25.9	21.1	4.7	2	4	13	31	10	0	0	0	0	0	0	0
16:00	45	27.6	22.4	5.1	0	3	10	20	10	1	1	0	0	0	0	0
17:00	49	27.8	22.5	5.1	0	6	5	23	13	2	0	0	0	0	0	0
18:00	39	29.4	22.8	6.4	1	3	9	11	11	3	1	0	0	0	0	0
19:00	32	25.1	19.8	5.1	0	7	8	12	5	0	0	0	0	0	0	0
20:00	21	26.3	21.1	5.0	0	3	4	11	2	1	0	0	0	0	0	0
21:00	18	25.4	20.3	4.9	0	4	2	10	2	0	0	0	0	0	0	0
22:00	12	28.7	24.6	4.0	0	0	1	6	4	1	0	0	0	0	0	0
23:00	3	31.5	22.5	8.7	0	1	0	0	2	0	0	0	0	0	0	0
Total																
2H(10-12)	66	26.9	21.1	5.6	1	8	19	22	14	1	1	0	0	0	0	0
2H(14-16)	87	26.2	21.4	4.6	2	6	20	41	18	0	0	0	0	0	0	0
12H(7-19)	414	27.0	21.6	5.2	4	43	96	166	92	10	3	0	0	0	0	0
24H(0-24)	509	26.9	21.5	5.2	4	59	112	212	107	12	3	0	0	0	0	0
AM Peak	11:00	11:00	00:00	11:00	10:00	09:00	09:00	08:00	11:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00
	37	27.7	22.5	6.0	1	5	12	14	9	1	1	0	0	0	0	0
PM Peak	15:00	23:00	22:00	23:00	15:00	19:00	15:00	15:00	17:00	18:00	16:00	12:00	12:00	12:00	12:00	12:00
	60	31.5	24.6	8.7	2	7	13	31	13	3	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	3	23.8	20.8	2.9	0	0	1	2	0	0	0	0	0	0	0	0
01:00	4	21.7	17.5	4.1	0	1	2	1	0	0	0	0	0	0	0	0
02:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
06:00	11	28.4	23.0	5.2	0	1	1	6	2	1	0	0	0	0	0	0
07:00	28	27.1	22.3	4.6	0	3	3	14	8	0	0	0	0	0	0	0
08:00	69	26.3	21.5	4.7	0	6	17	34	9	3	0	0	0	0	0	0
09:00	58	26.0	20.9	4.9	0	7	18	19	14	0	0	0	0	0	0	0
10:00	53	26.4	21.0	5.2	1	6	13	23	8	2	0	0	0	0	0	0
11:00	67	27.9	22.1	5.6	0	7	17	24	14	4	1	0	0	0	0	0
12:00	63	28.0	22.0	5.8	0	11	9	21	19	3	0	0	0	0	0	0
13:00	65	27.9	22.3	5.5	0	7	13	27	12	6	0	0	0	0	0	0
14:00	54	27.7	21.8	5.8	1	8	8	20	15	2	0	0	0	0	0	0
15:00	99	26.7	21.4	5.2	4	9	16	48	21	1	0	0	0	0	0	0
16:00	81	28.0	22.4	5.4	0	8	13	40	16	2	1	1	0	0	0	0
17:00	83	27.3	22.0	5.2	0	12	11	36	22	2	0	0	0	0	0	0
18:00	72	29.1	22.7	6.2	2	7	13	22	22	5	1	0	0	0	0	0
19:00	63	25.6	19.9	5.5	0	17	10	27	7	2	0	0	0	0	0	0
20:00	44	28.2	21.8	6.2	0	8	7	17	7	5	0	0	0	0	0	0
21:00	28	25.9	20.5	5.2	0	6	4	13	5	0	0	0	0	0	0	0
22:00	14	28.1	24.3	3.7	0	0	1	8	4	1	0	0	0	0	0	0
23:00	5	32.2	22.5	9.4	0	2	0	0	2	1	0	0	0	0	0	0
Total																
2H(10-12)	120	27.2	21.6	5.5	1	13	30	47	22	6	1	0	0	0	0	0
2H(14-16)	153	27.1	21.5	5.4	5	17	24	68	36	3	0	0	0	0	0	0
12H(7-19)	792	27.4	21.8	5.4	8	91	151	328	180	30	3	1	0	0	0	0
24H(0-24)	967	27.3	21.7	5.4	8	126	179	403	207	40	3	1	0	0	0	0
AM Peak	08:00	06:00	06:00	11:00	10:00	09:00	09:00	08:00	09:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00
	69	28.4	23.0	5.6	1	7	18	34	14	4	1	0	0	0	0	0
PM Peak	15:00	23:00	22:00	23:00	15:00	19:00	15:00	15:00	17:00	13:00	16:00	16:00	12:00	12:00	12:00	12:00
	99	32.2	24.3	9.4	4	17	16	48	22	6	1	1	0	0	0	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

06/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	36.0	25.0	10.6	0	0	1	0	0	1	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	9	29.3	24.2	5.0	0	1	0	3	5	0	0	0	0	0	0	0
07:00	26	28.5	23.3	5.0	0	2	3	12	7	2	0	0	0	0	0	0
08:00	40	26.9	22.1	4.6	0	4	5	22	8	1	0	0	0	0	0	0
09:00	23	28.0	22.3	5.5	0	4	1	11	6	1	0	0	0	0	0	0
10:00	22	26.7	21.4	5.1	0	3	5	8	6	0	0	0	0	0	0	0
11:00	35	26.0	20.2	5.5	2	3	12	10	8	0	0	0	0	0	0	0
12:00	21	28.3	23.7	4.4	0	1	2	10	7	1	0	0	0	0	0	0
13:00	40	27.1	21.6	5.3	0	6	6	19	7	2	0	0	0	0	0	0
14:00	36	28.4	22.8	5.5	0	5	2	18	8	3	0	0	0	0	0	0
15:00	32	26.7	22.5	4.0	0	1	7	15	9	0	0	0	0	0	0	0
16:00	30	27.1	22.2	4.7	0	3	5	13	9	0	0	0	0	0	0	0
17:00	44	26.5	22.5	3.9	0	3	4	27	10	0	0	0	0	0	0	0
18:00	31	26.5	20.6	5.7	0	6	9	8	7	1	0	0	0	0	0	0
19:00	30	27.6	22.5	4.9	1	2	2	16	9	0	0	0	0	0	0	0
20:00	19	28.9	22.0	6.6	0	4	3	5	5	2	0	0	0	0	0	0
21:00	19	30.5	23.1	7.2	1	3	1	4	8	2	0	0	0	0	0	0
22:00	12	31.7	24.6	6.9	0	2	0	4	3	3	0	0	0	0	0	0
23:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
Total																
2H(10-12)	57	26.2	20.7	5.4	2	6	17	18	14	0	0	0	0	0	0	0
2H(14-16)	68	27.6	22.6	4.8	0	6	9	33	17	3	0	0	0	0	0	0
12H(7-19)	380	27.2	22.0	5.0	2	41	61	173	92	11	0	0	0	0	0	0
24H(0-24)	475	27.6	22.2	5.2	4	53	69	207	123	19	0	0	0	0	0	0
AM Peak	08:00	00:00	00:00	00:00	11:00	08:00	11:00	08:00	08:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	40	**36.0**	**25.0**	**10.6**	**2**	**4**	**12**	**22**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	17:00	22:00	22:00	21:00	19:00	13:00	18:00	17:00	17:00	14:00	12:00	12:00	12:00	12:00	12:00	12:00
	44	**31.7**	**24.6**	**7.2**	**1**	**6**	**9**	**27**	**10**	**3**	**0**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	31.3	28.8	2.5	0	0	0	0	3	1	0	0	0	0	0	0
01:00	2	47.2	32.5	14.1	0	0	0	1	0	0	0	1	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
07:00	12	24.7	22.5	2.1	0	0	1	10	1	0	0	0	0	0	0	0
08:00	25	25.7	21.1	4.5	0	2	8	10	5	0	0	0	0	0	0	0
09:00	32	25.9	21.0	4.8	1	3	6	17	5	0	0	0	0	0	0	0
10:00	19	26.0	21.7	4.2	0	1	5	9	4	0	0	0	0	0	0	0
11:00	22	25.4	20.7	4.5	0	2	8	8	4	0	0	0	0	0	0	0
12:00	46	25.4	20.4	4.8	0	6	15	18	6	1	0	0	0	0	0	0
13:00	28	26.7	20.9	5.6	1	4	5	11	7	0	0	0	0	0	0	0
14:00	32	26.7	22.2	4.4	0	2	7	14	9	0	0	0	0	0	0	0
15:00	39	27.2	22.4	4.7	0	4	4	21	9	1	0	0	0	0	0	0
16:00	56	26.4	21.9	4.4	0	5	9	31	10	1	0	0	0	0	0	0
17:00	48	28.3	23.3	4.8	0	4	4	22	16	2	0	0	0	0	0	0
18:00	44	28.6	22.5	5.9	0	3	10	20	9	1	0	0	1	0	0	0
19:00	36	25.7	19.6	5.8	3	5	8	14	6	0	0	0	0	0	0	0
20:00	29	28.5	23.2	5.1	0	2	4	14	6	3	0	0	0	0	0	0
21:00	18	27.5	21.9	5.4	0	1	5	9	2	0	1	0	0	0	0	0
22:00	21	31.5	23.0	8.2	0	4	3	8	2	2	1	1	0	0	0	0
23:00	3	33.7	25.8	7.6	0	0	1	0	1	1	0	0	0	0	0	0
Total																
2H(10-12)	41	25.6	21.2	4.3	0	3	13	17	8	0	0	0	0	0	0	0
2H(14-16)	71	27.0	22.3	4.5	0	6	11	35	18	1	0	0	0	0	0	0
12H(7-19)	403	26.7	21.8	4.8	2	36	82	191	85	6	0	0	1	0	0	0
24H(0-24)	518	27.3	21.9	5.2	5	48	103	238	106	13	2	2	1	0	0	0
AM Peak	09:00	01:00	01:00	01:00	09:00	09:00	08:00	09:00	08:00	00:00	00:00	01:00	00:00	00:00	00:00	00:00
	32	**47.2**	**32.5**	**14.1**	**1**	**3**	**8**	**17**	**5**	**1**	**0**	**1**	**0**	**0**	**0**	**0**
PM Peak	16:00	23:00	23:00	22:00	19:00	12:00	12:00	16:00	17:00	20:00	21:00	22:00	18:00	12:00	12:00	12:00
	56	**33.7**	**25.8**	**8.2**	**3**	**6**	**15**	**31**	**16**	**3**	**1**	**1**	**1**	**0**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	6	33.2	27.5	5.5	0	0	1	0	3	2	0	0	0	0	0	0
01:00	2	47.2	32.5	14.1	0	0	0	1	0	0	0	1	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	10	29.5	24.5	4.8	0	1	0	3	6	0	0	0	0	0	0	0
07:00	38	27.5	23.0	4.3	0	2	4	22	8	2	0	0	0	0	0	0
08:00	65	26.4	21.7	4.5	0	6	13	32	13	1	0	0	0	0	0	0
09:00	55	26.8	21.5	5.1	1	7	7	28	11	1	0	0	0	0	0	0
10:00	41	26.3	21.5	4.6	0	4	10	17	10	0	0	0	0	0	0	0
11:00	57	25.7	20.4	5.1	2	5	20	18	12	0	0	0	0	0	0	0
12:00	67	26.5	21.5	4.9	0	7	17	28	13	2	0	0	0	0	0	0
13:00	68	26.9	21.3	5.4	1	10	11	30	14	2	0	0	0	0	0	0
14:00	68	27.6	22.5	5.0	0	7	9	32	17	3	0	0	0	0	0	0
15:00	71	26.9	22.4	4.4	0	5	11	36	18	1	0	0	0	0	0	0
16:00	86	26.6	22.0	4.5	0	8	14	44	19	1	0	0	0	0	0	0
17:00	92	27.5	22.9	4.4	0	7	8	49	26	2	0	0	0	0	0	0
18:00	75	27.8	21.7	5.9	0	9	19	28	16	2	0	0	1	0	0	0
19:00	66	26.7	20.9	5.6	4	7	10	30	15	0	0	0	0	0	0	0
20:00	48	28.7	22.7	5.7	0	6	7	19	11	5	0	0	0	0	0	0
21:00	37	29.1	22.5	6.3	1	4	6	13	10	2	1	0	0	0	0	0
22:00	33	31.5	23.6	7.7	0	6	3	12	5	5	1	1	0	0	0	0
23:00	5	31.5	24.5	6.7	0	0	2	0	2	1	0	0	0	0	0	0
Total																
2H(10-12)	98	26.0	20.9	4.9	2	9	30	35	22	0	0	0	0	0	0	0
2H(14-16)	139	27.3	22.5	4.6	0	12	20	68	35	4	0	0	0	0	0	0
12H(7-19)	783	27.0	21.9	4.9	4	77	143	364	177	17	0	0	1	0	0	0
24H(0-24)	993	27.5	22.1	5.2	9	101	172	445	229	32	2	2	1	0	0	0
AM Peak	08:00	01:00	01:00	01:00	11:00	09:00	11:00	08:00	08:00	00:00	00:00	01:00	00:00	00:00	00:00	00:00
	65	**47.2**	**32.5**	**14.1**	**2**	**7**	**20**	**32**	**13**	**2**	**0**	**1**	**0**	**0**	**0**	**0**
PM Peak	17:00	22:00	23:00	22:00	19:00	13:00	18:00	17:00	17:00	20:00	21:00	22:00	18:00	12:00	12:00	12:00
	92	**31.5**	**24.5**	**7.7**	**4**	**10**	**19**	**49**	**26**	**5**	**1**	**1**	**1**	**0**	**0**	**0**

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

07/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
06:00	11	29.1	24.3	4.6	0	0	2	4	4	1	0	0	0	0	0	0
07:00	17	29.2	22.8	6.2	1	0	4	6	4	2	0	0	0	0	0	0
08:00	39	26.6	21.0	5.4	0	5	14	9	10	1	0	0	0	0	0	0
09:00	25	28.0	21.5	6.2	1	5	1	9	9	0	0	0	0	0	0	0
10:00	26	25.9	21.5	4.2	0	1	9	10	6	0	0	0	0	0	0	0
11:00	29	27.3	20.8	6.3	1	6	3	13	4	2	0	0	0	0	0	0
12:00	33	28.3	22.1	6.0	1	4	4	15	6	3	0	0	0	0	0	0
13:00	29	26.3	21.5	4.7	0	4	4	15	6	0	0	0	0	0	0	0
14:00	41	26.0	20.1	5.7	1	9	8	14	9	0	0	0	0	0	0	0
15:00	52	26.3	20.0	6.1	2	12	8	20	8	2	0	0	0	0	0	0
16:00	41	28.7	23.1	5.4	0	4	6	15	13	3	0	0	0	0	0	0
17:00	45	26.9	21.4	5.3	1	4	12	16	11	1	0	0	0	0	0	0
18:00	40	29.2	23.1	5.9	0	4	5	19	8	2	2	0	0	0	0	0
19:00	30	27.1	20.7	6.2	1	7	3	10	9	0	0	0	0	0	0	0
20:00	25	30.6	24.1	6.2	0	1	6	7	8	1	2	0	0	0	0	0
21:00	13	24.6	21.7	2.8	0	0	3	9	1	0	0	0	0	0	0	0
22:00	16	29.4	22.2	6.9	0	4	0	7	4	0	1	0	0	0	0	0
23:00	13	31.4	25.2	6.0	0	1	0	6	4	1	1	0	0	0	0	0
Total																
2H(10-12)	55	26.7	21.1	5.4	1	7	12	23	10	2	0	0	0	0	0	0
2H(14-16)	93	26.1	20.0	5.9	3	21	16	34	17	2	0	0	0	0	0	0
12H(7-19)	417	27.4	21.5	5.7	8	58	78	161	94	16	2	0	0	0	0	0
24H(0-24)	530	27.7	21.8	5.7	9	71	93	206	126	19	6	0	0	0	0	0
AM Peak	08:00	07:00	00:00	11:00	07:00	11:00	08:00	11:00	08:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	39	29.2	27.5	6.3	1	6	14	13	10	2	0	0	0	0	0	0
PM Peak	15:00	23:00	23:00	22:00	15:00	15:00	17:00	15:00	16:00	12:00	18:00	12:00	12:00	12:00	12:00	12:00
	52	31.4	25.2	6.9	2	12	12	20	13	3	2	0	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	26.2	21.3	4.8	0	0	2	1	1	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	24.8	17.5	7.1	0	1	0	1	0	0	0	0	0	0	0	0
06:00	3	27.7	22.5	5.0	0	0	1	1	1	0	0	0	0	0	0	0
07:00	6	25.4	23.3	2.0	0	0	0	5	1	0	0	0	0	0	0	0
08:00	26	26.9	21.0	5.7	2	1	7	9	7	0	0	0	0	0	0	0
09:00	29	26.3	21.1	4.9	1	2	6	16	3	1	0	0	0	0	0	0
10:00	23	28.5	22.1	6.2	0	4	4	7	6	2	0	0	0	0	0	0
11:00	34	24.9	19.3	5.5	1	7	11	9	6	0	0	0	0	0	0	0
12:00	33	26.5	21.9	4.5	0	2	8	16	6	1	0	0	0	0	0	0
13:00	29	27.9	22.2	5.5	0	3	7	10	7	2	0	0	0	0	0	0
14:00	36	25.5	19.6	5.7	2	6	9	14	4	1	0	0	0	0	0	0
15:00	57	25.7	20.7	4.9	0	10	11	26	10	0	0	0	0	0	0	0
16:00	54	27.9	23.1	4.6	0	3	7	27	14	3	0	0	0	0	0	0
17:00	46	25.5	20.3	5.0	1	7	10	21	7	0	0	0	0	0	0	0
18:00	39	26.6	21.2	5.2	0	6	9	13	11	0	0	0	0	0	0	0
19:00	33	24.8	19.9	4.7	0	5	11	14	2	1	0	0	0	0	0	0
20:00	25	27.9	23.1	4.6	0	1	2	18	2	1	1	0	0	0	0	0
21:00	18	23.9	20.3	3.5	0	2	4	12	0	0	0	0	0	0	0	0
22:00	25	27.9	22.5	5.2	0	2	5	11	5	2	0	0	0	0	0	0
23:00	20	27.9	22.8	5.0	0	2	3	7	8	0	0	0	0	0	0	0
Total																
2H(10-12)	57	26.5	20.4	5.9	1	11	15	16	12	2	0	0	0	0	0	0
2H(14-16)	93	25.7	20.3	5.2	2	16	20	40	14	1	0	0	0	0	0	0
12H(7-19)	412	26.6	21.2	5.2	7	51	89	173	82	10	0	0	0	0	0	0
24H(0-24)	542	26.6	21.3	5.1	7	64	117	238	101	14	1	0	0	0	0	0
AM Peak	11:00	10:00	07:00	05:00	08:00	11:00	11:00	09:00	08:00	10:00	00:00	00:00	00:00	00:00	00:00	00:00
	34	28.5	23.3	7.1	2	7	11	16	7	2	0	0	0	0	0	0
PM Peak	15:00	23:00	16:00	14:00	14:00	15:00	15:00	16:00	16:00	16:00	20:00	12:00	12:00	12:00	12:00	12:00
	57	27.9	23.1	5.7	2	10	11	27	14	3	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	5	27.7	22.5	5.0	0	0	2	1	2	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	4	27.8	21.3	6.3	0	1	0	2	1	0	0	0	0	0	0	0
06:00	14	28.7	23.9	4.6	0	0	3	5	5	1	0	0	0	0	0	0
07:00	23	28.5	23.0	5.4	1	0	4	11	5	2	0	0	0	0	0	0
08:00	65	26.7	21.0	5.5	2	6	21	18	17	1	0	0	0	0	0	0
09:00	54	27.0	21.3	5.5	2	7	7	25	12	1	0	0	0	0	0	0
10:00	49	27.2	21.8	5.2	0	5	13	17	12	2	0	0	0	0	0	0
11:00	63	26.0	20.0	5.8	2	13	14	22	10	2	0	0	0	0	0	0
12:00	66	27.4	22.0	5.3	1	6	12	31	12	4	0	0	0	0	0	0
13:00	58	27.1	21.8	5.1	0	7	11	25	13	2	0	0	0	0	0	0
14:00	77	25.7	19.9	5.7	3	15	17	28	13	1	0	0	0	0	0	0
15:00	109	26.0	20.4	5.5	2	22	19	46	18	2	0	0	0	0	0	0
16:00	95	28.2	23.1	4.9	0	7	13	42	27	6	0	0	0	0	0	0
17:00	91	26.2	20.9	5.1	2	11	22	37	18	1	0	0	0	0	0	0
18:00	79	28.0	22.2	5.6	0	10	14	32	19	2	2	0	0	0	0	0
19:00	63	25.9	20.3	5.4	1	12	14	24	11	1	0	0	0	0	0	0
20:00	50	29.3	23.6	5.5	0	2	8	25	10	2	3	0	0	0	0	0
21:00	31	24.3	20.9	3.3	0	2	7	21	1	0	0	0	0	0	0	0
22:00	41	28.5	22.4	5.9	0	6	5	18	9	2	1	0	0	0	0	0
23:00	33	29.4	23.7	5.5	0	3	3	13	12	1	1	0	0	0	0	0
Total																
2H(10-12)	112	26.6	20.8	5.6	2	18	27	39	22	4	0	0	0	0	0	0
2H(14-16)	186	25.9	20.1	5.5	5	37	36	74	31	3	0	0	0	0	0	0
12H(7-19)	829	27.0	21.3	5.4	15	109	167	334	176	26	2	0	0	0	0	0
24H(0-24)	1072	27.1	21.5	5.4	16	135	210	444	227	33	7	0	0	0	0	0
AM Peak	08:00	06:00	06:00	05:00	08:00	11:00	08:00	09:00	08:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	65	28.7	23.9	6.3	2	13	21	25	17	2	0	0	0	0	0	0
PM Peak	15:00	23:00	23:00	22:00	14:00	15:00	17:00	15:00	16:00	16:00	20:00	12:00	12:00	12:00	12:00	12:00
	109	29.4	23.7	5.9	3	22	22	46	27	6	3	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

08/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	28.7	23.8	4.8	0	0	1	1	2	0	0	0	0	0	0	0
01:00	4	31.5	23.8	7.5	0	1	0	0	3	0	0	0	0	0	0	0
02:00	2	31.0	20.0	10.6	0	1	0	0	1	0	0	0	0	0	0	0
03:00	3	27.7	22.5	5.0	0	0	1	1	1	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
06:00	5	29.1	24.5	4.5	0	0	1	1	3	0	0	0	0	0	0	0
07:00	3	32.2	29.2	2.9	0	0	0	0	2	1	0	0	0	0	0	0
08:00	16	27.3	23.1	4.0	0	1	1	9	5	0	0	0	0	0	0	0
09:00	27	28.4	23.2	4.9	0	3	2	10	12	0	0	0	0	0	0	0
10:00	22	27.3	21.4	5.7	1	2	4	10	4	1	0	0	0	0	0	0
11:00	27	29.3	23.2	5.8	0	4	2	9	10	2	0	0	0	0	0	0
12:00	33	26.8	21.3	5.3	1	4	5	15	8	0	0	0	0	0	0	0
13:00	36	28.7	22.8	5.7	0	4	6	14	8	4	0	0	0	0	0	0
14:00	19	27.6	20.9	6.5	0	5	4	2	8	0	0	0	0	0	0	0
15:00	33	29.9	23.3	6.4	0	5	5	7	12	4	0	0	0	0	0	0
16:00	30	30.2	25.2	4.9	0	1	3	9	13	4	0	0	0	0	0	0
17:00	34	27.3	23.1	4.0	0	2	3	18	11	0	0	0	0	0	0	0
18:00	39	27.6	21.2	6.1	0	9	5	15	7	3	0	0	0	0	0	0
19:00	28	25.0	19.7	5.1	1	4	9	10	4	0	0	0	0	0	0	0
20:00	17	26.3	20.4	5.6	0	4	3	6	4	0	0	0	0	0	0	0
21:00	11	31.9	24.8	6.8	0	1	1	4	3	1	1	0	0	0	0	0
22:00	6	25.4	23.3	2.0	0	0	0	5	1	0	0	0	0	0	0	0
23:00	6	27.1	20.8	6.1	0	1	2	1	2	0	0	0	0	0	0	0
Total																
2H(10-12)	49	28.4	22.4	5.8	1	6	6	19	14	3	0	0	0	0	0	0
2H(14-16)	52	29.1	22.4	6.5	0	10	9	9	20	4	0	0	0	0	0	0
12H(7-19)	319	28.4	22.7	5.6	2	40	40	118	100	19	0	0	0	0	0	0
24H(0-24)	407	28.2	22.5	5.6	3	52	58	149	124	20	1	0	0	0	0	0
AM Peak	09:00	07:00	07:00	02:00	10:00	11:00	10:00	09:00	09:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	27	**32.2**	**29.2**	**10.6**	**1**	**4**	**4**	**10**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	18:00	21:00	16:00	21:00	12:00	18:00	19:00	17:00	16:00	13:00	21:00	12:00	12:00	12:00	12:00	12:00
	39	**31.9**	**25.2**	**6.8**	**1**	**9**	**9**	**18**	**13**	**4**	**1**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	26.7	22.5	4.1	0	0	1	2	1	0	0	0	0	0	0	0
01:00	4	29.8	22.5	7.1	0	1	0	1	2	0	0	0	0	0	0	0
02:00	4	24.8	17.5	7.1	0	2	1	0	1	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	3	22.2	19.2	2.9	0	0	2	1	0	0	0	0	0	0	0	0
07:00	3	32.7	21.0	11.3	1	0	0	0	2	0	0	0	0	0	0	0
08:00	8	27.7	21.9	5.6	0	1	2	2	3	0	0	0	0	0	0	0
09:00	10	25.6	21.5	3.9	0	0	4	4	2	0	0	0	0	0	0	0
10:00	16	28.1	21.6	6.2	2	0	2	7	5	0	0	0	0	0	0	0
11:00	27	26.9	22.1	4.6	0	1	8	11	6	1	0	0	0	0	0	0
12:00	38	27.0	21.8	5.0	0	2	13	13	8	2	0	0	0	0	0	0
13:00	31	27.9	23.1	4.6	0	2	2	19	7	0	1	0	0	0	0	0
14:00	39	25.7	21.0	4.6	0	4	11	18	5	1	0	0	0	0	0	0
15:00	38	29.4	24.3	4.9	0	1	5	16	11	5	0	0	0	0	0	0
16:00	37	30.6	24.5	5.8	0	2	5	13	12	3	2	0	0	0	0	0
17:00	29	26.7	22.2	4.4	0	2	6	13	8	0	0	0	0	0	0	0
18:00	33	26.9	21.9	4.8	0	2	9	15	5	2	0	0	0	0	0	0
19:00	21	26.6	22.0	4.4	0	1	6	8	6	0	0	0	0	0	0	0
20:00	17	26.5	20.1	6.2	0	3	6	6	1	0	1	0	0	0	0	0
21:00	21	26.8	21.8	4.8	0	2	4	11	3	1	0	0	0	0	0	0
22:00	12	26.9	22.5	4.3	0	0	4	4	4	0	0	0	0	0	0	0
23:00	7	22.5	22.5	0.0	0	0	0	7	0	0	0	0	0	0	0	0
Total																
2H(10-12)	43	27.3	21.9	5.2	2	1	10	18	11	1	0	0	0	0	0	0
2H(14-16)	77	27.8	22.6	5.0	0	5	16	34	16	6	0	0	0	0	0	0
12H(7-19)	309	27.8	22.5	5.1	3	17	67	131	74	14	3	0	0	0	0	0
24H(0-24)	402	27.5	22.3	5.0	3	26	91	171	92	15	4	0	0	0	0	0
AM Peak	11:00	07:00	00:00	07:00	10:00	02:00	11:00	11:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	27	**32.7**	**22.5**	**11.3**	**2**	**2**	**8**	**11**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	14:00	16:00	16:00	20:00	12:00	14:00	12:00	13:00	16:00	15:00	16:00	12:00	12:00	12:00	12:00	12:00
	39	**30.6**	**24.5**	**6.2**	**0**	**4**	**13**	**19**	**12**	**5**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	8	27.4	23.1	4.2	0	0	2	3	3	0	0	0	0	0	0	0
01:00	8	30.2	23.1	6.8	0	2	0	1	5	0	0	0	0	0	0	0
02:00	6	26.0	18.3	7.4	0	3	1	0	2	0	0	0	0	0	0	0
03:00	3	27.7	22.5	5.0	0	0	1	1	1	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
06:00	8	27.3	22.5	4.6	0	0	3	2	3	0	0	0	0	0	0	0
07:00	6	34.0	25.1	8.6	1	0	0	0	4	1	0	0	0	0	0	0
08:00	24	27.4	22.7	4.5	0	2	3	11	8	0	0	0	0	0	0	0
09:00	37	27.6	22.8	4.7	0	3	6	14	14	0	0	0	0	0	0	0
10:00	38	27.6	21.5	5.9	3	2	6	17	9	1	0	0	0	0	0	0
11:00	54	28.1	22.7	5.2	0	5	10	20	16	3	0	0	0	0	0	0
12:00	71	26.8	21.6	5.1	1	6	18	28	16	2	0	0	0	0	0	0
13:00	67	28.3	22.9	5.2	0	6	8	33	15	4	1	0	0	0	0	0
14:00	58	26.4	20.9	5.2	0	9	15	20	13	1	0	0	0	0	0	0
15:00	71	29.6	23.8	5.6	0	6	10	23	23	9	0	0	0	0	0	0
16:00	67	30.4	24.8	5.4	0	3	8	22	25	7	2	0	0	0	0	0
17:00	63	27.0	22.7	4.2	0	4	9	31	19	0	0	0	0	0	0	0
18:00	72	27.3	21.5	5.5	0	11	14	30	12	5	0	0	0	0	0	0
19:00	49	25.8	20.7	4.9	1	5	15	18	10	0	0	0	0	0	0	0
20:00	34	26.3	20.3	5.8	0	7	9	12	5	0	1	0	0	0	0	0
21:00	32	28.7	22.8	5.7	0	3	5	15	6	2	1	0	0	0	0	0
22:00	18	26.5	22.8	3.6	0	0	4	9	5	0	0	0	0	0	0	0
23:00	13	25.9	21.7	4.0	0	1	2	8	2	0	0	0	0	0	0	0
Total																
2H(10-12)	92	27.9	22.2	5.5	3	7	16	37	25	4	0	0	0	0	0	0
2H(14-16)	129	28.4	22.5	5.6	0	15	25	43	36	10	0	0	0	0	0	0
12H(7-19)	628	28.1	22.6	5.3	5	57	107	249	174	33	3	0	0	0	0	0
24H(0-24)	809	27.9	22.4	5.3	6	78	149	320	216	35	5	0	0	0	0	0
AM Peak	11:00	07:00	07:00	07:00	10:00	11:00	11:00	11:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	54	**34.0**	**25.1**	**8.6**	**3**	**5**	**10**	**20**	**16**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	18:00	16:00	16:00	20:00	12:00	18:00	12:00	13:00	16:00	15:00	16:00	12:00	12:00	12:00	12:00	12:00
	72	**30.4**	**24.8**	**5.8**	**1**	**11**	**18**	**33**	**25**	**9**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

09/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	23.7	18.8	4.8	0	1	1	2	0	0	0	0	0	0	0	0
01:00	4	27.5	27.5	0.0	0	0	0	0	4	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	2	31.0	20.0	10.6	0	1	0	0	1	0	0	0	0	0	0	0
06:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
07:00	2	31.0	20.0	10.6	0	1	0	0	1	0	0	0	0	0	0	0
08:00	14	28.4	22.1	6.0	0	1	5	4	2	2	0	0	0	0	0	0
09:00	10	29.1	22.0	6.9	0	2	2	2	3	1	0	0	0	0	0	0
10:00	25	29.7	24.7	4.8	0	2	0	10	11	2	0	0	0	0	0	0
11:00	34	27.9	23.8	4.0	0	0	5	17	10	2	0	0	0	0	0	0
12:00	42	25.8	20.6	5.1	0	6	14	12	10	0	0	0	0	0	0	0
13:00	22	24.8	19.5	5.0	0	5	6	8	3	0	0	0	0	0	0	0
14:00	22	27.1	22.0	4.9	0	2	5	8	7	0	0	0	0	0	0	0
15:00	23	26.7	22.1	4.4	1	0	4	13	5	0	0	0	0	0	0	0
16:00	35	28.1	21.6	6.2	0	8	4	11	10	2	0	0	0	0	0	0
17:00	36	28.0	23.2	4.7	0	1	7	17	8	3	0	0	0	0	0	0
18:00	28	28.4	22.1	6.1	0	6	1	12	7	2	0	0	0	0	0	0
19:00	19	28.0	21.7	6.1	0	4	1	10	2	2	0	0	0	0	0	0
20:00	27	29.3	21.4	7.6	2	6	1	8	7	3	0	0	0	0	0	0
21:00	24	33.1	26.0	6.8	0	2	3	3	10	4	2	0	0	0	0	0
22:00	3	28.8	25.8	2.9	0	0	0	1	2	0	0	0	0	0	0	0
23:00	4	26.7	22.5	4.1	0	0	1	2	1	0	0	0	0	0	0	0
Total																
2H(10-12)	59	28.7	24.2	4.3	0	2	5	27	21	4	0	0	0	0	0	0
2H(14-16)	45	26.8	22.1	4.6	1	2	9	21	12	0	0	0	0	0	0	0
12H(7-19)	293	27.7	22.2	5.3	1	34	53	114	77	14	0	0	0	0	0	0
24H(0-24)	383	28.3	22.4	5.7	3	48	60	143	104	23	2	0	0	0	0	0
AM Peak	11:00	05:00	01:00	05:00	00:00	09:00	08:00	11:00	10:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	34	**31.0**	**27.5**	**10.6**	**0**	**2**	**5**	**17**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	12:00	21:00	21:00	20:00	20:00	16:00	12:00	17:00	12:00	21:00	21:00	12:00	12:00	12:00	12:00	12:00
	42	**33.1**	**26.0**	**7.6**	**2**	**8**	**14**	**17**	**10**	**4**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	29.8	22.5	7.1	0	0	2	1	0	1	0	0	0	0	0	0
01:00	8	27.4	23.8	3.5	0	0	1	4	3	0	0	0	0	0	0	0
02:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
03:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
07:00	4	27.8	21.3	6.3	0	1	0	2	1	0	0	0	0	0	0	0
08:00	8	24.8	20.0	4.6	0	1	3	3	1	0	0	0	0	0	0	0
09:00	17	25.0	19.3	5.6	0	5	4	5	3	0	0	0	0	0	0	0
10:00	24	28.0	22.5	5.3	0	2	4	12	5	0	1	0	0	0	0	0
11:00	30	28.5	23.7	4.7	0	0	7	11	11	0	1	0	0	0	0	0
12:00	34	28.0	22.5	5.3	1	0	10	13	7	3	0	0	0	0	0	0
13:00	22	28.2	23.0	5.1	0	0	7	9	3	3	0	0	0	0	0	0
14:00	32	27.6	22.5	4.9	0	3	5	14	9	1	0	0	0	0	0	0
15:00	30	26.4	21.3	4.9	0	4	6	13	7	0	0	0	0	0	0	0
16:00	40	26.0	21.4	4.4	1	1	12	18	8	0	0	0	0	0	0	0
17:00	34	25.5	21.2	4.1	0	2	11	15	6	0	0	0	0	0	0	0
18:00	41	25.3	20.9	4.2	0	4	11	20	6	0	0	0	0	0	0	0
19:00	20	27.7	23.0	4.6	0	0	4	12	3	0	1	0	0	0	0	0
20:00	26	27.6	21.3	6.1	0	6	3	9	7	1	0	0	0	0	0	0
21:00	24	29.0	23.3	5.5	0	1	7	5	9	2	0	0	0	0	0	0
22:00	14	31.4	23.9	7.2	0	2	2	3	5	1	1	0	0	0	0	0
23:00	8	22.8	20.0	2.7	0	0	4	4	0	0	0	0	0	0	0	0
Total																
2H(10-12)	54	28.3	23.1	5.0	0	2	11	23	16	0	2	0	0	0	0	0
2H(14-16)	62	27.0	21.9	4.9	0	7	11	27	16	1	0	0	0	0	0	0
12H(7-19)	316	26.8	21.8	4.8	2	23	80	135	67	7	2	0	0	0	0	0
24H(0-24)	424	27.1	22.0	5.0	2	32	106	174	94	12	4	0	0	0	0	0
AM Peak	11:00	00:00	01:00	00:00	00:00	09:00	11:00	10:00	11:00	00:00	10:00	00:00	00:00	00:00	00:00	00:00
	30	**29.8**	**23.8**	**7.1**	**0**	**5**	**7**	**12**	**11**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
PM Peak	18:00	22:00	22:00	22:00	12:00	20:00	16:00	18:00	14:00	12:00	19:00	12:00	12:00	12:00	12:00	12:00
	41	**31.4**	**23.9**	**7.2**	**1**	**6**	**12**	**20**	**9**	**3**	**1**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	8	26.8	20.6	5.9	0	1	3	3	0	1	0	0	0	0	0	0
01:00	12	28.5	25.0	3.4	0	0	1	4	7	0	0	0	0	0	0	0
02:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
03:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	2	31.0	20.0	10.6	0	1	0	0	1	0	0	0	0	0	0	0
06:00	4	23.8	21.3	2.5	0	0	1	3	0	0	0	0	0	0	0	0
07:00	6	27.9	20.8	6.8	0	2	0	2	2	0	0	0	0	0	0	0
08:00	22	27.1	21.4	5.5	0	2	8	7	3	2	0	0	0	0	0	0
09:00	27	26.6	20.3	6.1	0	7	6	7	6	1	0	0	0	0	0	0
10:00	49	28.9	23.6	5.1	0	4	4	22	16	2	1	0	0	0	0	0
11:00	64	28.2	23.8	4.3	0	0	12	28	21	2	1	0	0	0	0	0
12:00	76	26.9	21.5	5.2	1	6	24	25	17	3	0	0	0	0	0	0
13:00	44	26.7	21.3	5.3	0	5	13	17	6	3	0	0	0	0	0	0
14:00	54	27.3	22.3	4.9	0	5	10	22	16	1	0	0	0	0	0	0
15:00	53	26.5	21.7	4.6	1	4	10	26	12	0	0	0	0	0	0	0
16:00	75	27.0	21.5	5.3	1	9	16	29	18	2	0	0	0	0	0	0
17:00	70	26.9	22.2	4.5	0	3	18	32	14	3	0	0	0	0	0	0
18:00	69	26.7	21.4	5.1	0	10	12	32	13	2	0	0	0	0	0	0
19:00	39	27.9	22.4	5.3	0	4	5	22	5	2	1	0	0	0	0	0
20:00	53	28.4	21.4	6.8	2	12	4	17	14	4	0	0	0	0	0	0
21:00	48	31.2	24.7	6.3	0	3	10	8	19	6	2	0	0	0	0	0
22:00	17	31.1	24.3	6.6	0	2	2	4	7	1	1	0	0	0	0	0
23:00	12	24.2	20.8	3.3	0	0	5	6	1	0	0	0	0	0	0	0
Total																
2H(10-12)	113	28.5	23.7	4.6	0	4	16	50	37	4	2	0	0	0	0	0
2H(14-16)	107	26.9	22.0	4.7	1	9	20	48	28	1	0	0	0	0	0	0
12H(7-19)	609	27.2	22.0	5.1	3	57	133	249	144	21	2	0	0	0	0	0
24H(0-24)	807	27.7	22.2	5.3	5	80	166	317	198	35	6	0	0	0	0	0
AM Peak	11:00	05:00	01:00	05:00	00:00	09:00	11:00	11:00	11:00	08:00	10:00	00:00	00:00	00:00	00:00	00:00
	64	**31.0**	**25.0**	**10.6**	**0**	**7**	**12**	**28**	**21**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
PM Peak	12:00	21:00	21:00	20:00	20:00	20:00	12:00	17:00	21:00	21:00	21:00	12:00	12:00	12:00	12:00	12:00
	76	**31.2**	**24.7**	**6.8**	**2**	**12**	**24**	**32**	**19**	**6**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

10/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	12.5	-	0	1	0	0	0	0	0	0	0	0	0	0
01:00	3	27.1	19.2	7.6	0	1	1	0	1	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
05:00	2	33.7	30.0	3.5	0	0	0	0	1	1	0	0	0	0	0	0
06:00	12	28.2	23.3	4.7	0	1	1	5	5	0	0	0	0	0	0	0
07:00	17	27.7	21.9	5.6	0	3	2	6	6	0	0	0	0	0	0	0
08:00	32	28.6	22.7	5.7	0	5	3	12	10	2	0	0	0	0	0	0
09:00	20	27.2	21.5	5.5	0	3	4	8	4	1	0	0	0	0	0	0
10:00	18	25.2	18.9	6.1	0	6	5	4	2	1	0	0	0	0	0	0
11:00	30	25.2	19.8	5.2	0	7	7	11	5	0	0	0	0	0	0	0
12:00	29	27.8	20.8	6.8	2	4	6	10	4	3	0	0	0	0	0	0
13:00	24	28.4	22.5	5.7	0	3	4	9	6	2	0	0	0	0	0	0
14:00	29	27.8	22.3	5.3	0	3	5	13	6	2	0	0	0	0	0	0
15:00	46	26.5	20.6	5.7	1	10	6	18	11	0	0	0	0	0	0	0
16:00	23	30.0	23.6	6.2	0	4	1	6	10	2	0	0	0	0	0	0
17:00	35	26.6	21.2	5.2	0	6	6	14	9	0	0	0	0	0	0	0
18:00	25	30.7	23.3	7.1	1	2	3	11	4	2	2	0	0	0	0	0
19:00	35	28.2	21.9	6.0	0	7	4	12	10	2	0	0	0	0	0	0
20:00	22	29.2	22.7	6.3	0	4	1	10	4	3	0	0	0	0	0	0
21:00	6	30.2	23.3	6.6	0	1	1	0	4	0	0	0	0	0	0	0
22:00	5	29.2	23.5	5.5	0	0	1	3	0	1	0	0	0	0	0	0
23:00	3	23.8	20.8	2.9	0	0	1	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	48	25.2	19.5	5.5	0	13	12	15	7	1	0	0	0	0	0	0
2H(14-16)	75	27.0	21.2	5.6	1	13	11	31	17	2	0	0	0	0	0	0
12H(7-19)	328	27.6	21.5	5.9	4	56	52	122	77	15	2	0	0	0	0	0
24H(0-24)	420	27.8	21.7	5.9	4	71	62	157	102	22	2	0	0	0	0	0
AM Peak	08:00	05:00	05:00	01:00	00:00	11:00	11:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	32	33.7	30.0	7.6	0	7	7	12	10	2	0	0	0	0	0	0
PM Peak	15:00	18:00	16:00	18:00	12:00	15:00	12:00	15:00	15:00	12:00	18:00	12:00	12:00	12:00	12:00	12:00
	46	30.7	23.6	7.1	2	10	6	18	11	3	2	0	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
01:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
07:00	10	23.1	19.5	3.5	0	1	4	5	0	0	0	0	0	0	0	0
08:00	28	26.6	21.8	4.7	0	1	10	10	6	1	0	0	0	0	0	0
09:00	28	23.2	18.0	5.0	0	10	7	9	2	0	0	0	0	0	0	0
10:00	18	22.9	17.3	5.5	1	6	6	3	2	0	0	0	0	0	0	0
11:00	29	28.6	22.2	6.3	0	3	8	10	6	0	2	0	0	0	0	0
12:00	27	27.5	21.4	5.9	0	4	8	7	6	2	0	0	0	0	0	0
13:00	26	25.2	20.8	4.2	0	3	6	14	3	0	0	0	0	0	0	0
14:00	25	27.6	22.3	5.1	0	2	6	9	7	1	0	0	0	0	0	0
15:00	54	26.3	21.4	4.7	0	7	10	25	12	0	0	0	0	0	0	0
16:00	38	28.1	22.0	5.9	0	5	9	12	10	1	1	0	0	0	0	0
17:00	49	26.8	20.9	5.7	0	9	14	11	14	1	0	0	0	0	0	0
18:00	43	28.8	22.1	6.5	4	1	9	12	16	0	1	0	0	0	0	0
19:00	28	27.7	22.0	5.5	0	2	9	9	7	0	1	0	0	0	0	0
20:00	21	28.0	23.5	4.4	0	1	2	11	6	1	0	0	0	0	0	0
21:00	10	28.2	22.0	6.0	0	2	1	3	4	0	0	0	0	0	0	0
22:00	10	29.5	24.5	4.8	0	1	0	3	6	0	0	0	0	0	0	0
23:00	4	23.8	21.3	2.5	0	0	1	3	0	0	0	0	0	0	0	0
Total																
2H(10-12)	47	26.9	20.3	6.4	1	9	14	13	8	0	2	0	0	0	0	0
2H(14-16)	79	26.7	21.7	4.8	0	9	16	34	19	1	0	0	0	0	0	0
12H(7-19)	375	26.8	21.1	5.5	5	52	97	127	84	6	4	0	0	0	0	0
24H(0-24)	453	27.1	21.4	5.5	5	58	111	157	110	7	5	0	0	0	0	0
AM Peak	11:00	01:00	00:00	01:00	10:00	09:00	08:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00
	29	29.8	27.5	7.1	1	10	10	10	6	1	2	0	0	0	0	0
PM Peak	15:00	22:00	22:00	18:00	18:00	17:00	17:00	15:00	18:00	12:00	16:00	12:00	12:00	12:00	12:00	12:00
	54	29.5	24.5	6.5	4	9	14	25	16	2	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	31.0	20.0	10.6	0	1	0	0	1	0	0	0	0	0	0	0
01:00	5	27.5	20.5	6.7	0	1	2	0	2	0	0	0	0	0	0	0
02:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
05:00	2	33.7	30.0	3.5	0	0	0	0	1	1	0	0	0	0	0	0
06:00	12	28.2	23.3	4.7	0	1	1	5	5	0	0	0	0	0	0	0
07:00	27	26.2	21.0	5.0	0	4	6	11	6	0	0	0	0	0	0	0
08:00	60	27.7	22.3	5.2	0	6	13	22	16	3	0	0	0	0	0	0
09:00	48	25.1	19.5	5.4	0	13	11	17	6	1	0	0	0	0	0	0
10:00	36	24.1	18.1	5.8	1	12	11	7	4	1	0	0	0	0	0	0
11:00	59	27.0	21.0	5.8	0	10	15	21	11	0	2	0	0	0	0	0
12:00	56	27.7	21.1	6.3	2	8	14	17	10	5	0	0	0	0	0	0
13:00	50	26.8	21.6	5.0	0	6	10	23	9	2	0	0	0	0	0	0
14:00	54	27.6	22.3	5.1	0	5	11	22	13	3	0	0	0	0	0	0
15:00	100	26.4	21.0	5.2	1	17	16	43	23	0	0	0	0	0	0	0
16:00	61	28.8	22.6	6.0	0	9	10	18	20	3	1	0	0	0	0	0
17:00	84	26.7	21.0	5.5	0	15	20	25	23	1	0	0	0	0	0	0
18:00	68	29.5	22.5	6.7	5	3	12	23	20	2	3	0	0	0	0	0
19:00	63	27.9	21.9	5.8	0	9	13	21	17	2	1	0	0	0	0	0
20:00	43	28.6	23.1	5.4	0	5	3	21	10	4	0	0	0	0	0	0
21:00	16	28.8	22.5	6.1	0	3	2	3	8	0	0	0	0	0	0	0
22:00	15	29.2	24.2	4.9	0	1	1	6	6	1	0	0	0	0	0	0
23:00	7	23.6	21.1	2.4	0	0	2	5	0	0	0	0	0	0	0	0
Total																
2H(10-12)	95	26.0	19.9	6.0	1	22	26	28	15	1	2	0	0	0	0	0
2H(14-16)	154	26.8	21.5	5.2	1	22	27	65	36	3	0	0	0	0	0	0
12H(7-19)	703	27.2	21.3	5.7	9	108	149	249	161	21	6	0	0	0	0	0
24H(0-24)	873	27.4	21.5	5.7	9	129	173	314	212	29	7	0	0	0	0	0
AM Peak	08:00	05:00	05:00	00:00	10:00	09:00	11:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00
	60	33.7	30.0	10.6	1	13	15	22	16	3	2	0	0	0	0	0
PM Peak	15:00	18:00	22:00	18:00	18:00	15:00	17:00	15:00	15:00	12:00	18:00	12:00	12:00	12:00	12:00	12:00
	100	29.5	24.2	6.7	5	17	20	43	23	5	3	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 1, Heol Pendyrus (Western Site)

Direction: Eastbound

11/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
05:00	3	23.8	20.8	2.9	0	0	1	2	0	0	0	0	0	0	0	0
06:00	9	29.3	24.7	4.4	0	0	1	4	3	1	0	0	0	0	0	0
07:00	24	27.1	22.1	4.9	0	3	3	11	7	0	0	0	0	0	0	0
08:00	35	27.7	22.2	5.3	0	4	6	15	8	2	0	0	0	0	0	0
09:00	20	25.2	21.0	4.0	0	0	10	6	4	0	0	0	0	0	0	0
10:00	23	24.8	19.7	5.0	0	4	9	6	4	0	0	0	0	0	0	0
11:00	29	24.9	20.9	3.8	0	2	8	16	3	0	0	0	0	0	0	0
12:00	35	27.9	22.1	5.6	0	5	7	10	12	1	0	0	0	0	0	0
13:00	24	28.4	21.7	6.5	0	5	4	8	4	3	0	0	0	0	0	0
14:00	39	28.3	22.5	5.6	0	5	6	15	10	3	0	0	0	0	0	0
15:00	32	27.5	20.8	6.5	2	5	5	12	6	2	0	0	0	0	0	0
16:00	36	27.0	20.6	6.2	3	4	7	12	10	0	0	0	0	0	0	0
17:00	31	27.2	22.2	4.8	0	3	6	12	10	0	0	0	0	0	0	0
18:00	32	26.7	21.0	5.6	1	4	8	10	9	0	0	0	0	0	0	0
19:00	36	31.8	23.8	7.8	0	4	8	11	6	4	1	2	0	0	0	0
20:00	25	27.3	22.1	5.0	0	2	5	13	3	2	0	0	0	0	0	0
21:00	8	30.4	21.9	8.2	0	3	0	1	3	1	0	0	0	0	0	0
22:00	8	29.8	23.8	5.8	0	1	0	4	2	1	0	0	0	0	0	0
23:00	5	29.2	23.5	5.5	0	0	2	0	3	0	0	0	0	0	0	0
Total																
2H(10-12)	52	24.9	20.4	4.4	0	6	17	22	7	0	0	0	0	0	0	0
2H(14-16)	71	28.0	21.7	6.0	2	10	11	27	16	5	0	0	0	0	0	0
12H(7-19)	360	27.1	21.5	5.4	6	44	79	133	87	11	0	0	0	0	0	0
24H(0-24)	457	27.7	21.8	5.7	6	54	96	170	108	20	1	2	0	0	0	0
AM Peak	08:00	06:00	02:00	08:00	00:00	08:00	09:00	11:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	35	**29.3**	**27.5**	**5.3**	**0**	**4**	**10**	**16**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	14:00	19:00	19:00	21:00	16:00	12:00	18:00	14:00	12:00	19:00	19:00	19:00	12:00	12:00	12:00	12:00
	39	**31.8**	**23.8**	**8.2**	**3**	**5**	**8**	**15**	**12**	**4**	**1**	**2**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	3	28.7	20.8	7.6	0	1	0	1	1	0	0	0	0	0	0	0
01:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	27.5	27.5	0.0	0	0	0	0	2	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	5	26.2	22.5	3.5	0	0	1	3	1	0	0	0	0	0	0	0
07:00	14	29.2	22.5	6.4	1	1	1	6	4	1	0	0	0	0	0	0
08:00	20	25.0	21.3	3.6	0	0	8	9	3	0	0	0	0	0	0	0
09:00	32	25.3	20.0	5.1	0	6	10	10	6	0	0	0	0	0	0	0
10:00	35	25.4	20.5	4.7	1	2	13	13	6	0	0	0	0	0	0	0
11:00	28	27.6	22.5	4.9	0	2	6	11	8	1	0	0	0	0	0	0
12:00	31	27.3	22.0	5.1	0	2	9	12	6	2	0	0	0	0	0	0
13:00	26	27.4	22.5	4.7	0	1	7	10	7	1	0	0	0	0	0	0
14:00	44	28.6	22.1	6.3	1	6	6	19	9	1	2	0	0	0	0	0
15:00	44	27.1	21.6	5.3	1	6	3	26	6	2	0	0	0	0	0	0
16:00	57	26.3	19.7	6.4	3	13	10	21	8	1	1	0	0	0	0	0
17:00	44	25.2	20.9	4.1	0	4	12	22	6	0	0	0	0	0	0	0
18:00	37	28.2	22.5	5.5	0	6	3	14	13	1	0	0	0	0	0	0
19:00	40	27.0	22.1	4.7	0	3	9	17	10	1	0	0	0	0	0	0
20:00	24	28.3	23.3	4.8	0	0	7	8	7	2	0	0	0	0	0	0
21:00	16	27.4	22.2	5.0	0	2	2	7	5	0	0	0	0	0	0	0
22:00	9	33.3	24.8	8.2	1	0	0	4	2	1	1	0	0	0	0	0
23:00	5	26.2	22.5	3.5	0	0	1	3	1	0	0	0	0	0	0	0
Total																
2H(10-12)	63	26.4	21.4	4.9	1	4	19	24	14	1	0	0	0	0	0	0
2H(14-16)	88	27.8	21.8	5.8	2	12	9	45	15	3	2	0	0	0	0	0
12H(7-19)	412	26.9	21.3	5.3	7	49	88	173	82	10	3	0	0	0	0	0
24H(0-24)	518	27.1	21.6	5.3	8	55	108	217	112	14	4	0	0	0	0	0
AM Peak	10:00	07:00	02:00	00:00	07:00	09:00	10:00	10:00	11:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	35	**29.2**	**27.5**	**7.6**	**1**	**6**	**13**	**13**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	16:00	22:00	22:00	22:00	16:00	16:00	17:00	15:00	18:00	12:00	14:00	12:00	12:00	12:00	12:00	12:00
	57	**33.3**	**24.8**	**8.2**	**3**	**13**	**12**	**26**	**13**	**2**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	27.8	21.3	6.3	0	1	0	2	1	0	0	0	0	0	0	0
01:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
02:00	2	27.5	27.5	0.0	0	0	0	0	2	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	3	28.8	25.8	2.9	0	0	0	1	2	0	0	0	0	0	0	0
05:00	3	23.8	20.8	2.9	0	0	1	2	0	0	0	0	0	0	0	0
06:00	14	28.2	23.9	4.1	0	0	2	7	4	1	0	0	0	0	0	0
07:00	38	27.9	22.3	5.4	1	4	4	17	11	1	0	0	0	0	0	0
08:00	55	26.8	21.9	4.7	0	4	14	24	11	2	0	0	0	0	0	0
09:00	52	25.2	20.4	4.7	0	6	20	16	10	0	0	0	0	0	0	0
10:00	58	25.1	20.2	4.8	1	6	22	19	10	0	0	0	0	0	0	0
11:00	57	26.3	21.7	4.4	0	4	14	27	11	1	0	0	0	0	0	0
12:00	66	27.6	22.0	5.3	0	7	16	22	18	3	0	0	0	0	0	0
13:00	50	27.9	22.1	5.6	0	6	11	18	11	4	0	0	0	0	0	0
14:00	83	28.5	22.3	6.0	1	11	12	34	19	4	2	0	0	0	0	0
15:00	76	27.3	21.3	5.8	3	11	8	38	12	4	0	0	0	0	0	0
16:00	93	26.5	20.1	6.3	6	17	17	33	18	1	1	0	0	0	0	0
17:00	75	26.0	21.4	4.4	0	7	18	34	16	0	0	0	0	0	0	0
18:00	69	27.5	21.8	5.6	1	10	11	24	22	1	0	0	0	0	0	0
19:00	76	29.5	22.9	6.4	0	7	17	28	16	5	1	2	0	0	0	0
20:00	49	27.8	22.7	4.9	0	2	12	21	10	4	0	0	0	0	0	0
21:00	24	28.4	22.1	6.1	0	5	2	8	8	1	0	0	0	0	0	0
22:00	17	31.5	24.3	7.0	1	1	0	8	4	2	1	0	0	0	0	0
23:00	10	27.5	23.0	4.4	0	0	3	3	4	0	0	0	0	0	0	0
Total																
2H(10-12)	115	25.7	20.9	4.6	1	10	36	46	21	1	0	0	0	0	0	0
2H(14-16)	159	27.9	21.8	5.9	4	22	20	72	31	8	2	0	0	0	0	0
12H(7-19)	772	27.0	21.4	5.4	13	93	167	306	169	21	3	0	0	0	0	0
24H(0-24)	975	27.4	21.7	5.5	14	109	204	387	220	34	5	2	0	0	0	0
AM Peak	10:00	04:00	02:00	00:00	07:00	09:00	10:00	11:00	07:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	58	**28.8**	**27.5**	**6.3**	**1**	**6**	**22**	**27**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	16:00	22:00	22:00	22:00	16:00	16:00	17:00	15:00	18:00	19:00	14:00	19:00	12:00	12:00	12:00	12:00
	93	**31.5**	**24.3**	**7.0**	**6**	**17**	**18**	**38**	**22**	**5**	**2**	**2**	**0**	**0**	**0**	**0**

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	10	10	14	22	42	14	18	13	19
01:00	9	9	9	18	17	8	5	8	11
02:00	4	4	6	4	12	8	0	4	5
03:00	3	4	5	5	13	0	2	3	5
04:00	9	6	8	2	8	11	4	8	7
05:00	27	26	29	9	3	25	29	27	21
06:00	55	61	65	35	20	71	61	63	53
07:00	172	155	160	54	20	166	185	168	130
08:00	241	220	210	101	89	219	275	233	194
09:00	184	167	176	115	95	194	198	184	161
10:00	213	186	146	141	147	189	202	187	175
11:00	187	175	187	197	165	160	184	179	179
12:00	178	206	206	223	199	198	188	195	200
13:00	181	180	211	164	179	186	196	191	185
14:00	226	217	251	168	177	197	202	219	205
15:00	278	282	307	155	142	277	292	287	248
16:00	341	287	306	161	172	267	301	300	262
17:00	267	231	219	122	164	237	251	241	213
18:00	223	187	166	123	152	196	218	198	181
19:00	192	154	157	119	108	164	165	166	151
20:00	143	138	109	93	97	122	118	126	117
21:00	96	85	96	82	78	82	74	87	85
22:00	65	55	55	65	43	42	63	56	55
23:00	24	17	60	60	29	21	30	30	34
Total 12H(7-19)	2691	2493	2545	1724	1701	2486	2692	2581	2333
16H(6-22)	3177	2931	2972	2053	2004	2925	3110	3023	2739
18H(6-24)	3266	3003	3087	2178	2076	2988	3203	3109	2829
24H(0-24)	3328	3062	3158	2238	2171	3054	3261	3173	2896
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	241	220	210	197	165	219	275	233	194
PM Peak	16:00	16:00	15:00	12:00	12:00	15:00	16:00	16:00	16:00
	341	287	307	223	199	277	301	300	262

Paul Castle Associates

Direction: Westbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	7	10	12	18	34	5	15	10	14
01:00	5	4	3	16	8	9	3	5	7
02:00	1	2	3	4	8	5	2	3	4
03:00	2	2	7	3	8	2	2	3	4
04:00	5	8	9	4	8	8	4	7	7
05:00	31	23	21	17	5	23	25	25	21
06:00	60	64	63	26	19	72	68	65	53
07:00	185	174	153	60	46	151	162	165	133
08:00	325	292	291	98	78	268	330	301	240
09:00	244	226	242	154	95	236	278	245	211
10:00	191	220	193	162	162	188	208	200	189
11:00	224	200	190	181	181	177	182	195	191
12:00	180	200	184	201	212	190	181	187	193
13:00	196	174	210	205	188	165	204	190	192
14:00	207	216	257	168	168	233	235	230	212
15:00	239	262	290	179	175	232	273	259	236
16:00	288	232	292	142	158	243	278	267	233
17:00	301	226	248	120	142	223	225	245	212
18:00	237	206	179	135	124	166	171	192	174
19:00	169	175	171	121	104	153	159	165	150
20:00	124	125	84	102	95	129	104	113	109
21:00	97	64	72	74	74	58	64	71	72
22:00	43	46	59	51	39	32	36	43	44
23:00	15	14	41	50	21	22	32	25	28
Total 12H(7-19)	2817	2628	2729	1805	1729	2472	2727	2675	2415
16H(6-22)	3267	3056	3119	2128	2021	2884	3122	3090	2800
18H(6-24)	3325	3116	3219	2229	2081	2938	3190	3158	2871
24H(0-24)	3376	3165	3274	2291	2152	2990	3241	3209	2927
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	325	292	291	181	181	268	330	301	240
PM Peak	17:00	15:00	16:00	13:00	12:00	16:00	16:00	16:00	15:00
	301	262	292	205	212	243	278	267	236

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	17	20	26	40	76	19	33	23	33
01:00	14	13	12	34	25	17	8	13	18
02:00	5	6	9	8	20	13	2	7	9
03:00	5	6	12	8	21	2	4	6	8
04:00	14	14	17	6	16	19	8	14	13
05:00	58	49	50	26	8	48	54	52	42
06:00	115	125	128	61	39	143	129	128	106
07:00	357	329	313	114	66	317	347	333	263
08:00	566	512	501	199	167	487	605	534	434
09:00	428	393	418	269	190	430	476	429	372
10:00	404	406	339	303	309	377	410	387	364
11:00	411	375	377	378	346	337	366	373	370
12:00	358	406	390	424	411	388	369	382	392
13:00	377	354	421	369	367	351	400	381	377
14:00	433	433	508	336	345	430	437	448	417
15:00	517	544	597	334	317	509	565	546	483
16:00	629	519	598	303	330	510	579	567	495
17:00	568	457	467	242	306	460	476	486	425
18:00	460	393	345	258	276	362	389	390	355
19:00	361	329	328	240	212	317	324	332	302
20:00	267	263	193	195	192	251	222	239	226
21:00	193	149	168	156	152	140	138	158	157
22:00	108	101	114	116	82	74	99	99	99
23:00	39	31	101	110	50	43	62	55	62
Total 12H(7-19)	5508	5121	5274	3529	3430	4958	5419	5256	4748
16H(6-22)	6444	5987	6091	4181	4025	5809	6232	6113	5538
18H(6-24)	6591	6119	6306	4407	4157	5926	6393	6267	5700
24H(0-24)	6704	6227	6432	4529	4323	6044	6502	6382	5823
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	566	512	501	378	346	487	605	534	434
PM Peak	16:00	15:00	16:00	12:00	12:00	16:00	16:00	16:00	16:00
	629	544	598	424	411	510	579	567	495

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	3328	3035	275	3	15
Thu 6 Mar 2025	3062	2802	247	2	11
Fri 7 Mar 2025	3158	2937	210	2	9
Sat 8 Mar 2025	2238	2123	103	0	12
Sun 9 Mar 2025	2171	2077	93	0	1
Mon 10 Mar 2025	3054	2823	218	0	13
Tue 11 Mar 2025	3261	3038	215	1	7
5 Day Ave.	3173	2927	233	2	11
7 Day Ave.	2896	2691	194	1	10

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	91.2%	8.3%	0.1%	0.5%
Thu 6 Mar 2025	100.0%	91.5%	8.1%	0.1%	0.4%
Fri 7 Mar 2025	100.0%	93.0%	6.6%	0.1%	0.3%
Sat 8 Mar 2025	100.0%	94.9%	4.6%	0.0%	0.5%
Sun 9 Mar 2025	100.0%	95.7%	4.3%	0.0%	0.0%
Mon 10 Mar 2025	100.0%	92.4%	7.1%	0.0%	0.4%
Tue 11 Mar 2025	100.0%	93.2%	6.6%	0.0%	0.2%
5 Day Ave.	100.0%	92.3%	7.3%	0.1%	0.3%
7 Day Ave.	100.0%	92.9%	6.7%	0.0%	0.3%

Paul Castle Associates

Direction: Westbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	3376	3118	237	5	16
Thu 6 Mar 2025	3165	2938	212	3	12
Fri 7 Mar 2025	3274	3090	173	2	9
Sat 8 Mar 2025	2291	2173	106	4	8
Sun 9 Mar 2025	2152	2069	77	3	3
Mon 10 Mar 2025	2990	2778	199	1	12
Tue 11 Mar 2025	3241	3036	185	7	13
5 Day Ave.	3209	2992	201	4	12
7 Day Ave.	2927	2743	170	4	10

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	92.4%	7.0%	0.1%	0.5%
Thu 6 Mar 2025	100.0%	92.8%	6.7%	0.1%	0.4%
Fri 7 Mar 2025	100.0%	94.4%	5.3%	0.1%	0.3%
Sat 8 Mar 2025	100.0%	94.8%	4.6%	0.2%	0.3%
Sun 9 Mar 2025	100.0%	96.1%	3.6%	0.1%	0.1%
Mon 10 Mar 2025	100.0%	92.9%	6.7%	0.0%	0.4%
Tue 11 Mar 2025	100.0%	93.7%	5.7%	0.2%	0.4%
5 Day Ave.	100.0%	93.2%	6.3%	0.1%	0.4%
7 Day Ave.	100.0%	93.7%	5.8%	0.1%	0.4%

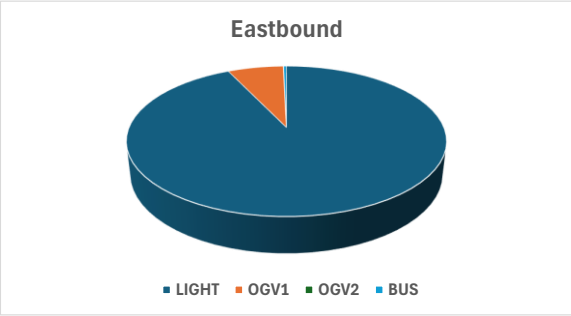
Paul Castle Associates

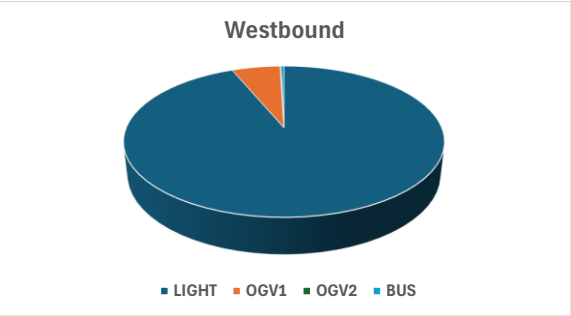
Direction: Total Flow

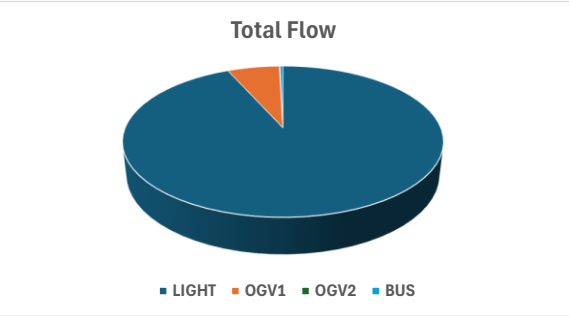
	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	6704	6153	512	8	31
Thu 6 Mar 2025	6227	5740	459	5	23
Fri 7 Mar 2025	6432	6027	383	4	18
Sat 8 Mar 2025	4529	4296	209	4	20
Sun 9 Mar 2025	4323	4146	170	3	4
Mon 10 Mar 2025	6044	5601	417	1	25
Tue 11 Mar 2025	6502	6074	400	8	20
5 Day Ave.	6382	5919	434	5	23
7 Day Ave.	5823	5434	364	5	20

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	91.8%	7.6%	0.1%	0.5%
Thu 6 Mar 2025	100.0%	92.2%	7.4%	0.1%	0.4%
Fri 7 Mar 2025	100.0%	93.7%	6.0%	0.1%	0.3%
Sat 8 Mar 2025	100.0%	94.9%	4.6%	0.1%	0.4%
Sun 9 Mar 2025	100.0%	95.9%	3.9%	0.1%	0.1%
Mon 10 Mar 2025	100.0%	92.7%	6.9%	0.0%	0.4%
Tue 11 Mar 2025	100.0%	93.4%	6.2%	0.1%	0.3%
5 Day Ave.	100.0%	92.7%	6.8%	0.1%	0.4%
7 Day Ave.	100.0%	93.3%	6.3%	0.1%	0.3%

Paul Castle Associates





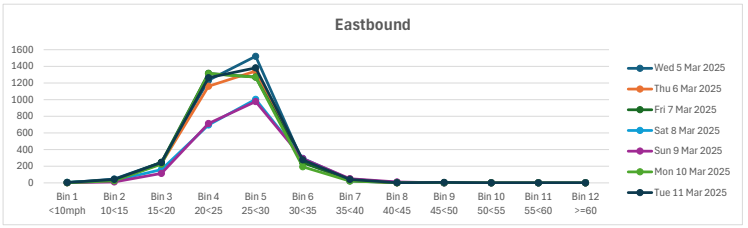


Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	3328	29.4	25.1	4.2	3	46	247	1233	1521	253	23	2	0	0	0	0
Thu 6 Mar 2025	3062	29.6	25.2	4.2	3	30	233	1161	1343	261	30	1	0	0	0	0
Fri 7 Mar 2025	3158	29.4	25.0	4.3	6	32	246	1316	1270	242	46	0	0	0	0	0
Sat 8 Mar 2025	2238	31.0	25.9	4.8	6	27	159	695	1004	295	43	6	1	0	0	2
Sun 9 Mar 2025	2171	30.9	26.2	4.5	3	11	113	713	977	292	51	11	0	0	0	0
Mon 10 Mar 2025	3054	29.1	24.9	4.0	1	25	225	1312	1270	194	21	3	3	0	0	0
Tue 11 Mar 2025	3261	29.8	25.2	4.4	5	42	244	1263	1382	276	41	2	6	0	0	0
5 Day Ave.	3173	29.5	25.1	4.2	4	35	239	1257	1357	245	32	2	2	0	0	0
7 Day Ave.	2896	29.9	25.4	4.3	4	30	210	1099	1252	259	36	4	1	0	0	0

Paul Castle Associates



Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	3376	30.2	26.2	3.8	5	5	85	1115	1788	328	39	8	2	1	0	0
Thu 6 Mar 2025	3165	30.2	26.3	3.8	7	13	80	946	1757	327	28	4	3	0	0	0
Fri 7 Mar 2025	3274	31.1	26.9	4.0	0	5	69	819	1937	369	52	14	3	0	3	3
Sat 8 Mar 2025	2291	31.3	27.0	4.2	3	7	65	564	1251	335	55	8	3	0	0	0
Sun 9 Mar 2025	2152	31.3	26.9	4.3	1	8	67	551	1142	309	64	8	1	1	0	0
Mon 10 Mar 2025	2990	30.5	26.6	3.8	1	6	60	839	1694	339	42	4	4	1	0	0
Tue 11 Mar 2025	3241	30.5	26.6	3.8	1	11	79	856	1925	301	52	10	4	2	0	0
5 Day Ave.	3209	30.5	26.5	3.8	3	8	75	915	1820	333	43	8	3	1	1	1
7 Day Ave.	2927	30.7	26.6	3.9	3	8	72	813	1642	330	47	8	3	1	0	0

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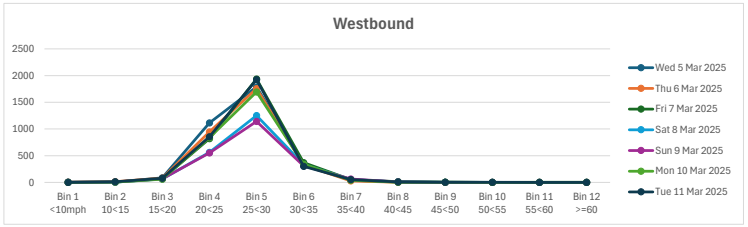
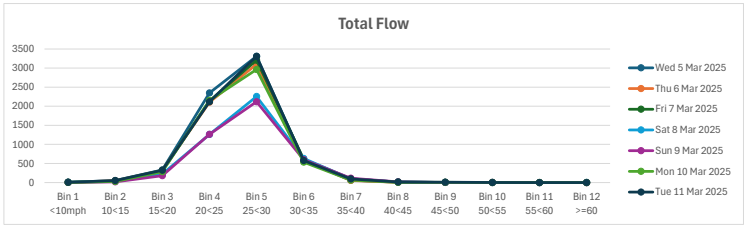


Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	6704	29.8	25.7	4.0	8	51	332	2348	3309	581	62	10	2	1	0	0
Thu 6 Mar 2025	6227	29.9	25.8	4.0	10	43	313	2107	3100	588	58	5	3	0	0	0
Fri 7 Mar 2025	6432	30.4	25.9	4.3	6	37	315	2135	3207	611	98	14	3	0	3	3
Sat 8 Mar 2025	4529	31.2	26.5	4.5	9	34	224	1259	2255	630	98	14	4	0	0	2
Sun 9 Mar 2025	4323	31.1	26.6	4.4	4	19	180	1264	2119	601	115	19	1	1	0	0
Mon 10 Mar 2025	6044	29.9	25.8	4.0	2	31	285	2151	2964	533	63	7	7	1	0	0
Tue 11 Mar 2025	6502	30.2	25.9	4.2	6	53	323	2119	3307	577	93	12	10	2	0	0
5 Day Ave.	6382	30.1	25.8	4.1	6	43	314	2172	3177	578	75	10	5	1	1	1
7 Day Ave.	5823	30.4	26.0	4.2	6	38	282	1912	2894	589	84	12	4	1	0	1

Paul Castle Associates



Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	400	29.8	25.4	4.2	0	2	34	145	174	40	5	0	0	0	0	0
Thu 6 Mar 2025	361	29.2	25.3	3.8	0	3	19	139	175	23	2	0	0	0	0	0
Fri 7 Mar 2025	333	28.7	24.9	3.7	0	1	20	156	132	23	1	0	0	0	0	0
Sat 8 Mar 2025	338	30.3	26.0	4.1	1	0	19	107	166	40	5	0	0	0	0	0
Sun 9 Mar 2025	312	30.6	25.9	4.5	1	3	14	111	138	38	6	1	0	0	0	0
Mon 10 Mar 2025	349	28.2	24.3	3.8	0	4	29	169	135	10	1	1	0	0	0	0
Tue 11 Mar 2025	386	29.5	24.2	5.1	4	15	39	159	134	30	3	2	0	0	0	0
5 Day Ave.	366	29.1	24.8	4.1	1	5	28	154	150	25	2	1	0	0	0	0
7 Day Ave.	354	29.5	25.1	4.2	1	4	25	141	151	29	3	1	0	0	0	0

Paul Castle Associates

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	415	29.4	25.4	3.8	3	1	19	151	212	28	1	0	0	0	0	0
Thu 6 Mar 2025	420	29.9	25.6	4.2	2	8	14	136	229	28	1	1	1	0	0	0
Fri 7 Mar 2025	383	29.2	25.2	3.8	0	2	29	137	188	26	1	0	0	0	0	0
Sat 8 Mar 2025	343	31.0	27.0	3.9	0	0	10	84	189	51	9	0	0	0	0	0
Sun 9 Mar 2025	343	31.4	26.8	4.5	1	2	17	79	183	53	5	3	0	0	0	0
Mon 10 Mar 2025	365	29.6	25.9	3.6	0	0	9	137	188	28	2	0	1	0	0	0
Tue 11 Mar 2025	390	29.5	25.5	3.8	1	3	10	149	204	20	2	0	0	1	0	0
5 Day Ave.	395	29.5	25.5	3.8	1	3	16	142	204	26	1	0	0	0	0	0
7 Day Ave.	380	30.0	25.9	3.9	1	2	15	125	199	33	3	1	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	815	29.6	25.4	4.0	3	3	53	296	386	68	6	0	0	0	0	0
Thu 6 Mar 2025	781	29.6	25.5	4.0	2	11	33	275	404	51	3	1	1	0	0	0
Fri 7 Mar 2025	716	29.0	25.1	3.8	0	3	49	293	320	49	2	0	0	0	0	0
Sat 8 Mar 2025	681	30.7	26.5	4.0	1	0	29	191	355	91	14	0	0	0	0	0
Sun 9 Mar 2025	655	31.0	26.4	4.5	2	5	31	190	321	91	11	4	0	0	0	0
Mon 10 Mar 2025	714	29.0	25.1	3.8	0	4	38	306	323	38	3	1	1	0	0	0
Tue 11 Mar 2025	776	29.6	24.9	4.5	5	18	49	308	338	50	5	2	0	1	0	0
5 Day Ave.	760	29.3	25.2	4.0	2	8	44	296	354	51	4	1	0	0	0	0
7 Day Ave.	734	29.8	25.5	4.1	2	6	40	266	350	63	6	1	0	0	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	504	29.0	24.1	4.7	2	19	62	187	202	29	3	0	0	0	0	0
Thu 6 Mar 2025	499	28.8	24.6	4.1	0	5	43	233	179	35	4	0	0	0	0	0
Fri 7 Mar 2025	558	28.4	24.1	4.2	3	8	58	265	197	22	5	0	0	0	0	0
Sat 8 Mar 2025	323	31.0	25.3	5.5	4	12	24	103	130	41	8	1	0	0	0	0
Sun 9 Mar 2025	319	31.7	26.7	4.8	0	1	19	93	136	58	9	3	0	0	0	0
Mon 10 Mar 2025	474	28.2	24.2	3.8	0	1	47	245	154	23	4	0	0	0	0	0
Tue 11 Mar 2025	494	29.5	24.7	4.6	1	11	43	196	207	30	4	0	2	0	0	0
5 Day Ave.	506	28.8	24.3	4.3	1	9	51	225	188	28	4	0	0	0	0	0
7 Day Ave.	453	29.5	24.8	4.5	1	8	42	189	172	34	5	1	0	0	0	0

Paul Castle Associates

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	446	30.4	26.4	3.8	0	0	13	140	234	51	7	1	0	0	0	0
Thu 6 Mar 2025	478	29.4	25.7	3.6	1	1	14	186	233	41	2	0	0	0	0	0
Fri 7 Mar 2025	547	30.0	26.6	3.3	0	0	5	149	336	51	5	1	0	0	0	0
Sat 8 Mar 2025	347	31.2	26.9	4.2	0	0	10	95	186	46	7	1	2	0	0	0
Sun 9 Mar 2025	343	31.6	27.2	4.3	0	0	8	91	175	56	12	0	0	1	0	0
Mon 10 Mar 2025	465	30.0	26.4	3.5	0	0	9	139	267	44	5	1	0	0	0	0
Tue 11 Mar 2025	508	30.2	26.5	3.6	0	3	9	135	317	36	5	2	1	0	0	0
5 Day Ave.	489	30.0	26.3	3.6	0	1	10	150	277	45	5	1	0	0	0	0
7 Day Ave.	448	30.4	26.5	3.8	0	1	10	134	250	46	6	1	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	950	29.8	25.2	4.5	2	19	75	327	436	80	10	1	0	0	0	0
Thu 6 Mar 2025	977	29.2	25.1	3.9	1	6	57	419	412	76	6	0	0	0	0	0
Fri 7 Mar 2025	1105	29.4	25.3	4.0	3	8	63	414	533	73	10	1	0	0	0	0
Sat 8 Mar 2025	670	31.2	26.1	4.9	4	12	34	198	316	87	15	2	2	0	0	0
Sun 9 Mar 2025	662	31.7	27.0	4.5	0	1	27	184	311	114	21	3	0	1	0	0
Mon 10 Mar 2025	939	29.3	25.3	3.8	0	1	56	384	421	67	9	1	0	0	0	0
Tue 11 Mar 2025	1002	30.0	25.6	4.2	1	14	52	331	524	66	9	2	3	0	0	0
5 Day Ave.	995	29.5	25.3	4.1	1	10	61	375	465	72	9	1	1	0	0	0
7 Day Ave.	901	30.1	25.7	4.3	2	9	52	322	422	80	11	1	1	0	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

05/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	10	10	0	0	0
01:00	9	9	0	0	0
02:00	4	4	0	0	0
03:00	3	1	2	0	0
04:00	9	8	1	0	0
05:00	27	25	2	0	0
06:00	55	44	11	0	0
07:00	172	148	24	0	0
08:00	241	221	19	0	1
09:00	184	162	20	0	2
10:00	213	191	21	1	0
11:00	187	164	23	0	0
12:00	178	153	22	0	3
13:00	181	165	16	0	0
14:00	226	197	25	0	4
15:00	278	244	29	2	3
16:00	341	310	30	0	1
17:00	267	255	11	0	1
18:00	223	217	6	0	0
19:00	192	188	4	0	0
20:00	143	138	5	0	0
21:00	96	95	1	0	0
22:00	65	63	2	0	0
23:00	24	23	1	0	0
Total 12H(7-19)	2691	2427	246	3	15
16H(6-22)	3177	2892	267	3	15
18H(6-24)	3266	2978	270	3	15
24H(0-24)	3328	3035	275	3	15
AM Peak	08:00	08:00	07:00	10:00	09:00
	241	221	24	1	2
PM Peak	16:00	16:00	16:00	15:00	14:00
	341	310	30	2	4

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	7	7	0	0	0
01:00	5	5	0	0	0
02:00	1	0	1	0	0
03:00	2	2	0	0	0
04:00	5	5	0	0	0
05:00	31	26	5	0	0
06:00	60	52	7	0	1
07:00	185	164	21	0	0
08:00	325	299	20	5	1
09:00	244	224	20	0	0
10:00	191	181	9	0	1
11:00	224	216	6	0	2
12:00	180	166	11	0	3
13:00	196	179	16	0	1
14:00	207	176	30	0	1
15:00	239	208	27	0	4
16:00	288	262	26	0	0
17:00	301	289	12	0	0
18:00	237	223	12	0	2
19:00	169	165	4	0	0
20:00	124	120	4	0	0
21:00	97	93	4	0	0
22:00	43	41	2	0	0
23:00	15	15	0	0	0
Total 12H(7-19)	2817	2587	210	5	15
16H(6-22)	3267	3017	229	5	16
18H(6-24)	3325	3073	231	5	16
24H(0-24)	3376	3118	237	5	16
AM Peak	08:00	08:00	07:00	08:00	11:00
	325	299	21	5	2
PM Peak	17:00	17:00	14:00	12:00	15:00
	301	289	30	0	4

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	17	17	0	0	0
01:00	14	14	0	0	0
02:00	5	4	1	0	0
03:00	5	3	2	0	0
04:00	14	13	1	0	0
05:00	58	51	7	0	0
06:00	115	96	18	0	1
07:00	357	312	45	0	0
08:00	566	520	39	5	2
09:00	428	386	40	0	2
10:00	404	372	30	1	1
11:00	411	380	29	0	2
12:00	358	319	33	0	6
13:00	377	344	32	0	1
14:00	433	373	55	0	5
15:00	517	452	56	2	7
16:00	629	572	56	0	1
17:00	568	544	23	0	1
18:00	460	440	18	0	2
19:00	361	353	8	0	0
20:00	267	258	9	0	0
21:00	193	188	5	0	0
22:00	108	104	4	0	0
23:00	39	38	1	0	0
Total 12H(7-19)	5508	5014	456	8	30
16H(6-22)	6444	5909	496	8	31
18H(6-24)	6591	6051	501	8	31
24H(0-24)	6704	6153	512	8	31
AM Peak	08:00	08:00	07:00	08:00	08:00
	566	520	45	5	2
PM Peak	16:00	16:00	15:00	15:00	15:00
	629	572	56	2	7

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

06/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	10	8	2	0	0
01:00	9	8	1	0	0
02:00	4	3	1	0	0
03:00	4	3	1	0	0
04:00	6	4	2	0	0
05:00	26	20	6	0	0
06:00	61	47	14	0	0
07:00	155	136	19	0	0
08:00	220	199	18	2	1
09:00	167	149	18	0	0
10:00	186	175	10	0	1
11:00	175	152	22	0	1
12:00	206	186	19	0	1
13:00	180	163	15	0	2
14:00	217	191	24	0	2
15:00	282	250	31	0	1
16:00	287	268	18	0	1
17:00	231	224	6	0	1
18:00	187	179	8	0	0
19:00	154	151	3	0	0
20:00	138	134	4	0	0
21:00	85	81	4	0	0
22:00	55	54	1	0	0
23:00	17	17	0	0	0
Total					
12H(7-19)	2493	2272	208	2	11
16H(6-22)	2931	2685	233	2	11
18H(6-24)	3003	2756	234	2	11
24H(0-24)	3062	2802	247	2	11
AM Peak	08:00	08:00	11:00	08:00	08:00
	220	199	22	2	1
PM Peak	16:00	16:00	15:00	12:00	13:00
	287	268	31	0	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	10	9	1	0	0
01:00	4	3	1	0	0
02:00	2	1	1	0	0
03:00	2	2	0	0	0
04:00	8	7	1	0	0
05:00	23	22	1	0	0
06:00	64	54	9	0	1
07:00	174	150	23	0	1
08:00	292	274	15	2	1
09:00	226	208	14	1	3
10:00	220	200	20	0	0
11:00	200	189	11	0	0
12:00	200	182	18	0	0
13:00	174	157	16	0	1
14:00	216	195	21	0	0
15:00	262	234	26	0	2
16:00	232	224	8	0	0
17:00	226	217	8	0	1
18:00	206	199	5	0	2
19:00	175	167	8	0	0
20:00	125	123	2	0	0
21:00	64	61	3	0	0
22:00	46	46	0	0	0
23:00	14	14	0	0	0
Total					
12H(7-19)	2628	2429	185	3	11
16H(6-22)	3056	2834	207	3	12
18H(6-24)	3116	2894	207	3	12
24H(0-24)	3165	2938	212	3	12
AM Peak	08:00	08:00	07:00	08:00	09:00
	292	274	23	2	3
PM Peak	15:00	15:00	15:00	12:00	15:00
	262	234	26	0	2

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	20	17	3	0	0
01:00	13	11	2	0	0
02:00	6	4	2	0	0
03:00	6	5	1	0	0
04:00	14	11	3	0	0
05:00	49	42	7	0	0
06:00	125	101	23	0	1
07:00	329	286	42	0	1
08:00	512	473	33	4	2
09:00	393	357	32	1	3
10:00	406	375	30	0	1
11:00	375	341	33	0	1
12:00	406	368	37	0	1
13:00	354	320	31	0	3
14:00	433	386	45	0	2
15:00	544	484	57	0	3
16:00	519	492	26	0	1
17:00	457	441	14	0	2
18:00	393	378	13	0	2
19:00	329	318	11	0	0
20:00	263	257	6	0	0
21:00	149	142	7	0	0
22:00	101	100	1	0	0
23:00	31	31	0	0	0
Total					
12H(7-19)	5121	4701	393	5	22
16H(6-22)	5987	5519	440	5	23
18H(6-24)	6119	5650	441	5	23
24H(0-24)	6227	5740	459	5	23
AM Peak	08:00	08:00	07:00	08:00	09:00
	512	473	42	4	3
PM Peak	15:00	16:00	15:00	12:00	13:00
	544	492	57	0	3

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

07/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	14	14	0	0	0
01:00	9	9	0	0	0
02:00	6	6	0	0	0
03:00	5	5	0	0	0
04:00	8	6	2	0	0
05:00	29	25	4	0	0
06:00	65	54	11	0	0
07:00	160	142	18	0	0
08:00	210	190	19	0	1
09:00	176	161	15	0	0
10:00	146	133	11	0	2
11:00	187	171	14	0	2
12:00	206	189	17	0	0
13:00	211	193	17	0	1
14:00	251	235	15	0	1
15:00	307	281	25	1	0
16:00	306	291	14	0	1
17:00	219	209	8	1	1
18:00	166	157	9	0	0
19:00	157	152	5	0	0
20:00	109	106	3	0	0
21:00	96	93	3	0	0
22:00	55	55	0	0	0
23:00	60	60	0	0	0
Total					
12H(7-19)	2545	2352	182	2	9
16H(6-22)	2972	2757	204	2	9
18H(6-24)	3087	2872	204	2	9
24H(0-24)	3158	2937	210	2	9
AM Peak	08:00	08:00	08:00	00:00	10:00
	210	190	19	0	2
PM Peak	15:00	16:00	15:00	15:00	13:00
	307	291	25	1	1

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	12	12	0	0	0
01:00	3	3	0	0	0
02:00	3	3	0	0	0
03:00	7	5	2	0	0
04:00	9	8	1	0	0
05:00	21	18	3	0	0
06:00	63	53	10	0	0
07:00	153	136	15	0	2
08:00	291	277	13	0	1
09:00	242	224	14	0	4
10:00	193	182	11	0	0
11:00	190	172	17	0	1
12:00	184	179	5	0	0
13:00	210	196	14	0	0
14:00	257	240	17	0	0
15:00	290	270	19	1	0
16:00	292	284	8	0	0
17:00	248	237	10	1	0
18:00	179	174	4	0	1
19:00	171	164	7	0	0
20:00	84	84	0	0	0
21:00	72	70	2	0	0
22:00	59	58	1	0	0
23:00	41	41	0	0	0
Total					
12H(7-19)	2729	2571	147	2	9
16H(6-22)	3119	2942	166	2	9
18H(6-24)	3219	3041	167	2	9
24H(0-24)	3274	3090	173	2	9
AM Peak	08:00	08:00	11:00	00:00	09:00
	291	277	17	0	4
PM Peak	16:00	16:00	15:00	15:00	18:00
	292	284	19	1	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	26	26	0	0	0
01:00	12	12	0	0	0
02:00	9	9	0	0	0
03:00	12	10	2	0	0
04:00	17	14	3	0	0
05:00	50	43	7	0	0
06:00	128	107	21	0	0
07:00	313	278	33	0	2
08:00	501	467	32	0	2
09:00	418	385	29	0	4
10:00	339	315	22	0	2
11:00	377	343	31	0	3
12:00	390	368	22	0	0
13:00	421	389	31	0	1
14:00	508	475	32	0	1
15:00	597	551	44	2	0
16:00	598	575	22	0	1
17:00	467	446	18	2	1
18:00	345	331	13	0	1
19:00	328	316	12	0	0
20:00	193	190	3	0	0
21:00	168	163	5	0	0
22:00	114	113	1	0	0
23:00	101	101	0	0	0
Total					
12H(7-19)	5274	4923	329	4	18
16H(6-22)	6091	5699	370	4	18
18H(6-24)	6306	5913	371	4	18
24H(0-24)	6432	6027	383	4	18
AM Peak	08:00	08:00	07:00	00:00	09:00
	501	467	33	0	4
PM Peak	16:00	16:00	15:00	15:00	13:00
	598	575	44	2	1

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

08/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	22	22	0	0	0
01:00	18	17	1	0	0
02:00	4	4	0	0	0
03:00	5	5	0	0	0
04:00	2	2	0	0	0
05:00	9	9	0	0	0
06:00	35	33	2	0	0
07:00	54	46	8	0	0
08:00	101	96	4	0	1
09:00	115	105	10	0	0
10:00	141	138	2	0	1
11:00	197	187	9	0	1
12:00	223	207	14	0	2
13:00	164	155	8	0	1
14:00	168	159	8	0	1
15:00	155	145	9	0	1
16:00	161	150	9	0	2
17:00	122	116	5	0	1
18:00	123	118	4	0	1
19:00	119	116	3	0	0
20:00	93	91	2	0	0
21:00	82	79	3	0	0
22:00	65	64	1	0	0
23:00	60	59	1	0	0
Total					
12H(7-19)	1724	1622	90	0	12
16H(6-22)	2053	1941	100	0	12
18H(6-24)	2178	2064	102	0	12
24H(0-24)	2238	2123	103	0	12
AM Peak	11:00	11:00	09:00	00:00	08:00
	197	**187**	**10**	**0**	**1**
PM Peak	12:00	12:00	12:00	12:00	12:00
	223	**207**	**14**	**0**	**2**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	18	18	0	0	0
01:00	16	16	0	0	0
02:00	4	3	1	0	0
03:00	3	2	1	0	0
04:00	4	4	0	0	0
05:00	17	16	1	0	0
06:00	26	23	3	0	0
07:00	60	52	8	0	0
08:00	98	91	6	0	1
09:00	154	139	14	0	1
10:00	162	155	6	0	1
11:00	181	171	9	1	0
12:00	201	196	3	1	1
13:00	205	195	9	0	1
14:00	168	161	7	0	0
15:00	179	162	15	2	0
16:00	142	136	5	0	1
17:00	120	117	2	0	1
18:00	135	131	3	0	1
19:00	121	118	3	0	0
20:00	102	97	5	0	0
21:00	74	71	3	0	0
22:00	51	51	0	0	0
23:00	50	48	2	0	0
Total					
12H(7-19)	1805	1706	87	4	8
16H(6-22)	2128	2015	101	4	8
18H(6-24)	2229	2114	103	4	8
24H(0-24)	2291	2173	106	4	8
AM Peak	11:00	11:00	09:00	11:00	08:00
	181	**171**	**14**	**1**	**1**
PM Peak	13:00	12:00	15:00	15:00	12:00
	205	**196**	**15**	**2**	**1**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	40	40	0	0	0
01:00	34	33	1	0	0
02:00	8	7	1	0	0
03:00	8	7	1	0	0
04:00	6	6	0	0	0
05:00	26	25	1	0	0
06:00	61	56	5	0	0
07:00	114	98	16	0	0
08:00	199	187	10	0	2
09:00	269	244	24	0	1
10:00	303	293	8	0	2
11:00	378	358	18	1	1
12:00	424	403	17	1	3
13:00	369	350	17	0	2
14:00	336	320	15	0	1
15:00	334	307	24	2	1
16:00	303	286	14	0	3
17:00	242	233	7	0	2
18:00	258	249	7	0	2
19:00	240	234	6	0	0
20:00	195	188	7	0	0
21:00	156	150	6	0	0
22:00	116	115	1	0	0
23:00	110	107	3	0	0
Total					
12H(7-19)	3529	3328	177	4	20
16H(6-22)	4181	3956	201	4	20
18H(6-24)	4407	4178	205	4	20
24H(0-24)	4529	4296	209	4	20
AM Peak	11:00	11:00	09:00	11:00	08:00
	378	**358**	**24**	**1**	**2**
PM Peak	12:00	12:00	15:00	15:00	12:00
	424	**403**	**24**	**2**	**3**

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

09/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	42	42	0	0	0
01:00	17	17	0	0	0
02:00	12	12	0	0	0
03:00	13	13	0	0	0
04:00	8	8	0	0	0
05:00	3	3	0	0	0
06:00	20	16	4	0	0
07:00	20	19	1	0	0
08:00	89	84	4	0	1
09:00	95	90	5	0	0
10:00	147	139	8	0	0
11:00	165	162	3	0	0
12:00	199	193	6	0	0
13:00	179	165	14	0	0
14:00	177	167	10	0	0
15:00	142	138	4	0	0
16:00	172	160	12	0	0
17:00	164	159	5	0	0
18:00	152	149	3	0	0
19:00	108	103	5	0	0
20:00	97	97	0	0	0
21:00	78	75	3	0	0
22:00	43	41	2	0	0
23:00	29	25	4	0	0
Total 12H(7-19)	1701	1625	75	0	1
16H(6-22)	2004	1916	87	0	1
18H(6-24)	2076	1982	93	0	1
24H(0-24)	2171	2077	93	0	1
AM Peak	11:00	11:00	10:00	00:00	08:00
	165	162	8	0	1
PM Peak	12:00	12:00	13:00	12:00	12:00
	199	193	14	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	34	33	1	0	0
01:00	8	8	0	0	0
02:00	8	8	0	0	0
03:00	8	8	0	0	0
04:00	8	8	0	0	0
05:00	5	5	0	0	0
06:00	19	17	2	0	0
07:00	46	44	2	0	0
08:00	78	73	5	0	0
09:00	95	91	3	1	0
10:00	162	159	3	0	0
11:00	181	177	4	0	0
12:00	212	205	6	1	0
13:00	188	177	11	0	0
14:00	168	157	8	0	3
15:00	175	166	9	0	0
16:00	158	148	10	0	0
17:00	142	138	4	0	0
18:00	124	119	5	0	0
19:00	104	102	2	0	0
20:00	95	95	0	0	0
21:00	74	73	1	0	0
22:00	39	39	0	0	0
23:00	21	19	1	1	0
Total 12H(7-19)	1729	1654	70	2	3
16H(6-22)	2021	1941	75	2	3
18H(6-24)	2081	1999	76	3	3
24H(0-24)	2152	2069	77	3	3
AM Peak	11:00	11:00	08:00	09:00	00:00
	181	177	5	1	0
PM Peak	12:00	12:00	13:00	12:00	14:00
	212	205	11	1	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	76	75	1	0	0
01:00	25	25	0	0	0
02:00	20	20	0	0	0
03:00	21	21	0	0	0
04:00	16	16	0	0	0
05:00	8	8	0	0	0
06:00	39	33	6	0	0
07:00	66	63	3	0	0
08:00	167	157	9	0	1
09:00	190	181	8	1	0
10:00	309	298	11	0	0
11:00	346	339	7	0	0
12:00	411	398	12	1	0
13:00	367	342	25	0	0
14:00	345	324	18	0	3
15:00	317	304	13	0	0
16:00	330	308	22	0	0
17:00	306	297	9	0	0
18:00	276	268	8	0	0
19:00	212	205	7	0	0
20:00	192	192	0	0	0
21:00	152	148	4	0	0
22:00	82	80	2	0	0
23:00	50	44	5	1	0
Total 12H(7-19)	3430	3279	145	2	4
16H(6-22)	4025	3857	162	2	4
18H(6-24)	4157	3981	169	3	4
24H(0-24)	4323	4146	170	3	4
AM Peak	11:00	11:00	10:00	09:00	08:00
	346	339	11	1	1
PM Peak	12:00	12:00	13:00	12:00	14:00
	411	398	25	1	3

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

10/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	14	13	1	0	0
01:00	8	8	0	0	0
02:00	8	7	1	0	0
03:00	0	0	0	0	0
04:00	11	7	4	0	0
05:00	25	23	2	0	0
06:00	71	65	6	0	0
07:00	166	152	14	0	0
08:00	219	200	18	0	1
09:00	194	178	16	0	0
10:00	189	169	19	0	1
11:00	160	146	13	0	1
12:00	198	180	17	0	1
13:00	186	156	27	0	3
14:00	197	182	13	0	2
15:00	277	252	23	0	2
16:00	267	251	15	0	1
17:00	237	228	9	0	0
18:00	196	190	6	0	0
19:00	164	158	6	0	0
20:00	122	119	3	0	0
21:00	82	80	1	0	1
22:00	42	40	2	0	0
23:00	21	19	2	0	0
Total					
12H(7-19)	2486	2284	190	0	12
16H(6-22)	2925	2706	206	0	13
18H(6-24)	2988	2765	210	0	13
24H(0-24)	3054	2823	218	0	13
AM Peak	08:00	08:00	10:00	00:00	08:00
	219	200	19	0	1
PM Peak	15:00	15:00	13:00	12:00	13:00
	277	252	27	0	3

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	5	5	0	0	0
01:00	9	8	1	0	0
02:00	5	3	2	0	0
03:00	2	2	0	0	0
04:00	8	8	0	0	0
05:00	23	22	1	0	0
06:00	72	60	11	0	1
07:00	151	139	12	0	0
08:00	268	251	17	0	0
09:00	236	216	19	0	1
10:00	188	172	16	0	0
11:00	177	167	9	0	1
12:00	190	178	11	0	1
13:00	165	148	16	0	1
14:00	233	205	27	0	1
15:00	232	211	17	1	3
16:00	243	223	20	0	0
17:00	223	215	7	0	1
18:00	166	156	8	0	2
19:00	153	152	1	0	0
20:00	129	126	3	0	0
21:00	58	58	0	0	0
22:00	32	32	0	0	0
23:00	22	21	1	0	0
Total					
12H(7-19)	2472	2281	179	1	11
16H(6-22)	2884	2677	194	1	12
18H(6-24)	2938	2730	195	1	12
24H(0-24)	2990	2778	199	1	12
AM Peak	08:00	08:00	09:00	00:00	06:00
	268	251	19	0	1
PM Peak	16:00	16:00	14:00	15:00	15:00
	243	223	27	1	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	19	18	1	0	0
01:00	17	16	1	0	0
02:00	13	10	3	0	0
03:00	2	2	0	0	0
04:00	19	15	4	0	0
05:00	48	45	3	0	0
06:00	143	125	17	0	1
07:00	317	291	26	0	0
08:00	487	451	35	0	1
09:00	430	394	35	0	1
10:00	377	341	35	0	1
11:00	337	313	22	0	2
12:00	388	358	28	0	2
13:00	351	304	43	0	4
14:00	430	387	40	0	3
15:00	509	463	40	1	5
16:00	510	474	35	0	1
17:00	460	443	16	0	1
18:00	362	346	14	0	2
19:00	317	310	7	0	0
20:00	251	245	6	0	0
21:00	140	138	1	0	1
22:00	74	72	2	0	0
23:00	43	40	3	0	0
Total					
12H(7-19)	4958	4565	369	1	23
16H(6-22)	5809	5383	400	1	25
18H(6-24)	5926	5495	405	1	25
24H(0-24)	6044	5601	417	1	25
AM Peak	08:00	08:00	08:00	00:00	11:00
	487	451	35	0	2
PM Peak	16:00	16:00	13:00	15:00	15:00
	510	474	43	1	5

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

11/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	18	17	1	0	0
01:00	5	5	0	0	0
02:00	0	0	0	0	0
03:00	2	2	0	0	0
04:00	4	4	0	0	0
05:00	29	25	4	0	0
06:00	61	54	7	0	0
07:00	185	168	17	0	0
08:00	275	259	16	0	0
09:00	198	185	12	0	1
10:00	202	184	18	0	0
11:00	184	172	11	0	1
12:00	188	172	15	0	1
13:00	196	183	11	0	2
14:00	202	177	24	0	1
15:00	292	272	20	0	0
16:00	301	281	20	0	0
17:00	251	239	11	0	1
18:00	218	209	9	0	0
19:00	165	161	3	1	0
20:00	118	113	5	0	0
21:00	74	66	8	0	0
22:00	63	61	2	0	0
23:00	30	29	1	0	0
Total 12H(7-19)	2692	2501	184	0	7
16H(6-22)	3110	2895	207	1	7
18H(6-24)	3203	2985	210	1	7
24H(0-24)	3261	3038	215	1	7
AM Peak	08:00	08:00	10:00	00:00	09:00
	275	259	18	0	1
PM Peak	16:00	16:00	14:00	19:00	13:00
	301	281	24	1	2

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	15	15	0	0	0
01:00	3	3	0	0	0
02:00	2	2	0	0	0
03:00	2	2	0	0	0
04:00	4	4	0	0	0
05:00	25	21	4	0	0
06:00	68	62	6	0	0
07:00	162	149	12	0	1
08:00	330	310	17	3	0
09:00	278	254	21	0	3
10:00	208	199	6	1	2
11:00	182	175	7	0	0
12:00	181	163	14	2	2
13:00	204	184	18	0	2
14:00	235	221	14	0	0
15:00	273	245	26	0	2
16:00	278	264	13	1	0
17:00	225	217	7	0	1
18:00	171	166	5	0	0
19:00	159	157	2	0	0
20:00	104	96	8	0	0
21:00	64	62	2	0	0
22:00	36	33	3	0	0
23:00	32	32	0	0	0
Total 12H(7-19)	2727	2547	160	7	13
16H(6-22)	3122	2924	178	7	13
18H(6-24)	3190	2989	181	7	13
24H(0-24)	3241	3036	185	7	13
AM Peak	08:00	08:00	09:00	08:00	09:00
	330	310	21	3	3
PM Peak	16:00	16:00	15:00	12:00	12:00
	278	264	26	2	2

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	33	32	1	0	0
01:00	8	8	0	0	0
02:00	2	2	0	0	0
03:00	4	4	0	0	0
04:00	8	8	0	0	0
05:00	54	46	8	0	0
06:00	129	116	13	0	0
07:00	347	317	29	0	1
08:00	605	569	33	3	0
09:00	476	439	33	0	4
10:00	410	383	24	1	2
11:00	366	347	18	0	1
12:00	369	335	29	2	3
13:00	400	367	29	0	4
14:00	437	398	38	0	1
15:00	565	517	46	0	2
16:00	579	545	33	1	0
17:00	476	456	18	0	2
18:00	389	375	14	0	0
19:00	324	318	5	1	0
20:00	222	209	13	0	0
21:00	138	128	10	0	0
22:00	99	94	5	0	0
23:00	62	61	1	0	0
Total 12H(7-19)	5419	5048	344	7	20
16H(6-22)	6232	5819	385	8	20
18H(6-24)	6393	5974	391	8	20
24H(0-24)	6502	6074	400	8	20
AM Peak	08:00	08:00	08:00	08:00	09:00
	605	569	33	3	4
PM Peak	16:00	16:00	15:00	12:00	13:00
	579	545	46	2	4

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

05/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	10	33.9	29.5	4.2	0	0	0	1	5	3	1	0	0	0	0	0
01:00	9	31.2	27.5	3.5	0	0	0	2	5	2	0	0	0	0	0	0
02:00	4	31.7	27.5	4.1	0	0	0	1	2	1	0	0	0	0	0	0
03:00	3	27.5	27.5	0.0	0	0	0	0	3	0	0	0	0	0	0	0
04:00	9	28.5	24.7	3.6	0	0	1	3	5	0	0	0	0	0	0	0
05:00	27	33.0	29.0	3.9	0	0	1	2	12	12	0	0	0	0	0	0
06:00	55	29.4	26.1	3.1	0	0	0	20	30	5	0	0	0	0	0	0
07:00	172	29.4	26.5	2.9	0	0	3	39	121	8	1	0	0	0	0	0
08:00	241	29.3	25.5	3.6	0	1	10	94	115	21	0	0	0	0	0	0
09:00	184	29.2	25.2	3.9	0	1	14	67	89	12	1	0	0	0	0	0
10:00	213	29.7	25.6	3.9	0	1	11	80	99	20	2	0	0	0	0	0
11:00	187	29.9	25.1	4.6	0	1	23	65	75	20	3	0	0	0	0	0
12:00	178	28.9	24.9	3.8	0	1	12	79	73	12	1	0	0	0	0	0
13:00	181	29.1	24.7	4.3	0	6	12	75	74	14	0	0	0	0	0	0
14:00	226	29.0	24.2	4.7	0	7	32	84	88	12	3	0	0	0	0	0
15:00	278	29.0	24.1	4.7	2	12	30	103	114	17	0	0	0	0	0	0
16:00	341	29.3	25.1	4.1	1	0	29	138	145	23	5	0	0	0	0	0
17:00	267	29.5	24.4	4.9	0	16	25	88	121	15	1	1	0	0	0	0
18:00	223	29.2	25.2	3.8	0	0	19	80	108	15	1	0	0	0	0	0
19:00	192	28.7	25.0	3.5	0	0	14	77	91	10	0	0	0	0	0	0
20:00	143	29.4	25.6	3.7	0	0	2	66	63	10	1	1	0	0	0	0
21:00	96	29.4	25.9	3.3	0	0	1	38	47	10	0	0	0	0	0	0
22:00	65	30.3	25.3	4.8	0	0	6	29	19	9	2	0	0	0	0	0
23:00	24	31.4	27.1	4.1	0	0	2	2	17	2	1	0	0	0	0	0
Total																
2H(10-12)	400	29.8	25.4	4.2	0	2	34	145	174	40	5	0	0	0	0	0
2H(14-16)	504	29.0	24.1	4.7	2	19	62	187	202	29	3	0	0	0	0	0
12H(7-19)	2691	29.4	25.0	4.2	3	46	220	992	1222	189	18	1	0	0	0	0
24H(0-24)	3328	29.4	25.1	4.2	3	46	247	1233	1521	253	23	2	0	0	0	0
AM Peak	08:00	00:00	00:00	11:00	00:00	08:00	11:00	08:00	07:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00
	241	33.9	29.5	4.6	0	1	23	94	121	21	3	0	0	0	0	0
PM Peak	16:00	23:00	23:00	17:00	15:00	17:00	14:00	16:00	16:00	16:00	16:00	17:00	12:00	12:00	12:00	12:00
	341	31.4	27.1	4.9	2	16	32	138	145	23	5	1	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	7	28.6	26.1	2.4	0	0	0	2	5	0	0	0	0	0	0	0
01:00	5	37.7	32.5	5.0	0	0	0	0	2	1	2	0	0	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	2	33.7	30.0	3.5	0	0	0	0	1	1	0	0	0	0	0	0
04:00	5	34.1	29.5	4.5	0	0	0	1	1	3	0	0	0	0	0	0
05:00	31	34.9	29.4	5.3	0	0	0	7	9	13	0	2	0	0	0	0
06:00	60	30.9	27.3	3.4	0	0	0	14	35	10	1	0	0	0	0	0
07:00	185	32.0	27.6	4.3	0	1	4	32	112	30	4	0	2	0	0	0
08:00	325	29.4	25.9	3.4	0	0	10	114	171	30	0	0	0	0	0	0
09:00	244	28.4	24.8	3.5	0	2	10	120	101	10	1	0	0	0	0	0
10:00	191	28.7	24.7	3.9	3	0	11	82	88	7	0	0	0	0	0	0
11:00	224	29.8	26.0	3.6	0	1	8	69	124	21	1	0	0	0	0	0
12:00	180	30.2	26.3	3.8	0	0	5	56	103	11	4	1	0	0	0	0
13:00	196	30.5	25.9	4.5	1	1	7	70	98	15	2	1	0	1	0	0
14:00	207	29.8	26.1	3.6	0	0	5	70	113	15	4	0	0	0	0	0
15:00	239	30.8	26.6	4.0	0	0	8	70	121	36	3	1	0	0	0	0
16:00	288	29.7	26.0	3.6	1	0	10	91	157	29	0	0	0	0	0	0
17:00	301	29.0	25.8	3.1	0	0	3	116	166	14	2	0	0	0	0	0
18:00	237	30.1	26.6	3.4	0	0	0	73	136	25	2	1	0	0	0	0
19:00	169	29.9	26.5	3.3	0	0	1	54	94	19	1	0	0	0	0	0
20:00	124	31.0	27.1	3.7	0	0	1	31	73	14	5	0	0	0	0	0
21:00	97	31.4	27.3	3.9	0	0	2	22	55	14	4	0	0	0	0	0
22:00	43	31.3	26.6	4.5	0	0	0	19	16	5	3	0	0	0	0	0
23:00	15	36.6	30.5	5.9	0	0	0	2	6	5	0	2	0	0	0	0
Total																
2H(10-12)	415	29.4	25.4	3.8	3	1	19	151	212	28	1	0	0	0	0	0
2H(14-16)	446	30.4	26.4	3.8	0	0	13	140	234	51	7	1	0	0	0	0
12H(7-19)	2817	29.9	26.0	3.7	5	5	81	963	1490	243	23	4	2	1	0	0
24H(0-24)	3376	30.2	26.2	3.8	5	5	85	1115	1788	328	39	8	2	1	0	0
AM Peak	08:00	01:00	01:00	05:00	10:00	09:00	10:00	09:00	08:00	07:00	07:00	05:00	07:00	00:00	00:00	00:00
	325	37.7	32.5	5.3	3	2	11	120	171	30	4	2	2	0	0	0
PM Peak	17:00	23:00	23:00	23:00	13:00	13:00	16:00	17:00	17:00	15:00	20:00	23:00	12:00	13:00	12:00	12:00
	301	36.6	30.5	5.9	1	1	10	116	166	36	5	2	0	1	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	17	32.1	28.1	3.9	0	0	0	3	10	3	1	0	0	0	0	0
01:00	14	34.1	29.3	4.6	0	0	0	2	7	3	2	0	0	0	0	0
02:00	5	31.2	27.5	3.5	0	0	0	1	3	1	0	0	0	0	0	0
03:00	5	30.8	28.5	2.2	0	0	0	0	4	1	0	0	0	0	0	0
04:00	14	31.1	26.4	4.5	0	0	1	4	6	3	0	0	0	0	0	0
05:00	58	34.0	29.2	4.6	0	0	1	9	21	25	0	2	0	0	0	0
06:00	115	30.2	26.8	3.3	0	0	0	34	65	15	1	0	0	0	0	0
07:00	357	30.9	27.1	3.7	0	1	7	71	233	38	5	0	2	0	0	0
08:00	566	29.4	25.7	3.5	0	1	20	208	286	51	0	0	0	0	0	0
09:00	428	28.7	25.0	3.7	0	3	24	187	190	22	2	0	0	0	0	0
10:00	404	29.2	25.2	3.9	3	1	22	162	187	27	2	0	0	0	0	0
11:00	411	29.9	25.6	4.1	0	2	31	134	199	41	4	0	0	0	0	0
12:00	358	29.6	25.6	3.9	0	1	17	135	176	23	5	1	0	0	0	0
13:00	377	29.9	25.3	4.4	1	7	19	145	172	29	2	1	0	1	0	0
14:00	433	29.6	25.1	4.3	0	7	37	154	201	27	7	0	0	0	0	0
15:00	517	30.0	25.3	4.6	2	12	38	173	235	53	3	1	0	0	0	0
16:00	629	29.6	25.5	3.9	2	0	39	229	302	52	5	0	0	0	0	0
17:00	568	29.4	25.1	4.1	0	16	28	204	287	29	3	1	0	0	0	0
18:00	460	29.8	26.0	3.7	0	0	19	153	244	40	3	1	0	0	0	0
19:00	361	29.3	25.7	3.5	0	0	15	131	185	29	1	0	0	0	0	0
20:00	267	30.2	26.3	3.8	0	0	3	97	136	24	6	1	0	0	0	0
21:00	193	30.5	26.6	3.7	0	0	3	60	102	24	4	0	0	0	0	0
22:00	108	30.7	25.8	4.7	0	0	6	48	35	14	5	0	0	0	0	0
23:00	39	33.7	28.4	5.1	0	0	2	4	23	7	1	2	0	0	0	0
Total																
2H(10-12)	815	29.6	25.4	4.0	3	3	53	296	386	68	6	0	0	0	0	0
2H(14-16)	950	29.8	25.2	4.5	2	19	75	327	436	80	10	1	0	0	0	0
12H(7-19)	5508	29.7	25.5	4.0	8	51	301	1955	2712	432	41	5	2	1	0	0
24H(0-24)	6704	29.8	25.7	4.0	8	51	332	2348	3309	581	62	10	2	1	0	0
AM Peak	08:00	01:00	01:00	01:00	10:00	09:00	11:00	08:00	08:00	08:00	07:00	05:00	07:00	00:00	00:00	00:00
	566	34.1	29.3	4.6	3	3	31	208	286	51	5	2	2	0	0	0
PM Peak	16:00	23:00	23:00	23:00	15:00	17:00	16:00	16:00	16:00	15:00	14:00	23:00	12:00	13:00	12:00	12:00
	629	33.7	28.4	5.1	2	16	39	229	302	53	7	2	0	1	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

06/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	10	35.2	27.1	7.8	1	0	0	1	5	2	1	0	0	0	0	0
01:00	9	32.7	27.5	5.0	0	0	1	1	4	3	0	0	0	0	0	0
02:00	4	26.3	23.8	2.5	0	0	0	3	1	0	0	0	0	0	0	0
03:00	4	26.3	23.8	2.5	0	0	0	3	1	0	0	0	0	0	0	0
04:00	6	34.1	27.5	6.3	0	0	0	3	1	1	1	0	0	0	0	0
05:00	26	33.4	27.5	5.7	0	0	1	8	11	3	2	1	0	0	0	0
06:00	61	30.2	26.4	3.7	0	0	2	18	32	9	0	0	0	0	0	0
07:00	155	30.4	26.5	3.8	0	1	2	48	82	20	2	0	0	0	0	0
08:00	220	29.3	25.4	3.8	0	2	11	81	110	15	1	0	0	0	0	0
09:00	167	28.8	24.7	3.9	1	2	10	72	73	9	0	0	0	0	0	0
10:00	186	29.3	25.5	3.7	0	1	12	62	97	14	0	0	0	0	0	0
11:00	175	29.0	25.1	3.8	0	2	7	77	78	9	2	0	0	0	0	0
12:00	206	29.7	24.7	4.7	0	4	32	59	92	17	2	0	0	0	0	0
13:00	180	30.5	25.4	4.9	0	1	25	53	75	21	5	0	0	0	0	0
14:00	217	28.9	24.8	3.9	0	2	14	100	85	14	2	0	0	0	0	0
15:00	282	28.7	24.4	4.2	0	3	29	133	94	21	2	0	0	0	0	0
16:00	287	30.0	25.3	4.5	1	7	21	90	140	25	3	0	0	0	0	0
17:00	231	29.2	24.9	4.2	0	3	20	94	93	20	1	0	0	0	0	0
18:00	187	29.0	25.1	3.7	0	0	13	77	83	13	1	0	0	0	0	0
19:00	154	29.2	24.7	4.3	0	2	12	73	50	16	1	0	0	0	0	0
20:00	138	30.3	26.2	4.0	0	0	11	34	75	17	1	0	0	0	0	0
21:00	85	29.9	26.0	3.8	0	0	0	38	36	9	2	0	0	0	0	0
22:00	55	28.6	24.1	4.3	0	0	9	23	20	2	1	0	0	0	0	0
23:00	17	27.9	24.3	3.5	0	0	1	10	5	1	0	0	0	0	0	0
Total 2H(10-12)	361	29.2	25.3	3.8	0	3	19	139	175	23	2	0	0	0	0	0
2H(14-16)	499	28.8	24.6	4.1	0	5	43	233	179	35	4	0	0	0	0	0
12H(7-19)	2493	29.4	25.1	4.2	2	28	196	946	1102	198	21	0	0	0	0	0
24H(0-24)	3062	29.6	25.2	4.2	3	30	233	1161	1343	261	30	1	0	0	0	0
AM Peak	08:00	00:00	01:00	00:00	00:00	08:00	10:00	08:00	08:00	07:00	05:00	05:00	00:00	00:00	00:00	00:00
	220	35.2	27.5	7.8	1	2	12	81	110	20	2	1	0	0	0	0
PM Peak	16:00	13:00	20:00	13:00	16:00	16:00	12:00	15:00	16:00	16:00	13:00	12:00	12:00	12:00	12:00	12:00
	287	30.5	26.2	4.9	1	7	32	133	140	25	5	0	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	10	30.8	27.0	3.7	0	0	0	3	5	2	0	0	0	0	0	0
01:00	4	28.0	25.0	2.9	0	0	0	2	2	0	0	0	0	0	0	0
02:00	2	39.8	32.5	7.1	0	0	0	0	1	0	1	0	0	0	0	0
03:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
04:00	8	33.3	28.8	4.4	0	0	0	2	2	4	0	0	0	0	0	0
05:00	23	33.4	29.7	3.6	0	0	0	2	10	10	1	0	0	0	0	0
06:00	64	32.5	29.0	3.4	0	0	0	5	38	18	3	0	0	0	0	0
07:00	174	29.8	26.2	3.4	0	0	5	54	96	19	0	0	0	0	0	0
08:00	292	30.1	26.5	3.4	0	0	5	82	173	28	4	0	0	0	0	0
09:00	226	29.0	24.7	4.2	2	3	17	90	100	14	0	0	0	0	0	0
10:00	220	30.1	26.1	3.8	0	1	6	69	126	15	1	1	1	0	0	0
11:00	200	29.6	25.0	4.4	2	7	8	67	103	13	0	0	0	0	0	0
12:00	200	29.5	25.7	3.7	0	0	11	70	101	17	1	0	0	0	0	0
13:00	174	29.9	26.2	3.6	0	0	4	56	100	11	2	1	0	0	0	0
14:00	216	29.6	26.0	3.5	0	1	4	73	120	16	2	0	0	0	0	0
15:00	262	29.2	25.4	3.7	1	0	10	113	113	25	0	0	0	0	0	0
16:00	232	29.4	26.2	3.0	0	0	1	75	139	16	1	0	0	0	0	0
17:00	226	30.4	26.9	3.4	0	0	3	57	133	32	0	1	0	0	0	0
18:00	206	30.6	26.4	4.1	2	1	2	55	129	14	1	1	1	0	0	0
19:00	175	31.1	27.8	3.2	0	0	2	22	119	29	3	0	0	0	0	0
20:00	125	30.1	27.3	2.8	0	0	0	20	93	10	2	0	0	0	0	0
21:00	64	33.5	28.8	4.5	0	0	2	10	26	22	4	0	0	0	0	0
22:00	46	33.3	28.3	4.8	0	0	0	10	24	9	2	0	1	0	0	0
23:00	14	30.1	25.7	4.2	0	0	0	8	3	3	0	0	0	0	0	0
Total 2H(10-12)	420	29.9	25.6	4.2	2	8	14	136	229	28	1	1	1	0	0	0
2H(14-16)	478	29.4	25.7	3.6	1	1	14	186	233	41	2	0	0	0	0	0
12H(7-19)	2628	29.8	25.9	3.7	7	13	76	861	1433	220	12	4	2	0	0	0
24H(0-24)	3165	30.2	26.3	3.8	7	13	80	946	1757	327	28	4	3	0	0	0
AM Peak	08:00	02:00	02:00	02:00	09:00	11:00	09:00	09:00	08:00	08:00	08:00	10:00	10:00	00:00	00:00	00:00
	292	39.8	32.5	7.1	2	7	17	90	173	28	4	1	1	0	0	0
PM Peak	15:00	21:00	21:00	22:00	18:00	14:00	12:00	15:00	16:00	17:00	21:00	13:00	18:00	12:00	12:00	12:00
	262	33.5	28.8	4.8	2	1	11	113	139	32	4	1	1	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	20	33.2	27.0	6.0	1	0	0	4	10	4	1	0	0	0	0	0
01:00	13	31.4	26.7	4.5	0	0	1	3	6	3	0	0	0	0	0	0
02:00	6	32.7	26.7	5.8	0	0	0	3	2	0	1	0	0	0	0	0
03:00	6	26.8	24.2	2.6	0	0	0	4	2	0	0	0	0	0	0	0
04:00	14	33.5	28.2	5.1	0	0	0	5	3	5	1	0	0	0	0	0
05:00	49	33.6	28.5	4.9	0	0	1	10	21	13	3	1	0	0	0	0
06:00	125	31.6	27.7	3.7	0	0	2	23	70	27	3	0	0	0	0	0
07:00	329	30.1	26.3	3.6	0	1	7	102	178	39	2	0	0	0	0	0
08:00	512	29.8	26.1	3.6	0	2	16	163	283	43	5	0	0	0	0	0
09:00	393	28.9	24.7	4.1	3	5	27	162	173	23	0	0	0	0	0	0
10:00	406	29.8	25.8	3.8	0	2	18	131	223	29	1	1	1	0	0	0
11:00	375	29.4	25.1	4.1	2	9	15	144	181	22	2	0	0	0	0	0
12:00	406	29.6	25.2	4.3	0	4	43	129	193	34	3	0	0	0	0	0
13:00	354	30.3	25.8	4.3	0	1	29	109	175	32	7	1	0	0	0	0
14:00	433	29.3	25.4	3.8	0	3	18	173	205	30	4	0	0	0	0	0
15:00	544	29.0	24.9	4.0	1	3	39	246	207	46	2	0	0	0	0	0
16:00	519	29.8	25.7	3.9	1	7	22	165	279	41	4	0	0	0	0	0
17:00	457	30.0	25.9	4.0	0	3	23	151	226	52	1	1	0	0	0	0
18:00	393	29.9	25.8	4.0	2	1	15	132	212	27	2	1	1	0	0	0
19:00	329	30.5	26.3	4.0	0	2	14	95	169	45	4	0	0	0	0	0
20:00	263	30.3	26.7	3.5	0	0	11	54	168	27	3	0	0	0	0	0
21:00	149	31.7	27.2	4.3	0	0	2	48	62	31	6	0	0	0	0	0
22:00	101	31.2	26.0	5.0	0	0	9	33	44	11	3	0	1	0	0	0
23:00	31	28.9	24.9	3.8	0	0	1	18	8	4	0	0	0	0	0	0
Total 2H(10-12)	781	29.6	25.5	4.0	2	11	33	275	404	51	3	1	1	0	0	0
2H(14-16)	977	29.2	25.1	3.9	1	6	57	419	412	76	6	0	0	0	0	0
12H(7-19)	5121	29.7	25.5	4.0	9	41	272	1807	2535	418	33	4	2	0	0	0
24H(0-24)	6227	29.9	25.8	4.0	10	43	313	2107	3100	588	58	5	3	0	0	0
AM Peak	08:00	05:00	05:00	00:00	09:00	11:00	09:00	08:00	08:00	08:00	08:00	05:00	10:00	00:00	00:00	00:00
	512	33.6	28.5	6.0	3	9	27	163	283	43	5	1	1	0	0	0
PM Peak	15:00	21:00	21:00	22:00	18:00	16:00	12:00	15:00	16:00	17:00	13:00	13:00	18:00	12:00	12:00	12:00
	544	31.7	27.2	5.0	2	7	43	246	279	52	7	1	1	0	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

07/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	14	32.2	28.2	3.9	0	0	0	3	6	5	0	0	0	0	0	0
01:00	9	32.1	28.6	3.3	0	0	0	1	5	3	0	0	0	0	0	0
02:00	6	30.6	26.7	3.8	0	0	0	2	3	1	0	0	0	0	0	0
03:00	5	22.5	22.5	0.0	0	0	0	5	0	0	0	0	0	0	0	0
04:00	8	35.8	27.5	8.0	0	0	2	1	2	1	2	0	0	0	0	0
05:00	29	31.1	27.3	3.7	0	0	2	2	20	5	0	0	0	0	0	0
06:00	65	31.9	26.5	5.2	0	0	2	30	18	9	6	0	0	0	0	0
07:00	160	30.7	26.6	3.9	0	0	2	55	78	20	5	0	0	0	0	0
08:00	210	30.0	26.1	3.7	0	0	8	70	104	27	1	0	0	0	0	0
09:00	176	29.4	25.6	3.6	0	0	9	63	90	13	1	0	0	0	0	0
10:00	146	29.0	25.1	3.7	0	0	6	73	53	13	1	0	0	0	0	0
11:00	187	28.5	24.7	3.7	0	1	14	83	79	10	0	0	0	0	0	0
12:00	206	28.4	23.7	4.6	1	3	36	87	66	11	2	0	0	0	0	0
13:00	211	28.8	24.3	4.3	0	4	22	93	78	12	2	0	0	0	0	0
14:00	251	28.1	23.9	4.1	0	4	27	128	80	9	3	0	0	0	0	0
15:00	307	28.6	24.1	4.3	3	4	31	137	117	13	2	0	0	0	0	0
16:00	306	29.1	24.3	4.6	2	6	30	139	101	25	3	0	0	0	0	0
17:00	219	30.7	25.9	4.7	0	3	18	65	101	26	6	0	0	0	0	0
18:00	166	29.5	24.5	4.8	0	7	11	77	55	12	4	0	0	0	0	0
19:00	157	28.2	24.5	3.5	0	0	10	82	57	7	1	0	0	0	0	0
20:00	109	29.1	25.3	3.7	0	0	6	46	49	7	1	0	0	0	0	0
21:00	96	29.7	25.8	3.8	0	0	5	33	50	6	2	0	0	0	0	0
22:00	55	30.8	26.4	4.3	0	0	3	16	28	6	2	0	0	0	0	0
23:00	60	29.3	25.5	3.7	0	0	2	25	30	1	2	0	0	0	0	0
Total																
2H(10-12)	333	28.7	24.9	3.7	0	1	20	156	132	23	1	0	0	0	0	0
2H(14-16)	558	28.4	24.1	4.2	3	8	58	265	197	22	5	0	0	0	0	0
12H(7-19)	2545	29.3	24.8	4.3	6	32	214	1070	1002	191	30	0	0	0	0	0
24H(0-24)	3158	29.4	25.0	4.3	6	32	246	1316	1270	242	46	0	0	0	0	0
AM Peak	08:00	04:00	01:00	04:00	00:00	11:00	11:00	11:00	08:00	08:00	06:00	00:00	00:00	00:00	00:00	00:00
	210	**35.8**	**28.6**	**8.0**	**0**	**1**	**14**	**83**	**104**	**27**	**6**	**0**	**0**	**0**	**0**	**0**
PM Peak	15:00	22:00	22:00	18:00	15:00	18:00	12:00	16:00	15:00	17:00	17:00	12:00	12:00	12:00	12:00	12:00
	307	**30.8**	**26.4**	**4.8**	**3**	**7**	**36**	**139**	**117**	**26**	**6**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	12	32.1	28.3	3.6	0	0	0	2	6	4	0	0	0	0	0	0
01:00	3	28.8	25.8	2.9	0	0	0	1	2	0	0	0	0	0	0	0
02:00	3	27.5	27.5	0.0	0	0	0	0	3	0	0	0	0	0	0	0
03:00	7	33.9	28.9	4.8	0	0	0	2	1	4	0	0	0	0	0	0
04:00	9	28.3	22.5	5.6	0	1	1	5	1	1	0	0	0	0	0	0
05:00	21	35.0	28.2	6.6	0	0	2	5	6	5	2	1	0	0	0	0
06:00	63	34.4	29.2	5.0	0	0	0	10	31	15	5	1	1	0	0	0
07:00	153	32.2	27.9	4.1	0	0	0	34	84	23	12	0	0	0	0	0
08:00	291	30.7	27.6	3.0	0	0	1	42	207	36	4	1	0	0	0	0
09:00	242	30.2	26.6	3.5	0	0	7	62	143	28	2	0	0	0	0	0
10:00	193	29.0	25.6	3.3	0	0	5	79	96	12	1	0	0	0	0	0
11:00	190	29.3	24.9	4.2	0	2	24	58	92	14	0	0	0	0	0	0
12:00	184	29.6	26.0	3.5	0	0	3	66	103	10	1	0	1	0	0	0
13:00	210	29.9	25.9	3.9	0	2	7	71	112	15	2	1	0	0	0	0
14:00	257	29.9	26.4	3.4	0	0	5	80	142	29	1	0	0	0	0	0
15:00	290	30.1	26.9	3.1	0	0	0	69	194	22	4	1	0	0	0	0
16:00	292	34.3	28.3	5.8	0	0	0	46	192	42	5	1	0	0	3	3
17:00	248	30.4	27.3	3.0	0	0	1	43	169	33	2	0	0	0	0	0
18:00	179	29.3	26.2	3.1	0	0	5	49	114	11	0	0	0	0	0	0
19:00	171	30.3	27.0	3.3	0	0	2	37	112	17	3	0	0	0	0	0
20:00	84	32.7	28.2	4.4	0	0	0	18	43	20	0	3	0	0	0	0
21:00	72	32.2	27.7	4.3	0	0	0	19	36	13	3	1	0	0	0	0
22:00	59	34.0	28.1	5.7	0	0	4	10	30	8	4	3	0	0	0	0
23:00	41	33.7	27.6	5.9	0	0	2	11	18	7	1	1	1	0	0	0
Total																
2H(10-12)	383	29.2	25.2	3.8	0	2	29	137	188	26	1	0	0	0	0	0
2H(14-16)	547	30.0	26.6	3.3	0	0	5	149	336	51	5	1	0	0	0	0
12H(7-19)	2729	30.7	26.7	3.9	0	4	58	699	1648	275	34	4	1	0	3	3
24H(0-24)	3274	31.1	26.9	4.0	0	5	69	819	1937	369	52	14	3	0	3	3
AM Peak	08:00	05:00	06:00	05:00	00:00	11:00	11:00	10:00	08:00	08:00	07:00	05:00	06:00	00:00	00:00	00:00
	291	**35.0**	**29.2**	**6.6**	**0**	**2**	**24**	**79**	**207**	**36**	**12**	**1**	**1**	**0**	**0**	**0**
PM Peak	16:00	16:00	16:00	23:00	12:00	13:00	13:00	14:00	15:00	16:00	16:00	20:00	12:00	12:00	16:00	16:00
	292	**34.3**	**28.3**	**5.9**	**0**	**2**	**7**	**80**	**194**	**42**	**5**	**3**	**1**	**0**	**3**	**3**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	26	32.1	28.3	3.7	0	0	0	5	12	9	0	0	0	0	0	0
01:00	12	31.4	27.9	3.3	0	0	0	2	7	3	0	0	0	0	0	0
02:00	9	30.1	26.9	3.0	0	0	0	2	6	1	0	0	0	0	0	0
03:00	12	31.3	26.3	4.8	0	0	0	7	1	4	0	0	0	0	0	0
04:00	17	32.2	24.9	7.1	0	1	3	6	3	2	2	0	0	0	0	0
05:00	50	32.9	27.7	5.0	0	0	4	7	26	10	2	1	0	0	0	0
06:00	128	33.3	27.9	5.3	0	0	2	40	49	24	11	1	1	0	0	0
07:00	313	31.5	27.2	4.1	0	0	2	89	162	43	17	0	0	0	0	0
08:00	501	30.5	27.0	3.4	0	0	9	112	311	63	5	1	0	0	0	0
09:00	418	29.9	26.2	3.6	0	0	16	125	233	41	3	0	0	0	0	0
10:00	339	29.0	25.4	3.5	0	0	11	152	149	25	2	0	0	0	0	0
11:00	377	28.9	24.8	4.0	0	3	38	141	171	24	0	0	0	0	0	0
12:00	390	29.2	24.8	4.3	1	3	39	153	169	21	3	0	1	0	0	0
13:00	421	29.4	25.1	4.1	0	6	29	164	190	27	4	1	0	0	0	0
14:00	508	29.2	25.2	3.9	0	4	32	208	222	38	4	0	0	0	0	0
15:00	597	29.6	25.5	4.0	3	4	31	206	311	35	6	1	0	0	0	0
16:00	598	32.1	26.3	5.6	2	6	30	185	293	67	8	1	0	0	3	3
17:00	467	30.7	26.6	3.9	0	3	19	108	270	59	8	0	0	0	0	0
18:00	345	29.6	25.4	4.1	0	7	16	126	169	23	4	0	0	0	0	0
19:00	328	29.5	25.8	3.6	0	0	12	119	169	24	4	0	0	0	0	0
20:00	193	30.9	26.5	4.2	0	0	6	64	92	27	1	3	0	0	0	0
21:00	168	30.9	26.6	4.1	0	0	5	52	86	19	5	1	0	0	0	0
22:00	114	32.6	27.3	5.1	0	0	7	26	58	14	6	3	0	0	0	0
23:00	101	31.3	26.4	4.8	0	0	4	36	48	8	3	1	1	0	0	0
Total																
2H(10-12)	716	29.0	25.1	3.8	0	3	49	293	320	49	2	0	0	0	0	0
2H(14-16)	1105	29.4	25.3	4.0	3	8	63	414	533	73	10	1	0	0	0	0
12H(7-19)	5274	30.1	25.8	4.2	6	36	272	1769	2650	466	64	4	1	0	3	3
24H(0-24)	6432	30.4	25.9	4.3	6	37	315	2135	3207	611	98	14	3	0	3	3
AM Peak	08:00	06:00	00:00	04:00	00:00	11:00	11:00	10:00	08:00	08:00	07:00	05:00	06:00	00:00	00:00	00:00
	501	**33.3**	**28.3**	**7.1**	**0**	**3**	**38**	**152**	**311**	**63**	**17**	**1**	**1**	**0**	**0**	**0**
PM Peak	16:00	22:00	22:00	16:00	15:00	18:00	12:00	14:00	15:00	16:00	16:00	20:00	12:00	12:00	16:00	16:00
	598	**32.6**	**27.3**	**5.6**	**3**	**7**	**39**	**208**	**311**	**67**	**8**	**3**	**1**	**0**	**3**	**3**

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

08/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	22	31.1	26.8	4.2	0	0	1	6	10	5	0	0	0	0	0	0
01:00	18	32.3	27.8	4.4	0	0	1	2	11	3	1	0	0	0	0	0
02:00	4	32.0	22.5	9.1	0	1	1	0	1	1	0	0	0	0	0	0
03:00	5	29.1	24.5	4.5	0	0	1	1	3	0	0	0	0	0	0	0
04:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
05:00	9	33.5	29.7	3.6	0	0	0	1	3	5	0	0	0	0	0	0
06:00	35	29.5	26.5	2.9	0	0	0	10	22	3	0	0	0	0	0	0
07:00	54	31.7	27.2	4.3	0	0	2	12	30	7	3	0	0	0	0	0
08:00	101	29.8	25.6	4.0	0	0	6	39	44	11	1	0	0	0	0	0
09:00	115	30.9	27.3	3.4	0	0	3	17	78	16	0	1	0	0	0	0
10:00	141	30.6	26.3	4.2	0	0	8	43	70	16	4	0	0	0	0	0
11:00	197	30.1	25.9	4.1	1	0	11	64	96	24	1	0	0	0	0	0
12:00	223	30.4	25.2	5.0	0	6	25	70	95	21	5	1	0	0	0	0
13:00	164	30.6	26.3	4.1	0	2	7	46	83	25	1	0	0	0	0	0
14:00	168	31.4	25.1	6.0	4	6	16	52	59	26	4	1	0	0	0	0
15:00	155	30.5	25.5	4.8	0	6	8	51	71	15	4	0	0	0	0	0
16:00	161	31.0	26.2	4.6	0	0	14	45	76	23	2	0	1	0	0	0
17:00	122	34.9	27.8	6.8	1	2	2	28	55	29	3	0	0	0	0	2
18:00	123	30.8	25.7	5.0	0	0	12	46	47	13	3	2	0	0	0	0
19:00	119	30.2	25.1	4.9	0	2	14	40	48	13	1	1	0	0	0	0
20:00	93	30.6	25.3	5.1	0	1	9	41	25	13	4	0	0	0	0	0
21:00	82	29.2	25.2	3.9	0	0	5	36	34	6	1	0	0	0	0	0
22:00	65	30.9	25.8	4.9	0	0	7	23	22	11	2	0	0	0	0	0
23:00	60	31.4	25.8	5.3	0	1	6	20	21	9	3	0	0	0	0	0
Total																
2H(10-12)	338	30.3	26.0	4.1	1	0	19	107	166	40	5	0	0	0	0	0
2H(14-16)	323	31.0	25.3	5.5	4	12	24	103	130	41	8	1	0	0	0	0
12H(7-19)	1724	31.1	26.0	4.9	6	22	114	513	804	226	31	5	1	0	0	2
24H(0-24)	2238	31.0	25.9	4.8	6	27	159	695	1004	295	43	6	1	0	0	2
AM Peak	11:00	05:00	05:00	02:00	11:00	02:00	11:00	11:00	11:00	11:00	10:00	09:00	00:00	00:00	00:00	00:00
	197	**33.5**	**29.7**	**9.1**	**1**	**1**	**11**	**64**	**96**	**24**	**4**	**1**	**0**	**0**	**0**	**0**
PM Peak	12:00	17:00	17:00	17:00	14:00	12:00	12:00	12:00	12:00	17:00	12:00	18:00	16:00	12:00	12:00	17:00
	223	**34.9**	**27.8**	**6.8**	**4**	**6**	**25**	**70**	**95**	**29**	**5**	**2**	**1**	**0**	**0**	**2**

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	18	34.4	28.6	5.6	0	0	0	6	5	4	3	0	0	0	0	0
01:00	16	32.7	28.1	4.4	0	0	0	2	12	1	0	1	0	0	0	0
02:00	4	34.0	26.3	7.5	0	0	1	1	0	2	0	0	0	0	0	0
03:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
04:00	4	35.2	30.0	5.0	0	0	0	1	0	3	0	0	0	0	0	0
05:00	17	33.4	27.8	5.4	0	0	0	7	4	4	2	0	0	0	0	0
06:00	26	30.5	26.7	3.7	0	0	0	9	12	5	0	0	0	0	0	0
07:00	60	32.1	27.3	4.6	0	0	1	17	30	8	3	1	0	0	0	0
08:00	98	29.8	26.6	3.1	0	0	0	29	58	11	0	0	0	0	0	0
09:00	154	29.9	26.5	3.3	0	0	4	38	98	13	1	0	0	0	0	0
10:00	162	31.4	27.7	3.5	0	0	2	28	96	33	3	0	0	0	0	0
11:00	181	30.6	26.3	4.1	0	0	8	56	93	18	6	0	0	0	0	0
12:00	201	31.0	27.0	3.8	0	1	6	42	119	29	4	0	0	0	0	0
13:00	205	31.1	26.4	4.5	3	2	6	48	119	22	5	0	0	0	0	0
14:00	168	30.7	27.0	3.6	0	0	6	31	106	23	2	0	0	0	0	0
15:00	179	31.6	26.7	4.7	0	0	4	64	80	23	5	1	2	0	0	0
16:00	142	32.9	28.3	4.4	0	0	5	21	71	37	7	1	0	0	0	0
17:00	120	31.9	27.8	3.9	0	0	2	19	74	21	2	2	0	0	0	0
18:00	135	31.1	26.5	4.5	0	2	5	38	68	19	2	1	0	0	0	0
19:00	121	29.2	24.8	4.2	0	2	11	48	49	11	0	0	0	0	0	0
20:00	102	31.1	27.1	3.9	0	0	2	24	60	15	0	0	1	0	0	0
21:00	74	33.0	28.2	4.6	0	0	1	17	32	18	6	0	0	0	0	0
22:00	51	32.8	28.2	4.5	0	0	1	8	30	8	3	1	0	0	0	0
23:00	50	30.8	27.6	3.1	0	0	0	8	34	7	1	0	0	0	0	0
Total																
2H(10-12)	343	31.0	27.0	3.9	0	0	10	84	189	51	9	0	0	0	0	0
2H(14-16)	347	31.2	26.9	4.2	0	0	10	95	186	46	7	1	2	0	0	0
12H(7-19)	1805	31.2	27.0	4.1	3	5	49	431	1012	257	40	6	2	0	0	0
24H(0-24)	2291	31.3	27.0	4.2	3	7	65	564	1251	335	55	8	3	0	0	0
AM Peak	11:00	04:00	04:00	02:00	00:00	00:00	11:00	11:00	09:00	10:00	11:00	01:00	00:00	00:00	00:00	00:00
	181	**35.2**	**30.0**	**7.5**	**0**	**0**	**8**	**56**	**98**	**33**	**6**	**1**	**0**	**0**	**0**	**0**
PM Peak	13:00	21:00	16:00	15:00	13:00	13:00	19:00	15:00	12:00	16:00	16:00	17:00	15:00	12:00	12:00	12:00
	205	**33.0**	**28.3**	**4.7**	**3**	**2**	**11**	**64**	**119**	**37**	**7**	**2**	**2**	**0**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	40	32.7	27.6	4.9	0	0	1	12	15	9	3	0	0	0	0	0
01:00	34	32.4	27.9	4.3	0	0	1	4	23	4	1	1	0	0	0	0
02:00	8	32.7	24.4	8.0	0	1	2	1	1	3	0	0	0	0	0	0
03:00	8	28.2	24.4	3.7	0	0	1	3	4	0	0	0	0	0	0	0
04:00	6	33.2	27.5	5.5	0	0	0	3	0	3	0	0	0	0	0	0
05:00	26	33.5	28.5	4.9	0	0	0	8	7	9	2	0	0	0	0	0
06:00	61	29.9	26.6	3.2	0	0	0	19	34	8	0	0	0	0	0	0
07:00	114	31.9	27.3	4.4	0	0	3	29	60	15	6	1	0	0	0	0
08:00	199	29.8	26.1	3.6	0	0	6	68	102	22	1	0	0	0	0	0
09:00	269	30.3	26.8	3.4	0	0	7	55	176	29	1	1	0	0	0	0
10:00	303	31.1	27.0	3.9	0	0	10	71	166	49	7	0	0	0	0	0
11:00	378	30.3	26.1	4.1	1	0	19	120	189	42	7	0	0	0	0	0
12:00	424	30.8	26.0	4.6	0	7	31	112	214	50	9	1	0	0	0	0
13:00	369	30.9	26.4	4.4	3	4	13	94	202	47	6	0	0	0	0	0
14:00	336	31.3	26.1	5.0	4	6	22	83	165	49	6	1	0	0	0	0
15:00	334	31.1	26.2	4.8	0	6	12	115	151	38	9	1	2	0	0	0
16:00	303	32.0	27.2	4.7	0	0	19	66	147	60	9	1	1	0	0	0
17:00	242	33.6	27.8	5.5	1	2	4	47	129	50	5	2	0	0	0	2
18:00	258	31.0	26.1	4.7	0	2	17	84	115	32	5	3	0	0	0	0
19:00	240	29.7	25.0	4.6	0	4	25	88	97	24	1	1	0	0	0	0
20:00	195	31.0	26.2	4.6	0	1	11	65	85	28	4	0	1	0	0	0
21:00	156	31.3	26.6	4.5	0	0	6	53	66	24	7	0	0	0	0	0
22:00	116	31.9	26.9	4.9	0	0	8	31	52	19	5	1	0	0	0	0
23:00	110	31.3	26.6	4.5	0	1	6	28	55	16	4	0	0	0	0	0
Total																
2H(10-12)	681	30.7	26.5	4.0	1	0	29	191	355	91	14	0	0	0	0	0
2H(14-16)	670	31.2	26.1	4.9	4	12	34	198	316	87	15	2	2	0	0	0
12H(7-19)	3529	31.2	26.5	4.5	9	27	163	944	1816	483	71	11	3	0	0	2
24H(0-24)	4529	31.2	26.5	4.5	9	34	224	1259	2255	630	98	14	4	0	0	2
AM Peak	11:00	05:00	05:00	02:00	11:00	02:00	11:00	11:00	11:00	10:00	10:00	01:00	00:00	00:00	00:00	00:00
	378	**33.5**	**28.5**	**8.0**	**1**	**1**	**19**	**120**	**189**	**49**	**7**	**1**	**0**	**0**	**0**	**0**
PM Peak	12:00	17:00	17:00	17:00	14:00	12:00	12:00	15:00	12:00	16:00	12:00	18:00	15:00	12:00	12:00	17:00
	424	**33.6**	**27.8**	**5.5**	**4**	**7**	**31**	**115**	**214**	**60**	**9**	**3**	**2**	**0**	**0**	**2**

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

09/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	42	29.8	24.5	5.1	0	2	4	16	16	3	1	0	0	0	0	0
01:00	17	30.6	25.4	5.0	0	1	1	4	9	2	0	0	0	0	0	0
02:00	12	30.4	25.8	4.4	0	0	1	4	5	2	0	0	0	0	0	0
03:00	13	28.6	25.2	3.3	0	0	0	7	5	1	0	0	0	0	0	0
04:00	8	30.2	26.9	3.2	0	0	0	2	5	1	0	0	0	0	0	0
05:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
06:00	20	29.7	26.5	3.1	0	0	0	6	12	2	0	0	0	0	0	0
07:00	20	32.4	29.0	3.3	0	0	0	1	13	5	1	0	0	0	0	0
08:00	89	31.4	27.4	3.8	0	0	0	23	49	13	4	0	0	0	0	0
09:00	95	30.8	26.0	4.6	0	0	5	39	35	13	2	1	0	0	0	0
10:00	147	30.3	25.8	4.3	1	1	8	46	74	15	2	0	0	0	0	0
11:00	165	30.8	26.0	4.6	0	2	6	65	64	23	4	1	0	0	0	0
12:00	199	30.2	25.5	4.6	1	2	13	74	85	19	5	0	0	0	0	0
13:00	179	30.1	25.7	4.3	1	1	13	56	85	23	0	0	0	0	0	0
14:00	177	32.0	26.9	4.9	0	0	9	52	78	29	6	3	0	0	0	0
15:00	142	31.4	26.5	4.7	0	1	10	41	58	29	3	0	0	0	0	0
16:00	172	31.5	26.6	4.7	0	0	14	44	78	31	4	1	0	0	0	0
17:00	164	31.2	26.7	4.3	0	0	6	47	85	19	6	1	0	0	0	0
18:00	152	30.9	26.0	4.7	0	0	11	56	59	19	7	0	0	0	0	0
19:00	108	29.4	24.9	4.3	0	1	6	58	29	12	2	0	0	0	0	0
20:00	97	29.9	26.2	3.6	0	0	2	34	48	13	0	0	0	0	0	0
21:00	78	32.9	27.8	4.9	0	0	1	19	41	11	3	3	0	0	0	0
22:00	43	29.7	26.0	3.5	0	0	2	13	24	4	0	0	0	0	0	0
23:00	29	32.6	27.8	4.6	0	0	1	4	19	3	1	1	0	0	0	0
Total																
2H(10-12)	312	30.6	25.9	4.5	1	3	14	111	138	38	6	1	0	0	0	0
2H(14-16)	319	31.7	26.7	4.8	0	1	19	93	136	58	9	3	0	0	0	0
12H(7-19)	1701	31.0	26.3	4.5	3	7	95	544	763	238	44	7	0	0	0	0
24H(0-24)	2171	30.9	26.2	4.5	3	11	113	713	977	292	51	11	0	0	0	0
AM Peak	11:00	07:00	07:00	00:00	10:00	00:00	10:00	11:00	10:00	11:00	08:00	09:00	00:00	00:00	00:00	00:00
	165	32.4	29.0	5.1	1	2	8	65	74	23	4	1	0	0	0	0
PM Peak	12:00	21:00	23:00	21:00	12:00	12:00	16:00	12:00	12:00	16:00	18:00	14:00	12:00	12:00	12:00	12:00
	199	32.9	27.8	4.9	1	2	14	74	85	31	7	3	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	34	30.9	26.9	3.8	0	0	0	12	14	8	0	0	0	0	0	0
01:00	8	34.1	28.8	5.2	0	0	0	2	3	2	1	0	0	0	0	0
02:00	8	31.4	27.5	3.8	0	0	0	2	4	2	0	0	0	0	0	0
03:00	8	36.1	30.6	5.3	0	0	0	1	3	2	2	0	0	0	0	0
04:00	8	34.8	28.8	5.8	0	0	0	2	4	0	2	0	0	0	0	0
05:00	5	36.4	30.5	5.7	0	0	0	1	1	2	1	0	0	0	0	0
06:00	19	32.0	26.7	5.1	0	1	0	4	11	2	1	0	0	0	0	0
07:00	46	32.5	27.3	5.1	0	0	1	16	17	9	2	1	0	0	0	0
08:00	78	31.0	26.7	4.1	0	0	4	20	41	11	2	0	0	0	0	0
09:00	95	32.1	27.2	4.7	0	0	3	26	49	9	7	1	0	0	0	0
10:00	162	31.9	26.8	4.9	1	2	4	45	80	23	4	3	0	0	0	0
11:00	181	30.9	26.7	4.0	0	0	13	34	103	30	1	0	0	0	0	0
12:00	212	30.6	26.5	3.9	0	1	6	62	112	27	4	0	0	0	0	0
13:00	188	30.7	26.1	4.4	0	0	11	65	86	20	4	2	0	0	0	0
14:00	168	31.4	26.7	4.6	0	0	4	57	79	21	6	0	0	1	0	0
15:00	175	31.7	27.6	4.0	0	0	4	34	96	35	6	0	0	0	0	0
16:00	158	30.8	26.4	4.2	0	4	4	40	85	24	1	0	0	0	0	0
17:00	142	30.5	27.0	3.3	0	0	1	32	91	15	3	0	0	0	0	0
18:00	124	31.0	27.2	3.7	0	0	1	29	75	14	5	0	0	0	0	0
19:00	104	31.2	26.5	4.5	0	0	6	29	54	12	2	0	1	0	0	0
20:00	95	32.6	28.0	4.4	0	0	3	15	55	15	6	1	0	0	0	0
21:00	74	31.8	28.2	3.5	0	0	0	11	45	15	3	0	0	0	0	0
22:00	39	31.1	27.5	3.4	0	0	1	6	24	8	0	0	0	0	0	0
23:00	21	31.5	26.8	4.6	0	0	1	6	10	3	1	0	0	0	0	0
Total																
2H(10-12)	343	31.4	26.8	4.5	1	2	17	79	183	53	5	3	0	0	0	0
2H(14-16)	343	31.6	27.2	4.3	0	0	8	91	175	56	12	0	0	1	0	0
12H(7-19)	1729	31.2	26.8	4.2	1	7	56	460	914	238	45	7	0	1	0	0
24H(0-24)	2152	31.3	26.9	4.3	1	8	67	551	1142	309	64	8	1	1	0	0
AM Peak	11:00	05:00	03:00	04:00	10:00	10:00	11:00	10:00	11:00	11:00	09:00	10:00	00:00	00:00	00:00	00:00
	181	36.4	30.6	5.8	1	2	13	45	103	30	7	3	0	0	0	0
PM Peak	12:00	20:00	21:00	14:00	12:00	16:00	13:00	13:00	12:00	15:00	14:00	13:00	19:00	14:00	12:00	12:00
	212	32.6	28.2	4.6	0	4	11	65	112	35	6	2	1	1	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	76	30.5	25.6	4.7	0	2	4	28	30	11	1	0	0	0	0	0
01:00	25	31.9	26.5	5.2	0	1	1	6	12	4	1	0	0	0	0	0
02:00	20	30.8	26.5	4.2	0	0	1	6	9	4	0	0	0	0	0	0
03:00	21	32.3	27.3	4.9	0	0	0	8	8	3	2	0	0	0	0	0
04:00	16	32.6	27.8	4.6	0	0	0	4	9	1	2	0	0	0	0	0
05:00	8	34.0	28.1	5.6	0	0	0	3	2	2	1	0	0	0	0	0
06:00	39	30.9	26.6	4.1	0	1	0	10	23	4	1	0	0	0	0	0
07:00	66	32.6	27.8	4.6	0	0	1	17	30	14	3	1	0	0	0	0
08:00	167	31.2	27.1	4.0	0	0	4	43	90	24	6	0	0	0	0	0
09:00	190	31.4	26.6	4.7	0	0	8	65	84	22	9	2	0	0	0	0
10:00	309	31.2	26.3	4.7	2	3	12	91	154	38	6	3	0	0	0	0
11:00	346	30.9	26.4	4.3	0	2	19	99	167	53	5	1	0	0	0	0
12:00	411	30.4	26.0	4.3	1	3	19	136	197	46	9	0	0	0	0	0
13:00	367	30.4	25.9	4.4	1	1	24	121	171	43	4	2	0	0	0	0
14:00	345	31.7	26.8	4.7	0	0	13	109	157	50	12	3	0	1	0	0
15:00	317	31.6	27.1	4.3	0	1	14	75	154	64	9	0	0	0	0	0
16:00	330	31.2	26.5	4.5	0	4	18	84	163	55	5	1	0	0	0	0
17:00	306	30.9	26.9	3.9	0	0	7	79	176	34	9	1	0	0	0	0
18:00	276	31.0	26.6	4.3	0	0	12	85	134	33	12	0	0	0	0	0
19:00	212	30.3	25.7	4.5	0	1	12	87	83	24	4	0	1	0	0	0
20:00	192	31.3	27.1	4.1	0	0	5	49	103	28	6	1	0	0	0	0
21:00	152	32.4	28.0	4.3	0	0	1	30	86	26	6	3	0	0	0	0
22:00	82	30.4	26.7	3.6	0	0	3	19	48	12	0	0	0	0	0	0
23:00	50	32.1	27.4	4.6	0	0	2	10	29	6	2	1	0	0	0	0
Total																
2H(10-12)	655	31.0	26.4	4.5	2	5	31	190	321	91	11	4	0	0	0	0
2H(14-16)	662	31.7	27.0	4.5	0	1	27	184	311	114	21	3	0	1	0	0
12H(7-19)	3430	31.1	26.5	4.4	4	14	151	1004	1677	476	89	14	0	1	0	0
24H(0-24)	4323	31.1	26.6	4.4	4	19	180	1264	2119	601	115	19	1	1	0	0
AM Peak	11:00	05:00	05:00	05:00	10:00	10:00	11:00	11:00	11:00	11:00	09:00	10:00	00:00	00:00	00:00	00:00
	346	34.0	28.1	5.6	2	3	19	99	167	53	9	3	0	0	0	0
PM Peak	12:00	21:00	21:00	14:00	12:00	16:00	13:00	12:00	12:00	15:00	14:00	14:00	19:00	14:00	12:00	12:00
	411	32.4	28.0	4.7	1	4	24	136	197	64	12	3	1	1	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

10/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	14	31.7	26.8	4.7	0	0	1	3	8	1	1	0	0	0	0	0
01:00	8	27.5	27.5	0.0	0	0	0	0	8	0	0	0	0	0	0	0
02:00	8	31.2	26.9	4.2	0	0	0	3	3	2	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	11	29.8	27.0	2.7	0	0	0	2	8	1	0	0	0	0	0	0
05:00	25	32.1	28.7	3.3	0	0	0	3	13	9	0	0	0	0	0	0
06:00	71	30.4	26.9	3.4	0	0	0	21	38	12	0	0	0	0	0	0
07:00	166	30.9	26.5	4.3	0	0	6	44	102	11	0	0	3	0	0	0
08:00	219	28.6	25.1	3.4	0	2	9	90	110	8	0	0	0	0	0	0
09:00	194	28.3	24.1	4.0	0	4	16	98	64	12	0	0	0	0	0	0
10:00	189	27.8	24.3	3.4	0	1	13	99	70	6	0	0	0	0	0	0
11:00	160	28.7	24.3	4.2	0	3	16	70	65	4	1	1	0	0	0	0
12:00	198	28.4	24.2	4.0	0	3	21	90	72	12	0	0	0	0	0	0
13:00	186	28.9	24.5	4.3	0	4	23	64	86	8	1	0	0	0	0	0
14:00	197	28.0	24.0	3.9	0	1	22	105	58	9	2	0	0	0	0	0
15:00	277	28.3	24.4	3.7	0	0	25	140	96	14	2	0	0	0	0	0
16:00	267	29.7	25.5	4.0	0	0	20	100	120	23	4	0	0	0	0	0
17:00	237	29.2	25.3	3.8	0	0	13	99	106	16	3	0	0	0	0	0
18:00	196	30.0	25.0	4.8	1	3	16	80	76	15	3	2	0	0	0	0
19:00	164	28.7	24.5	4.0	0	4	10	75	65	10	0	0	0	0	0	0
20:00	122	29.3	25.1	4.0	0	0	8	56	46	10	2	0	0	0	0	0
21:00	82	28.5	24.6	3.8	0	0	5	44	27	5	1	0	0	0	0	0
22:00	42	28.9	25.7	3.1	0	0	1	15	24	2	0	0	0	0	0	0
23:00	21	31.2	26.3	4.7	0	0	0	11	5	4	1	0	0	0	0	0
Total																
2H(10-12)	349	28.2	24.3	3.8	0	4	29	169	135	10	1	1	0	0	0	0
2H(14-16)	474	28.2	24.2	3.8	0	1	47	245	154	23	4	0	0	0	0	0
12H(7-19)	2486	29.0	24.8	4.0	1	21	200	1079	1025	138	16	3	3	0	0	0
24H(0-24)	3054	29.1	24.9	4.0	1	25	225	1312	1270	194	21	3	3	0	0	0
AM Peak	08:00	05:00	05:00	00:00	00:00	09:00	09:00	10:00	08:00	06:00	00:00	11:00	07:00	00:00	00:00	00:00
	219	32.1	28.7	4.7	0	4	16	99	110	12	1	1	3	0	0	0
PM Peak	15:00	23:00	23:00	18:00	18:00	13:00	15:00	15:00	16:00	16:00	16:00	18:00	12:00	12:00	12:00	12:00
	277	31.2	26.3	4.8	1	4	25	140	120	23	4	2	0	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	5	36.2	32.5	3.5	0	0	0	0	1	3	1	0	0	0	0	0
01:00	9	31.2	28.1	3.0	0	0	0	1	6	2	0	0	0	0	0	0
02:00	5	33.3	26.5	6.5	0	0	0	3	1	0	1	0	0	0	0	0
03:00	2	27.5	27.5	0.0	0	0	0	0	2	0	0	0	0	0	0	0
04:00	8	30.3	27.5	2.7	0	0	0	1	6	1	0	0	0	0	0	0
05:00	23	33.3	28.8	4.3	0	0	0	3	14	3	3	0	0	0	0	0
06:00	72	33.1	29.5	3.4	0	0	0	5	36	28	3	0	0	0	0	0
07:00	151	31.7	28.1	3.5	0	0	0	24	88	37	1	1	0	0	0	0
08:00	268	29.6	26.3	3.1	0	0	5	74	172	14	3	0	0	0	0	0
09:00	236	28.7	25.2	3.4	0	0	8	110	104	12	2	0	0	0	0	0
10:00	188	29.1	25.4	3.6	0	0	4	87	84	12	0	0	1	0	0	0
11:00	177	30.0	26.4	3.5	0	0	5	50	104	16	2	0	0	0	0	0
12:00	190	29.6	25.4	4.1	0	4	11	65	92	18	0	0	0	0	0	0
13:00	165	30.0	26.6	3.3	0	1	2	39	109	12	2	0	0	0	0	0
14:00	233	29.6	26.1	3.4	0	0	6	75	130	21	1	0	0	0	0	0
15:00	232	30.4	26.7	3.6	0	0	3	64	137	23	4	1	0	0	0	0
16:00	243	30.5	26.6	3.8	1	0	3	69	142	24	2	2	0	0	0	0
17:00	223	30.5	27.0	3.4	0	0	5	46	141	29	2	0	0	0	0	0
18:00	166	31.4	27.3	3.9	0	0	3	38	94	24	7	0	0	0	0	0
19:00	153	31.4	27.7	3.5	0	0	3	19	104	25	1	0	1	0	0	0
20:00	129	30.3	26.3	3.8	0	0	2	48	61	15	3	0	0	0	0	0
21:00	58	33.1	28.2	4.7	0	1	0	7	38	8	3	0	1	0	0	0
22:00	32	32.3	28.4	3.7	0	0	0	5	17	9	1	0	0	0	0	0
23:00	22	36.7	28.9	7.6	0	0	0	6	11	3	0	0	1	1	0	0
Total																
2H(10-12)	365	29.6	25.9	3.6	0	0	9	137	188	28	2	0	1	0	0	0
2H(14-16)	465	30.0	26.4	3.5	0	0	9	139	267	44	5	1	0	0	0	0
12H(7-19)	2472	30.1	26.4	3.6	1	5	55	741	1397	242	26	4	1	0	0	0
24H(0-24)	2990	30.5	26.6	3.8	1	6	60	839	1694	339	42	4	4	1	0	0
AM Peak	08:00	00:00	00:00	02:00	00:00	00:00	09:00	09:00	08:00	07:00	05:00	07:00	10:00	00:00	00:00	00:00
	268	36.2	32.5	6.5	0	0	8	110	172	37	3	1	1	0	0	0
PM Peak	16:00	23:00	23:00	23:00	16:00	12:00	12:00	14:00	16:00	17:00	18:00	16:00	19:00	23:00	12:00	12:00
	243	36.7	28.9	7.6	1	4	11	75	142	29	7	2	1	1	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	19	33.5	28.3	5.1	0	0	1	3	9	4	2	0	0	0	0	0
01:00	17	30.0	27.8	2.1	0	0	0	1	14	2	0	0	0	0	0	0
02:00	13	31.8	26.7	4.9	0	0	0	6	4	2	1	0	0	0	0	0
03:00	2	27.5	27.5	0.0	0	0	0	0	2	0	0	0	0	0	0	0
04:00	19	30.0	27.2	2.6	0	0	0	3	14	2	0	0	0	0	0	0
05:00	48	32.7	28.8	3.8	0	0	0	6	27	12	3	0	0	0	0	0
06:00	143	32.0	28.2	3.6	0	0	0	26	74	40	3	0	0	0	0	0
07:00	317	31.4	27.3	4.0	0	0	6	68	190	48	1	1	3	0	0	0
08:00	487	29.2	25.8	3.3	0	2	14	164	282	22	3	0	0	0	0	0
09:00	430	28.6	24.7	3.7	0	4	24	208	168	24	2	0	0	0	0	0
10:00	377	28.5	24.8	3.6	0	1	17	186	154	18	0	0	1	0	0	0
11:00	337	29.5	25.4	4.0	0	3	21	120	169	20	3	1	0	0	0	0
12:00	388	29.1	24.8	4.1	0	7	32	155	164	30	0	0	0	0	0	0
13:00	351	29.6	25.5	4.0	0	5	25	103	195	20	3	0	0	0	0	0
14:00	430	29.1	25.1	3.8	0	1	28	180	188	30	3	0	0	0	0	0
15:00	509	29.4	25.5	3.8	0	0	28	204	233	37	6	1	0	0	0	0
16:00	510	30.1	26.0	4.0	1	0	23	169	262	47	6	2	0	0	0	0
17:00	460	29.9	26.1	3.7	0	0	18	145	247	45	5	0	0	0	0	0
18:00	362	30.8	26.1	4.6	1	3	19	118	170	39	10	2	0	0	0	0
19:00	317	30.3	26.1	4.1	0	4	13	94	169	35	1	0	1	0	0	0
20:00	251	29.8	25.7	4.0	0	0	10	104	107	25	5	0	0	0	0	0
21:00	140	30.8	26.1	4.5	0	1	5	51	65	13	4	0	1	0	0	0
22:00	74	30.6	26.9	3.6	0	0	1	20	41	11	1	0	0	0	0	0
23:00	43	34.3	27.6	6.4	0	0	0	17	16	7	1	0	1	1	0	0
Total																
2H(10-12)	714	29.0	25.1	3.8	0	4	38	306	323	38	3	1	1	0	0	0
2H(14-16)	939	29.3	25.3	3.8	0	1	56	384	421	67	9	1	0	0	0	0
12H(7-19)	4958	29.6	25.6	3.9	2	26	255	1820	2422	380	42	7	4	0	0	0
24H(0-24)	6044	29.9	25.8	4.0	2	31	285	2151	2964	533	63	7	7	1	0	0
AM Peak	08:00	00:00	05:00	00:00	00:00	09:00	09:00	09:00	08:00	07:00	05:00	07:00	07:00	00:00	00:00	00:00
	487	33.5	28.8	5.1	0	4	24	208	282	48	3	1	3	0	0	0
PM Peak	16:00	23:00	23:00	23:00	16:00	12:00	12:00	15:00	16:00	16:00	18:00	16:00	19:00	23:00	12:00	12:00
	510	34.3	27.6	6.4	1	7	32	204	262	47	10	2	1	1	0	0

Paul Castle Associates

Penrhys ATC 2, B4512 Penrhys Road (Western Site)

Direction: Eastbound

11/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	18	30.2	26.4	3.7	0	0	1	4	11	2	0	0	0	0	0	0
01:00	5	27.5	27.5	0.0	0	0	0	0	5	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
04:00	4	31.2	26.3	4.8	0	0	0	2	1	1	0	0	0	0	0	0
05:00	29	31.4	27.3	3.9	0	0	1	6	15	7	0	0	0	0	0	0
06:00	61	30.3	26.4	3.8	0	1	0	19	32	9	0	0	0	0	0	0
07:00	185	29.8	25.8	3.9	0	0	6	75	84	16	4	0	0	0	0	0
08:00	275	30.8	26.0	4.7	0	0	17	93	138	18	5	0	4	0	0	0
09:00	198	28.9	25.0	3.8	0	3	11	80	94	9	1	0	0	0	0	0
10:00	202	29.7	24.8	4.8	1	1	23	84	71	19	1	2	0	0	0	0
11:00	184	29.1	23.5	5.4	3	14	16	75	63	11	2	0	0	0	0	0
12:00	188	29.2	24.9	4.2	0	1	17	82	71	14	3	0	0	0	0	0
13:00	196	29.2	24.1	4.9	0	5	26	93	46	24	2	0	0	0	0	0
14:00	202	30.2	25.2	4.8	0	5	24	54	96	20	3	0	0	0	0	0
15:00	292	28.9	24.4	4.3	1	6	19	142	111	10	1	0	2	0	0	0
16:00	301	28.7	24.7	3.9	0	2	26	128	127	17	1	0	0	0	0	0
17:00	251	30.6	25.7	4.7	0	0	25	88	96	35	7	0	0	0	0	0
18:00	218	29.9	25.9	3.8	0	0	8	82	104	20	4	0	0	0	0	0
19:00	165	29.3	25.4	3.7	0	0	7	71	73	12	2	0	0	0	0	0
20:00	118	30.9	26.7	4.0	0	0	4	34	60	17	3	0	0	0	0	0
21:00	74	30.2	25.5	4.6	0	3	3	24	36	7	1	0	0	0	0	0
22:00	63	29.8	25.0	4.6	0	1	7	21	28	5	1	0	0	0	0	0
23:00	30	30.1	26.3	3.6	0	0	2	6	19	3	0	0	0	0	0	0
Total																
2H(10-12)	386	29.5	24.2	5.1	4	15	39	159	134	30	3	2	0	0	0	0
2H(14-16)	494	29.5	24.7	4.6	1	11	43	196	207	30	4	0	2	0	0	0
12H(7-19)	2692	29.7	25.0	4.5	5	37	218	1076	1101	213	34	2	6	0	0	0
24H(0-24)	3261	29.8	25.2	4.4	5	42	244	1263	1382	276	41	2	6	0	0	0
AM Peak	08:00	05:00	01:00	03:00	11:00	11:00	10:00	08:00	08:00	10:00	08:00	10:00	08:00	00:00	00:00	00:00
	275	31.4	27.5	7.1	3	14	23	93	138	19	5	2	4	0	0	0
PM Peak	16:00	20:00	20:00	13:00	15:00	15:00	13:00	15:00	16:00	17:00	17:00	12:00	15:00	12:00	12:00	12:00
	301	30.9	26.7	4.9	1	6	26	142	127	35	7	0	2	0	0	0

Paul Castle Associates

Direction: Westbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	15	33.0	28.5	4.3	0	0	0	3	7	4	1	0	0	0	0	0
01:00	3	37.9	27.5	10.0	0	0	1	0	1	0	1	0	0	0	0	0
02:00	2	36.0	25.0	10.6	0	0	1	0	0	1	0	0	0	0	0	0
03:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
04:00	4	33.0	30.0	2.9	0	0	0	0	2	2	0	0	0	0	0	0
05:00	25	33.5	29.5	3.8	0	0	0	2	13	8	2	0	0	0	0	0
06:00	68	32.3	28.2	3.9	0	0	1	10	40	13	4	0	0	0	0	0
07:00	162	31.3	27.1	4.0	0	0	7	31	97	22	4	1	0	0	0	0
08:00	330	29.7	26.8	2.8	0	0	1	73	229	25	2	0	0	0	0	0
09:00	278	29.7	26.5	3.1	0	0	4	73	181	18	1	1	0	0	0	0
10:00	208	30.2	26.0	4.0	0	3	6	61	123	13	1	0	0	1	0	0
11:00	182	28.5	25.0	3.4	1	0	4	88	81	7	1	0	0	0	0	0
12:00	181	30.4	26.3	3.9	0	1	8	47	106	16	2	1	0	0	0	0
13:00	204	30.2	26.2	3.9	0	1	12	53	115	21	2	0	0	0	0	0
14:00	235	30.1	26.3	3.7	0	2	2	69	146	12	2	1	1	0	0	0
15:00	273	30.3	26.6	3.6	0	1	7	66	171	24	3	1	0	0	0	0
16:00	278	29.6	25.9	3.6	0	3	4	95	155	18	3	0	0	0	0	0
17:00	225	30.9	26.4	4.4	0	0	16	56	126	17	9	1	0	0	0	0
18:00	171	30.0	26.7	3.2	0	0	1	45	110	11	4	0	0	0	0	0
19:00	159	32.0	27.7	4.2	0	0	3	28	97	26	3	0	2	0	0	0
20:00	104	34.2	28.8	5.2	0	0	0	17	61	18	2	4	1	1	0	0
21:00	64	30.7	26.6	4.0	0	0	1	22	31	8	2	0	0	0	0	0
22:00	36	31.4	27.5	3.8	0	0	0	9	19	7	1	0	0	0	0	0
23:00	32	33.1	28.6	4.4	0	0	0	7	13	10	2	0	0	0	0	0
Total																
2H(10-12)	390	29.5	25.5	3.8	1	3	10	149	204	20	2	0	0	1	0	0
2H(14-16)	508	30.2	26.5	3.6	0	3	9	135	317	36	5	2	1	0	0	0
12H(7-19)	2727	30.1	26.3	3.6	1	11	72	757	1640	204	34	6	1	1	0	0
24H(0-24)	3241	30.5	26.6	3.8	1	11	79	856	1925	301	52	10	4	2	0	0
AM Peak	08:00	01:00	04:00	02:00	11:00	10:00	07:00	11:00	08:00	08:00	06:00	07:00	00:00	10:00	00:00	00:00
	330	37.9	30.0	10.6	1	3	7	88	229	25	4	1	0	1	0	0
PM Peak	16:00	20:00	20:00	20:00	12:00	16:00	17:00	16:00	15:00	19:00	17:00	20:00	19:00	20:00	12:00	12:00
	278	34.2	28.8	5.2	0	3	16	95	171	26	9	4	2	1	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	33	31.5	27.3	4.0	0	0	1	7	18	6	1	0	0	0	0	0
01:00	8	33.0	27.5	5.3	0	0	1	0	6	0	1	0	0	0	0	0
02:00	2	36.0	25.0	10.6	0	0	1	0	0	1	0	0	0	0	0	0
03:00	4	28.7	23.8	4.8	0	0	1	1	2	0	0	0	0	0	0	0
04:00	8	32.4	28.1	4.2	0	0	0	2	3	3	0	0	0	0	0	0
05:00	54	32.5	28.3	4.0	0	0	1	8	28	15	2	0	0	0	0	0
06:00	129	31.4	27.3	3.9	0	1	1	29	72	22	4	0	0	0	0	0
07:00	347	30.6	26.4	4.0	0	0	13	106	181	38	8	1	0	0	0	0
08:00	605	30.4	26.4	3.8	0	0	18	166	367	43	7	0	4	0	0	0
09:00	476	29.5	25.8	3.5	0	3	15	153	275	27	2	1	0	0	0	0
10:00	410	30.0	25.4	4.4	1	4	29	145	194	32	2	2	0	1	0	0
11:00	366	29.0	24.3	4.6	4	14	20	163	144	18	3	0	0	0	0	0
12:00	369	29.9	25.6	4.1	0	2	25	129	177	30	5	1	0	0	0	0
13:00	400	29.8	25.2	4.5	0	6	38	146	161	45	4	0	0	0	0	0
14:00	437	30.2	25.8	4.3	0	7	26	123	242	32	5	1	1	0	0	0
15:00	565	29.7	25.4	4.1	1	7	26	208	282	34	4	1	2	0	0	0
16:00	579	29.2	25.3	3.8	0	5	30	223	282	35	4	0	0	0	0	0
17:00	476	30.7	26.0	4.5	0	0	41	144	222	52	16	1	0	0	0	0
18:00	389	30.0	26.2	3.6	0	0	9	127	214	31	8	0	0	0	0	0
19:00	324	30.8	26.5	4.1	0	0	10	99	170	38	5	0	2	0	0	0
20:00	222	32.6	27.7	4.7	0	0	4	51	121	35	5	4	1	1	0	0
21:00	138	30.5	26.0	4.3	0	3	4	46	67	15	3	0	0	0	0	0
22:00	99	30.5	25.9	4.4	0	1	7	30	47	12	2	0	0	0	0	0
23:00	62	31.8	27.5	4.1	0	0	2	13	32	13	2	0	0	0	0	0
Total																
2H(10-12)	776	29.6	24.9	4.5	5	18	49	308	338	50	5	2	0	1	0	0
2H(14-16)	1002	30.0	25.6	4.2	1	14	52	331	524	66	9	2	3	0	0	0
12H(7-19)	5419	30.0	25.7	4.1	6	48	290	1833	2741	417	68	8	7	1	0	0
24H(0-24)	6502	30.2	25.9	4.2	6	53	323	2119	3307	577	93	12	10	2	0	0
AM Peak	08:00	02:00	05:00	02:00	11:00	11:00	10:00	08:00	08:00	08:00	07:00	10:00	08:00	10:00	00:00	00:00
	605	36.0	28.3	10.6	4	14	29	166	367	43	8	2	4	1	0	0
PM Peak	16:00	20:00	20:00	20:00	15:00	14:00	17:00	16:00	15:00	17:00	17:00	20:00	15:00	20:00	12:00	12:00
	579	32.6	27.7	4.7	1	7	41	223	282	52	16	4	2	1	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	0	1	1	3	2	1	2	1	1
01:00	1	2	0	2	2	0	1	1	1
02:00	0	1	0	0	1	1	0	0	0
03:00	0	0	0	1	1	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0
05:00	1	0	1	2	0	2	2	1	1
06:00	4	8	8	1	1	2	4	5	4
07:00	12	13	15	4	4	15	8	13	10
08:00	28	31	28	6	4	26	31	29	22
09:00	38	21	24	8	15	39	19	28	23
10:00	23	23	25	11	24	17	24	22	21
11:00	44	27	26	21	26	31	24	30	28
12:00	32	34	32	31	44	26	31	31	33
13:00	30	26	30	34	24	31	21	28	28
14:00	33	24	27	20	26	34	42	32	29
15:00	52	42	55	35	30	75	52	55	49
16:00	42	51	47	20	30	51	70	52	44
17:00	27	20	22	17	38	29	30	26	26
18:00	35	28	19	35	20	24	20	25	26
19:00	39	23	25	20	27	18	17	24	24
20:00	11	20	24	20	15	13	15	17	17
21:00	7	8	13	8	19	6	16	10	11
22:00	10	12	27	4	9	4	12	13	11
23:00	3	2	8	4	4	4	4	4	4
Total 12H(7-19)	396	340	350	242	285	398	372	371	340
16H(6-22)	457	399	420	291	347	437	424	427	396
18H(6-24)	470	413	455	299	360	445	440	445	412
24H(0-24)	472	418	457	307	366	449	445	448	416
AM Peak	11:00	08:00	08:00	11:00	11:00	09:00	08:00	11:00	11:00
	44	31	28	21	26	39	31	30	28
PM Peak	15:00	16:00	15:00	15:00	12:00	15:00	16:00	15:00	15:00
	52	51	55	35	44	75	70	55	49

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	0	1	1	3	4	1	2	1	2
01:00	0	1	0	3	2	1	0	0	1
02:00	0	1	1	1	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	1	0	0	0	0	0	0
06:00	2	2	0	1	0	2	1	1	1
07:00	13	13	11	1	1	18	10	13	10
08:00	37	43	41	4	3	61	42	45	33
09:00	19	14	18	10	5	17	14	16	14
10:00	19	24	30	17	20	30	14	23	22
11:00	34	32	24	34	18	28	19	27	27
12:00	33	30	25	26	43	22	31	28	30
13:00	23	19	23	25	28	27	31	25	25
14:00	41	40	33	33	30	38	43	39	37
15:00	33	26	32	22	23	43	30	33	30
16:00	33	28	28	27	33	20	25	27	28
17:00	38	19	23	20	25	26	27	27	25
18:00	31	29	17	23	23	21	25	25	24
19:00	22	19	33	25	18	17	16	21	21
20:00	14	15	20	15	15	14	8	14	14
21:00	8	10	10	9	8	3	12	9	9
22:00	8	10	14	5	4	7	12	10	9
23:00	2	2	8	4	2	2	4	4	3
Total 12H(7-19)	354	317	305	242	252	351	311	328	305
16H(6-22)	400	363	368	292	293	387	348	373	350
18H(6-24)	410	375	390	301	299	396	364	387	362
24H(0-24)	410	378	393	308	306	398	366	389	366
AM Peak	08:00	08:00	08:00	11:00	10:00	08:00	08:00	08:00	08:00
	37	43	41	34	20	61	42	45	33
PM Peak	14:00	14:00	14:00	14:00	12:00	15:00	14:00	14:00	14:00
	41	40	33	33	43	43	43	39	37

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	0	2	2	6	6	2	4	2	3
01:00	1	3	0	5	4	1	1	1	2
02:00	0	2	1	1	1	1	0	1	1
03:00	0	0	0	1	2	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0
05:00	1	0	2	2	0	2	2	1	1
06:00	6	10	8	2	1	4	5	7	5
07:00	25	26	26	5	5	33	18	26	20
08:00	65	74	69	10	7	87	73	74	55
09:00	57	35	42	18	20	56	33	45	37
10:00	42	47	55	28	44	47	38	46	43
11:00	78	59	50	55	44	59	43	58	55
12:00	65	64	57	57	87	48	62	59	63
13:00	53	45	53	59	52	58	52	52	53
14:00	74	64	60	53	56	72	85	71	66
15:00	85	68	87	57	53	118	82	88	79
16:00	75	79	75	47	63	71	95	79	72
17:00	65	39	45	37	63	55	57	52	52
18:00	66	57	36	58	43	45	45	50	50
19:00	61	42	58	45	45	35	33	46	46
20:00	25	35	44	35	30	27	23	31	31
21:00	15	18	23	17	27	9	28	19	20
22:00	18	22	41	9	13	11	24	23	20
23:00	5	4	16	8	6	6	8	8	8
Total 12H(7-19)	750	657	655	484	537	749	683	699	645
16H(6-22)	857	762	788	583	640	824	772	801	747
18H(6-24)	880	788	845	600	659	841	804	832	774
24H(0-24)	882	796	850	615	672	847	811	837	782
AM Peak	11:00	08:00	08:00	11:00	10:00	08:00	08:00	08:00	11:00
	78	74	69	55	44	87	73	74	55
PM Peak	15:00	16:00	15:00	13:00	12:00	15:00	16:00	15:00	15:00
	85	79	87	59	87	118	95	88	79

Paul Castle Associates

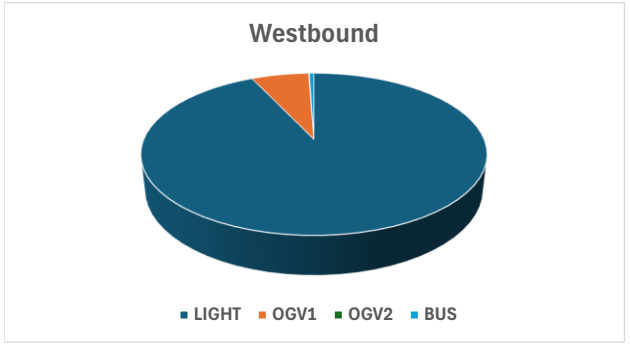
Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	472	439	30	0	3
Thu 6 Mar 2025	418	385	30	0	3
Fri 7 Mar 2025	457	421	35	0	1
Sat 8 Mar 2025	307	283	22	1	1
Sun 9 Mar 2025	366	349	16	1	0
Mon 10 Mar 2025	449	414	30	0	5
Tue 11 Mar 2025	445	420	23	0	2
5 Day Ave.	448	416	30	0	3
7 Day Ave.	416	387	27	0	2

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	93.0%	6.4%	0.0%	0.6%
Thu 6 Mar 2025	100.0%	92.1%	7.2%	0.0%	0.7%
Fri 7 Mar 2025	100.0%	92.1%	7.7%	0.0%	0.2%
Sat 8 Mar 2025	100.0%	92.2%	7.2%	0.3%	0.3%
Sun 9 Mar 2025	100.0%	95.4%	4.4%	0.3%	0.0%
Mon 10 Mar 2025	100.0%	92.2%	6.7%	0.0%	1.1%
Tue 11 Mar 2025	100.0%	94.4%	5.2%	0.0%	0.4%
5 Day Ave.	100.0%	92.8%	6.6%	0.0%	0.6%
7 Day Ave.	100.0%	93.0%	6.4%	0.1%	0.5%

Paul Castle Associates

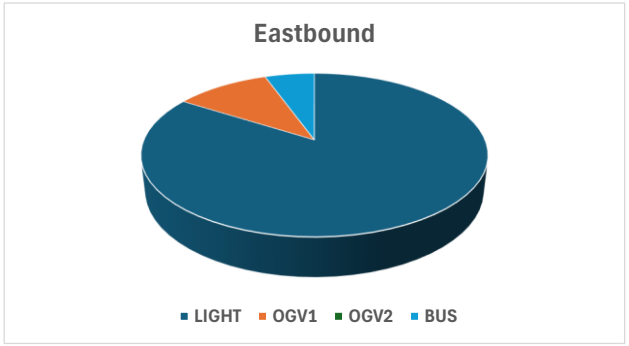


Direction: Eastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	410	346	38	0	26
Thu 6 Mar 2025	378	310	42	0	26
Fri 7 Mar 2025	393	320	56	0	17
Sat 8 Mar 2025	308	267	19	0	22
Sun 9 Mar 2025	306	284	22	0	0
Mon 10 Mar 2025	398	320	51	0	27
Tue 11 Mar 2025	366	302	41	0	23
5 Day Ave.	389	320	46	0	24
7 Day Ave.	366	307	38	0	20

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	84.4%	9.3%	0.0%	6.3%
Thu 6 Mar 2025	100.0%	82.0%	11.1%	0.0%	6.9%
Fri 7 Mar 2025	100.0%	81.4%	14.2%	0.0%	4.3%
Sat 8 Mar 2025	100.0%	86.7%	6.2%	0.0%	7.1%
Sun 9 Mar 2025	100.0%	92.8%	7.2%	0.0%	0.0%
Mon 10 Mar 2025	100.0%	80.4%	12.8%	0.0%	6.8%
Tue 11 Mar 2025	100.0%	82.5%	11.2%	0.0%	6.3%
5 Day Ave.	100.0%	82.2%	11.7%	0.0%	6.1%
7 Day Ave.	100.0%	84.0%	10.5%	0.0%	5.5%

Paul Castle Associates

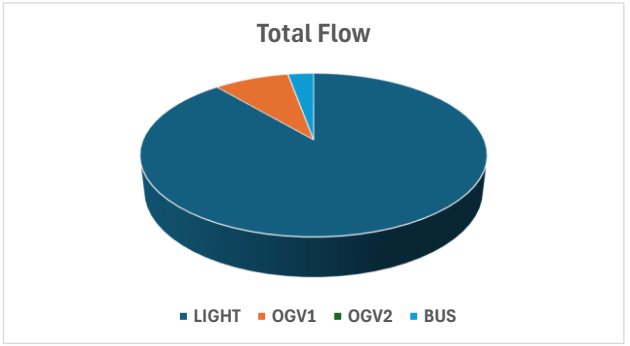


Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	882	785	68	0	29
Thu 6 Mar 2025	796	695	72	0	29
Fri 7 Mar 2025	850	741	91	0	18
Sat 8 Mar 2025	615	550	41	1	23
Sun 9 Mar 2025	672	633	38	1	0
Mon 10 Mar 2025	847	734	81	0	32
Tue 11 Mar 2025	811	722	64	0	25
5 Day Ave.	837	735	75	0	27
7 Day Ave.	782	694	65	0	22

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	89.0%	7.7%	0.0%	3.3%
Thu 6 Mar 2025	100.0%	87.3%	9.0%	0.0%	3.6%
Fri 7 Mar 2025	100.0%	87.2%	10.7%	0.0%	2.1%
Sat 8 Mar 2025	100.0%	89.4%	6.7%	0.2%	3.7%
Sun 9 Mar 2025	100.0%	94.2%	5.7%	0.1%	0.0%
Mon 10 Mar 2025	100.0%	86.7%	9.6%	0.0%	3.8%
Tue 11 Mar 2025	100.0%	89.0%	7.9%	0.0%	3.1%
5 Day Ave.	100.0%	87.8%	9.0%	0.0%	3.2%
7 Day Ave.	100.0%	88.8%	8.3%	0.0%	2.9%

Paul Castle Associates

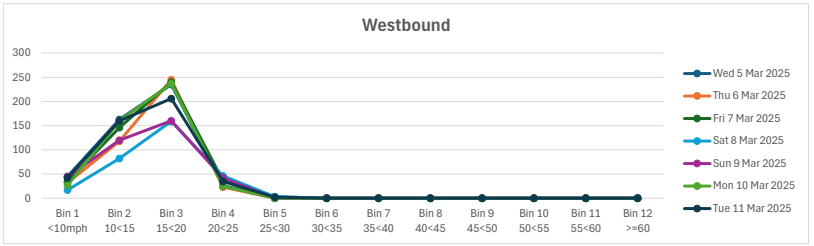


Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	472	19.1	15.2	3.7	45	163	235	26	3	0	0	0	0	0	0	0
Thu 6 Mar 2025	418	19.2	15.6	3.4	32	118	245	23	0	0	0	0	0	0	0	0
Fri 7 Mar 2025	457	19.3	15.6	3.6	35	146	240	36	0	0	0	0	0	0	0	0
Sat 8 Mar 2025	307	20.6	16.5	3.9	17	82	159	46	3	0	0	0	0	0	0	0
Sun 9 Mar 2025	366	19.6	15.3	4.1	44	120	160	42	0	0	0	0	0	0	0	0
Mon 10 Mar 2025	449	18.9	15.4	3.4	27	160	237	25	0	0	0	0	0	0	0	0
Tue 11 Mar 2025	445	19.2	15.2	3.9	42	160	206	35	2	0	0	0	0	0	0	0
5 Day Ave.	448	19.2	15.4	3.6	36	149	233	29	1	0	0	0	0	0	0	0
7 Day Ave.	416	19.4	15.6	3.7	35	136	212	33	1	0	0	0	0	0	0	0

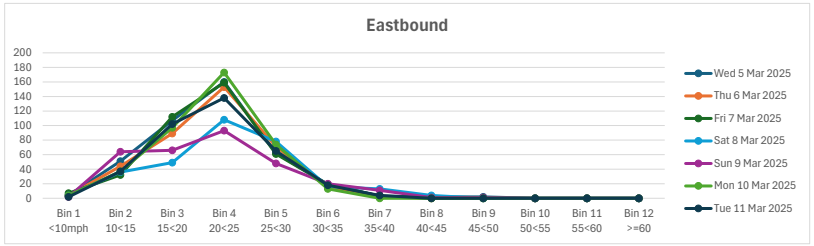
Paul Castle Associates



Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	410	27.5	21.4	5.9	4	51	107	160	62	19	3	2	2	0	0	0
Thu 6 Mar 2025	378	27.0	21.4	5.3	4	44	89	153	71	15	2	0	0	0	0	0
Fri 7 Mar 2025	393	26.9	21.4	5.3	7	32	112	159	61	19	3	0	0	0	0	0
Sat 8 Mar 2025	308	29.9	23.0	6.7	4	36	49	108	78	16	13	4	0	0	0	0
Sun 9 Mar 2025	306	28.6	21.4	7.0	2	64	66	93	48	20	11	1	1	0	0	0
Mon 10 Mar 2025	398	26.6	21.5	4.9	4	37	97	173	74	13	0	0	0	0	0	0
Tue 11 Mar 2025	366	27.2	21.6	5.4	2	37	102	138	65	18	4	0	0	0	0	0
5 Day Ave.	389	27.0	21.4	5.4	4	40	101	157	67	17	2	0	0	0	0	0
7 Day Ave.	366	27.7	21.7	5.8	4	43	89	141	66	17	5	1	0	0	0	0

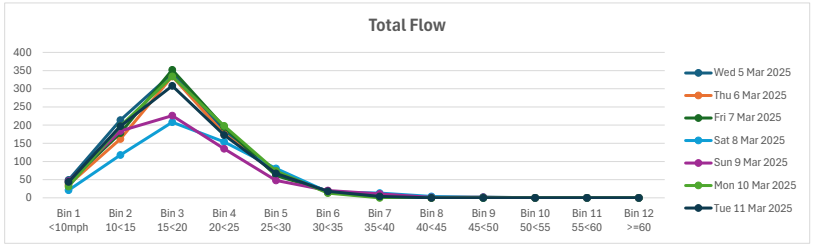
Paul Castle Associates



Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	882	24.0	18.1	5.8	49	214	342	186	65	19	3	2	2	0	0	0
Thu 6 Mar 2025	796	23.9	18.4	5.3	36	162	334	176	71	15	2	0	0	0	0	0
Fri 7 Mar 2025	850	23.8	18.3	5.3	42	178	352	195	61	19	3	0	0	0	0	0
Sat 8 Mar 2025	615	26.4	19.8	6.4	21	118	208	154	81	16	13	4	0	0	0	0
Sun 9 Mar 2025	672	24.6	18.1	6.4	46	184	226	135	48	20	11	1	1	0	0	0
Mon 10 Mar 2025	847	23.6	18.3	5.2	31	197	334	198	74	13	0	0	0	0	0	0
Tue 11 Mar 2025	811	23.9	18.1	5.6	44	197	308	173	67	18	4	0	0	0	0	0
5 Day Ave.	837	23.8	18.2	5.4	40	190	334	186	68	17	2	0	0	0	0	0
7 Day Ave.	782	24.3	18.4	5.7	38	179	301	174	67	17	5	1	0	0	0	0

Paul Castle Associates



Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	67	17.7	13.7	3.8	13	28	24	2	0	0	0	0	0	0	0	0
Thu 6 Mar 2025	50	19.1	14.8	4.2	9	13	25	3	0	0	0	0	0	0	0	0
Fri 7 Mar 2025	51	17.6	13.8	3.6	7	26	16	2	0	0	0	0	0	0	0	0
Sat 8 Mar 2025	32	18.6	14.7	3.7	3	14	13	2	0	0	0	0	0	0	0	0
Sun 9 Mar 2025	50	18.7	14.3	4.2	9	19	18	4	0	0	0	0	0	0	0	0
Mon 10 Mar 2025	48	18.4	14.5	3.7	5	22	18	3	0	0	0	0	0	0	0	0
Tue 11 Mar 2025	48	16.7	13.2	3.4	9	24	15	0	0	0	0	0	0	0	0	0
5 Day Ave.	53	17.9	14.0	3.7	9	23	20	2	0	0	0	0	0	0	0	0
7 Day Ave.	49	18.1	14.2	3.8	8	21	18	2	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	53	25.7	19.8	5.7	1	10	18	15	6	3	0	0	0	0	0	0
Thu 6 Mar 2025	56	26.4	19.8	6.4	2	13	14	14	10	3	0	0	0	0	0	0
Fri 7 Mar 2025	54	24.3	19.0	5.2	2	9	21	16	5	1	0	0	0	0	0	0
Sat 8 Mar 2025	51	28.1	21.0	6.9	1	11	11	12	13	1	2	0	0	0	0	0
Sun 9 Mar 2025	38	27.6	19.1	8.2	0	16	12	1	3	3	3	0	0	0	0	0
Mon 10 Mar 2025	58	24.6	19.3	5.0	3	7	21	20	7	0	0	0	0	0	0	0
Tue 11 Mar 2025	33	24.8	19.5	5.1	0	7	9	16	0	0	1	0	0	0	0	0
5 Day Ave.	51	25.2	19.5	5.5	2	9	17	16	6	1	0	0	0	0	0	0
7 Day Ave.	49	25.9	19.6	6.1	1	10	15	13	6	2	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	120	22.2	16.4	5.6	14	38	42	17	6	3	0	0	0	0	0	0
Thu 6 Mar 2025	106	23.6	17.5	6.0	11	26	39	17	10	3	0	0	0	0	0	0
Fri 7 Mar 2025	105	21.8	16.5	5.1	9	35	37	18	5	1	0	0	0	0	0	0
Sat 8 Mar 2025	83	25.4	18.6	6.6	4	25	24	14	13	1	2	0	0	0	0	0
Sun 9 Mar 2025	88	23.3	16.4	6.7	9	35	30	5	3	3	3	0	0	0	0	0
Mon 10 Mar 2025	106	22.4	17.2	5.1	8	29	39	23	7	0	0	0	0	0	0	0
Tue 11 Mar 2025	81	21.1	15.8	5.2	9	31	24	16	0	0	1	0	0	0	0	0
5 Day Ave.	104	22.3	16.7	5.4	10	32	36	18	6	1	0	0	0	0	0	0
7 Day Ave.	98	22.9	16.9	5.8	9	31	34	16	6	2	1	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	85	18.6	15.2	3.3	7	28	48	2	0	0	0	0	0	0	0	0
Thu 6 Mar 2025	66	19.2	15.6	3.4	4	21	37	4	0	0	0	0	0	0	0	0
Fri 7 Mar 2025	82	18.4	15.0	3.3	6	31	43	2	0	0	0	0	0	0	0	0
Sat 8 Mar 2025	55	20.7	16.1	4.5	7	12	26	10	0	0	0	0	0	0	0	0
Sun 9 Mar 2025	56	19.4	15.8	3.4	2	20	29	5	0	0	0	0	0	0	0	0
Mon 10 Mar 2025	109	18.3	14.9	3.3	7	48	50	4	0	0	0	0	0	0	0	0
Tue 11 Mar 2025	94	19.4	15.6	3.7	7	30	49	8	0	0	0	0	0	0	0	0
5 Day Ave.	87	18.8	15.3	3.4	6	32	45	4	0	0	0	0	0	0	0	0
7 Day Ave.	78	19.2	15.5	3.6	6	27	40	5	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	74	25.7	20.2	5.3	2	11	18	34	6	3	0	0	0	0	0	0
Thu 6 Mar 2025	66	26.9	21.7	5.1	1	5	18	23	18	1	0	0	0	0	0	0
Fri 7 Mar 2025	65	27.1	21.4	5.5	1	7	15	29	8	5	0	0	0	0	0	0
Sat 8 Mar 2025	55	28.4	21.7	6.5	2	9	8	17	15	4	0	0	0	0	0	0
Sun 9 Mar 2025	53	29.1	22.5	6.4	0	8	9	18	13	3	2	0	0	0	0	0
Mon 10 Mar 2025	81	26.6	20.8	5.6	0	15	19	29	14	4	0	0	0	0	0	0
Tue 11 Mar 2025	73	25.6	20.2	5.1	0	12	22	29	8	1	1	0	0	0	0	0
5 Day Ave.	72	26.4	20.9	5.3	1	10	18	29	11	3	0	0	0	0	0	0
7 Day Ave.	67	27.1	21.2	5.6	1	10	16	26	12	3	0	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	159	22.7	17.5	5.0	9	39	66	36	6	3	0	0	0	0	0	0
Thu 6 Mar 2025	132	24.1	18.7	5.3	5	26	55	27	18	1	0	0	0	0	0	0
Fri 7 Mar 2025	147	23.5	17.9	5.4	7	38	58	31	8	5	0	0	0	0	0	0
Sat 8 Mar 2025	110	25.3	18.9	6.2	9	21	34	27	15	4	0	0	0	0	0	0
Sun 9 Mar 2025	109	25.3	19.1	6.1	2	28	38	23	13	3	2	0	0	0	0	0
Mon 10 Mar 2025	190	22.9	17.4	5.3	7	63	69	33	14	4	0	0	0	0	0	0
Tue 11 Mar 2025	167	22.7	17.6	4.9	7	42	71	37	8	1	1	0	0	0	0	0
5 Day Ave.	159	23.2	17.8	5.2	7	42	64	33	11	3	0	0	0	0	0	0
7 Day Ave.	145	23.8	18.2	5.5	7	37	56	31	12	3	0	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

05/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	0	0	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	1	0	0	0
06:00	4	4	0	0	0
07:00	12	9	2	0	1
08:00	28	25	3	0	0
09:00	38	33	5	0	0
10:00	23	19	3	0	1
11:00	44	43	1	0	0
12:00	32	27	5	0	0
13:00	30	30	0	0	0
14:00	33	27	5	0	1
15:00	52	50	2	0	0
16:00	42	41	1	0	0
17:00	27	27	0	0	0
18:00	35	32	3	0	0
19:00	39	39	0	0	0
20:00	11	11	0	0	0
21:00	7	7	0	0	0
22:00	10	10	0	0	0
23:00	3	3	0	0	0
Total 12H(7-19)	396	363	30	0	3
16H(6-22)	457	424	30	0	3
18H(6-24)	470	437	30	0	3
24H(0-24)	472	439	30	0	3
AM Peak	11:00	11:00	09:00	00:00	07:00
	44	43	5	0	1
PM Peak	15:00	15:00	12:00	12:00	14:00
	52	50	5	0	1

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	0	0	0	0	0
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	2	2	0	0	0
07:00	13	8	4	0	1
08:00	37	31	3	0	3
09:00	19	16	1	0	2
10:00	19	12	4	0	3
11:00	34	28	4	0	2
12:00	33	29	2	0	2
13:00	23	17	5	0	1
14:00	41	32	6	0	3
15:00	33	27	4	0	2
16:00	33	28	2	0	3
17:00	38	35	0	0	3
18:00	31	27	3	0	1
19:00	22	22	0	0	0
20:00	14	14	0	0	0
21:00	8	8	0	0	0
22:00	8	8	0	0	0
23:00	2	2	0	0	0
Total 12H(7-19)	354	290	38	0	26
16H(6-22)	400	336	38	0	26
18H(6-24)	410	346	38	0	26
24H(0-24)	410	346	38	0	26
AM Peak	08:00	08:00	07:00	00:00	08:00
	37	31	4	0	3
PM Peak	14:00	17:00	14:00	12:00	14:00
	41	35	6	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	0	0	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	1	0	0	0
06:00	6	6	0	0	0
07:00	25	17	6	0	2
08:00	65	56	6	0	3
09:00	57	49	6	0	2
10:00	42	31	7	0	4
11:00	78	71	5	0	2
12:00	65	56	7	0	2
13:00	53	47	5	0	1
14:00	74	59	11	0	4
15:00	85	77	6	0	2
16:00	75	69	3	0	3
17:00	65	62	0	0	3
18:00	66	59	6	0	1
19:00	61	61	0	0	0
20:00	25	25	0	0	0
21:00	15	15	0	0	0
22:00	18	18	0	0	0
23:00	5	5	0	0	0
Total 12H(7-19)	750	653	68	0	29
16H(6-22)	857	760	68	0	29
18H(6-24)	880	783	68	0	29
24H(0-24)	882	785	68	0	29
AM Peak	11:00	11:00	10:00	00:00	10:00
	78	71	7	0	4
PM Peak	15:00	15:00	14:00	12:00	14:00
	85	77	11	0	4

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

06/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	2	2	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	1	1	0	0	0
05:00	0	0	0	0	0
06:00	8	6	1	0	1
07:00	13	12	1	0	0
08:00	31	29	2	0	0
09:00	21	19	2	0	0
10:00	23	19	4	0	0
11:00	27	21	5	0	1
12:00	34	32	1	0	1
13:00	26	24	2	0	0
14:00	24	20	4	0	0
15:00	42	40	2	0	0
16:00	51	49	2	0	0
17:00	20	18	2	0	0
18:00	28	28	0	0	0
19:00	23	22	1	0	0
20:00	20	19	1	0	0
21:00	8	8	0	0	0
22:00	12	12	0	0	0
23:00	2	2	0	0	0
Total					
12H(7-19)	340	311	27	0	2
16H(6-22)	399	366	30	0	3
18H(6-24)	413	380	30	0	3
24H(0-24)	418	385	30	0	3
AM Peak	08:00	08:00	11:00	00:00	06:00
	31	29	5	0	1
PM Peak	16:00	16:00	14:00	12:00	12:00
	51	49	4	0	1

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	1	1	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	2	0	0	0	2
07:00	13	12	0	0	1
08:00	43	36	3	0	4
09:00	14	11	3	0	0
10:00	24	14	6	0	4
11:00	32	21	8	0	3
12:00	30	26	4	0	0
13:00	19	15	1	0	3
14:00	40	33	5	0	2
15:00	26	22	3	0	1
16:00	28	21	4	0	3
17:00	19	16	1	0	2
18:00	29	24	4	0	1
19:00	19	19	0	0	0
20:00	15	15	0	0	0
21:00	10	10	0	0	0
22:00	10	10	0	0	0
23:00	2	2	0	0	0
Total					
12H(7-19)	317	251	42	0	24
16H(6-22)	363	295	42	0	26
18H(6-24)	375	307	42	0	26
24H(0-24)	378	310	42	0	26
AM Peak	08:00	08:00	11:00	00:00	08:00
	43	36	8	0	4
PM Peak	14:00	14:00	14:00	12:00	13:00
	40	33	5	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	3	3	0	0	0
02:00	2	2	0	0	0
03:00	0	0	0	0	0
04:00	1	1	0	0	0
05:00	0	0	0	0	0
06:00	10	6	1	0	3
07:00	26	24	1	0	1
08:00	74	65	5	0	4
09:00	35	30	5	0	0
10:00	47	33	10	0	4
11:00	59	42	13	0	4
12:00	64	58	5	0	1
13:00	45	39	3	0	3
14:00	64	53	9	0	2
15:00	68	62	5	0	1
16:00	79	70	6	0	3
17:00	39	34	3	0	2
18:00	57	52	4	0	1
19:00	42	41	1	0	0
20:00	35	34	1	0	0
21:00	18	18	0	0	0
22:00	22	22	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	657	562	69	0	26
16H(6-22)	762	661	72	0	29
18H(6-24)	788	687	72	0	29
24H(0-24)	796	695	72	0	29
AM Peak	08:00	08:00	11:00	00:00	08:00
	74	65	13	0	4
PM Peak	16:00	16:00	14:00	12:00	13:00
	79	70	9	0	3

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

07/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	0	1	0	0
06:00	8	8	0	0	0
07:00	15	15	0	0	0
08:00	28	25	3	0	0
09:00	24	20	4	0	0
10:00	25	20	5	0	0
11:00	26	24	2	0	0
12:00	32	30	2	0	0
13:00	30	30	0	0	0
14:00	27	23	3	0	1
15:00	55	52	3	0	0
16:00	47	44	3	0	0
17:00	22	20	2	0	0
18:00	19	17	2	0	0
19:00	25	23	2	0	0
20:00	24	22	2	0	0
21:00	13	13	0	0	0
22:00	27	26	1	0	0
23:00	8	8	0	0	0
Total 12H(7-19)	350	320	29	0	1
16H(6-22)	420	386	33	0	1
18H(6-24)	455	420	34	0	1
24H(0-24)	457	421	35	0	1
AM Peak	08:00	08:00	10:00	00:00	00:00
	28	25	5	0	0
PM Peak	15:00	15:00	14:00	12:00	14:00
	55	52	3	0	1

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	0	0	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	1	0	1	0	0
06:00	0	0	0	0	0
07:00	11	10	1	0	0
08:00	41	30	8	0	3
09:00	18	9	8	0	1
10:00	30	21	7	0	2
11:00	24	21	2	0	1
12:00	25	19	5	0	1
13:00	23	18	3	0	2
14:00	33	26	4	0	3
15:00	32	30	2	0	0
16:00	28	22	4	0	2
17:00	23	21	1	0	1
18:00	17	13	3	0	1
19:00	33	30	3	0	0
20:00	20	20	0	0	0
21:00	10	8	2	0	0
22:00	14	12	2	0	0
23:00	8	8	0	0	0
Total 12H(7-19)	305	240	48	0	17
16H(6-22)	368	298	53	0	17
18H(6-24)	390	318	55	0	17
24H(0-24)	393	320	56	0	17
AM Peak	08:00	08:00	08:00	00:00	08:00
	41	30	8	0	3
PM Peak	14:00	15:00	12:00	12:00	14:00
	33	30	5	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	0	0	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	0	2	0	0
06:00	8	8	0	0	0
07:00	26	25	1	0	0
08:00	69	55	11	0	3
09:00	42	29	12	0	1
10:00	55	41	12	0	2
11:00	50	45	4	0	1
12:00	57	49	7	0	1
13:00	53	48	3	0	2
14:00	60	49	7	0	4
15:00	87	82	5	0	0
16:00	75	66	7	0	2
17:00	45	41	3	0	1
18:00	36	30	5	0	1
19:00	58	53	5	0	0
20:00	44	42	2	0	0
21:00	23	21	2	0	0
22:00	41	38	3	0	0
23:00	16	16	0	0	0
Total 12H(7-19)	655	560	77	0	18
16H(6-22)	788	684	86	0	18
18H(6-24)	845	738	89	0	18
24H(0-24)	850	741	91	0	18
AM Peak	08:00	08:00	09:00	00:00	08:00
	69	55	12	0	3
PM Peak	15:00	15:00	12:00	12:00	14:00
	87	82	7	0	4

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

08/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	3	3	0	0	0
01:00	2	2	0	0	0
02:00	0	0	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	1	1	0	0	0
07:00	4	3	1	0	0
08:00	6	5	1	0	0
09:00	8	5	2	0	1
10:00	11	11	0	0	0
11:00	21	19	2	0	0
12:00	31	26	4	1	0
13:00	34	30	4	0	0
14:00	20	20	0	0	0
15:00	35	33	2	0	0
16:00	20	19	1	0	0
17:00	17	17	0	0	0
18:00	35	33	2	0	0
19:00	20	19	1	0	0
20:00	20	20	0	0	0
21:00	8	7	1	0	0
22:00	4	3	1	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	242	221	19	1	1
16H(6-22)	291	268	21	1	1
18H(6-24)	299	275	22	1	1
24H(0-24)	307	283	22	1	1
AM Peak	11:00	11:00	09:00	00:00	09:00
	21	19	2	0	1
PM Peak	15:00	15:00	12:00	12:00	12:00
	35	33	4	1	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	3	3	0	0	0
01:00	3	3	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	1	1	0	0	0
07:00	1	1	0	0	0
08:00	4	1	1	0	2
09:00	10	6	0	0	4
10:00	17	15	0	0	2
11:00	34	26	4	0	4
12:00	26	22	2	0	2
13:00	25	21	1	0	3
14:00	33	29	2	0	2
15:00	22	21	0	0	1
16:00	27	25	2	0	0
17:00	20	19	0	0	1
18:00	23	19	3	0	1
19:00	25	23	2	0	0
20:00	15	15	0	0	0
21:00	9	7	2	0	0
22:00	5	5	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	242	205	15	0	22
16H(6-22)	292	251	19	0	22
18H(6-24)	301	260	19	0	22
24H(0-24)	308	267	19	0	22
AM Peak	11:00	11:00	11:00	00:00	09:00
	34	26	4	0	4
PM Peak	14:00	14:00	18:00	12:00	13:00
	33	29	3	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	6	6	0	0	0
01:00	5	5	0	0	0
02:00	1	1	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	2	2	0	0	0
07:00	5	4	1	0	0
08:00	10	6	2	0	2
09:00	18	11	2	0	5
10:00	28	26	0	0	2
11:00	55	45	6	0	4
12:00	57	48	6	1	2
13:00	59	51	5	0	3
14:00	53	49	2	0	2
15:00	57	54	2	0	1
16:00	47	44	3	0	0
17:00	37	36	0	0	1
18:00	58	52	5	0	1
19:00	45	42	3	0	0
20:00	35	35	0	0	0
21:00	17	14	3	0	0
22:00	9	8	1	0	0
23:00	8	8	0	0	0
Total					
12H(7-19)	484	426	34	1	23
16H(6-22)	583	519	40	1	23
18H(6-24)	600	535	41	1	23
24H(0-24)	615	550	41	1	23
AM Peak	11:00	11:00	11:00	00:00	09:00
	55	45	6	0	5
PM Peak	13:00	15:00	12:00	12:00	13:00
	59	54	6	1	3

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

09/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	2	2	0	0	0
02:00	1	1	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	1	1	0	0	0
07:00	4	4	0	0	0
08:00	4	3	1	0	0
09:00	15	14	1	0	0
10:00	24	24	0	0	0
11:00	26	26	0	0	0
12:00	44	43	1	0	0
13:00	24	24	0	0	0
14:00	26	24	2	0	0
15:00	30	28	2	0	0
16:00	30	26	3	1	0
17:00	38	34	4	0	0
18:00	20	19	1	0	0
19:00	27	27	0	0	0
20:00	15	14	1	0	0
21:00	19	19	0	0	0
22:00	9	9	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	285	269	15	1	0
16H(6-22)	347	330	16	1	0
18H(6-24)	360	343	16	1	0
24H(0-24)	366	349	16	1	0
AM Peak	11:00	11:00	08:00	00:00	00:00
	26	26	1	0	0
PM Peak	12:00	12:00	17:00	16:00	12:00
	44	43	4	1	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	2	2	0	0	0
02:00	0	0	0	0	0
03:00	1	1	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	0	0	0	0	0
07:00	1	1	0	0	0
08:00	3	1	2	0	0
09:00	5	4	1	0	0
10:00	20	19	1	0	0
11:00	18	17	1	0	0
12:00	43	41	2	0	0
13:00	28	27	1	0	0
14:00	30	28	2	0	0
15:00	23	20	3	0	0
16:00	33	32	1	0	0
17:00	25	22	3	0	0
18:00	23	20	3	0	0
19:00	18	16	2	0	0
20:00	15	15	0	0	0
21:00	8	8	0	0	0
22:00	4	4	0	0	0
23:00	2	2	0	0	0
Total					
12H(7-19)	252	232	20	0	0
16H(6-22)	293	271	22	0	0
18H(6-24)	299	277	22	0	0
24H(0-24)	306	284	22	0	0
AM Peak	10:00	10:00	08:00	00:00	00:00
	20	19	2	0	0
PM Peak	12:00	12:00	15:00	12:00	12:00
	43	41	3	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	6	6	0	0	0
01:00	4	4	0	0	0
02:00	1	1	0	0	0
03:00	2	2	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	1	1	0	0	0
07:00	5	5	0	0	0
08:00	7	4	3	0	0
09:00	20	18	2	0	0
10:00	44	43	1	0	0
11:00	44	43	1	0	0
12:00	87	84	3	0	0
13:00	52	51	1	0	0
14:00	56	52	4	0	0
15:00	53	48	5	0	0
16:00	63	58	4	1	0
17:00	63	56	7	0	0
18:00	43	39	4	0	0
19:00	45	43	2	0	0
20:00	30	29	1	0	0
21:00	27	27	0	0	0
22:00	13	13	0	0	0
23:00	6	6	0	0	0
Total					
12H(7-19)	537	501	35	1	0
16H(6-22)	640	601	38	1	0
18H(6-24)	659	620	38	1	0
24H(0-24)	672	633	38	1	0
AM Peak	10:00	10:00	08:00	00:00	00:00
	44	43	3	0	0
PM Peak	12:00	12:00	17:00	16:00	12:00
	87	84	7	1	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

10/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	0	0	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	2	1	0	0	1
07:00	15	14	1	0	0
08:00	26	23	2	0	1
09:00	39	37	2	0	0
10:00	17	13	4	0	0
11:00	31	26	4	0	1
12:00	26	24	2	0	0
13:00	31	28	3	0	0
14:00	34	31	3	0	0
15:00	75	73	2	0	0
16:00	51	47	2	0	2
17:00	29	27	2	0	0
18:00	24	23	1	0	0
19:00	18	17	1	0	0
20:00	13	12	1	0	0
21:00	6	6	0	0	0
22:00	4	4	0	0	0
23:00	4	4	0	0	0
Total 12H(7-19)	398	366	28	0	4
16H(6-22)	437	402	30	0	5
18H(6-24)	445	410	30	0	5
24H(0-24)	449	414	30	0	5
AM Peak	09:00	09:00	10:00	00:00	06:00
	39	37	4	0	1
PM Peak	15:00	15:00	13:00	12:00	16:00
	75	73	3	0	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	1	1	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	2	1	0	0	1
07:00	18	15	1	0	2
08:00	61	51	7	0	3
09:00	17	12	5	0	0
10:00	30	21	5	0	4
11:00	28	21	5	0	2
12:00	22	18	2	0	2
13:00	27	19	6	0	2
14:00	38	32	3	0	3
15:00	43	37	3	0	3
16:00	20	15	4	0	1
17:00	26	20	4	0	2
18:00	21	18	2	0	1
19:00	17	13	4	0	0
20:00	14	14	0	0	0
21:00	3	2	0	0	1
22:00	7	7	0	0	0
23:00	2	2	0	0	0
Total 12H(7-19)	351	279	47	0	25
16H(6-22)	387	309	51	0	27
18H(6-24)	396	318	51	0	27
24H(0-24)	398	320	51	0	27
AM Peak	08:00	08:00	08:00	00:00	10:00
	61	51	7	0	4
PM Peak	15:00	15:00	13:00	12:00	14:00
	43	37	6	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	1	1	0	0	0
02:00	1	1	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	4	2	0	0	2
07:00	33	29	2	0	2
08:00	87	74	9	0	4
09:00	56	49	7	0	0
10:00	47	34	9	0	4
11:00	59	47	9	0	3
12:00	48	42	4	0	2
13:00	58	47	9	0	2
14:00	72	63	6	0	3
15:00	118	110	5	0	3
16:00	71	62	6	0	3
17:00	55	47	6	0	2
18:00	45	41	3	0	1
19:00	35	30	5	0	0
20:00	27	26	1	0	0
21:00	9	8	0	0	1
22:00	11	11	0	0	0
23:00	6	6	0	0	0
Total 12H(7-19)	749	645	75	0	29
16H(6-22)	824	711	81	0	32
18H(6-24)	841	728	81	0	32
24H(0-24)	847	734	81	0	32
AM Peak	08:00	08:00	08:00	00:00	08:00
	87	74	9	0	4
PM Peak	15:00	15:00	13:00	12:00	14:00
	118	110	9	0	3

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

11/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	4	4	0	0	0
07:00	8	8	0	0	0
08:00	31	28	3	0	0
09:00	19	18	1	0	0
10:00	24	21	3	0	0
11:00	24	23	1	0	0
12:00	31	28	2	0	1
13:00	21	19	2	0	0
14:00	42	36	6	0	0
15:00	52	50	2	0	0
16:00	70	69	1	0	0
17:00	30	29	1	0	0
18:00	20	20	0	0	0
19:00	17	17	0	0	0
20:00	15	14	1	0	0
21:00	16	15	0	0	1
22:00	12	12	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	372	349	22	0	1
16H(6-22)	424	399	23	0	2
18H(6-24)	440	415	23	0	2
24H(0-24)	445	420	23	0	2
AM Peak	08:00	08:00	08:00	00:00	00:00
	31	28	3	0	0
PM Peak	16:00	16:00	14:00	12:00	12:00
	70	69	6	0	1

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	2	2	0	0	0
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	0	0	0	0	0
06:00	1	1	0	0	0
07:00	10	9	0	0	1
08:00	42	32	7	0	3
09:00	14	9	4	0	1
10:00	14	11	1	0	2
11:00	19	14	3	0	2
12:00	31	22	6	0	3
13:00	31	25	3	0	3
14:00	43	31	8	0	4
15:00	30	25	3	0	2
16:00	25	22	3	0	0
17:00	27	24	2	0	1
18:00	25	24	0	0	1
19:00	16	16	0	0	0
20:00	8	7	1	0	0
21:00	12	12	0	0	0
22:00	12	12	0	0	0
23:00	4	4	0	0	0
Total					
12H(7-19)	311	248	40	0	23
16H(6-22)	348	284	41	0	23
18H(6-24)	364	300	41	0	23
24H(0-24)	366	302	41	0	23
AM Peak	08:00	08:00	08:00	00:00	08:00
	42	32	7	0	3
PM Peak	14:00	14:00	14:00	12:00	14:00
	43	31	8	0	4

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	4	0	0	0
01:00	1	1	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	2	2	0	0	0
06:00	5	5	0	0	0
07:00	18	17	0	0	1
08:00	73	60	10	0	3
09:00	33	27	5	0	1
10:00	38	32	4	0	2
11:00	43	37	4	0	2
12:00	62	50	8	0	4
13:00	52	44	5	0	3
14:00	85	67	14	0	4
15:00	82	75	5	0	2
16:00	95	91	4	0	0
17:00	57	53	3	0	1
18:00	45	44	0	0	1
19:00	33	33	0	0	0
20:00	23	21	2	0	0
21:00	28	27	0	0	1
22:00	24	24	0	0	0
23:00	8	8	0	0	0
Total					
12H(7-19)	683	597	62	0	24
16H(6-22)	772	683	64	0	25
18H(6-24)	804	715	64	0	25
24H(0-24)	811	722	64	0	25
AM Peak	08:00	08:00	08:00	00:00	08:00
	73	60	10	0	3
PM Peak	16:00	16:00	14:00	12:00	12:00
	95	91	14	0	4

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

05/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
01:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
06:00	4	16.3	13.8	2.5	0	3	1	0	0	0	0	0	0	0	0	0
07:00	12	17.6	13.8	3.6	2	5	5	0	0	0	0	0	0	0	0	0
08:00	28	19.6	16.3	3.2	0	10	15	3	0	0	0	0	0	0	0	0
09:00	38	18.8	14.9	3.7	4	14	18	2	0	0	0	0	0	0	0	0
10:00	23	16.7	13.4	3.1	3	13	7	0	0	0	0	0	0	0	0	0
11:00	44	18.2	13.9	4.2	10	15	17	2	0	0	0	0	0	0	0	0
12:00	32	19.5	14.0	5.3	8	12	9	1	2	0	0	0	0	0	0	0
13:00	30	16.1	13.1	2.9	4	19	7	0	0	0	0	0	0	0	0	0
14:00	33	17.9	14.2	3.6	4	15	13	1	0	0	0	0	0	0	0	0
15:00	52	18.9	15.8	3.0	3	13	35	1	0	0	0	0	0	0	0	0
16:00	42	18.5	15.3	3.1	2	16	23	1	0	0	0	0	0	0	0	0
17:00	27	20.2	17.0	3.1	1	4	19	3	0	0	0	0	0	0	0	0
18:00	35	21.2	17.2	3.8	1	7	21	5	1	0	0	0	0	0	0	0
19:00	39	19.7	16.0	3.6	3	9	24	3	0	0	0	0	0	0	0	0
20:00	11	19.7	16.6	3.0	0	3	7	1	0	0	0	0	0	0	0	0
21:00	7	21.7	17.5	4.1	0	2	3	2	0	0	0	0	0	0	0	0
22:00	10	18.5	16.0	2.4	0	3	7	0	0	0	0	0	0	0	0	0
23:00	3	17.5	17.5	0.0	0	0	3	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	67	17.7	13.7	3.8	13	28	24	2	0	0	0	0	0	0	0	0
2H(14-16)	85	18.6	15.2	3.3	7	28	48	2	0	0	0	0	0	0	0	0
12H(7-19)	396	18.9	15.0	3.8	42	143	189	19	3	0	0	0	0	0	0	0
24H(0-24)	472	19.1	15.2	3.7	45	163	235	26	3	0	0	0	0	0	0	0
AM Peak	11:00	08:00	01:00	11:00	11:00	11:00	09:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	44	19.6	22.5	4.2	10	15	18	3	0	0	0	0	0	0	0	0
PM Peak	15:00	21:00	21:00	12:00	12:00	13:00	15:00	18:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	52	21.7	17.5	5.3	8	19	35	5	2	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
07:00	13	22.9	20.2	2.6	0	0	6	7	0	0	0	0	0	0	0	0
08:00	37	25.0	20.5	4.3	0	3	15	13	6	0	0	0	0	0	0	0
09:00	19	23.2	18.3	4.7	1	3	8	6	1	0	0	0	0	0	0	0
10:00	19	25.7	20.2	5.3	1	2	5	8	3	0	0	0	0	0	0	0
11:00	34	25.8	19.6	6.0	0	8	13	7	3	3	0	0	0	0	0	0
12:00	33	26.3	20.1	6.0	0	8	9	9	5	2	0	0	0	0	0	0
13:00	23	33.0	22.7	9.9	0	6	3	8	2	2	0	0	2	0	0	0
14:00	41	24.5	19.3	5.0	0	8	15	15	1	2	0	0	0	0	0	0
15:00	33	27.0	21.3	5.5	2	3	3	19	5	1	0	0	0	0	0	0
16:00	33	29.9	23.6	6.1	0	1	9	12	6	3	2	0	0	0	0	0
17:00	38	30.7	24.2	6.3	0	1	7	17	8	3	0	2	0	0	0	0
18:00	31	28.9	23.5	5.2	0	2	4	14	9	1	1	0	0	0	0	0
19:00	22	25.9	20.7	5.0	0	4	4	10	4	0	0	0	0	0	0	0
20:00	14	27.5	22.5	4.8	0	1	3	5	5	0	0	0	0	0	0	0
21:00	8	29.6	23.1	6.2	0	1	1	3	2	1	0	0	0	0	0	0
22:00	8	23.6	21.3	2.3	0	0	2	6	0	0	0	0	0	0	0	0
23:00	2	33.7	30.0	3.5	0	0	0	0	1	1	0	0	0	0	0	0
Total																
2H(10-12)	53	25.7	19.8	5.7	1	10	18	15	6	3	0	0	0	0	0	0
2H(14-16)	74	25.7	20.2	5.3	2	11	18	34	6	3	0	0	0	0	0	0
12H(7-19)	354	27.5	21.2	6.0	4	45	97	135	49	17	3	2	2	0	0	0
24H(0-24)	410	27.5	21.4	5.9	4	51	107	160	62	19	3	2	2	0	0	0
AM Peak	08:00	06:00	06:00	11:00	09:00	11:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	37	28.7	25.0	6.0	1	8	15	13	6	3	0	0	0	0	0	0
PM Peak	14:00	23:00	23:00	13:00	15:00	12:00	14:00	15:00	18:00	16:00	16:00	17:00	13:00	12:00	12:00	12:00
	41	33.7	30.0	9.9	2	8	15	19	9	3	2	2	2	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
01:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
06:00	6	24.1	17.5	6.3	0	3	1	1	1	0	0	0	0	0	0	0
07:00	25	21.8	17.1	4.5	2	5	11	7	0	0	0	0	0	0	0	0
08:00	65	23.2	18.7	4.4	0	13	30	16	6	0	0	0	0	0	0	0
09:00	57	20.6	16.1	4.3	5	17	26	8	1	0	0	0	0	0	0	0
10:00	42	22.1	16.5	5.4	4	15	12	8	3	0	0	0	0	0	0	0
11:00	78	22.3	16.3	5.8	10	23	30	9	3	3	0	0	0	0	0	0
12:00	65	23.7	17.1	6.4	8	20	18	10	7	2	0	0	0	0	0	0
13:00	53	25.9	17.3	8.4	4	25	10	8	2	2	0	0	2	0	0	0
14:00	74	22.3	17.1	5.1	4	23	28	16	1	2	0	0	0	0	0	0
15:00	85	23.1	17.9	5.0	5	16	38	20	5	1	0	0	0	0	0	0
16:00	75	25.4	18.9	6.2	2	17	32	13	6	3	2	0	0	0	0	0
17:00	65	27.7	21.2	6.3	1	5	26	20	8	3	0	2	0	0	0	0
18:00	66	25.8	20.2	5.5	1	9	25	19	10	1	1	0	0	0	0	0
19:00	61	22.5	17.7	4.7	3	13	28	13	4	0	0	0	0	0	0	0
20:00	25	25.1	19.9	5.0	0	4	10	6	5	0	0	0	0	0	0	0
21:00	15	26.6	20.5	5.9	0	3	4	5	2	1	0	0	0	0	0	0
22:00	18	22.0	18.3	3.5	0	3	9	6	0	0	0	0	0	0	0	0
23:00	5	29.8	22.5	7.1	0	0	3	0	1	1	0	0	0	0	0	0
Total																
2H(10-12)	120	22.2	16.4	5.6	14	38	42	17	6	3	0	0	0	0	0	0
2H(14-16)	159	22.7	17.5	5.0	9	39	66	36	6	3	0	0	0	0	0	0
12H(7-19)	750	24.0	18.0	5.9	46	188	286	154	52	17	3	2	2	0	0	0
24H(0-24)	882	24.0	18.1	5.8	49	214	342	186	65	19	3	2	2	0	0	0
AM Peak	11:00	06:00	01:00	06:00	11:00	11:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	78	24.1	22.5	6.3	10	23	30	16	6	3	0	0	0	0	0	0
PM Peak	15:00	23:00	23:00	13:00	12:00	13:00	15:00	15:00	18:00	16:00	16:00	17:00	13:00	12:00	12:00	12:00
	85	29.8	22.5	8.4	8	25	38	20	10	3	2	2	2	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

06/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
01:00	2	24.8	17.5	7.1	0	1	0	1	0	0	0	0	0	0	0	0
02:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	8	20.2	16.9	3.2	0	2	5	1	0	0	0	0	0	0	0	0
07:00	13	18.6	15.2	3.2	1	4	8	0	0	0	0	0	0	0	0	0
08:00	31	20.1	16.4	3.5	1	9	17	4	0	0	0	0	0	0	0	0
09:00	21	18.2	15.1	2.9	1	8	12	0	0	0	0	0	0	0	0	0
10:00	23	20.3	15.6	4.6	4	4	12	3	0	0	0	0	0	0	0	0
11:00	27	17.9	14.1	3.7	5	9	13	0	0	0	0	0	0	0	0	0
12:00	34	19.4	15.2	4.0	5	8	19	2	0	0	0	0	0	0	0	0
13:00	26	19.0	15.8	3.1	1	8	16	1	0	0	0	0	0	0	0	0
14:00	24	19.4	15.5	3.8	2	8	12	2	0	0	0	0	0	0	0	0
15:00	42	19.1	15.7	3.2	2	13	25	2	0	0	0	0	0	0	0	0
16:00	51	18.4	14.9	3.4	4	21	24	2	0	0	0	0	0	0	0	0
17:00	20	19.9	17.5	2.3	0	2	16	2	0	0	0	0	0	0	0	0
18:00	28	19.3	16.4	2.8	1	5	21	1	0	0	0	0	0	0	0	0
19:00	23	18.5	15.2	3.2	2	7	14	0	0	0	0	0	0	0	0	0
20:00	20	19.5	15.8	3.6	2	4	13	1	0	0	0	0	0	0	0	0
21:00	8	18.8	15.1	3.6	1	2	5	0	0	0	0	0	0	0	0	0
22:00	12	19.7	16.7	2.9	0	3	8	1	0	0	0	0	0	0	0	0
23:00	2	17.5	17.5	0.0	0	0	2	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	50	19.1	14.8	4.2	9	13	25	3	0	0	0	0	0	0	0	0
2H(14-16)	66	19.2	15.6	3.4	4	21	37	4	0	0	0	0	0	0	0	0
12H(7-19)	340	19.2	15.6	3.5	27	99	195	19	0	0	0	0	0	0	0	0
24H(0-24)	418	19.2	15.6	3.4	32	118	245	23	0	0	0	0	0	0	0	0
AM Peak	08:00	01:00	00:00	01:00	11:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	31	24.8	17.5	7.1	5	9	17	4	0	0	0	0	0	0	0	0
PM Peak	16:00	17:00	17:00	12:00	12:00	16:00	15:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	51	19.9	17.5	4.0	5	21	25	2	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
07:00	13	25.9	21.7	4.0	0	1	2	8	2	0	0	0	0	0	0	0
08:00	43	25.7	21.8	3.7	0	2	9	25	7	0	0	0	0	0	0	0
09:00	14	25.9	19.7	6.0	1	2	4	4	3	0	0	0	0	0	0	0
10:00	24	25.9	19.6	6.1	0	6	9	3	5	1	0	0	0	0	0	0
11:00	32	26.9	20.0	6.7	2	7	5	11	5	2	0	0	0	0	0	0
12:00	30	28.9	22.5	6.2	0	5	4	10	8	3	0	0	0	0	0	0
13:00	19	26.7	20.9	5.5	0	4	2	10	2	1	0	0	0	0	0	0
14:00	40	26.1	21.0	5.0	0	5	12	13	10	0	0	0	0	0	0	0
15:00	26	28.0	22.7	5.1	1	0	6	10	8	1	0	0	0	0	0	0
16:00	28	28.1	22.5	5.4	0	2	7	11	5	3	0	0	0	0	0	0
17:00	19	28.5	23.0	5.2	0	1	4	8	4	2	0	0	0	0	0	0
18:00	29	28.9	22.3	6.3	0	3	7	12	4	1	2	0	0	0	0	0
19:00	19	24.8	20.1	4.5	0	3	5	9	2	0	0	0	0	0	0	0
20:00	15	26.5	21.2	5.2	0	2	3	8	1	1	0	0	0	0	0	0
21:00	10	24.1	20.5	3.5	0	0	5	4	1	0	0	0	0	0	0	0
22:00	10	27.7	22.0	5.5	0	1	3	2	4	0	0	0	0	0	0	0
23:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	56	26.4	19.8	6.4	2	13	14	14	10	3	0	0	0	0	0	0
2H(14-16)	66	26.9	21.7	5.1	1	5	18	23	18	1	0	0	0	0	0	0
12H(7-19)	317	27.2	21.5	5.5	4	38	71	125	63	14	2	0	0	0	0	0
24H(0-24)	378	27.0	21.4	5.3	4	44	89	153	71	15	2	0	0	0	0	0
AM Peak	08:00	11:00	00:00	11:00	11:00	11:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	43	26.9	22.5	6.7	2	7	9	25	7	2	0	0	0	0	0	0
PM Peak	14:00	18:00	17:00	18:00	15:00	12:00	14:00	14:00	14:00	12:00	18:00	12:00	12:00	12:00	12:00	12:00
	40	28.9	23.0	6.3	1	5	12	13	10	3	2	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
01:00	3	22.7	17.5	5.0	0	1	1	1	0	0	0	0	0	0	0	0
02:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	10	21.0	17.5	3.3	0	2	6	2	0	0	0	0	0	0	0	0
07:00	26	23.5	18.5	4.9	1	5	10	8	2	0	0	0	0	0	0	0
08:00	74	24.2	19.5	4.5	1	11	26	29	7	0	0	0	0	0	0	0
09:00	35	22.0	17.0	4.9	2	10	16	4	3	0	0	0	0	0	0	0
10:00	47	23.5	17.6	5.7	4	10	21	6	5	1	0	0	0	0	0	0
11:00	59	23.8	17.3	6.2	7	16	18	11	5	2	0	0	0	0	0	0
12:00	64	25.1	18.6	6.3	5	13	23	12	8	3	0	0	0	0	0	0
13:00	45	23.1	18.0	5.0	1	12	18	11	2	1	0	0	0	0	0	0
14:00	64	24.4	18.9	5.3	2	13	24	15	10	0	0	0	0	0	0	0
15:00	68	23.9	18.4	5.3	3	13	31	12	8	1	0	0	0	0	0	0
16:00	79	23.4	17.6	5.6	4	23	31	13	5	3	0	0	0	0	0	0
17:00	39	25.2	20.2	4.8	0	3	20	10	4	2	0	0	0	0	0	0
18:00	57	25.4	19.4	5.7	1	8	28	13	4	1	2	0	0	0	0	0
19:00	42	22.1	17.4	4.6	2	10	19	9	2	0	0	0	0	0	0	0
20:00	35	23.3	18.1	5.1	2	6	16	9	1	1	0	0	0	0	0	0
21:00	18	22.7	18.1	4.4	1	2	10	4	1	0	0	0	0	0	0	0
22:00	22	24.2	19.1	5.0	0	4	11	3	4	0	0	0	0	0	0	0
23:00	4	23.0	20.0	2.9	0	0	2	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	106	23.6	17.5	6.0	11	26	39	17	10	3	0	0	0	0	0	0
2H(14-16)	132	24.1	18.7	5.3	5	26	55	27	18	1	0	0	0	0	0	0
12H(7-19)	657	24.1	18.4	5.5	31	137	266	144	63	14	2	0	0	0	0	0
24H(0-24)	796	23.9	18.4	5.3	36	162	334	176	71	15	2	0	0	0	0	0
AM Peak	08:00	08:00	00:00	11:00	11:00	11:00	08:00	08:00	08:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00
	74	24.2	20.0	6.2	7	16	26	29	7	2	0	0	0	0	0	0
PM Peak	16:00	18:00	17:00	12:00	12:00	16:00	15:00	14:00	14:00	12:00	18:00	12:00	12:00	12:00	12:00	12:00
	79	25.4	20.2	6.3	5	23	31	15	10	3	2	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

07/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
06:00	8	21.9	16.9	4.8	1	1	4	2	0	0	0	0	0	0	0	0
07:00	15	20.7	16.8	3.7	0	5	7	3	0	0	0	0	0	0	0	0
08:00	28	20.0	16.6	3.2	2	3	21	2	0	0	0	0	0	0	0	0
09:00	24	18.0	15.0	2.9	1	10	13	0	0	0	0	0	0	0	0	0
10:00	25	18.5	14.2	4.1	4	11	8	2	0	0	0	0	0	0	0	0
11:00	26	16.7	13.5	3.1	3	15	8	0	0	0	0	0	0	0	0	0
12:00	32	19.9	15.5	4.3	4	9	15	4	0	0	0	0	0	0	0	0
13:00	30	17.4	13.8	3.5	5	13	12	0	0	0	0	0	0	0	0	0
14:00	27	17.9	14.9	2.9	1	12	14	0	0	0	0	0	0	0	0	0
15:00	55	18.7	15.1	3.5	5	19	29	2	0	0	0	0	0	0	0	0
16:00	47	19.6	15.8	3.6	2	17	23	5	0	0	0	0	0	0	0	0
17:00	22	19.0	16.1	2.8	0	7	14	1	0	0	0	0	0	0	0	0
18:00	19	18.7	15.7	2.9	1	5	13	0	0	0	0	0	0	0	0	0
19:00	25	20.3	16.3	3.8	2	5	15	3	0	0	0	0	0	0	0	0
20:00	24	21.4	17.3	3.9	2	2	15	5	0	0	0	0	0	0	0	0
21:00	13	18.7	16.7	1.9	0	2	11	0	0	0	0	0	0	0	0	0
22:00	27	20.5	16.1	4.3	2	9	11	5	0	0	0	0	0	0	0	0
23:00	8	21.4	18.1	3.2	0	1	5	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	51	17.6	13.8	3.6	7	26	16	2	0	0	0	0	0	0	0	0
2H(14-16)	82	18.4	15.0	3.3	6	31	43	2	0	0	0	0	0	0	0	0
12H(7-19)	350	18.9	15.2	3.5	28	126	177	19	0	0	0	0	0	0	0	0
24H(0-24)	457	19.3	15.6	3.6	35	146	240	36	0	0	0	0	0	0	0	0
AM Peak	08:00	06:00	00:00	06:00	10:00	11:00	08:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	28	21.9	17.5	4.8	4	15	21	3	0	0	0	0	0	0	0	0
PM Peak	15:00	23:00	23:00	22:00	13:00	15:00	15:00	16:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	55	21.4	18.1	4.3	5	19	29	5	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
06:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
07:00	11	25.1	20.2	4.7	0	1	5	3	2	0	0	0	0	0	0	0
08:00	41	25.6	21.6	3.9	0	1	12	22	5	1	0	0	0	0	0	0
09:00	18	24.1	20.0	3.9	0	2	6	9	1	0	0	0	0	0	0	0
10:00	30	24.5	19.5	4.8	1	2	15	9	2	1	0	0	0	0	0	0
11:00	24	24.2	18.4	5.6	1	7	6	7	3	0	0	0	0	0	0	0
12:00	25	27.8	20.3	7.2	1	4	10	4	3	2	1	0	0	0	0	0
13:00	23	24.8	19.7	5.0	0	5	6	9	3	0	0	0	0	0	0	0
14:00	33	25.7	21.0	4.6	0	3	10	15	4	1	0	0	0	0	0	0
15:00	32	28.4	21.9	6.3	1	4	5	14	4	4	0	0	0	0	0	0
16:00	28	27.4	21.6	5.6	1	1	9	10	5	2	0	0	0	0	0	0
17:00	23	27.2	22.1	4.9	1	0	5	12	4	1	0	0	0	0	0	0
18:00	17	28.7	24.0	4.6	0	0	3	8	4	2	0	0	0	0	0	0
19:00	33	26.9	21.8	5.0	1	0	12	11	8	1	0	0	0	0	0	0
20:00	20	28.9	23.3	5.4	0	1	4	9	3	3	0	0	0	0	0	0
21:00	10	28.3	24.0	4.1	0	0	1	6	2	1	0	0	0	0	0	0
22:00	14	30.2	24.3	5.8	0	1	1	6	5	0	1	0	0	0	0	0
23:00	8	30.4	23.8	6.4	0	0	2	4	1	0	1	0	0	0	0	0
Total																
2H(10-12)	54	24.3	19.0	5.2	2	9	21	16	5	1	0	0	0	0	0	0
2H(14-16)	65	27.1	21.4	5.5	1	7	15	29	8	5	0	0	0	0	0	0
12H(7-19)	305	26.3	20.9	5.3	6	30	92	122	40	14	1	0	0	0	0	0
24H(0-24)	393	26.9	21.4	5.3	7	32	112	159	61	19	3	0	0	0	0	0
AM Peak	08:00	08:00	00:00	11:00	10:00	11:00	10:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	41	25.6	27.5	5.6	1	7	15	22	5	1	0	0	0	0	0	0
PM Peak	14:00	23:00	22:00	12:00	12:00	13:00	19:00	14:00	19:00	15:00	12:00	12:00	12:00	12:00	12:00	12:00
	33	30.4	24.3	7.2	1	5	12	15	8	4	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
06:00	8	21.9	16.9	4.8	1	1	4	2	0	0	0	0	0	0	0	0
07:00	26	22.8	18.3	4.4	0	6	12	6	2	0	0	0	0	0	0	0
08:00	69	24.1	19.6	4.4	2	4	33	24	5	1	0	0	0	0	0	0
09:00	42	21.5	17.2	4.2	1	12	19	9	1	0	0	0	0	0	0	0
10:00	55	22.5	17.1	5.2	5	13	23	11	2	1	0	0	0	0	0	0
11:00	50	21.1	15.8	5.0	4	22	14	7	3	0	0	0	0	0	0	0
12:00	57	24.0	17.6	6.2	5	13	25	8	3	2	1	0	0	0	0	0
13:00	53	21.6	16.3	5.1	5	18	18	9	3	0	0	0	0	0	0	0
14:00	60	23.4	18.3	4.9	1	15	24	15	4	1	0	0	0	0	0	0
15:00	87	23.5	17.6	5.7	6	23	34	16	4	4	0	0	0	0	0	0
16:00	75	23.4	18.0	5.2	3	18	32	15	5	2	0	0	0	0	0	0
17:00	45	24.3	19.2	5.0	1	7	19	13	4	1	0	0	0	0	0	0
18:00	36	25.4	19.6	5.6	1	5	16	8	4	2	0	0	0	0	0	0
19:00	58	24.8	19.4	5.2	3	5	27	14	8	1	0	0	0	0	0	0
20:00	44	25.7	20.0	5.5	2	3	19	14	3	3	0	0	0	0	0	0
21:00	23	24.8	19.9	4.7	0	2	12	6	2	1	0	0	0	0	0	0
22:00	41	25.3	18.9	6.2	2	10	12	11	5	0	1	0	0	0	0	0
23:00	16	26.8	20.9	5.7	0	1	7	6	1	0	1	0	0	0	0	0
Total																
2H(10-12)	105	21.8	16.5	5.1	9	35	37	18	5	1	0	0	0	0	0	0
2H(14-16)	147	23.5	17.9	5.4	7	38	58	31	8	5	0	0	0	0	0	0
12H(7-19)	655	23.3	17.9	5.2	34	156	269	141	40	14	1	0	0	0	0	0
24H(0-24)	850	23.8	18.3	5.3	42	178	352	195	61	19	3	0	0	0	0	0
AM Peak	08:00	00:00	00:00	00:00	10:00	11:00	08:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	69	29.8	22.5	7.1	5	22	33	24	5	1	0	0	0	0	0	0
PM Peak	15:00	23:00	23:00	22:00	15:00	15:00	15:00	15:00	19:00	15:00	12:00	12:00	12:00	12:00	12:00	12:00
	87	26.8	20.9	6.2	6	23	34	16	8	4	1	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

08/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	3	17.5	17.5	0.0	0	0	3	0	0	0	0	0	0	0	0	0
01:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	13.5	10.3	3.2	1	1	0	0	0	0	0	0	0	0	0	0
06:00	1	-	12.5	-	0	1	0	0	0	0	0	0	0	0	0	0
07:00	4	21.7	17.5	4.1	0	1	2	1	0	0	0	0	0	0	0	0
08:00	6	20.6	16.7	3.8	0	2	3	1	0	0	0	0	0	0	0	0
09:00	8	17.1	14.4	2.6	0	5	3	0	0	0	0	0	0	0	0	0
10:00	11	16.9	14.3	2.5	0	7	4	0	0	0	0	0	0	0	0	0
11:00	21	19.3	15.0	4.2	3	7	9	2	0	0	0	0	0	0	0	0
12:00	31	20.6	16.3	4.1	4	4	19	4	0	0	0	0	0	0	0	0
13:00	34	20.8	16.5	4.2	1	12	15	5	1	0	0	0	0	0	0	0
14:00	20	20.8	15.8	4.8	3	5	8	4	0	0	0	0	0	0	0	0
15:00	35	20.7	16.3	4.3	4	7	18	6	0	0	0	0	0	0	0	0
16:00	20	22.3	17.8	4.4	1	4	8	7	0	0	0	0	0	0	0	0
17:00	17	21.1	17.2	3.7	0	4	11	1	1	0	0	0	0	0	0	0
18:00	35	19.9	16.9	2.9	0	8	23	4	0	0	0	0	0	0	0	0
19:00	20	21.7	18.0	3.6	0	3	13	3	1	0	0	0	0	0	0	0
20:00	20	21.9	17.5	4.3	0	7	6	7	0	0	0	0	0	0	0	0
21:00	8	18.7	16.9	1.8	0	1	7	0	0	0	0	0	0	0	0	0
22:00	4	18.8	16.3	2.5	0	1	3	0	0	0	0	0	0	0	0	0
23:00	4	18.0	15.0	2.9	0	2	2	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	32	18.6	14.7	3.7	3	14	13	2	0	0	0	0	0	0	0	0
2H(14-16)	55	20.7	16.1	4.5	7	12	26	10	0	0	0	0	0	0	0	0
12H(7-19)	242	20.4	16.3	4.0	16	66	123	35	2	0	0	0	0	0	0	0
24H(0-24)	307	20.6	16.5	3.9	17	82	159	46	3	0	0	0	0	0	0	0
AM Peak	11:00	01:00	01:00	11:00	11:00	10:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	21	23.7	20.0	4.2	3	7	9	2	0	0	0	0	0	0	0	0
PM Peak	15:00	16:00	19:00	14:00	12:00	13:00	18:00	16:00	13:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	35	22.3	18.0	4.8	4	12	23	7	1	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	3	36.6	25.8	10.4	0	0	1	1	0	0	1	0	0	0	0	0
01:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
07:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
08:00	4	21.7	17.5	4.1	0	1	2	1	0	0	0	0	0	0	0	0
09:00	10	27.4	21.5	5.7	0	2	1	4	3	0	0	0	0	0	0	0
10:00	17	24.9	18.7	5.9	1	4	5	4	3	0	0	0	0	0	0	0
11:00	34	29.5	22.2	7.1	0	7	6	8	10	1	2	0	0	0	0	0
12:00	26	27.6	21.3	6.1	0	5	5	9	5	2	0	0	0	0	0	0
13:00	25	32.9	24.1	8.5	1	1	6	8	4	2	1	2	0	0	0	0
14:00	33	27.6	21.1	6.3	0	9	3	10	10	1	0	0	0	0	0	0
15:00	22	29.6	22.5	6.8	2	0	5	7	5	3	0	0	0	0	0	0
16:00	27	31.6	24.9	6.4	0	1	4	11	6	2	3	0	0	0	0	0
17:00	20	32.4	24.8	7.3	0	3	1	6	6	2	2	0	0	0	0	0
18:00	23	33.3	25.5	7.5	0	2	1	9	8	0	1	2	0	0	0	0
19:00	25	29.2	24.1	4.9	0	0	4	13	5	2	1	0	0	0	0	0
20:00	15	29.2	23.8	5.2	0	1	2	5	6	1	0	0	0	0	0	0
21:00	9	33.6	25.8	7.5	0	0	2	3	2	0	2	0	0	0	0	0
22:00	5	27.3	24.5	2.7	0	0	0	3	2	0	0	0	0	0	0	0
23:00	4	26.7	22.5	4.1	0	0	1	2	1	0	0	0	0	0	0	0
Total																
2H(10-12)	51	28.1	21.0	6.9	1	11	11	12	13	1	2	0	0	0	0	0
2H(14-16)	55	28.4	21.7	6.5	2	9	8	17	15	4	0	0	0	0	0	0
12H(7-19)	242	29.9	22.7	7.0	4	35	39	78	60	13	9	4	0	0	0	0
24H(0-24)	308	29.9	23.0	6.7	4	36	49	108	78	16	13	4	0	0	0	0
AM Peak	11:00	00:00	02:00	00:00	10:00	11:00	11:00	11:00	11:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00
	34	36.6	27.5	10.4	1	7	6	8	10	1	2	0	0	0	0	0
PM Peak	14:00	21:00	21:00	13:00	15:00	14:00	13:00	19:00	14:00	15:00	16:00	13:00	12:00	12:00	12:00	12:00
	33	33.6	25.8	8.5	2	9	6	13	10	3	3	2	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	6	30.0	21.7	8.0	0	0	4	1	0	0	1	0	0	0	0	0
01:00	5	26.2	22.5	3.5	0	0	1	3	1	0	0	0	0	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	13.5	10.3	3.2	1	1	0	0	0	0	0	0	0	0	0	0
06:00	2	24.8	17.5	7.1	0	1	0	1	0	0	0	0	0	0	0	0
07:00	5	22.8	18.5	4.2	0	1	2	2	0	0	0	0	0	0	0	0
08:00	10	20.8	17.0	3.7	0	3	5	2	0	0	0	0	0	0	0	0
09:00	18	24.3	18.3	5.8	0	7	4	4	3	0	0	0	0	0	0	0
10:00	28	22.5	17.0	5.3	1	11	9	4	3	0	0	0	0	0	0	0
11:00	55	26.8	19.4	7.1	3	14	15	10	10	1	2	0	0	0	0	0
12:00	57	24.5	18.6	5.7	4	9	24	13	5	2	0	0	0	0	0	0
13:00	59	27.3	19.7	7.4	2	13	21	13	5	2	1	2	0	0	0	0
14:00	53	25.6	19.1	6.3	3	14	11	14	10	1	0	0	0	0	0	0
15:00	57	25.1	18.7	6.2	6	7	23	13	5	3	0	0	0	0	0	0
16:00	47	28.7	21.9	6.6	1	5	12	18	6	2	3	0	0	0	0	0
17:00	37	28.6	21.3	7.0	0	7	12	7	7	2	2	0	0	0	0	0
18:00	58	27.3	20.3	6.7	0	10	24	13	8	0	1	2	0	0	0	0
19:00	45	26.9	21.4	5.3	0	3	17	16	6	2	1	0	0	0	0	0
20:00	35	26.0	20.2	5.6	0	8	8	12	6	1	0	0	0	0	0	0
21:00	17	29.0	21.6	7.1	0	1	9	3	2	0	2	0	0	0	0	0
22:00	9	26.0	20.8	5.0	0	1	3	3	2	0	0	0	0	0	0	0
23:00	8	24.1	18.8	5.2	0	2	3	2	1	0	0	0	0	0	0	0
Total																
2H(10-12)	83	25.4	18.6	6.6	4	25	24	14	13	1	2	0	0	0	0	0
2H(14-16)	110	25.3	18.9	6.2	9	21	34	27	15	4	0	0	0	0	0	0
12H(7-19)	484	26.2	19.5	6.5	20	101	162	113	62	13	9	4	0	0	0	0
24H(0-24)	615	26.4	19.8	6.4	21	118	208	154	81	16	13	4	0	0	0	0
AM Peak	11:00	00:00	02:00	00:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	00:00	00:00	00:00	00:00	00:00
	55	30.0	27.5	8.0	3	14	15	10	10	1	2	0	0	0	0	0
PM Peak	13:00	21:00	16:00	13:00	15:00	14:00	12:00	16:00	14:00	15:00	16:00	13:00	12:00	12:00	12:00	12:00
	59	29.0	21.9	7.4	6	14	24	18	10	3	3	2	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

09/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
01:00	2	23.7	20.0	3.5	0	0	1	1	0	0	0	0	0	0	0	0
02:00	1	-	12.5	-	0	1	0	0	0	0	0	0	0	0	0	0
03:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
07:00	4	17.5	17.5	0.0	0	0	4	0	0	0	0	0	0	0	0	0
08:00	4	21.6	15.1	6.3	1	1	1	1	0	0	0	0	0	0	0	0
09:00	15	17.4	13.3	4.0	4	5	6	0	0	0	0	0	0	0	0	0
10:00	24	19.6	14.5	4.9	6	6	9	3	0	0	0	0	0	0	0	0
11:00	26	17.8	14.1	3.6	3	13	9	1	0	0	0	0	0	0	0	0
12:00	44	17.4	13.3	4.0	10	20	12	2	0	0	0	0	0	0	0	0
13:00	24	21.0	15.7	5.1	5	4	10	5	0	0	0	0	0	0	0	0
14:00	26	19.2	15.6	3.4	1	10	13	2	0	0	0	0	0	0	0	0
15:00	30	19.6	16.0	3.5	1	10	16	3	0	0	0	0	0	0	0	0
16:00	30	20.1	16.8	3.1	0	8	18	4	0	0	0	0	0	0	0	0
17:00	38	19.6	15.4	4.0	4	12	18	4	0	0	0	0	0	0	0	0
18:00	20	17.0	12.9	3.9	6	7	7	0	0	0	0	0	0	0	0	0
19:00	27	20.5	16.4	4.0	1	9	12	5	0	0	0	0	0	0	0	0
20:00	15	19.5	15.9	3.5	1	4	9	1	0	0	0	0	0	0	0	0
21:00	19	21.7	17.5	4.1	0	6	7	6	0	0	0	0	0	0	0	0
22:00	9	21.4	16.4	4.7	1	2	4	2	0	0	0	0	0	0	0	0
23:00	4	18.0	15.0	2.9	0	2	2	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	50	18.7	14.3	4.2	9	19	18	4	0	0	0	0	0	0	0	0
2H(14-16)	56	19.4	15.8	3.4	2	20	29	5	0	0	0	0	0	0	0	0
12H(7-19)	285	19.1	14.9	4.1	41	96	123	25	0	0	0	0	0	0	0	0
24H(0-24)	366	19.6	15.3	4.1	44	120	160	42	0	0	0	0	0	0	0	0
AM Peak	11:00	00:00	03:00	08:00	10:00	11:00	10:00	10:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	26	23.7	22.5	6.3	6	13	9	3	0	0	0	0	0	0	0	0
PM Peak	12:00	21:00	21:00	13:00	12:00	12:00	16:00	21:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	44	21.7	17.5	5.1	10	20	18	6	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	26.7	22.5	4.1	0	0	1	2	1	0	0	0	0	0	0	0
01:00	2	34.8	27.5	7.1	0	0	0	1	0	1	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
08:00	3	18.8	15.8	2.9	0	1	2	0	0	0	0	0	0	0	0	0
09:00	5	25.4	19.5	5.7	0	1	2	1	1	0	0	0	0	0	0	0
10:00	20	28.7	19.3	9.1	0	10	4	1	1	2	2	0	0	0	0	0
11:00	18	26.6	18.9	7.4	0	6	8	0	2	1	1	0	0	0	0	0
12:00	43	25.0	17.9	6.9	1	18	9	11	3	0	0	0	1	0	0	0
13:00	28	25.9	19.1	6.5	0	11	4	8	3	2	0	0	0	0	0	0
14:00	30	29.1	22.0	6.9	0	7	3	10	7	2	1	0	0	0	0	0
15:00	23	29.1	23.2	5.7	0	1	6	8	6	1	1	0	0	0	0	0
16:00	33	30.6	24.0	6.3	0	0	10	12	5	3	3	0	0	0	0	0
17:00	25	30.1	23.3	6.6	0	2	7	6	6	3	1	0	0	0	0	0
18:00	23	28.6	23.2	5.3	0	2	3	10	6	2	0	0	0	0	0	0
19:00	18	31.1	24.2	6.6	0	0	5	7	3	2	0	1	0	0	0	0
20:00	15	24.3	18.2	5.9	1	5	1	7	1	0	0	0	0	0	0	0
21:00	8	30.5	24.4	5.9	0	0	1	5	1	0	1	0	0	0	0	0
22:00	4	36.5	28.8	7.5	0	0	0	2	0	1	1	0	0	0	0	0
23:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	38	27.6	19.1	8.2	0	16	12	1	3	3	3	0	0	0	0	0
2H(14-16)	53	29.1	22.5	6.4	0	8	9	18	13	3	2	0	0	0	0	0
12H(7-19)	252	28.3	21.0	7.0	1	59	58	67	41	16	9	0	1	0	0	0
24H(0-24)	306	28.6	21.4	7.0	2	64	66	93	48	20	11	1	1	0	0	0
AM Peak	10:00	01:00	01:00	10:00	00:00	10:00	11:00	00:00	11:00	10:00	10:00	00:00	00:00	00:00	00:00	00:00
	20	34.8	27.5	9.1	0	10	8	2	2	2	2	0	0	0	0	0
PM Peak	12:00	22:00	22:00	22:00	12:00	12:00	16:00	16:00	14:00	16:00	16:00	19:00	12:00	12:00	12:00	12:00
	43	36.5	28.8	7.5	1	18	10	12	7	3	3	1	1	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	6	25.6	21.7	3.8	0	0	2	3	1	0	0	0	0	0	0	0
01:00	4	30.3	23.8	6.3	0	0	1	2	0	1	0	0	0	0	0	0
02:00	1	-	12.5	-	0	1	0	0	0	0	0	0	0	0	0	0
03:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
07:00	5	24.1	19.5	4.5	0	0	4	0	1	0	0	0	0	0	0	0
08:00	7	20.3	15.4	4.7	1	2	3	1	0	0	0	0	0	0	0	0
09:00	20	20.1	14.9	5.1	4	6	8	1	1	0	0	0	0	0	0	0
10:00	44	24.3	16.7	7.4	6	16	13	4	1	2	2	0	0	0	0	0
11:00	44	22.2	16.1	5.9	3	19	17	1	2	1	1	0	0	0	0	0
12:00	87	21.8	15.6	6.0	11	38	21	13	3	0	0	0	1	0	0	0
13:00	52	23.9	17.5	6.1	5	15	14	13	3	2	0	0	0	0	0	0
14:00	56	25.6	19.0	6.4	1	17	16	12	7	2	1	0	0	0	0	0
15:00	53	25.1	19.1	5.8	1	11	22	11	6	1	1	0	0	0	0	0
16:00	63	27.0	20.6	6.2	0	8	28	16	5	3	3	0	0	0	0	0
17:00	63	25.2	18.6	6.4	4	14	25	10	6	3	1	0	0	0	0	0
18:00	43	25.6	18.4	7.0	6	9	10	10	6	2	0	0	0	0	0	0
19:00	45	26.2	19.5	6.4	1	9	17	12	3	2	0	1	0	0	0	0
20:00	30	22.1	17.0	4.9	2	9	10	8	1	0	0	0	0	0	0	0
21:00	27	25.3	19.5	5.6	0	6	8	11	1	0	1	0	0	0	0	0
22:00	13	28.5	20.2	8.0	1	2	4	4	0	1	1	0	0	0	0	0
23:00	6	22.1	17.5	4.5	0	2	2	2	0	0	0	0	0	0	0	0
Total																
2H(10-12)	88	23.3	16.4	6.7	9	35	30	5	3	3	3	0	0	0	0	0
2H(14-16)	109	25.3	19.1	6.1	2	28	38	23	13	3	2	0	0	0	0	0
12H(7-19)	537	24.4	17.8	6.4	42	155	181	92	41	16	9	0	1	0	0	0
24H(0-24)	672	24.6	18.1	6.4	46	184	226	135	48	20	11	1	1	0	0	0
AM Peak	10:00	01:00	03:00	10:00	10:00	11:00	11:00	10:00	11:00	10:00	10:00	00:00	00:00	00:00	00:00	00:00
	44	30.3	25.0	7.4	6	19	17	4	2	2	2	0	0	0	0	0
PM Peak	12:00	22:00	16:00	22:00	12:00	12:00	16:00	16:00	14:00	16:00	16:00	19:00	12:00	12:00	12:00	12:00
	87	28.5	20.6	8.0	11	38	28	16	7	3	3	1	1	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

10/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	8.0	-	1	0	0	0	0	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	18.7	15.0	3.5	0	1	1	0	0	0	0	0	0	0	0	0
06:00	2	12.5	12.5	0.0	0	2	0	0	0	0	0	0	0	0	0	0
07:00	15	19.5	17.2	2.3	0	2	12	1	0	0	0	0	0	0	0	0
08:00	26	19.2	16.0	3.1	0	10	14	2	0	0	0	0	0	0	0	0
09:00	39	18.9	14.7	4.0	5	15	16	3	0	0	0	0	0	0	0	0
10:00	17	17.1	13.7	3.2	2	9	6	0	0	0	0	0	0	0	0	0
11:00	31	19.1	15.0	4.0	3	13	12	3	0	0	0	0	0	0	0	0
12:00	26	18.9	14.9	3.9	4	7	14	1	0	0	0	0	0	0	0	0
13:00	31	19.7	15.5	4.1	4	8	16	3	0	0	0	0	0	0	0	0
14:00	34	18.6	14.5	3.9	6	10	17	1	0	0	0	0	0	0	0	0
15:00	75	18.1	15.0	3.0	1	38	33	3	0	0	0	0	0	0	0	0
16:00	51	18.0	15.1	2.9	1	24	25	1	0	0	0	0	0	0	0	0
17:00	29	19.4	16.6	2.7	0	7	20	2	0	0	0	0	0	0	0	0
18:00	24	19.0	16.3	2.7	0	7	16	1	0	0	0	0	0	0	0	0
19:00	18	18.3	15.8	2.4	0	6	12	0	0	0	0	0	0	0	0	0
20:00	13	19.3	17.9	1.4	0	0	12	1	0	0	0	0	0	0	0	0
21:00	6	17.5	17.5	0.0	0	0	6	0	0	0	0	0	0	0	0	0
22:00	4	23.7	18.8	4.8	0	1	1	2	0	0	0	0	0	0	0	0
23:00	4	17.5	17.5	0.0	0	0	4	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	48	18.4	14.5	3.7	5	22	18	3	0	0	0	0	0	0	0	0
2H(14-16)	109	18.3	14.9	3.3	7	48	50	4	0	0	0	0	0	0	0	0
12H(7-19)	398	18.8	15.3	3.4	26	150	201	21	0	0	0	0	0	0	0	0
24H(0-24)	449	18.9	15.4	3.4	27	160	237	25	0	0	0	0	0	0	0	0
AM Peak	09:00	07:00	02:00	09:00	09:00	09:00	09:00	09:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	39	19.5	22.5	4.0	5	15	16	3	0	0	0	0	0	0	0	0
PM Peak	15:00	22:00	22:00	22:00	14:00	15:00	15:00	13:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	75	23.7	18.8	4.8	6	38	33	3	0	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	1	-	12.5	-	0	1	0	0	0	0	0	0	0	0	0	0
01:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
07:00	18	25.0	22.2	2.7	0	0	3	13	2	0	0	0	0	0	0	0
08:00	61	26.2	22.2	3.9	0	1	15	34	9	2	0	0	0	0	0	0
09:00	17	26.7	21.3	5.2	0	2	5	5	5	0	0	0	0	0	0	0
10:00	30	24.6	19.4	5.1	2	2	13	9	4	0	0	0	0	0	0	0
11:00	28	24.6	19.3	5.1	1	5	8	11	3	0	0	0	0	0	0	0
12:00	22	25.9	20.2	5.5	0	4	7	7	3	1	0	0	0	0	0	0
13:00	27	25.3	20.3	4.9	0	4	9	9	5	0	0	0	0	0	0	0
14:00	38	27.5	20.9	6.4	0	9	7	13	5	4	0	0	0	0	0	0
15:00	43	25.8	20.8	4.9	0	6	12	16	9	0	0	0	0	0	0	0
16:00	20	27.5	23.5	3.8	0	0	3	11	5	1	0	0	0	0	0	0
17:00	26	27.3	23.1	4.1	0	1	3	15	6	1	0	0	0	0	0	0
18:00	21	26.1	20.9	5.0	1	1	6	9	4	0	0	0	0	0	0	0
19:00	17	30.0	25.1	4.7	0	0	2	7	5	3	0	0	0	0	0	0
20:00	14	28.2	23.9	4.1	0	0	2	7	4	1	0	0	0	0	0	0
21:00	3	25.2	19.2	5.8	0	1	0	2	0	0	0	0	0	0	0	0
22:00	7	27.8	23.9	3.8	0	0	1	3	3	0	0	0	0	0	0	0
23:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
Total																
2H(10-12)	58	24.6	19.3	5.0	3	7	21	20	7	0	0	0	0	0	0	0
2H(14-16)	81	26.6	20.8	5.6	0	15	19	29	14	4	0	0	0	0	0	0
12H(7-19)	351	26.2	21.2	4.9	4	35	91	152	60	9	0	0	0	0	0	0
24H(0-24)	398	26.6	21.5	4.9	4	37	97	173	74	13	0	0	0	0	0	0
AM Peak	08:00	09:00	01:00	09:00	10:00	11:00	08:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	61	26.7	27.5	5.2	2	5	15	34	9	2	0	0	0	0	0	0
PM Peak	15:00	19:00	19:00	23:00	18:00	14:00	15:00	15:00	15:00	14:00	12:00	12:00	12:00	12:00	12:00	12:00
	43	30.0	25.1	7.1	1	9	12	16	9	4	0	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	13.5	10.3	3.2	1	1	0	0	0	0	0	0	0	0	0	0
01:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	18.7	15.0	3.5	0	1	1	0	0	0	0	0	0	0	0	0
06:00	4	23.5	17.5	5.8	0	2	0	2	0	0	0	0	0	0	0	0
07:00	33	23.6	19.9	3.6	0	2	15	14	2	0	0	0	0	0	0	0
08:00	87	25.1	20.3	4.6	0	11	29	36	9	2	0	0	0	0	0	0
09:00	56	22.2	16.7	5.3	5	17	21	8	5	0	0	0	0	0	0	0
10:00	47	22.8	17.3	5.2	4	11	19	9	4	0	0	0	0	0	0	0
11:00	59	22.2	17.0	5.0	4	18	20	14	3	0	0	0	0	0	0	0
12:00	48	22.9	17.3	5.4	4	11	21	8	3	1	0	0	0	0	0	0
13:00	58	22.9	17.7	5.1	4	12	25	12	5	0	0	0	0	0	0	0
14:00	72	24.3	17.9	6.2	6	19	24	14	5	4	0	0	0	0	0	0
15:00	118	22.0	17.1	4.7	1	44	45	19	9	0	0	0	0	0	0	0
16:00	71	22.6	17.4	4.9	1	24	28	12	5	1	0	0	0	0	0	0
17:00	55	24.5	19.7	4.7	0	8	23	17	6	1	0	0	0	0	0	0
18:00	45	23.1	18.4	4.5	1	8	22	10	4	0	0	0	0	0	0	0
19:00	35	26.6	20.4	6.0	0	6	14	7	5	3	0	0	0	0	0	0
20:00	27	25.5	21.0	4.3	0	0	14	8	4	1	0	0	0	0	0	0
21:00	9	21.2	18.1	3.0	0	1	6	2	0	0	0	0	0	0	0	0
22:00	11	26.9	22.0	4.7	0	1	2	5	3	0	0	0	0	0	0	0
23:00	6	23.4	19.2	4.1	0	0	5	0	1	0	0	0	0	0	0	0
Total																
2H(10-12)	106	22.4	17.2	5.1	8	29	39	23	7	0	0	0	0	0	0	0
2H(14-16)	190	22.9	17.4	5.3	7	63	69	33	14	4	0	0	0	0	0	0
12H(7-19)	749	23.3	18.0	5.1	30	185	292	173	60	9	0	0	0	0	0	0
24H(0-24)	847	23.6	18.3	5.2	31	197	334	198	74	13	0	0	0	0	0	0
AM Peak	08:00	08:00	01:00	06:00	09:00	11:00	08:00	08:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	87	25.1	27.5	5.8	5	18	29	36	9	2	0	0	0	0	0	0
PM Peak	15:00	22:00	22:00	14:00	14:00	15:00	15:00	15:00	15:00	14:00	12:00	12:00	12:00	12:00	12:00	12:00
	118	26.9	22.0	6.2	6	44	45	19	9	4	0	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 3, Heol Pendyrus (Eastern Site)

Direction: Westbound

11/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	18.7	15.0	3.5	0	1	1	0	0	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	17.5	17.5	0.0	0	0	2	0	0	0	0	0	0	0	0	0
06:00	4	18.0	15.0	2.9	0	2	2	0	0	0	0	0	0	0	0	0
07:00	8	21.2	16.9	4.2	0	3	3	2	0	0	0	0	0	0	0	0
08:00	31	20.4	17.8	2.5	1	0	26	4	0	0	0	0	0	0	0	0
09:00	19	18.4	14.9	3.4	2	6	11	0	0	0	0	0	0	0	0	0
10:00	24	16.5	12.6	3.7	7	10	7	0	0	0	0	0	0	0	0	0
11:00	24	16.9	13.8	3.0	2	14	8	0	0	0	0	0	0	0	0	0
12:00	31	18.8	14.4	4.2	6	10	13	2	0	0	0	0	0	0	0	0
13:00	21	17.9	14.2	3.5	3	8	10	0	0	0	0	0	0	0	0	0
14:00	42	20.7	16.6	3.9	3	9	23	7	0	0	0	0	0	0	0	0
15:00	52	18.2	14.8	3.3	4	21	26	1	0	0	0	0	0	0	0	0
16:00	70	17.9	14.0	3.8	8	40	16	6	0	0	0	0	0	0	0	0
17:00	30	20.8	15.6	5.1	4	10	12	2	2	0	0	0	0	0	0	0
18:00	20	19.2	16.5	2.6	0	5	14	1	0	0	0	0	0	0	0	0
19:00	17	20.0	16.0	3.9	0	8	6	3	0	0	0	0	0	0	0	0
20:00	15	20.7	16.2	4.3	1	5	6	3	0	0	0	0	0	0	0	0
21:00	16	20.1	16.9	3.1	0	4	10	2	0	0	0	0	0	0	0	0
22:00	12	21.1	17.1	3.9	1	1	8	2	0	0	0	0	0	0	0	0
23:00	4	16.3	13.8	2.5	0	3	1	0	0	0	0	0	0	0	0	0
Total																
2H(10-12)	48	16.7	13.2	3.4	9	24	15	0	0	0	0	0	0	0	0	0
2H(14-16)	94	19.4	15.6	3.7	7	30	49	8	0	0	0	0	0	0	0	0
12H(7-19)	372	19.1	15.0	3.9	40	136	169	25	2	0	0	0	0	0	0	0
24H(0-24)	445	19.2	15.2	3.9	42	160	206	35	2	0	0	0	0	0	0	0
AM Peak	08:00	07:00	08:00	07:00	10:00	11:00	08:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	31	21.2	17.8	4.2	7	14	26	4	0	0	0	0	0	0	0	0
PM Peak	16:00	22:00	22:00	17:00	16:00	16:00	15:00	14:00	17:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
	70	21.1	17.1	5.1	8	40	26	7	2	0	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
01:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
07:00	10	24.8	21.5	3.2	0	0	3	6	1	0	0	0	0	0	0	0
08:00	42	25.1	20.8	4.1	0	2	17	16	7	0	0	0	0	0	0	0
09:00	14	25.8	21.1	4.6	0	1	5	5	3	0	0	0	0	0	0	0
10:00	14	22.2	18.2	3.9	0	3	6	5	0	0	0	0	0	0	0	0
11:00	19	26.5	20.4	5.8	0	4	3	11	0	0	1	0	0	0	0	0
12:00	31	27.5	21.2	6.1	0	5	9	9	5	3	0	0	0	0	0	0
13:00	31	27.7	22.0	5.5	0	2	9	14	3	2	1	0	0	0	0	0
14:00	43	25.8	20.2	5.4	0	7	14	17	3	1	1	0	0	0	0	0
15:00	30	25.4	20.3	4.9	0	5	8	12	5	0	0	0	0	0	0	0
16:00	25	27.1	20.3	6.6	1	5	6	7	4	2	0	0	0	0	0	0
17:00	27	29.7	23.1	6.4	1	0	9	6	8	2	1	0	0	0	0	0
18:00	25	28.2	23.3	4.7	0	2	3	9	11	0	0	0	0	0	0	0
19:00	16	27.3	23.4	3.8	0	0	2	10	3	1	0	0	0	0	0	0
20:00	8	32.3	26.3	5.8	0	0	2	0	4	2	0	0	0	0	0	0
21:00	12	30.1	25.4	4.5	0	0	1	5	4	2	0	0	0	0	0	0
22:00	12	28.5	22.1	6.2	0	1	4	4	1	2	0	0	0	0	0	0
23:00	4	31.7	27.5	4.1	0	0	0	1	2	1	0	0	0	0	0	0
Total																
2H(10-12)	33	24.8	19.5	5.1	0	7	9	16	0	0	1	0	0	0	0	0
2H(14-16)	73	25.6	20.2	5.1	0	12	22	29	8	1	1	0	0	0	0	0
12H(7-19)	311	26.6	21.1	5.3	2	36	92	117	50	10	4	0	0	0	0	0
24H(0-24)	366	27.2	21.6	5.4	2	37	102	138	65	18	4	0	0	0	0	0
AM Peak	08:00	00:00	00:00	00:00	00:00	11:00	08:00	08:00	08:00	00:00	11:00	00:00	00:00	00:00	00:00	00:00
	42	29.8	22.5	7.1	0	4	17	16	7	0	1	0	0	0	0	0
PM Peak	14:00	20:00	23:00	16:00	16:00	14:00	14:00	14:00	18:00	12:00	13:00	12:00	12:00	12:00	12:00	12:00
	43	32.3	27.5	6.6	1	7	14	17	11	3	1	0	0	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	25.3	18.8	6.3	0	1	2	0	1	0	0	0	0	0	0	0
01:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
02:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2	17.5	17.5	0.0	0	0	2	0	0	0	0	0	0	0	0	0
06:00	5	20.8	16.5	4.2	0	2	2	1	0	0	0	0	0	0	0	0
07:00	18	23.8	19.4	4.2	0	3	6	8	1	0	0	0	0	0	0	0
08:00	73	23.5	19.6	3.8	1	2	43	20	7	0	0	0	0	0	0	0
09:00	33	22.6	17.5	4.9	2	7	16	5	3	0	0	0	0	0	0	0
10:00	38	19.5	14.7	4.6	7	13	13	5	0	0	0	0	0	0	0	0
11:00	43	22.4	16.7	5.5	2	18	11	11	0	0	1	0	0	0	0	0
12:00	62	24.2	17.8	6.2	6	15	22	11	5	3	0	0	0	0	0	0
13:00	52	25.2	18.9	6.1	3	10	19	14	3	2	1	0	0	0	0	0
14:00	85	23.6	18.4	5.0	3	16	37	24	3	1	1	0	0	0	0	0
15:00	82	21.7	16.9	4.7	4	26	34	13	5	0	0	0	0	0	0	0
16:00	95	21.3	15.7	5.4	9	45	22	13	4	2	0	0	0	0	0	0
17:00	57	26.2	19.1	6.8	5	10	21	8	10	2	1	0	0	0	0	0
18:00	45	25.6	20.3	5.2	0	7	17	10	11	0	0	0	0	0	0	0
19:00	33	25.1	19.6	5.3	0	8	8	13	3	1	0	0	0	0	0	0
20:00	23	26.8	19.7	6.8	1	5	8	3	4	2	0	0	0	0	0	0
21:00	28	26.4	20.5	5.7	0	4	11	7	4	2	0	0	0	0	0	0
22:00	24	25.5	19.6	5.6	1	2	12	6	1	2	0	0	0	0	0	0
23:00	8	28.9	20.6	8.0	0	3	1	1	2	1	0	0	0	0	0	0
Total																
2H(10-12)	81	21.1	15.8	5.2	9	31	24	16	0	0	1	0	0	0	0	0
2H(14-16)	167	22.7	17.6	4.9	7	42	71	37	8	1	1	0	0	0	0	0
12H(7-19)	683	23.5	17.8	5.5	42	172	261	142	52	10	4	0	0	0	0	0
24H(0-24)	811	23.9	18.1	5.6	44	197	308	173	67	18	4	0	0	0	0	0
AM Peak	08:00	00:00	08:00	00:00	10:00	11:00	08:00	08:00	08:00	00:00	11:00	00:00	00:00	00:00	00:00	00:00
	73	25.3	19.6	6.3	7	18	43	20	7	0	1	0	0	0	0	0
PM Peak	16:00	23:00	23:00	23:00	16:00	16:00	14:00	14:00	18:00	12:00	13:00	12:00	12:00	12:00	12:00	12:00
	95	28.9	20.6	8.0	9	45	37	24	11	3	1	0	0	0	0	0

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	7	12	14	18	34	4	20	11	16
01:00	3	5	3	13	14	10	2	5	7
02:00	1	3	3	7	9	3	4	3	4
03:00	1	2	5	1	8	2	2	2	3
04:00	5	7	8	4	7	10	7	7	7
05:00	30	23	20	15	5	20	23	23	19
06:00	61	59	58	27	18	63	62	61	50
07:00	169	170	140	60	52	149	154	156	128
08:00	327	309	304	92	68	299	331	314	247
09:00	213	236	239	151	100	220	264	234	203
10:00	168	200	198	171	170	192	200	192	186
11:00	231	196	209	201	184	176	182	199	197
12:00	201	206	193	211	217	196	184	196	201
13:00	199	172	198	209	191	183	205	191	194
14:00	227	234	257	198	182	227	233	236	223
15:00	255	260	278	191	183	241	273	261	240
16:00	295	253	291	156	168	245	277	272	241
17:00	320	237	256	139	143	255	236	261	227
18:00	249	223	190	149	143	197	195	211	192
19:00	162	170	183	122	107	145	159	164	150
20:00	116	115	102	101	92	134	107	115	110
21:00	110	65	76	85	73	52	73	75	76
22:00	45	52	57	58	41	34	35	45	46
23:00	16	17	44	56	22	23	32	26	30
Total 12H(7-19)	2854	2696	2753	1928	1801	2580	2734	2723	2478
16H(6-22)	3303	3105	3172	2263	2091	2974	3135	3138	2863
18H(6-24)	3364	3174	3273	2377	2154	3031	3202	3209	2939
24H(0-24)	3411	3226	3326	2435	2231	3080	3260	3261	2996
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	327	309	304	201	184	299	331	314	247
PM Peak	17:00	15:00	16:00	12:00	12:00	17:00	16:00	16:00	16:00
	320	260	291	211	217	255	277	272	241

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	9	11	11	22	42	12	22	13	18
01:00	6	8	10	16	18	8	5	7	10
02:00	5	6	6	5	14	7	1	5	6
03:00	3	3	5	7	13	0	3	3	5
04:00	9	8	8	2	9	14	7	9	8
05:00	27	24	28	12	6	26	31	27	22
06:00	60	71	74	37	20	76	62	69	57
07:00	168	161	165	55	24	170	192	171	134
08:00	257	236	218	108	89	222	276	242	201
09:00	162	171	171	123	100	189	170	173	155
10:00	191	165	155	146	160	185	185	176	170
11:00	201	175	197	199	175	169	195	187	187
12:00	198	195	217	235	207	206	201	203	208
13:00	191	193	210	186	183	211	187	198	194
14:00	233	216	251	160	171	195	190	217	202
15:00	300	298	309	171	152	314	308	306	265
16:00	341	299	306	159	175	281	328	311	270
17:00	258	237	221	137	183	264	246	245	221
18:00	230	195	181	158	158	212	225	209	194
19:00	205	150	154	120	123	167	167	169	155
20:00	134	127	134	100	93	129	131	131	121
21:00	100	85	93	77	85	75	77	86	85
22:00	59	56	55	64	40	37	62	54	53
23:00	25	20	57	62	30	23	30	31	35
Total 12H(7-19)	2730	2541	2601	1837	1777	2618	2703	2639	2401
16H(6-22)	3229	2974	3056	2171	2098	3065	3140	3093	2819
18H(6-24)	3313	3050	3168	2297	2168	3125	3232	3178	2908
24H(0-24)	3372	3110	3236	2361	2270	3192	3301	3242	2977
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	257	236	218	199	175	222	276	242	201
PM Peak	16:00	16:00	15:00	12:00	12:00	15:00	16:00	16:00	16:00
	341	299	309	235	207	314	328	311	270

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Wed 05/03/2025	Thu 06/03/2025	Fri 07/03/2025	Sat 08/03/2025	Sun 09/03/2025	Mon 10/03/2025	Tue 11/03/2025	5-Day Ave.	7-Day Ave.
00:00	16	23	25	40	76	16	42	24	34
01:00	9	13	13	29	32	18	7	12	17
02:00	6	9	9	12	23	10	5	8	11
03:00	4	5	10	8	21	2	5	5	8
04:00	14	15	16	6	16	24	14	17	15
05:00	57	47	48	27	11	46	54	50	41
06:00	121	130	132	64	38	139	124	129	107
07:00	337	331	305	115	76	319	346	328	261
08:00	584	545	522	200	157	521	607	556	448
09:00	375	407	410	274	200	409	434	407	358
10:00	359	365	353	317	330	377	385	368	355
11:00	432	371	406	400	359	345	377	386	384
12:00	399	401	410	446	424	402	385	399	410
13:00	390	365	408	395	374	394	392	390	388
14:00	460	450	508	358	353	422	423	453	425
15:00	555	558	587	362	335	555	581	567	505
16:00	636	552	597	315	343	526	605	583	511
17:00	578	474	477	276	326	519	482	506	447
18:00	479	418	371	307	301	409	420	419	386
19:00	367	320	337	242	230	312	326	332	305
20:00	250	242	236	201	185	263	238	246	231
21:00	210	150	169	162	158	127	150	161	161
22:00	104	108	112	122	81	71	97	98	99
23:00	41	37	101	118	52	46	62	57	65
Total 12H(7-19)	5584	5237	5354	3765	3578	5198	5437	5362	4879
16H(6-22)	6532	6079	6228	4434	4189	6039	6275	6231	5682
18H(6-24)	6677	6224	6441	4674	4322	6156	6434	6386	5847
24H(0-24)	6783	6336	6562	4796	4501	6272	6561	6503	5973
AM Peak	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00
	584	545	522	400	359	521	607	556	448
PM Peak	16:00	15:00	16:00	12:00	12:00	15:00	16:00	16:00	16:00
	636	558	597	446	424	555	605	583	511

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	3411	3058	322	6	25
Thu 6 Mar 2025	3226	2911	292	2	21
Fri 7 Mar 2025	3326	3025	278	4	19
Sat 8 Mar 2025	2435	2279	136	3	17
Sun 9 Mar 2025	2231	2123	101	5	2
Mon 10 Mar 2025	3080	2817	247	2	14
Tue 11 Mar 2025	3260	2943	288	12	17
5 Day Ave.	3261	2951	285	5	19
7 Day Ave.	2996	2737	238	5	16

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	89.7%	9.4%	0.2%	0.7%
Thu 6 Mar 2025	100.0%	90.2%	9.1%	0.1%	0.7%
Fri 7 Mar 2025	100.0%	91.0%	8.4%	0.1%	0.6%
Sat 8 Mar 2025	100.0%	93.6%	5.6%	0.1%	0.7%
Sun 9 Mar 2025	100.0%	95.2%	4.5%	0.2%	0.1%
Mon 10 Mar 2025	100.0%	91.5%	8.0%	0.1%	0.5%
Tue 11 Mar 2025	100.0%	90.3%	8.8%	0.4%	0.5%
5 Day Ave.	100.0%	90.5%	8.8%	0.2%	0.6%
7 Day Ave.	100.0%	91.4%	7.9%	0.2%	0.5%

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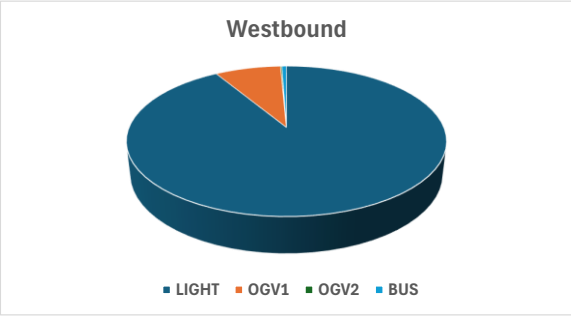

Direction: Eastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	3372	3014	333	4	21
Thu 6 Mar 2025	3110	2817	281	1	11
Fri 7 Mar 2025	3236	2948	269	6	13
Sat 8 Mar 2025	2361	2231	121	0	9
Sun 9 Mar 2025	2270	2160	108	1	1
Mon 10 Mar 2025	3192	2979	206	1	6
Tue 11 Mar 2025	3301	3005	283	7	6
5 Day Ave.	3242	2953	274	4	11
7 Day Ave.	2977	2736	229	3	10

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	89.4%	9.9%	0.1%	0.6%
Thu 6 Mar 2025	100.0%	90.6%	9.0%	0.0%	0.4%
Fri 7 Mar 2025	100.0%	91.1%	8.3%	0.2%	0.4%
Sat 8 Mar 2025	100.0%	94.5%	5.1%	0.0%	0.4%
Sun 9 Mar 2025	100.0%	95.2%	4.8%	0.0%	0.0%
Mon 10 Mar 2025	100.0%	93.3%	6.5%	0.0%	0.2%
Tue 11 Mar 2025	100.0%	91.0%	8.6%	0.2%	0.2%
5 Day Ave.	100.0%	91.1%	8.5%	0.1%	0.4%
7 Day Ave.	100.0%	91.9%	7.7%	0.1%	0.3%

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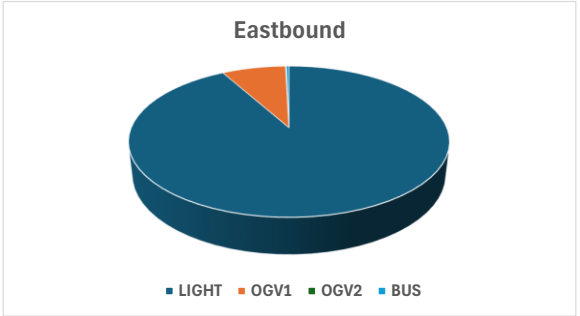

Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	6783	6072	655	10	46
Thu 6 Mar 2025	6336	5728	573	3	32
Fri 7 Mar 2025	6562	5973	547	10	32
Sat 8 Mar 2025	4796	4510	257	3	26
Sun 9 Mar 2025	4501	4283	209	6	3
Mon 10 Mar 2025	6272	5796	453	3	20
Tue 11 Mar 2025	6561	5948	571	19	23
5 Day Ave.	6503	5903	560	9	31
7 Day Ave.	5973	5473	466	8	26

	Total Volume	LIGHT	OGV1	OGV2	BUS
Wed 5 Mar 2025	100.0%	89.5%	9.7%	0.1%	0.7%
Thu 6 Mar 2025	100.0%	90.4%	9.0%	0.0%	0.5%
Fri 7 Mar 2025	100.0%	91.0%	8.3%	0.2%	0.5%
Sat 8 Mar 2025	100.0%	94.0%	5.4%	0.1%	0.5%
Sun 9 Mar 2025	100.0%	95.2%	4.6%	0.1%	0.1%
Mon 10 Mar 2025	100.0%	92.4%	7.2%	0.0%	0.3%
Tue 11 Mar 2025	100.0%	90.7%	8.7%	0.3%	0.4%
5 Day Ave.	100.0%	90.8%	8.6%	0.1%	0.5%
7 Day Ave.	100.0%	91.6%	7.8%	0.1%	0.4%

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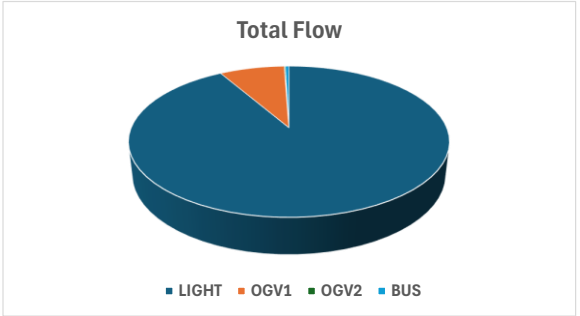

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	3411	23.7	19.7	3.9	26	284	1477	1425	179	17	3	0	0	0	0	0
Thu 6 Mar 2025	3226	23.7	19.7	3.8	20	268	1402	1340	183	12	1	0	0	0	0	0
Fri 7 Mar 2025	3326	23.5	19.8	3.6	13	177	1603	1346	173	14	0	0	0	0	0	0
Sat 8 Mar 2025	2435	24.8	20.8	3.9	9	109	850	1207	237	19	4	0	0	0	0	0
Sun 9 Mar 2025	2231	24.9	21.0	3.7	11	79	723	1172	228	17	1	0	0	0	0	0
Mon 10 Mar 2025	3080	23.9	20.0	3.8	11	176	1397	1311	170	11	2	0	0	0	0	2
Tue 11 Mar 2025	3260	24.4	20.2	4.0	21	228	1284	1457	255	12	1	0	0	0	0	2
5 Day Ave.	3261	23.8	19.9	3.8	18	227	1433	1376	192	13	1	0	0	0	0	1
7 Day Ave.	2996	24.1	20.2	3.8	16	189	1248	1323	204	15	2	0	0	0	0	1

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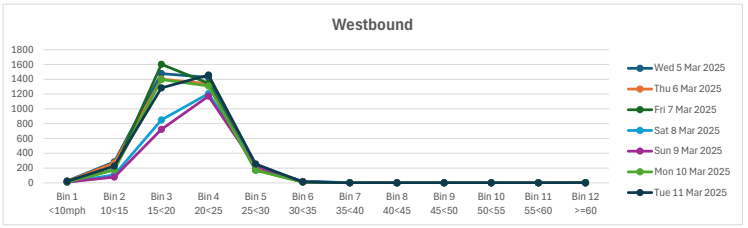

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	3372	29.1	25.1	3.9	0	3	165	1577	1433	145	30	11	6	0	0	2
Thu 6 Mar 2025	3110	28.8	25.0	3.7	1	4	162	1448	1307	157	21	9	1	0	0	0
Fri 7 Mar 2025	3236	29.0	25.2	3.6	0	6	123	1442	1472	154	34	3	2	0	0	0
Sat 8 Mar 2025	2361	30.0	25.7	4.1	0	5	92	986	1013	208	46	8	1	2	0	0
Sun 9 Mar 2025	2270	30.6	26.0	4.5	2	5	92	888	1008	186	66	16	7	0	0	0
Mon 10 Mar 2025	3192	28.6	25.0	3.5	1	8	103	1577	1340	134	24	3	2	0	0	0
Tue 11 Mar 2025	3301	29.2	25.1	3.9	1	13	168	1486	1389	203	26	9	4	2	0	0
5 Day Ave.	3242	28.9	25.1	3.7	1	7	144	1506	1388	159	27	7	3	0	0	0
7 Day Ave.	2977	29.3	25.3	3.9	1	6	129	1343	1280	170	35	8	3	1	0	0

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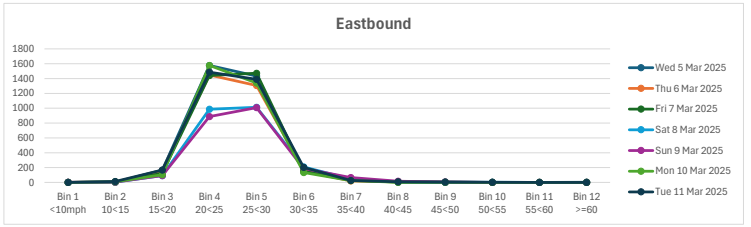

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	6783	27.3	22.4	4.7	26	287	1642	3002	1612	162	33	11	6	0	0	2
Thu 6 Mar 2025	6336	27.1	22.3	4.6	21	272	1564	2788	1490	169	22	9	1	0	0	0
Fri 7 Mar 2025	6562	27.1	22.5	4.5	13	183	1726	2788	1645	168	34	3	2	0	0	0
Sat 8 Mar 2025	4796	28.1	23.2	4.7	9	114	942	2193	1250	227	50	8	1	2	0	0
Sun 9 Mar 2025	4501	28.5	23.5	4.8	13	84	815	2060	1236	203	67	16	7	0	0	0
Mon 10 Mar 2025	6272	27.1	22.5	4.4	12	184	1500	2888	1510	145	26	3	2	0	0	2
Tue 11 Mar 2025	6561	27.6	22.7	4.7	22	241	1452	2943	1644	215	27	9	4	2	0	2
5 Day Ave.	6503	27.2	22.5	4.6	19	233	1577	2882	1580	172	28	7	3	0	0	1
7 Day Ave.	5973	27.5	22.7	4.6	17	195	1377	2666	1484	184	37	8	3	1	0	1

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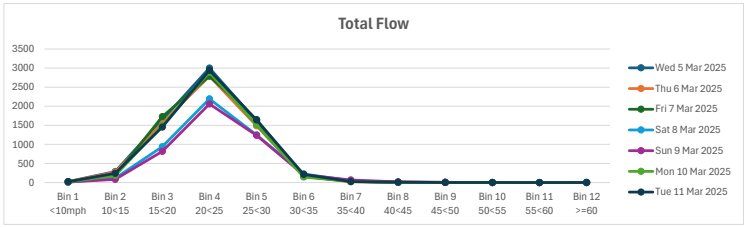

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	399	22.8	19.1	3.5	4	25	221	136	11	2	0	0	0	0	0	0
Thu 6 Mar 2025	396	23.2	19.6	3.4	0	23	202	153	16	2	0	0	0	0	0	0
Fri 7 Mar 2025	407	23.0	19.6	3.3	1	20	209	161	16	0	0	0	0	0	0	0
Sat 8 Mar 2025	372	24.3	20.5	3.6	0	20	139	183	28	2	0	0	0	0	0	0
Sun 9 Mar 2025	354	24.6	20.5	4.0	4	22	122	173	32	1	0	0	0	0	0	0
Mon 10 Mar 2025	368	22.9	19.4	3.4	0	18	208	125	15	2	0	0	0	0	0	0
Tue 11 Mar 2025	382	23.9	20.0	3.8	0	29	166	158	27	2	0	0	0	0	0	0
5 Day Ave.	390	23.2	19.6	3.5	1	23	201	147	17	2	0	0	0	0	0	0
7 Day Ave.	383	23.5	19.8	3.6	1	22	181	156	21	2	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	392	28.1	24.5	3.5	0	0	22	210	143	15	1	1	0	0	0	0
Thu 6 Mar 2025	340	27.6	24.2	3.3	0	1	23	186	120	10	0	0	0	0	0	0
Fri 7 Mar 2025	352	27.9	24.5	3.3	0	2	18	179	146	6	1	0	0	0	0	0
Sat 8 Mar 2025	345	29.2	24.9	4.1	0	0	20	170	131	19	2	2	0	1	0	0
Sun 9 Mar 2025	335	28.9	25.0	3.8	0	1	20	154	136	21	3	0	0	0	0	0
Mon 10 Mar 2025	354	27.5	23.8	3.5	0	2	27	214	98	12	0	1	0	0	0	0
Tue 11 Mar 2025	380	27.1	23.4	3.6	0	8	30	233	105	3	0	0	1	0	0	0
5 Day Ave.	364	27.6	24.1	3.4	0	3	24	204	122	9	0	0	0	0	0	0
7 Day Ave.	357	28.0	24.3	3.6	0	2	23	192	126	12	1	1	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	791	26.4	21.8	4.4	4	25	243	346	154	17	1	1	0	0	0	0
Thu 6 Mar 2025	736	26.0	21.7	4.1	0	24	225	339	136	12	0	0	0	0	0	0
Fri 7 Mar 2025	759	26.1	21.9	4.1	1	22	227	340	162	6	1	0	0	0	0	0
Sat 8 Mar 2025	717	27.3	22.7	4.5	0	20	159	353	159	21	2	2	0	1	0	0
Sun 9 Mar 2025	689	27.3	22.7	4.5	4	23	142	327	168	22	3	0	0	0	0	0
Mon 10 Mar 2025	722	25.8	21.6	4.1	0	20	235	339	113	14	0	1	0	0	0	0
Tue 11 Mar 2025	762	25.9	21.7	4.1	0	37	196	391	132	5	0	0	1	0	0	0
5 Day Ave.	754	26.0	21.7	4.1	1	26	225	351	139	11	0	0	0	0	0	0
7 Day Ave.	739	26.4	22.0	4.2	1	24	204	348	146	14	1	1	0	0	0	0

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	482	23.6	19.6	3.8	6	39	206	209	19	3	0	0	0	0	0	0
Thu 6 Mar 2025	494	23.3	19.3	3.8	6	48	224	194	22	0	0	0	0	0	0	0
Fri 7 Mar 2025	535	22.7	19.0	3.7	6	52	277	181	19	0	0	0	0	0	0	0
Sat 8 Mar 2025	389	24.4	20.2	4.0	4	33	134	185	32	1	0	0	0	0	0	0
Sun 9 Mar 2025	365	25.1	21.1	3.8	2	15	108	199	38	2	1	0	0	0	0	0
Mon 10 Mar 2025	468	24.5	19.7	4.6	4	26	232	183	21	0	0	0	0	0	0	2
Tue 11 Mar 2025	506	25.1	20.1	4.9	3	45	199	220	35	2	0	0	0	0	0	2
5 Day Ave.	497	23.9	19.6	4.2	5	42	228	197	23	1	0	0	0	0	0	1
7 Day Ave.	463	24.1	19.9	4.1	4	37	197	196	27	1	0	0	0	0	0	1

Paul Castle Associates

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	533	28.9	24.9	3.8	0	0	31	252	223	20	4	1	2	0	0	0
Thu 6 Mar 2025	514	28.4	24.8	3.5	1	1	25	243	222	20	2	0	0	0	0	0
Fri 7 Mar 2025	560	28.0	24.7	3.3	0	2	20	295	223	18	2	0	0	0	0	0
Sat 8 Mar 2025	331	28.4	24.3	4.0	0	2	29	177	101	18	3	1	0	0	0	0
Sun 9 Mar 2025	323	30.1	25.6	4.4	1	0	10	152	121	28	8	3	0	0	0	0
Mon 10 Mar 2025	509	27.4	24.1	3.2	0	0	22	320	148	17	2	0	0	0	0	0
Tue 11 Mar 2025	498	28.3	24.2	4.0	0	5	40	266	161	20	5	0	1	0	0	0
5 Day Ave.	523	28.2	24.5	3.5	0	2	28	275	195	19	3	0	1	0	0	0
7 Day Ave.	467	28.5	24.7	3.7	0	1	25	244	171	20	4	1	0	0	0	0

Paul Castle Associates

Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Wed 5 Mar 2025	1015	27.2	22.4	4.7	6	39	237	461	242	23	4	1	2	0	0	0
Thu 6 Mar 2025	1008	26.8	22.1	4.6	7	49	249	437	244	20	2	0	0	0	0	0
Fri 7 Mar 2025	1095	26.5	21.9	4.5	6	54	297	476	242	18	2	0	0	0	0	0
Sat 8 Mar 2025	720	26.7	22.1	4.5	4	35	163	362	133	19	3	1	0	0	0	0
Sun 9 Mar 2025	688	28.1	23.2	4.7	3	15	118	351	159	30	9	3	0	0	0	0
Mon 10 Mar 2025	977	26.7	22.0	4.5	4	26	254	503	169	17	2	0	0	0	0	2
Tue 11 Mar 2025	1004	27.2	22.1	4.9	3	50	239	486	196	22	5	0	1	0	0	2
5 Day Ave.	1020	26.9	22.1	4.6	5	44	255	473	219	20	3	0	1	0	0	1
7 Day Ave.	930	27.0	22.3	4.6	5	38	222	439	198	21	4	1	0	0	0	1

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

05/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	7	7	0	0	0
01:00	3	3	0	0	0
02:00	1	0	1	0	0
03:00	1	1	0	0	0
04:00	5	5	0	0	0
05:00	30	24	6	0	0
06:00	61	50	10	0	1
07:00	169	141	24	0	4
08:00	327	290	32	4	1
09:00	213	185	27	0	1
10:00	168	148	18	0	2
11:00	231	209	19	0	3
12:00	201	182	17	0	2
13:00	199	168	28	0	3
14:00	227	192	32	0	3
15:00	255	226	27	0	2
16:00	295	272	22	0	1
17:00	320	303	16	0	1
18:00	249	227	21	0	1
19:00	162	153	9	0	0
20:00	116	107	7	2	0
21:00	110	107	3	0	0
22:00	45	42	3	0	0
23:00	16	16	0	0	0
Total 12H(7-19)	2854	2543	283	4	24
16H(6-22)	3303	2960	312	6	25
18H(6-24)	3364	3018	315	6	25
24H(0-24)	3411	3058	322	6	25
AM Peak	08:00	08:00	08:00	08:00	07:00
	327	290	32	4	4
PM Peak	17:00	17:00	14:00	20:00	13:00
	320	303	32	2	3

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	9	9	0	0	0
01:00	6	6	0	0	0
02:00	5	5	0	0	0
03:00	3	1	2	0	0
04:00	9	8	1	0	0
05:00	27	24	3	0	0
06:00	60	45	15	0	0
07:00	168	140	25	0	3
08:00	257	224	32	0	1
09:00	162	134	26	0	2
10:00	191	162	28	1	0
11:00	201	167	31	0	3
12:00	198	166	29	0	3
13:00	191	169	21	0	1
14:00	233	204	25	0	4
15:00	300	275	22	1	2
16:00	341	317	24	0	0
17:00	258	242	14	0	2
18:00	230	215	15	0	0
19:00	205	196	9	0	0
20:00	134	126	6	2	0
21:00	100	99	1	0	0
22:00	59	56	3	0	0
23:00	25	24	1	0	0
Total 12H(7-19)	2730	2415	292	2	21
16H(6-22)	3229	2881	323	4	21
18H(6-24)	3313	2961	327	4	21
24H(0-24)	3372	3014	333	4	21
AM Peak	08:00	08:00	08:00	10:00	07:00
	257	224	32	1	3
PM Peak	16:00	16:00	12:00	20:00	14:00
	341	317	29	2	4

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	16	16	0	0	0
01:00	9	9	0	0	0
02:00	6	5	1	0	0
03:00	4	2	2	0	0
04:00	14	13	1	0	0
05:00	57	48	9	0	0
06:00	121	95	25	0	1
07:00	337	281	49	0	7
08:00	584	514	64	4	2
09:00	375	319	53	0	3
10:00	359	310	46	1	2
11:00	432	376	50	0	6
12:00	399	348	46	0	5
13:00	390	337	49	0	4
14:00	460	396	57	0	7
15:00	555	501	49	1	4
16:00	636	589	46	0	1
17:00	578	545	30	0	3
18:00	479	442	36	0	1
19:00	367	349	18	0	0
20:00	250	233	13	4	0
21:00	210	206	4	0	0
22:00	104	98	6	0	0
23:00	41	40	1	0	0
Total 12H(7-19)	5584	4958	575	6	45
16H(6-22)	6532	5841	635	10	46
18H(6-24)	6677	5979	642	10	46
24H(0-24)	6783	6072	655	10	46
AM Peak	08:00	08:00	08:00	08:00	07:00
	584	514	64	4	7
PM Peak	16:00	16:00	14:00	20:00	14:00
	636	589	57	4	7

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

06/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	12	11	1	0	0
01:00	5	4	1	0	0
02:00	3	2	1	0	0
03:00	2	2	0	0	0
04:00	7	6	1	0	0
05:00	23	21	2	0	0
06:00	59	46	12	0	1
07:00	170	144	24	0	2
08:00	309	272	33	1	3
09:00	236	207	27	1	1
10:00	200	173	25	0	2
11:00	196	171	22	0	3
12:00	206	187	19	0	0
13:00	172	156	14	0	2
14:00	234	211	22	0	1
15:00	260	237	21	0	2
16:00	253	233	18	0	2
17:00	237	220	17	0	0
18:00	223	206	15	0	2
19:00	170	159	11	0	0
20:00	115	113	2	0	0
21:00	65	61	4	0	0
22:00	52	52	0	0	0
23:00	17	17	0	0	0
Total 12H(7-19)	2696	2417	257	2	20
16H(6-22)	3105	2796	286	2	21
18H(6-24)	3174	2865	286	2	21
24H(0-24)	3226	2911	292	2	21
AM Peak	08:00	08:00	08:00	08:00	08:00
	309	272	33	1	3
PM Peak	15:00	15:00	14:00	12:00	13:00
	260	237	22	0	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	11	10	1	0	0
01:00	8	7	1	0	0
02:00	6	4	2	0	0
03:00	3	1	2	0	0
04:00	8	5	3	0	0
05:00	24	18	6	0	0
06:00	71	53	18	0	0
07:00	161	137	22	0	2
08:00	236	202	31	1	2
09:00	171	146	25	0	0
10:00	165	157	8	0	0
11:00	175	144	28	0	3
12:00	195	177	15	0	3
13:00	193	177	16	0	0
14:00	216	193	22	0	1
15:00	298	274	24	0	0
16:00	299	279	20	0	0
17:00	237	225	12	0	0
18:00	195	182	13	0	0
19:00	150	146	4	0	0
20:00	127	124	3	0	0
21:00	85	81	4	0	0
22:00	56	55	1	0	0
23:00	20	20	0	0	0
Total 12H(7-19)	2541	2293	236	1	11
16H(6-22)	2974	2697	265	1	11
18H(6-24)	3050	2772	266	1	11
24H(0-24)	3110	2817	281	1	11
AM Peak	08:00	08:00	08:00	08:00	11:00
	236	202	31	1	3
PM Peak	16:00	16:00	15:00	12:00	12:00
	299	279	24	0	3

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	23	21	2	0	0
01:00	13	11	2	0	0
02:00	9	6	3	0	0
03:00	5	3	2	0	0
04:00	15	11	4	0	0
05:00	47	39	8	0	0
06:00	130	99	30	0	1
07:00	331	281	46	0	4
08:00	545	474	64	2	5
09:00	407	353	52	1	1
10:00	365	330	33	0	2
11:00	371	315	50	0	6
12:00	401	364	34	0	3
13:00	365	333	30	0	2
14:00	450	404	44	0	2
15:00	558	511	45	0	2
16:00	552	512	38	0	2
17:00	474	445	29	0	0
18:00	418	388	28	0	2
19:00	320	305	15	0	0
20:00	242	237	5	0	0
21:00	150	142	8	0	0
22:00	108	107	1	0	0
23:00	37	37	0	0	0
Total 12H(7-19)	5237	4710	493	3	31
16H(6-22)	6079	5493	551	3	32
18H(6-24)	6224	5637	552	3	32
24H(0-24)	6336	5728	573	3	32
AM Peak	08:00	08:00	08:00	08:00	11:00
	545	474	64	2	6
PM Peak	15:00	16:00	15:00	12:00	12:00
	558	512	45	0	3

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

07/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	14	12	2	0	0
01:00	3	3	0	0	0
02:00	3	2	1	0	0
03:00	5	4	1	0	0
04:00	8	7	1	0	0
05:00	20	17	2	0	1
06:00	58	45	13	0	0
07:00	140	116	23	0	1
08:00	304	271	27	2	4
09:00	239	211	25	0	3
10:00	198	180	17	0	1
11:00	209	186	20	1	2
12:00	193	176	16	0	1
13:00	198	173	23	0	2
14:00	257	228	27	0	2
15:00	278	251	27	0	0
16:00	291	275	14	1	1
17:00	256	242	14	0	0
18:00	190	183	6	0	1
19:00	183	172	11	0	0
20:00	102	101	1	0	0
21:00	76	71	5	0	0
22:00	57	55	2	0	0
23:00	44	44	0	0	0
Total					
12H(7-19)	2753	2492	239	4	18
16H(6-22)	3172	2881	269	4	18
18H(6-24)	3273	2980	271	4	18
24H(0-24)	3326	3025	278	4	19
AM Peak	08:00	08:00	08:00	08:00	08:00
	304	271	27	2	4
PM Peak	16:00	16:00	14:00	16:00	13:00
	291	275	27	1	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	11	10	1	0	0
01:00	10	10	0	0	0
02:00	6	5	1	0	0
03:00	5	5	0	0	0
04:00	8	4	4	0	0
05:00	28	24	3	0	1
06:00	74	57	17	0	0
07:00	165	139	26	0	0
08:00	218	192	21	2	3
09:00	171	154	17	0	0
10:00	155	138	16	0	1
11:00	197	181	14	1	1
12:00	217	195	22	0	0
13:00	210	187	21	0	2
14:00	251	233	17	0	1
15:00	309	277	31	1	0
16:00	306	283	19	2	2
17:00	221	207	12	0	2
18:00	181	172	9	0	0
19:00	154	147	7	0	0
20:00	134	128	6	0	0
21:00	93	89	4	0	0
22:00	55	54	1	0	0
23:00	57	57	0	0	0
Total					
12H(7-19)	2601	2358	225	6	12
16H(6-22)	3056	2779	259	6	12
18H(6-24)	3168	2890	260	6	12
24H(0-24)	3236	2948	269	6	13
AM Peak	08:00	08:00	07:00	08:00	08:00
	218	192	26	2	3
PM Peak	15:00	16:00	15:00	16:00	13:00
	309	283	31	2	2

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	25	22	3	0	0
01:00	13	13	0	0	0
02:00	9	7	2	0	0
03:00	10	9	1	0	0
04:00	16	11	5	0	0
05:00	48	41	5	0	2
06:00	132	102	30	0	0
07:00	305	255	49	0	1
08:00	522	463	48	4	7
09:00	410	365	42	0	3
10:00	353	318	33	0	2
11:00	406	367	34	2	3
12:00	410	371	38	0	1
13:00	408	360	44	0	4
14:00	508	461	44	0	3
15:00	587	528	58	1	0
16:00	597	558	33	3	3
17:00	477	449	26	0	2
18:00	371	355	15	0	1
19:00	337	319	18	0	0
20:00	236	229	7	0	0
21:00	169	160	9	0	0
22:00	112	109	3	0	0
23:00	101	101	0	0	0
Total					
12H(7-19)	5354	4850	464	10	30
16H(6-22)	6228	5660	528	10	30
18H(6-24)	6441	5870	531	10	30
24H(0-24)	6562	5973	547	10	32
AM Peak	08:00	08:00	07:00	08:00	08:00
	522	463	49	4	7
PM Peak	16:00	16:00	15:00	16:00	13:00
	597	558	58	3	4

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

08/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	18	18	0	0	0
01:00	13	13	0	0	0
02:00	7	6	1	0	0
03:00	1	0	1	0	0
04:00	4	4	0	0	0
05:00	15	13	2	0	0
06:00	27	23	4	0	0
07:00	60	54	6	0	0
08:00	92	82	9	0	1
09:00	151	131	17	0	3
10:00	171	161	8	0	2
11:00	201	181	17	2	1
12:00	211	204	5	0	2
13:00	209	196	11	0	2
14:00	198	187	9	0	2
15:00	191	177	11	1	2
16:00	156	150	6	0	0
17:00	139	133	5	0	1
18:00	149	140	8	0	1
19:00	122	119	3	0	0
20:00	101	99	2	0	0
21:00	85	80	5	0	0
22:00	58	54	4	0	0
23:00	56	54	2	0	0
Total 12H(7-19)	1928	1796	112	3	17
16H(6-22)	2263	2117	126	3	17
18H(6-24)	2377	2225	132	3	17
24H(0-24)	2435	2279	136	3	17
AM Peak	11:00	11:00	09:00	11:00	09:00
	201	181	17	2	3
PM Peak	12:00	12:00	13:00	15:00	12:00
	211	204	11	1	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	22	22	0	0	0
01:00	16	15	1	0	0
02:00	5	5	0	0	0
03:00	7	7	0	0	0
04:00	2	2	0	0	0
05:00	12	11	1	0	0
06:00	37	34	3	0	0
07:00	55	48	7	0	0
08:00	108	100	7	0	1
09:00	123	109	14	0	0
10:00	146	139	5	0	2
11:00	199	187	12	0	0
12:00	235	216	17	0	2
13:00	186	173	13	0	0
14:00	160	151	7	0	2
15:00	171	163	7	0	1
16:00	159	152	6	0	1
17:00	137	130	7	0	0
18:00	158	154	4	0	0
19:00	120	115	5	0	0
20:00	100	99	1	0	0
21:00	77	75	2	0	0
22:00	64	64	0	0	0
23:00	62	60	2	0	0
Total 12H(7-19)	1837	1722	106	0	9
16H(6-22)	2171	2045	117	0	9
18H(6-24)	2297	2169	119	0	9
24H(0-24)	2361	2231	121	0	9
AM Peak	11:00	11:00	09:00	00:00	10:00
	199	187	14	0	2
PM Peak	12:00	12:00	12:00	12:00	12:00
	235	216	17	0	2

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	40	40	0	0	0
01:00	29	28	1	0	0
02:00	12	11	1	0	0
03:00	8	7	1	0	0
04:00	6	6	0	0	0
05:00	27	24	3	0	0
06:00	64	57	7	0	0
07:00	115	102	13	0	0
08:00	200	182	16	0	2
09:00	274	240	31	0	3
10:00	317	300	13	0	4
11:00	400	368	29	2	1
12:00	446	420	22	0	4
13:00	395	369	24	0	2
14:00	358	338	16	0	4
15:00	362	340	18	1	3
16:00	315	302	12	0	1
17:00	276	263	12	0	1
18:00	307	294	12	0	1
19:00	242	234	8	0	0
20:00	201	198	3	0	0
21:00	162	155	7	0	0
22:00	122	118	4	0	0
23:00	118	114	4	0	0
Total 12H(7-19)	3765	3518	218	3	26
16H(6-22)	4434	4162	243	3	26
18H(6-24)	4674	4394	251	3	26
24H(0-24)	4796	4510	257	3	26
AM Peak	11:00	11:00	09:00	11:00	10:00
	400	368	31	2	4
PM Peak	12:00	12:00	13:00	15:00	12:00
	446	420	24	1	4

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

09/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	34	33	1	0	0
01:00	14	14	0	0	0
02:00	9	9	0	0	0
03:00	8	8	0	0	0
04:00	7	7	0	0	0
05:00	5	5	0	0	0
06:00	18	17	1	0	0
07:00	52	50	2	0	0
08:00	68	64	4	0	0
09:00	100	94	5	1	0
10:00	170	160	10	0	0
11:00	184	174	9	1	0
12:00	217	209	7	1	0
13:00	191	180	11	0	0
14:00	182	170	10	0	2
15:00	183	170	13	0	0
16:00	168	158	9	1	0
17:00	143	138	5	0	0
18:00	143	135	8	0	0
19:00	107	104	3	0	0
20:00	92	91	1	0	0
21:00	73	71	2	0	0
22:00	41	41	0	0	0
23:00	22	21	0	1	0
Total					
12H(7-19)	1801	1702	93	4	2
16H(6-22)	2091	1985	100	4	2
18H(6-24)	2154	2047	100	5	2
24H(0-24)	2231	2123	101	5	2
AM Peak	11:00	11:00	10:00	09:00	00:00
	184	174	10	1	0
PM Peak	12:00	12:00	15:00	12:00	14:00
	217	209	13	1	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	42	41	1	0	0
01:00	18	18	0	0	0
02:00	14	14	0	0	0
03:00	13	13	0	0	0
04:00	9	9	0	0	0
05:00	6	6	0	0	0
06:00	20	16	4	0	0
07:00	24	24	0	0	0
08:00	89	83	5	0	1
09:00	100	93	7	0	0
10:00	160	149	11	0	0
11:00	175	169	6	0	0
12:00	207	198	9	0	0
13:00	183	170	13	0	0
14:00	171	160	11	0	0
15:00	152	148	4	0	0
16:00	175	163	11	1	0
17:00	183	176	7	0	0
18:00	158	153	5	0	0
19:00	123	122	1	0	0
20:00	93	90	3	0	0
21:00	85	81	4	0	0
22:00	40	38	2	0	0
23:00	30	26	4	0	0
Total					
12H(7-19)	1777	1686	89	1	1
16H(6-22)	2098	1995	101	1	1
18H(6-24)	2168	2059	107	1	1
24H(0-24)	2270	2160	108	1	1
AM Peak	11:00	11:00	10:00	00:00	08:00
	175	169	11	0	1
PM Peak	12:00	12:00	13:00	16:00	12:00
	207	198	13	1	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	76	74	2	0	0
01:00	32	32	0	0	0
02:00	23	23	0	0	0
03:00	21	21	0	0	0
04:00	16	16	0	0	0
05:00	11	11	0	0	0
06:00	38	33	5	0	0
07:00	76	74	2	0	0
08:00	157	147	9	0	1
09:00	200	187	12	1	0
10:00	330	309	21	0	0
11:00	359	343	15	1	0
12:00	424	407	16	1	0
13:00	374	350	24	0	0
14:00	353	330	21	0	2
15:00	335	318	17	0	0
16:00	343	321	20	2	0
17:00	326	314	12	0	0
18:00	301	288	13	0	0
19:00	230	226	4	0	0
20:00	185	181	4	0	0
21:00	158	152	6	0	0
22:00	81	79	2	0	0
23:00	52	47	4	1	0
Total					
12H(7-19)	3578	3388	182	5	3
16H(6-22)	4189	3980	201	5	3
18H(6-24)	4322	4106	207	6	3
24H(0-24)	4501	4283	209	6	3
AM Peak	11:00	11:00	10:00	09:00	08:00
	359	343	21	1	1
PM Peak	12:00	12:00	13:00	16:00	14:00
	424	407	24	2	2

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

10/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	4	3	1	0	0
01:00	10	9	1	0	0
02:00	3	1	2	0	0
03:00	2	2	0	0	0
04:00	10	8	2	0	0
05:00	20	17	3	0	0
06:00	63	52	11	0	0
07:00	149	131	16	0	2
08:00	299	277	22	0	0
09:00	220	202	17	1	0
10:00	192	170	21	0	1
11:00	176	159	16	0	1
12:00	196	185	10	0	1
13:00	183	166	16	0	1
14:00	227	201	25	0	1
15:00	241	217	18	1	5
16:00	245	229	16	0	0
17:00	255	236	18	0	1
18:00	197	181	15	0	1
19:00	145	140	5	0	0
20:00	134	126	8	0	0
21:00	52	52	0	0	0
22:00	34	32	2	0	0
23:00	23	21	2	0	0
Total					
12H(7-19)	2580	2354	210	2	14
16H(6-22)	2974	2724	234	2	14
18H(6-24)	3031	2777	238	2	14
24H(0-24)	3080	2817	247	2	14
AM Peak	08:00	08:00	08:00	09:00	07:00
	299	277	22	1	2
PM Peak	17:00	17:00	14:00	15:00	15:00
	255	236	25	1	5

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	12	11	1	0	0
01:00	8	8	0	0	0
02:00	7	6	1	0	0
03:00	0	0	0	0	0
04:00	14	7	7	0	0
05:00	26	22	4	0	0
06:00	76	67	9	0	0
07:00	170	153	15	0	2
08:00	222	212	10	0	0
09:00	189	175	13	1	0
10:00	185	166	19	0	0
11:00	169	151	18	0	0
12:00	206	192	14	0	0
13:00	211	190	19	0	2
14:00	195	185	10	0	0
15:00	314	295	18	0	1
16:00	281	274	6	0	1
17:00	264	250	14	0	0
18:00	212	204	8	0	0
19:00	167	162	5	0	0
20:00	129	121	8	0	0
21:00	75	73	2	0	0
22:00	37	34	3	0	0
23:00	23	21	2	0	0
Total					
12H(7-19)	2618	2447	164	1	6
16H(6-22)	3065	2870	188	1	6
18H(6-24)	3125	2925	193	1	6
24H(0-24)	3192	2979	206	1	6
AM Peak	08:00	08:00	10:00	09:00	07:00
	222	212	19	1	2
PM Peak	15:00	15:00	13:00	12:00	13:00
	314	295	19	0	2

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	16	14	2	0	0
01:00	18	17	1	0	0
02:00	10	7	3	0	0
03:00	2	2	0	0	0
04:00	24	15	9	0	0
05:00	46	39	7	0	0
06:00	139	119	20	0	0
07:00	319	284	31	0	4
08:00	521	489	32	0	0
09:00	409	377	30	2	0
10:00	377	336	40	0	1
11:00	345	310	34	0	1
12:00	402	377	24	0	1
13:00	394	356	35	0	3
14:00	422	386	35	0	1
15:00	555	512	36	1	6
16:00	526	503	22	0	1
17:00	519	486	32	0	1
18:00	409	385	23	0	1
19:00	312	302	10	0	0
20:00	263	247	16	0	0
21:00	127	125	2	0	0
22:00	71	66	5	0	0
23:00	46	42	4	0	0
Total					
12H(7-19)	5198	4801	374	3	20
16H(6-22)	6039	5594	422	3	20
18H(6-24)	6156	5702	431	3	20
24H(0-24)	6272	5796	453	3	20
AM Peak	08:00	08:00	10:00	09:00	07:00
	521	489	40	2	4
PM Peak	15:00	15:00	15:00	15:00	15:00
	555	512	36	1	6

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

11/03/2025

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	20	20	0	0	0
01:00	2	2	0	0	0
02:00	4	4	0	0	0
03:00	2	2	0	0	0
04:00	7	6	1	0	0
05:00	23	19	4	0	0
06:00	62	53	9	0	0
07:00	154	136	18	0	0
08:00	331	297	30	4	0
09:00	264	230	32	0	2
10:00	200	178	16	1	5
11:00	182	163	15	0	4
12:00	184	161	21	1	1
13:00	205	182	21	0	2
14:00	233	210	22	0	1
15:00	273	243	28	0	2
16:00	277	256	18	3	0
17:00	236	219	15	2	0
18:00	195	179	16	0	0
19:00	159	152	6	1	0
20:00	107	96	11	0	0
21:00	73	70	3	0	0
22:00	35	33	2	0	0
23:00	32	32	0	0	0
Total 12H(7-19)	2734	2454	252	11	17
16H(6-22)	3135	2825	281	12	17
18H(6-24)	3202	2890	283	12	17
24H(0-24)	3260	2943	288	12	17
AM Peak	08:00	08:00	09:00	08:00	10:00
	331	297	32	4	5
PM Peak	16:00	16:00	15:00	16:00	13:00
	277	256	28	3	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	22	21	1	0	0
01:00	5	5	0	0	0
02:00	1	1	0	0	0
03:00	3	3	0	0	0
04:00	7	6	1	0	0
05:00	31	26	5	0	0
06:00	62	49	13	0	0
07:00	192	166	25	0	1
08:00	276	249	24	3	0
09:00	170	158	12	0	0
10:00	185	158	26	0	1
11:00	195	175	17	0	3
12:00	201	184	17	0	0
13:00	187	173	14	0	0
14:00	190	165	25	0	0
15:00	308	291	17	0	0
16:00	328	307	19	2	0
17:00	246	225	20	1	0
18:00	225	205	20	0	0
19:00	167	160	6	1	0
20:00	131	124	7	0	0
21:00	77	66	10	0	1
22:00	62	60	2	0	0
23:00	30	28	2	0	0
Total 12H(7-19)	2703	2456	236	6	5
16H(6-22)	3140	2855	272	7	6
18H(6-24)	3232	2943	276	7	6
24H(0-24)	3301	3005	283	7	6
AM Peak	08:00	08:00	10:00	08:00	11:00
	276	249	26	3	3
PM Peak	16:00	16:00	14:00	16:00	21:00
	328	307	25	2	1

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	LIGHT	OGV1	OGV2	BUS
00:00	42	41	1	0	0
01:00	7	7	0	0	0
02:00	5	5	0	0	0
03:00	5	5	0	0	0
04:00	14	12	2	0	0
05:00	54	45	9	0	0
06:00	124	102	22	0	0
07:00	346	302	43	0	1
08:00	607	546	54	7	0
09:00	434	388	44	0	2
10:00	385	336	42	1	6
11:00	377	338	32	0	7
12:00	385	345	38	1	1
13:00	392	355	35	0	2
14:00	423	375	47	0	1
15:00	581	534	45	0	2
16:00	605	563	37	5	0
17:00	482	444	35	3	0
18:00	420	384	36	0	0
19:00	326	312	12	2	0
20:00	238	220	18	0	0
21:00	150	136	13	0	1
22:00	97	93	4	0	0
23:00	62	60	2	0	0
Total 12H(7-19)	5437	4910	488	17	22
16H(6-22)	6275	5680	553	19	23
18H(6-24)	6434	5833	559	19	23
24H(0-24)	6561	5948	571	19	23
AM Peak	08:00	08:00	08:00	08:00	11:00
	607	546	54	7	7
PM Peak	16:00	16:00	14:00	16:00	13:00
	605	563	47	5	2

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

05/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	7	23.6	21.1	2.4	0	0	2	5	0	0	0	0	0	0	0	0
01:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
02:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
03:00	1	-	22.5	-	0	0	0	1	0	0	0	0	0	0	0	0
04:00	5	25.8	21.5	4.2	0	0	2	2	1	0	0	0	0	0	0	0
05:00	30	26.9	22.3	4.4	0	2	6	13	9	0	0	0	0	0	0	0
06:00	61	25.6	21.8	3.7	0	1	18	32	9	1	0	0	0	0	0	0
07:00	169	24.7	20.4	4.1	0	17	54	82	14	2	0	0	0	0	0	0
08:00	327	23.3	19.5	3.7	1	36	134	144	12	0	0	0	0	0	0	0
09:00	213	22.6	18.9	3.6	1	27	102	80	2	1	0	0	0	0	0	0
10:00	168	23.0	19.1	3.7	2	13	89	59	3	2	0	0	0	0	0	0
11:00	231	22.6	19.2	3.3	2	12	132	77	8	0	0	0	0	0	0	0
12:00	201	24.5	20.9	3.5	2	4	68	113	12	2	0	0	0	0	0	0
13:00	199	24.5	19.5	4.9	2	36	69	69	21	1	1	0	0	0	0	0
14:00	227	23.1	19.6	3.4	4	6	113	98	6	0	0	0	0	0	0	0
15:00	255	24.0	19.6	4.2	2	33	93	111	13	3	0	0	0	0	0	0
16:00	295	22.5	18.9	3.5	2	27	162	94	10	0	0	0	0	0	0	0
17:00	320	22.8	18.6	4.1	8	49	139	115	9	0	0	0	0	0	0	0
18:00	249	23.5	20.0	3.4	0	13	111	114	10	1	0	0	0	0	0	0
19:00	162	24.0	20.5	3.4	0	3	74	72	12	1	0	0	0	0	0	0
20:00	116	24.2	21.0	3.1	0	0	44	64	7	1	0	0	0	0	0	0
21:00	110	25.2	20.7	4.3	0	3	51	43	10	1	2	0	0	0	0	0
22:00	45	25.6	21.5	3.9	0	2	12	25	5	1	0	0	0	0	0	0
23:00	16	26.8	23.4	3.3	0	0	2	9	5	0	0	0	0	0	0	0
Total																
2H(10-12)	399	22.8	19.1	3.5	4	25	221	136	11	2	0	0	0	0	0	0
2H(14-16)	482	23.6	19.6	3.8	6	39	206	209	19	3	0	0	0	0	0	0
12H(7-19)	2854	23.4	19.5	3.9	26	273	1266	1156	120	12	1	0	0	0	0	0
24H(0-24)	3411	23.7	19.7	3.9	26	284	1477	1425	179	17	3	0	0	0	0	0
AM Peak	08:00	01:00	01:00	05:00	10:00	08:00	08:00	08:00	07:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	327	**27.2**	**24.2**	**4.4**	**2**	**36**	**134**	**144**	**14**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	17:00	23:00	23:00	13:00	17:00	17:00	16:00	17:00	13:00	15:00	21:00	12:00	12:00	12:00	12:00	12:00
	320	**26.8**	**23.4**	**4.9**	**8**	**49**	**162**	**115**	**21**	**3**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	9	39.2	29.2	9.7	0	0	0	5	1	1	0	1	1	0	0	0
01:00	6	30.8	27.5	3.2	0	0	0	1	4	1	0	0	0	0	0	0
02:00	5	30.1	25.5	4.5	0	0	0	3	1	1	0	0	0	0	0	0
03:00	3	27.7	22.5	5.0	0	0	1	1	1	0	0	0	0	0	0	0
04:00	9	31.4	26.4	4.9	0	0	1	2	4	2	0	0	0	0	0	0
05:00	27	31.2	27.1	3.9	0	0	0	9	11	7	0	0	0	0	0	0
06:00	60	31.3	26.5	4.6	0	0	2	22	26	6	4	0	0	0	0	0
07:00	168	29.3	25.5	3.7	0	1	6	63	89	7	1	1	0	0	0	0
08:00	257	27.9	24.7	3.1	0	0	10	134	104	9	0	0	0	0	0	0
09:00	162	27.9	24.1	3.6	0	0	15	88	51	7	1	0	0	0	0	0
10:00	191	28.0	24.7	3.2	0	0	7	100	76	8	0	0	0	0	0	0
11:00	201	28.1	24.3	3.7	0	0	15	110	67	7	1	1	0	0	0	0
12:00	198	27.3	23.7	3.5	0	1	21	112	60	3	1	0	0	0	0	0
13:00	191	28.1	24.6	3.4	0	0	13	89	84	4	1	0	0	0	0	0
14:00	233	28.9	25.0	3.8	0	0	13	109	98	9	3	1	0	0	0	0
15:00	300	28.9	24.9	3.9	0	0	18	143	125	11	1	0	2	0	0	0
16:00	341	28.6	25.0	3.4	0	0	14	163	148	12	4	0	0	0	0	0
17:00	258	28.8	25.6	3.1	0	0	4	100	146	5	3	0	0	0	0	0
18:00	230	31.9	26.3	5.3	0	0	7	82	121	12	3	3	0	0	0	2
19:00	205	29.2	25.6	3.5	0	0	4	91	93	14	3	0	0	0	0	0
20:00	134	28.8	25.0	3.6	0	1	5	62	58	7	1	0	0	0	0	0
21:00	100	29.5	24.7	4.7	0	0	8	55	29	4	3	0	1	0	0	0
22:00	59	32.2	26.5	5.5	0	0	1	24	28	3	0	1	2	0	0	0
23:00	25	35.2	28.5	6.5	0	0	0	9	8	5	0	3	0	0	0	0
Total																
2H(10-12)	392	28.1	24.5	3.5	0	0	22	210	143	15	1	1	0	0	0	0
2H(14-16)	533	28.9	24.9	3.8	0	0	31	252	223	20	4	1	2	0	0	0
12H(7-19)	2730	28.8	24.9	3.7	0	2	143	1293	1169	94	19	6	2	0	0	2
24H(0-24)	3372	29.1	25.1	3.9	0	3	165	1577	1433	145	30	11	6	0	0	2
AM Peak	08:00	00:00	00:00	00:00	00:00	07:00	09:00	08:00	08:00	08:00	06:00	00:00	00:00	00:00	00:00	00:00
	257	**39.2**	**29.2**	**9.7**	**0**	**1**	**15**	**134**	**104**	**9**	**4**	**1**	**1**	**0**	**0**	**0**
PM Peak	16:00	23:00	23:00	23:00	12:00	12:00	12:00	16:00	16:00	19:00	16:00	18:00	15:00	12:00	12:00	18:00
	341	**35.2**	**28.5**	**6.5**	**0**	**1**	**21**	**163**	**148**	**14**	**4**	**3**	**2**	**0**	**0**	**2**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	16	34.3	25.6	8.3	0	0	2	10	1	1	0	1	1	0	0	0
01:00	9	29.8	26.4	3.3	0	0	0	3	5	1	0	0	0	0	0	0
02:00	6	29.3	25.0	4.2	0	0	0	4	1	1	0	0	0	0	0	0
03:00	4	26.7	22.5	4.1	0	0	1	2	1	0	0	0	0	0	0	0
04:00	14	29.9	24.6	5.1	0	0	3	4	5	2	0	0	0	0	0	0
05:00	57	29.6	24.6	4.8	0	2	6	22	20	7	0	0	0	0	0	0
06:00	121	29.1	24.1	4.8	0	1	20	54	35	7	4	0	0	0	0	0
07:00	337	27.8	23.0	4.7	0	18	60	145	103	9	1	1	0	0	0	0
08:00	584	26.3	21.8	4.3	1	36	144	278	116	9	0	0	0	0	0	0
09:00	375	25.8	21.1	4.5	1	27	117	168	53	8	1	0	0	0	0	0
10:00	359	26.7	22.1	4.4	2	13	96	159	79	10	0	0	0	0	0	0
11:00	432	26.1	21.6	4.3	2	12	147	187	75	7	1	1	0	0	0	0
12:00	399	26.2	22.3	3.8	2	5	89	225	72	5	1	0	0	0	0	0
13:00	390	27.1	22.0	5.0	2	36	82	158	105	5	2	0	0	0	0	0
14:00	460	27.0	22.3	4.5	4	6	126	207	104	9	3	1	0	0	0	0
15:00	555	27.5	22.5	4.8	2	33	111	254	138	14	1	0	2	0	0	0
16:00	636	27.0	22.2	4.6	2	27	176	257	158	12	4	0	0	0	0	0
17:00	578	27.0	21.7	5.1	8	49	143	215	155	5	3	0	0	0	0	0
18:00	479	28.7	23.0	5.4	0	13	118	196	131	13	3	3	0	0	0	2
19:00	367	27.8	23.3	4.3	0	3	78	163	105	15	3	0	0	0	0	0
20:00	250	27.2	23.2	3.9	0	1	49	126	65	8	1	0	0	0	0	0
21:00	210	27.7	22.6	4.9	0	3	59	98	39	5	5	0	1	0	0	0
22:00	104	30.0	24.3	5.4	0	2	13	49	33	4	0	1	2	0	0	0
23:00	41	32.7	26.5	5.9	0	0	2	18	13	5	0	3	0	0	0	0
Total																
2H(10-12)	791	26.4	21.8	4.4	4	25	243	346	154	17	1	1	0	0	0	0
2H(14-16)	1015	27.2	22.4	4.7	6	39	237	461	242	23	4	1	2	0	0	0
12H(7-19)	5584	27.0	22.1	4.7	26	275	1409	2449	1289	106	20	6	2	0	0	2
24H(0-24)	6783	27.3	22.4	4.7	26	287	1642	3002	1612	162	33	11	6	0	0	2
AM Peak	08:00	00:00	01:00	00:00	10:00	08:00	11:00	08:00	08:00	10:00	06:00	00:00	00:00	00:00	00:00	00:00
	584	**34.3**	**26.4**	**8.3**	**2**	**36**	**147**	**278**	**116**	**10**	**4**	**1**	**1**	**0**	**0**	**0**
PM Peak	16:00	23:00	23:00	23:00	17:00	17:00	16:00	16:00	16:00	19:00	21:00	18:00	15:00	12:00	12:00	18:00
	636	**32.7**	**26.5**	**5.9**	**8**	**49**	**176**	**257**	**158**	**15**	**5**	**3**	**2**	**0**	**0**	**2**

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

06/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	12	28.8	24.2	4.4	0	0	2	5	4	1	0	0	0	0	0	0
01:00	5	24.1	19.5	4.5	0	1	1	3	0	0	0	0	0	0	0	0
02:00	3	27.7	22.5	5.0	0	0	1	1	1	0	0	0	0	0	0	0
03:00	2	24.8	17.5	7.1	0	1	0	1	0	0	0	0	0	0	0	0
04:00	7	26.7	22.5	4.1	0	0	2	3	2	0	0	0	0	0	0	0
05:00	23	25.9	22.3	3.5	0	1	3	15	4	0	0	0	0	0	0	0
06:00	59	25.4	21.7	3.6	0	0	20	30	8	1	0	0	0	0	0	0
07:00	170	24.5	21.0	3.3	0	5	56	94	15	0	0	0	0	0	0	0
08:00	309	23.3	19.2	4.0	1	39	139	114	14	2	0	0	0	0	0	0
09:00	236	23.1	18.6	4.3	7	33	111	70	15	0	0	0	0	0	0	0
10:00	200	23.7	20.1	3.5	0	9	91	89	9	2	0	0	0	0	0	0
11:00	196	22.6	19.1	3.3	0	14	111	64	7	0	0	0	0	0	0	0
12:00	206	23.3	19.4	3.8	1	25	81	93	6	0	0	0	0	0	0	0
13:00	172	23.9	20.5	3.3	0	5	70	87	9	1	0	0	0	0	0	0
14:00	234	23.6	20.0	3.5	0	15	100	107	12	0	0	0	0	0	0	0
15:00	260	22.9	18.7	4.0	6	33	124	87	10	0	0	0	0	0	0	0
16:00	253	23.1	18.9	4.0	2	35	117	86	13	0	0	0	0	0	0	0
17:00	237	23.5	19.9	3.5	0	15	106	107	8	0	1	0	0	0	0	0
18:00	223	22.5	19.1	3.3	0	18	122	77	6	0	0	0	0	0	0	0
19:00	170	23.4	19.7	3.6	0	13	78	71	7	1	0	0	0	0	0	0
20:00	115	25.0	21.1	3.8	1	4	37	58	15	0	0	0	0	0	0	0
21:00	65	26.4	22.4	3.9	1	1	9	43	9	2	0	0	0	0	0	0
22:00	52	26.7	22.2	4.3	1	0	13	27	9	2	0	0	0	0	0	0
23:00	17	22.8	19.6	3.1	0	1	8	8	0	0	0	0	0	0	0	0
Total																
2H(10-12)	396	23.2	19.6	3.4	0	23	202	153	16	2	0	0	0	0	0	0
2H(14-16)	494	23.3	19.3	3.8	6	48	224	194	22	0	0	0	0	0	0	0
12H(7-19)	2696	23.4	19.5	3.8	17	246	1228	1075	124	5	1	0	0	0	0	0
24H(0-24)	3226	23.7	19.7	3.8	20	268	1402	1340	183	12	1	0	0	0	0	0
AM Peak	08:00	00:00	00:00	03:00	09:00	08:00	08:00	08:00	07:00	08:00	00:00	00:00	00:00	00:00	00:00	00:00
	309	28.8	24.2	7.1	7	39	139	114	15	2	0	0	0	0	0	0
PM Peak	15:00	22:00	21:00	22:00	15:00	16:00	15:00	14:00	20:00	21:00	17:00	12:00	12:00	12:00	12:00	12:00
	260	26.7	22.4	4.3	6	35	124	107	15	2	1	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	11	33.2	27.5	5.5	0	0	0	3	7	0	0	1	0	0	0	0
01:00	8	28.3	25.6	2.6	0	0	0	3	5	0	0	0	0	0	0	0
02:00	6	22.5	22.5	0.0	0	0	0	6	0	0	0	0	0	0	0	0
03:00	3	28.8	25.8	2.9	0	0	0	1	2	0	0	0	0	0	0	0
04:00	8	32.9	25.6	7.0	0	0	2	2	2	1	1	0	0	0	0	0
05:00	24	35.1	27.9	6.9	0	0	1	10	5	4	2	2	0	0	0	0
06:00	71	31.1	26.6	4.3	0	0	1	28	28	11	3	0	0	0	0	0
07:00	161	29.2	25.8	3.4	0	0	4	61	84	11	1	0	0	0	0	0
08:00	236	28.6	25.3	3.2	0	0	7	103	113	13	0	0	0	0	0	0
09:00	171	27.1	23.6	3.4	0	0	19	99	50	2	1	0	0	0	0	0
10:00	165	27.1	23.6	3.4	0	1	18	92	52	2	0	0	0	0	0	0
11:00	175	28.0	24.8	3.2	0	0	5	94	68	8	0	0	0	0	0	0
12:00	195	28.4	24.6	3.7	0	0	16	95	73	10	1	0	0	0	0	0
13:00	193	27.8	24.4	3.3	0	1	12	96	80	4	0	0	0	0	0	0
14:00	216	28.4	24.7	3.6	0	1	14	103	88	9	1	0	0	0	0	0
15:00	298	28.4	24.9	3.4	1	0	11	140	134	11	1	0	0	0	0	0
16:00	299	28.5	25.1	3.3	0	0	11	140	132	15	1	0	0	0	0	0
17:00	237	28.3	24.9	3.2	0	0	10	109	111	6	1	0	0	0	0	0
18:00	195	29.2	25.4	3.7	0	0	8	84	88	12	3	0	0	0	0	0
19:00	150	28.8	24.8	3.9	0	0	15	63	61	11	0	0	0	0	0	0
20:00	127	29.1	25.6	3.4	0	0	1	59	56	10	1	0	0	0	0	0
21:00	85	31.0	26.1	4.7	0	0	4	33	35	10	1	2	0	0	0	0
22:00	56	34.3	27.3	6.7	0	1	3	18	21	6	3	3	1	0	0	0
23:00	20	31.7	27.0	4.6	0	0	0	6	12	1	0	1	0	0	0	0
Total																
2H(10-12)	340	27.6	24.2	3.3	0	1	23	186	120	10	0	0	0	0	0	0
2H(14-16)	514	28.4	24.8	3.5	1	1	25	243	222	20	2	0	0	0	0	0
12H(7-19)	2541	28.3	24.8	3.4	1	3	135	1216	1073	103	10	0	0	0	0	0
24H(0-24)	3110	28.8	25.0	3.7	1	4	162	1448	1307	157	21	9	1	0	0	0
AM Peak	08:00	05:00	05:00	04:00	00:00	10:00	09:00	08:00	08:00	08:00	06:00	05:00	00:00	00:00	00:00	00:00
	236	35.1	27.9	7.0	0	1	19	103	113	13	3	2	0	0	0	0
PM Peak	16:00	22:00	22:00	22:00	15:00	13:00	12:00	15:00	15:00	16:00	18:00	22:00	22:00	12:00	12:00	12:00
	299	34.3	27.3	6.7	1	1	16	140	134	15	3	3	1	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	23	31.1	25.8	5.1	0	0	2	8	11	1	0	1	0	0	0	0
01:00	13	27.9	23.3	4.5	0	1	1	6	5	0	0	0	0	0	0	0
02:00	9	25.1	22.5	2.5	0	0	1	7	1	0	0	0	0	0	0	0
03:00	5	28.8	22.5	6.1	0	1	0	2	2	0	0	0	0	0	0	0
04:00	15	30.3	24.2	5.9	0	0	4	5	4	1	1	0	0	0	0	0
05:00	47	31.5	25.2	6.2	0	1	4	25	9	4	2	2	0	0	0	0
06:00	130	29.2	24.3	4.7	0	0	21	58	36	12	3	0	0	0	0	0
07:00	331	27.6	23.3	4.1	0	5	60	155	99	11	1	0	0	0	0	0
08:00	545	26.8	21.9	4.7	1	39	146	217	127	15	0	0	0	0	0	0
09:00	407	25.6	20.7	4.7	7	33	130	169	65	2	1	0	0	0	0	0
10:00	365	25.7	21.7	3.9	0	10	109	181	61	4	0	0	0	0	0	0
11:00	371	26.2	21.8	4.3	0	14	116	158	75	8	0	0	0	0	0	0
12:00	401	26.6	21.9	4.5	1	25	97	188	79	10	1	0	0	0	0	0
13:00	365	26.6	22.6	3.8	0	6	82	183	89	5	0	0	0	0	0	0
14:00	450	26.6	22.2	4.2	0	16	114	210	100	9	1	0	0	0	0	0
15:00	558	27.0	22.0	4.8	7	33	135	227	144	11	1	0	0	0	0	0
16:00	552	27.2	22.3	4.8	2	35	128	226	145	15	1	0	0	0	0	0
17:00	474	26.8	22.4	4.2	0	15	116	216	119	6	2	0	0	0	0	0
18:00	418	26.9	22.0	4.7	0	18	130	161	94	12	3	0	0	0	0	0
19:00	320	26.7	22.1	4.5	0	13	93	134	68	12	0	0	0	0	0	0
20:00	242	27.8	23.4	4.2	1	4	38	117	71	10	1	0	0	0	0	0
21:00	150	29.4	24.5	4.7	1	1	13	76	44	12	1	2	0	0	0	0
22:00	108	31.3	24.9	6.2	1	1	16	45	30	8	3	3	1	0	0	0
23:00	37	29.2	23.6	5.4	0	1	8	14	12	1	0	1	0	0	0	0
Total																
2H(10-12)	736	26.0	21.7	4.1	0	24	225	339	136	12	0	0	0	0	0	0
2H(14-16)	1008	26.8	22.1	4.6	7	49	249	437	244	20	2	0	0	0	0	0
12H(7-19)	5237	26.7	22.1	4.5	18	249	1363	2291	1197	108	11	0	0	0	0	0
24H(0-24)	6336	27.1	22.3	4.6	21	272	1564	2788	1490	169	22	9	1	0	0	0
AM Peak	08:00	05:00	00:00	05:00	09:00	08:00	08:00	08:00	08:00	08:00	06:00	05:00	00:00	00:00	00:00	00:00
	545	31.5	25.8	6.2	7	39	146	217	127	15	3	2	0	0	0	0
PM Peak	15:00	22:00	22:00	22:00	15:00	16:00	15:00	15:00	16:00	16:00	18:00	22:00	22:00	12:00	12:00	12:00
	558	31.3	24.9	6.2	7	35	135	227	145	15	3	3	1	0	0	0

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

07/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	14	29.4	23.6	5.6	0	0	4	6	1	3	0	0	0	0	0	0
01:00	3	26.8	20.8	5.8	0	0	2	0	1	0	0	0	0	0	0	0
02:00	3	27.2	24.2	2.9	0	0	0	2	1	0	0	0	0	0	0	0
03:00	5	25.8	21.5	4.2	0	0	2	2	1	0	0	0	0	0	0	0
04:00	8	24.9	21.3	3.5	0	0	3	4	1	0	0	0	0	0	0	0
05:00	20	26.6	21.8	4.7	0	1	6	9	3	1	0	0	0	0	0	0
06:00	58	25.7	22.0	3.6	0	0	18	28	12	0	0	0	0	0	0	0
07:00	140	24.1	20.3	3.7	1	5	60	65	7	2	0	0	0	0	0	0
08:00	304	23.4	19.5	3.8	2	23	148	116	12	3	0	0	0	0	0	0
09:00	239	23.1	19.8	3.2	0	11	118	101	9	0	0	0	0	0	0	0
10:00	198	23.4	19.8	3.4	1	9	96	82	10	0	0	0	0	0	0	0
11:00	209	22.7	19.4	3.2	0	11	113	79	6	0	0	0	0	0	0	0
12:00	193	23.6	19.8	3.7	1	11	93	74	14	0	0	0	0	0	0	0
13:00	198	23.7	20.1	3.4	1	6	93	85	13	0	0	0	0	0	0	0
14:00	257	22.8	19.4	3.3	0	16	137	95	9	0	0	0	0	0	0	0
15:00	278	22.6	18.6	3.9	6	36	140	86	10	0	0	0	0	0	0	0
16:00	291	23.5	19.9	3.4	1	13	135	128	13	1	0	0	0	0	0	0
17:00	256	22.8	19.3	3.4	0	18	138	90	10	0	0	0	0	0	0	0
18:00	190	23.3	19.9	3.3	0	8	93	80	9	0	0	0	0	0	0	0
19:00	183	22.5	19.4	2.9	0	5	108	65	5	0	0	0	0	0	0	0
20:00	102	24.6	20.9	3.6	0	1	42	49	8	2	0	0	0	0	0	0
21:00	76	24.4	21.1	3.1	0	0	28	41	7	0	0	0	0	0	0	0
22:00	57	24.6	21.4	3.1	0	0	19	32	6	0	0	0	0	0	0	0
23:00	44	26.5	22.0	4.3	0	3	7	27	5	2	0	0	0	0	0	0
Total																
2H(10-12)	407	23.0	19.6	3.3	1	20	209	161	16	0	0	0	0	0	0	0
2H(14-16)	535	22.7	19.0	3.7	6	52	277	181	19	0	0	0	0	0	0	0
12H(7-19)	2753	23.2	19.6	3.5	13	167	1364	1081	122	6	0	0	0	0	0	0
24H(0-24)	3326	23.5	19.8	3.6	13	177	1603	1346	173	14	0	0	0	0	0	0
AM Peak	08:00	00:00	02:00	01:00	08:00	08:00	08:00	08:00	06:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
	304	29.4	24.2	5.8	2	23	148	116	12	3	0	0	0	0	0	0
PM Peak	16:00	23:00	23:00	23:00	15:00	15:00	15:00	16:00	12:00	20:00	12:00	12:00	12:00	12:00	12:00	12:00
	291	26.5	22.0	4.3	6	36	140	128	14	2	0	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	11	29.0	24.8	4.1	0	0	1	5	4	1	0	0	0	0	0	0
01:00	10	31.8	28.0	3.7	0	0	0	2	5	3	0	0	0	0	0	0
02:00	6	30.6	26.7	3.8	0	0	0	2	3	1	0	0	0	0	0	0
03:00	5	25.8	23.5	2.2	0	0	0	4	1	0	0	0	0	0	0	0
04:00	8	32.7	26.9	5.6	0	0	0	4	2	1	1	0	0	0	0	0
05:00	28	33.1	29.1	3.9	0	0	0	4	12	11	1	0	0	0	0	0
06:00	74	30.7	26.5	4.1	0	0	2	24	38	7	3	0	0	0	0	0
07:00	165	30.5	26.4	3.9	0	0	3	54	89	15	3	0	1	0	0	0
08:00	218	28.4	25.0	3.3	0	0	5	111	91	9	2	0	0	0	0	0
09:00	171	28.2	24.7	3.3	0	1	12	71	85	2	0	0	0	0	0	0
10:00	155	27.8	24.4	3.3	0	0	11	79	61	4	0	0	0	0	0	0
11:00	197	27.9	24.6	3.3	0	2	7	100	85	2	1	0	0	0	0	0
12:00	217	28.7	24.9	3.6	0	1	15	90	103	6	2	0	0	0	0	0
13:00	210	29.8	25.6	4.0	0	0	8	88	96	13	4	0	1	0	0	0
14:00	251	28.0	24.6	3.3	0	2	8	135	96	10	0	0	0	0	0	0
15:00	309	28.1	24.7	3.2	0	0	12	160	127	8	2	0	0	0	0	0
16:00	306	28.6	25.4	3.1	0	0	6	132	158	7	3	0	0	0	0	0
17:00	221	29.0	25.3	3.6	0	0	13	87	110	8	3	0	0	0	0	0
18:00	181	29.6	25.7	3.8	0	0	4	75	89	8	4	1	0	0	0	0
19:00	154	28.2	24.8	3.3	0	0	6	78	64	5	1	0	0	0	0	0
20:00	134	30.2	26.0	4.1	0	0	6	49	63	13	2	1	0	0	0	0
21:00	93	28.1	24.9	3.1	0	0	3	45	42	3	0	0	0	0	0	0
22:00	55	32.2	27.3	4.7	0	0	1	17	24	10	2	1	0	0	0	0
23:00	57	29.4	25.8	3.5	0	0	0	26	24	7	0	0	0	0	0	0
Total																
2H(10-12)	352	27.9	24.5	3.3	0	2	18	179	146	6	1	0	0	0	0	0
2H(14-16)	560	28.0	24.7	3.3	0	2	20	295	223	18	2	0	0	0	0	0
12H(7-19)	2601	28.7	25.1	3.5	0	6	104	1182	1190	92	24	1	2	0	0	0
24H(0-24)	3236	29.0	25.2	3.6	0	6	123	1442	1472	154	34	3	2	0	0	0
AM Peak	08:00	05:00	05:00	04:00	00:00	11:00	09:00	08:00	08:00	07:00	06:00	00:00	07:00	00:00	00:00	00:00
	218	33.1	29.1	5.6	0	2	12	111	91	15	3	0	1	0	0	0
PM Peak	15:00	22:00	22:00	22:00	12:00	14:00	12:00	15:00	16:00	13:00	13:00	18:00	13:00	12:00	12:00	12:00
	309	32.2	27.3	4.7	0	2	15	160	158	13	4	1	1	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	25	29.2	24.1	4.9	0	0	5	11	5	4	0	0	0	0	0	0
01:00	13	31.6	26.3	5.1	0	0	2	2	6	3	0	0	0	0	0	0
02:00	9	29.5	25.8	3.5	0	0	0	4	4	1	0	0	0	0	0	0
03:00	10	26.0	22.5	3.3	0	0	2	6	2	0	0	0	0	0	0	0
04:00	16	29.6	24.1	5.4	0	0	3	8	3	1	1	0	0	0	0	0
05:00	48	31.8	26.0	5.6	0	1	6	13	15	12	1	0	0	0	0	0
06:00	132	29.1	24.5	4.4	0	0	20	52	50	7	3	0	0	0	0	0
07:00	305	28.7	23.6	4.9	1	5	63	119	96	17	3	0	1	0	0	0
08:00	522	26.5	21.8	4.5	2	23	153	227	103	12	2	0	0	0	0	0
09:00	410	26.0	21.8	4.1	0	12	130	172	94	2	0	0	0	0	0	0
10:00	353	26.0	21.8	4.1	1	9	107	161	71	4	0	0	0	0	0	0
11:00	406	26.2	21.9	4.1	0	13	120	179	91	2	1	0	0	0	0	0
12:00	410	27.1	22.5	4.4	1	12	108	164	117	6	2	0	0	0	0	0
13:00	408	27.8	22.9	4.7	1	6	101	173	109	13	4	0	1	0	0	0
14:00	508	26.3	21.9	4.2	0	18	145	230	105	10	0	0	0	0	0	0
15:00	587	26.7	21.8	4.7	6	36	152	246	137	8	2	0	0	0	0	0
16:00	597	27.1	22.7	4.2	1	13	141	260	171	8	3	0	0	0	0	0
17:00	477	26.8	22.1	4.6	0	18	151	177	120	8	3	0	0	0	0	0
18:00	371	27.5	22.7	4.6	0	8	97	155	98	8	4	1	0	0	0	0
19:00	337	26.1	21.9	4.1	0	5	114	143	69	5	1	0	0	0	0	0
20:00	236	28.6	23.8	4.6	0	1	48	98	71	15	2	1	0	0	0	0
21:00	169	27.0	23.2	3.6	0	0	31	86	49	3	0	0	0	0	0	0
22:00	112	29.4	24.3	5.0	0	0	20	49	30	10	2	1	0	0	0	0
23:00	101	28.6	24.2	4.3	0	3	7	53	29	9	0	0	0	0	0	0
Total																
2H(10-12)	759	26.1	21.9	4.1	1	22	227	340	162	6	1	0	0	0	0	0
2H(14-16)	1095	26.5	21.9	4.5	6	54	297	476	242	18	2	0	0	0	0	0
12H(7-19)	5354	26.9	22.3	4.5	13	173	1468	2263	1312	98	24	1	2	0	0	0
24H(0-24)	6562	27.1	22.5	4.5	13	183	1726	2788	1645	168	34	3	2	0	0	0
AM Peak	08:00	05:00	01:00	05:00	08:00	08:00	08:00	08:00	08:00	07:00	06:00	00:00	07:00	00:00	00:00	00:00
	522	31.8	26.3	5.6	2	23	153	227	103	17	3	0	1	0	0	0
PM Peak	16:00	22:00	22:00	22:00	15:00	15:00	15:00	16:00	16:00	20:00	13:00	18:00	13:00	12:00	12:00	12:00
	597	29.4	24.3	5.0	6	36	152	260	171	15	4	1	1	0	0	0

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

08/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	18	25.7	21.7	3.9	0	0	7	7	4	0	0	0	0	0	0	0
01:00	13	25.5	22.5	2.9	0	0	2	9	2	0	0	0	0	0	0	0
02:00	7	25.0	21.1	3.8	0	0	3	3	1	0	0	0	0	0	0	0
03:00	1	-	17.5	-	0	0	1	0	0	0	0	0	0	0	0	0
04:00	4	28.0	25.0	2.9	0	0	0	2	2	0	0	0	0	0	0	0
05:00	15	23.4	19.2	4.1	0	2	7	5	1	0	0	0	0	0	0	0
06:00	27	25.6	23.2	2.3	0	0	1	21	5	0	0	0	0	0	0	0
07:00	60	26.6	22.9	3.6	0	0	11	35	12	2	0	0	0	0	0	0
08:00	92	25.2	21.4	3.6	0	4	23	55	9	1	0	0	0	0	0	0
09:00	151	24.1	20.5	3.5	1	6	55	79	10	0	0	0	0	0	0	0
10:00	171	24.9	21.5	3.3	0	2	51	100	16	2	0	0	0	0	0	0
11:00	201	23.5	19.7	3.7	0	18	88	83	12	0	0	0	0	0	0	0
12:00	211	25.1	20.6	4.3	2	16	74	90	27	2	0	0	0	0	0	0
13:00	209	23.8	20.3	3.4	0	3	103	86	16	1	0	0	0	0	0	0
14:00	198	24.4	20.4	3.8	3	10	70	99	16	0	0	0	0	0	0	0
15:00	191	24.4	20.0	4.2	1	23	64	86	16	1	0	0	0	0	0	0
16:00	156	25.8	22.1	3.7	0	2	39	89	24	1	1	0	0	0	0	0
17:00	139	25.4	21.2	4.1	0	5	49	65	18	1	1	0	0	0	0	0
18:00	149	24.4	20.2	4.0	1	8	65	61	12	2	0	0	0	0	0	0
19:00	122	24.7	20.8	3.8	0	5	45	60	10	2	0	0	0	0	0	0
20:00	101	25.8	21.5	4.1	0	2	34	53	9	1	2	0	0	0	0	0
21:00	85	24.9	20.9	3.9	1	3	27	46	7	1	0	0	0	0	0	0
22:00	58	25.6	22.1	3.4	0	0	14	37	5	2	0	0	0	0	0	0
23:00	56	24.1	21.3	2.7	0	0	17	36	3	0	0	0	0	0	0	0
Total																
2H(10-12)	372	24.3	20.5	3.6	0	20	139	183	28	2	0	0	0	0	0	0
2H(14-16)	389	24.4	20.2	4.0	4	33	134	185	32	1	0	0	0	0	0	0
12H(7-19)	1928	24.7	20.7	3.9	8	97	692	928	188	13	2	0	0	0	0	0
24H(0-24)	2435	24.8	20.8	3.9	9	109	850	1207	237	19	4	0	0	0	0	0
AM Peak	11:00	04:00	04:00	05:00	09:00	11:00	11:00	10:00	10:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	201	**28.0**	**25.0**	**4.1**	**1**	**18**	**88**	**100**	**16**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	12:00	16:00	22:00	12:00	14:00	15:00	13:00	14:00	12:00	12:00	20:00	12:00	12:00	12:00	12:00	12:00
	211	**25.8**	**22.1**	**4.3**	**3**	**23**	**103**	**99**	**27**	**2**	**2**	**0**	**0**	**0**	**0**	**0**

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	22	36.1	29.5	6.3	0	0	1	2	12	3	3	0	1	0	0	0
01:00	16	33.2	28.8	4.3	0	0	0	2	10	2	2	0	0	0	0	0
02:00	5	35.4	29.5	5.7	0	0	0	1	2	1	1	0	0	0	0	0
03:00	7	34.4	30.4	3.9	0	0	0	1	1	5	0	0	0	0	0	0
04:00	2	38.7	35.0	3.5	0	0	0	0	0	1	1	0	0	0	0	0
05:00	12	35.3	28.3	6.7	0	0	1	3	4	1	3	0	0	0	0	0
06:00	37	30.7	27.2	3.3	0	0	0	8	24	4	1	0	0	0	0	0
07:00	55	29.1	25.6	3.4	0	0	1	24	25	5	0	0	0	0	0	0
08:00	108	29.1	25.7	3.2	0	1	0	42	58	7	0	0	0	0	0	0
09:00	123	28.5	25.0	3.4	0	0	5	59	53	5	1	0	0	0	0	0
10:00	146	29.2	25.2	3.8	0	0	7	66	63	8	1	1	0	0	0	0
11:00	199	29.2	24.8	4.3	0	0	13	104	68	11	1	1	0	1	0	0
12:00	235	28.7	25.0	3.6	0	1	9	112	97	15	1	0	0	0	0	0
13:00	186	29.0	25.2	3.7	0	0	9	84	79	12	2	0	0	0	0	0
14:00	160	28.3	24.1	4.1	0	2	13	93	39	11	2	0	0	0	0	0
15:00	171	28.5	24.5	3.9	0	0	16	84	62	7	1	1	0	0	0	0
16:00	159	29.5	25.4	4.0	0	0	8	71	64	14	1	1	0	0	0	0
17:00	137	31.3	27.2	3.9	0	0	1	37	76	16	7	0	0	0	0	0
18:00	158	30.5	26.0	4.4	0	1	2	74	51	26	4	0	0	0	0	0
19:00	120	29.0	26.3	2.7	0	0	1	33	81	5	0	0	0	0	0	0
20:00	100	30.6	26.8	3.6	0	0	1	28	57	13	0	1	0	0	0	0
21:00	77	32.4	28.0	4.3	0	0	1	14	44	13	4	1	0	0	0	0
22:00	64	33.5	27.7	5.6	0	0	0	26	19	11	6	2	0	0	0	0
23:00	62	33.6	27.6	5.8	0	0	3	18	24	12	4	0	0	1	0	0
Total																
2H(10-12)	345	29.2	24.9	4.1	0	0	20	170	131	19	2	2	0	1	0	0
2H(14-16)	331	28.4	24.3	4.0	0	2	29	177	101	18	3	1	0	0	0	0
12H(7-19)	1837	29.3	25.2	3.9	0	5	84	850	735	137	21	4	0	1	0	0
24H(0-24)	2361	30.0	25.7	4.1	0	5	92	986	1013	208	46	8	1	2	0	0
AM Peak	11:00	04:00	04:00	05:00	00:00	08:00	11:00	11:00	11:00	11:00	00:00	10:00	00:00	11:00	00:00	00:00
	199	**38.7**	**35.0**	**6.7**	**0**	**1**	**13**	**104**	**68**	**11**	**3**	**1**	**1**	**1**	**0**	**0**
PM Peak	12:00	23:00	21:00	23:00	12:00	14:00	15:00	12:00	12:00	18:00	17:00	22:00	12:00	23:00	12:00	12:00
	235	**33.6**	**28.0**	**5.8**	**0**	**2**	**16**	**112**	**97**	**26**	**7**	**2**	**0**	**1**	**0**	**0**

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	40	32.9	26.0	6.6	0	0	8	9	16	3	3	0	1	0	0	0
01:00	29	31.0	25.9	4.8	0	0	2	11	12	2	2	0	0	0	0	0
02:00	12	31.0	24.6	6.2	0	0	3	4	3	1	1	0	0	0	0	0
03:00	8	34.8	28.8	5.8	0	0	1	1	1	5	0	0	0	0	0	0
04:00	6	34.4	28.3	5.8	0	0	0	2	2	1	1	0	0	0	0	0
05:00	27	30.5	23.2	7.0	0	2	8	8	5	1	3	0	0	0	0	0
06:00	64	29.2	25.5	3.5	0	0	1	29	29	4	1	0	0	0	0	0
07:00	115	28.1	24.2	3.7	0	0	12	59	37	7	0	0	0	0	0	0
08:00	200	27.9	23.8	4.0	0	5	23	97	67	8	0	0	0	0	0	0
09:00	274	26.8	22.5	4.1	1	6	60	138	63	5	1	0	0	0	0	0
10:00	317	27.4	23.2	4.0	0	2	58	166	79	10	1	1	0	0	0	0
11:00	400	27.1	22.2	4.7	0	18	101	187	80	11	1	1	0	1	0	0
12:00	446	27.6	22.9	4.5	2	17	83	202	124	17	1	0	0	0	0	0
13:00	395	27.1	22.6	4.3	0	3	112	170	95	13	2	0	0	0	0	0
14:00	358	26.6	22.0	4.4	3	12	83	192	55	11	2	0	0	0	0	0
15:00	362	26.9	22.1	4.7	1	23	80	170	78	8	1	1	0	0	0	0
16:00	315	28.0	23.7	4.2	0	2	47	160	88	15	2	1	0	0	0	0
17:00	276	29.3	24.2	5.0	0	5	50	102	94	17	8	0	0	0	0	0
18:00	307	28.5	23.2	5.1	1	9	67	135	63	28	4	0	0	0	0	0
19:00	242	27.9	23.5	4.3	0	5	46	93	91	7	0	0	0	0	0	0
20:00	201	29.0	24.1	4.7	0	2	35	81	66	14	2	1	0	0	0	0
21:00	162	29.9	24.3	5.4	1	3	28	60	51	14	4	1	0	0	0	0
22:00	122	30.7	25.0	5.5	0	0	14	63	24	13	6	2	0	0	0	0
23:00	118	30.4	24.6	5.6	0	0	20	54	27	12	4	0	0	1	0	0
Total																
2H(10-12)	717	27.3	22.7	4.5	0	20	159	353	159	21	2	2	0	1	0	0
2H(14-16)	720	26.7	22.1	4.5	4	35	163	362	133	19	3	1	0	0	0	0
12H(7-19)	3765	27.6	22.9	4.5	8	102	776	1778	923	150	23	4	0	1	0	0
24H(0-24)	4796	28.1	23.2	4.7	9	114	942	2193	1250	227	50	8	1	2	0	0
AM Peak	11:00	03:00	03:00	05:00	09:00	11:00	11:00	11:00	11:00	11:00	00:00	10:00	00:00	11:00	00:00	00:00
	400	**34.8**	**28.8**	**7.0**	**1**	**18**	**101**	**187**	**80**	**11**	**3**	**1**	**1**	**1**	**0**	**0**
PM Peak	12:00	22:00	22:00	23:00	14:00	15:00	13:00	12:00	12:00	18:00	17:00	22:00	12:00	23:00	12:00	12:00
	446	**30.7**	**25.0**	**5.6**	**3**	**23**	**112**	**202**	**124**	**28**	**8**	**2**	**0**	**1**	**0**	**0**

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

09/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	34	24.9	20.9	3.8	0	2	11	17	4	0	0	0	0	0	0	0
01:00	14	27.7	23.9	3.6	0	0	1	9	3	1	0	0	0	0	0	0
02:00	9	26.2	23.1	3.0	0	0	1	6	2	0	0	0	0	0	0	0
03:00	8	24.5	20.6	3.7	0	1	1	6	0	0	0	0	0	0	0	0
04:00	7	24.4	20.4	3.9	0	0	4	2	1	0	0	0	0	0	0	0
05:00	5	26.2	22.5	3.5	0	0	1	3	1	0	0	0	0	0	0	0
06:00	18	26.4	21.7	4.5	1	0	3	11	3	0	0	0	0	0	0	0
07:00	52	26.6	22.9	3.5	0	0	9	32	9	2	0	0	0	0	0	0
08:00	68	24.1	20.6	3.3	0	2	27	34	5	0	0	0	0	0	0	0
09:00	100	25.0	21.1	3.7	1	3	31	53	12	0	0	0	0	0	0	0
10:00	170	24.0	20.2	3.6	1	8	70	80	10	1	0	0	0	0	0	0
11:00	184	25.1	20.7	4.2	3	14	52	93	22	0	0	0	0	0	0	0
12:00	217	24.4	20.7	3.5	0	7	82	109	18	1	0	0	0	0	0	0
13:00	191	24.9	21.2	3.5	0	4	65	101	19	2	0	0	0	0	0	0
14:00	182	25.2	20.9	4.1	2	8	59	93	17	2	1	0	0	0	0	0
15:00	183	25.0	21.4	3.5	0	7	49	106	21	0	0	0	0	0	0	0
16:00	168	24.7	20.8	3.8	2	2	70	73	21	0	0	0	0	0	0	0
17:00	143	24.8	21.3	3.4	0	2	47	80	12	2	0	0	0	0	0	0
18:00	143	24.4	20.7	3.6	1	6	48	78	9	1	0	0	0	0	0	0
19:00	107	25.3	21.5	3.7	0	4	28	63	10	2	0	0	0	0	0	0
20:00	92	25.1	21.0	3.9	0	5	30	44	13	0	0	0	0	0	0	0
21:00	73	25.3	21.3	3.9	0	4	20	40	8	1	0	0	0	0	0	0
22:00	41	26.2	22.9	3.2	0	0	5	30	4	2	0	0	0	0	0	0
23:00	22	25.3	21.4	3.8	0	0	9	9	4	0	0	0	0	0	0	0
Total																
2H(10-12)	354	24.6	20.5	4.0	4	22	122	173	32	1	0	0	0	0	0	0
2H(14-16)	365	25.1	21.1	3.8	2	15	108	199	38	2	1	0	0	0	0	0
12H(7-19)	1801	24.8	20.9	3.7	10	63	609	932	175	11	1	0	0	0	0	0
24H(0-24)	2231	24.9	21.0	3.7	11	79	723	1172	228	17	1	0	0	0	0	0
AM Peak	11:00	01:00	01:00	06:00	11:00	11:00	10:00	11:00	11:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	184	27.7	23.9	4.5	3	14	70	93	22	2	0	0	0	0	0	0
PM Peak	12:00	22:00	22:00	14:00	14:00	14:00	12:00	12:00	15:00	13:00	14:00	12:00	12:00	12:00	12:00	12:00
	217	26.2	22.9	4.1	2	8	82	109	21	2	1	0	0	0	0	0

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	42	30.8	26.2	4.4	0	0	2	14	21	4	0	1	0	0	0	0
01:00	18	30.6	26.4	4.0	0	0	1	5	9	3	0	0	0	0	0	0
02:00	14	35.1	31.4	3.5	0	0	0	0	5	7	2	0	0	0	0	0
03:00	13	33.4	28.3	4.9	0	0	0	2	9	1	0	1	0	0	0	0
04:00	9	33.8	27.5	6.1	0	0	0	3	5	0	0	1	0	0	0	0
05:00	6	30.6	26.7	3.8	0	0	0	2	3	1	0	0	0	0	0	0
06:00	20	29.8	26.0	3.7	0	0	1	6	11	2	0	0	0	0	0	0
07:00	24	30.5	27.1	3.3	0	0	1	3	17	3	0	0	0	0	0	0
08:00	89	32.3	27.4	4.7	0	0	1	24	48	10	3	3	0	0	0	0
09:00	100	29.8	25.4	4.2	1	0	2	46	42	6	3	0	0	0	0	0
10:00	160	29.2	25.1	4.0	0	1	9	73	64	10	3	0	0	0	0	0
11:00	175	28.5	24.9	3.5	0	0	11	81	72	11	0	0	0	0	0	0
12:00	207	28.8	24.3	4.3	0	3	20	100	72	6	6	0	0	0	0	0
13:00	183	28.8	25.2	3.5	0	0	8	81	81	13	0	0	0	0	0	0
14:00	171	29.0	25.2	3.7	0	0	8	79	69	14	1	0	0	0	0	0
15:00	152	31.3	26.1	5.0	1	0	2	73	52	14	7	3	0	0	0	0
16:00	175	30.8	26.0	4.6	0	1	8	66	81	9	8	2	0	0	0	0
17:00	183	31.6	26.6	4.8	0	0	6	65	83	16	11	1	1	0	0	0
18:00	158	30.2	26.1	4.0	0	0	3	61	77	14	2	0	1	0	0	0
19:00	123	29.3	25.5	3.7	0	0	4	51	62	5	0	0	1	0	0	0
20:00	93	31.6	26.9	4.6	0	0	2	29	48	10	2	1	1	0	0	0
21:00	85	35.0	29.1	5.6	0	0	2	14	40	17	9	1	2	0	0	0
22:00	40	35.7	30.4	5.2	0	0	0	5	17	9	8	1	0	0	0	0
23:00	30	34.0	28.0	5.8	0	0	1	5	20	1	1	1	1	0	0	0
Total																
2H(10-12)	335	28.9	25.0	3.8	0	1	20	154	136	21	3	0	0	0	0	0
2H(14-16)	323	30.1	25.6	4.4	1	0	10	152	121	28	8	3	0	0	0	0
12H(7-19)	1777	30.0	25.6	4.3	2	5	79	752	758	126	44	9	2	0	0	0
24H(0-24)	2270	30.6	26.0	4.5	2	5	92	888	1008	186	66	16	7	0	0	0
AM Peak	11:00	02:00	02:00	04:00	09:00	10:00	11:00	11:00	11:00	11:00	08:00	08:00	00:00	00:00	00:00	00:00
	175	35.1	31.4	6.1	1	1	11	81	72	11	3	3	0	0	0	0
PM Peak	12:00	22:00	22:00	23:00	15:00	12:00	12:00	12:00	17:00	21:00	17:00	15:00	21:00	12:00	12:00	12:00
	207	35.7	30.4	5.8	1	3	20	100	83	17	11	3	2	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	76	28.9	23.8	4.9	0	2	13	31	25	4	0	1	0	0	0	0
01:00	32	29.5	25.3	4.0	0	0	2	14	12	4	0	0	0	0	0	0
02:00	23	33.6	28.2	5.3	0	0	1	6	7	7	2	0	0	0	0	0
03:00	21	31.4	25.4	5.8	0	1	1	8	9	1	0	1	0	0	0	0
04:00	16	30.9	24.4	6.3	0	0	4	5	6	0	0	1	0	0	0	0
05:00	11	29.0	24.8	4.1	0	0	1	5	4	1	0	0	0	0	0	0
06:00	38	28.7	24.0	4.6	1	0	4	17	14	2	0	0	0	0	0	0
07:00	76	28.3	24.2	4.0	0	0	10	35	26	5	0	0	0	0	0	0
08:00	157	30.0	24.5	5.4	0	2	28	58	53	10	3	3	0	0	0	0
09:00	200	27.9	23.3	4.5	2	3	33	99	54	6	3	0	0	0	0	0
10:00	330	27.3	22.6	4.5	1	9	79	153	74	11	3	0	0	0	0	0
11:00	359	27.3	22.7	4.4	3	14	63	174	94	11	0	0	0	0	0	0
12:00	424	27.0	22.5	4.3	0	10	102	209	90	7	6	0	0	0	0	0
13:00	374	27.3	23.2	4.0	0	4	73	182	100	15	0	0	0	0	0	0
14:00	353	27.6	23.0	4.5	2	8	67	172	86	16	2	0	0	0	0	0
15:00	335	28.5	23.5	4.9	1	7	51	179	73	14	7	3	0	0	0	0
16:00	343	28.6	23.4	5.0	2	3	78	139	102	9	8	2	0	0	0	0
17:00	326	29.5	24.3	5.0	0	2	53	145	95	18	11	1	1	0	0	0
18:00	301	28.3	23.5	4.7	1	6	51	139	86	15	2	0	1	0	0	0
19:00	230	28.0	23.6	4.2	0	4	32	114	72	7	0	0	1	0	0	0
20:00	185	29.3	24.0	5.2	0	5	32	73	61	10	2	1	1	0	0	0
21:00	158	32.0	25.5	6.3	0	4	22	54	48	18	9	1	2	0	0	0
22:00	81	32.5	26.6	5.7	0	0	5	35	21	11	8	1	0	0	0	0
23:00	52	31.4	25.2	6.0	0	0	10	14	24	1	1	1	1	0	0	0
Total																
2H(10-12)	689	27.3	22.7	4.5	4	23	142	327	168	22	3	0	0	0	0	0
2H(14-16)	688	28.1	23.2	4.7	3	15	118	351	159	30	9	3	0	0	0	0
12H(7-19)	3578	28.0	23.2	4.6	12	68	688	1684	933	137	45	9	2	0	0	0
24H(0-24)	4501	28.5	23.5	4.8	13	84	815	2060	1236	203	67	16	7	0	0	0
AM Peak	11:00	02:00	02:00	04:00	11:00	11:00	10:00	11:00	11:00	10:00	08:00	08:00	00:00	00:00	00:00	00:00
	359	33.6	28.2	6.3	3	14	79	174	94	11	3	3	0	0	0	0
PM Peak	12:00	22:00	22:00	21:00	14:00	12:00	12:00	12:00	16:00	17:00	17:00	15:00	21:00	12:00	12:00	12:00
	424	32.5	26.6	6.3	2	10	102	209	102	18	11	3	2	0	0	0

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

10/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	4	26.3	23.8	2.5	0	0	0	3	1	0	0	0	0	0	0	0
01:00	10	23.6	22.0	1.6	0	0	1	9	0	0	0	0	0	0	0	0
02:00	3	23.8	20.8	2.9	0	0	1	2	0	0	0	0	0	0	0	0
03:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
04:00	10	23.7	20.0	3.5	0	0	6	3	1	0	0	0	0	0	0	0
05:00	20	27.1	23.0	3.9	0	0	5	8	7	0	0	0	0	0	0	0
06:00	63	26.0	23.3	2.6	0	0	4	45	14	0	0	0	0	0	0	0
07:00	149	24.4	20.5	3.8	0	8	59	69	11	2	0	0	0	0	0	0
08:00	299	22.4	18.8	3.5	1	35	157	100	6	0	0	0	0	0	0	0
09:00	220	23.8	20.1	3.6	0	15	90	101	14	0	0	0	0	0	0	0
10:00	192	22.2	18.9	3.2	0	12	123	52	3	2	0	0	0	0	0	0
11:00	176	23.6	20.1	3.4	0	6	85	73	12	0	0	0	0	0	0	0
12:00	196	23.7	20.1	3.5	0	11	85	91	7	2	0	0	0	0	0	0
13:00	183	24.1	20.0	3.9	1	10	88	67	15	2	0	0	0	0	0	0
14:00	227	23.4	19.5	3.7	4	16	100	99	8	0	0	0	0	0	0	0
15:00	241	25.4	20.0	5.3	0	10	132	84	13	0	0	0	0	0	0	2
16:00	245	23.4	19.9	3.4	2	13	106	116	8	0	0	0	0	0	0	0
17:00	255	23.8	20.2	3.5	3	9	104	127	12	0	0	0	0	0	0	0
18:00	197	22.6	19.1	3.4	0	19	99	75	4	0	0	0	0	0	0	0
19:00	145	24.2	20.3	3.8	0	9	58	69	8	0	1	0	0	0	0	0
20:00	134	23.9	20.4	3.4	0	2	65	56	10	1	0	0	0	0	0	0
21:00	52	26.5	22.2	4.1	0	1	13	28	9	0	1	0	0	0	0	0
22:00	34	25.3	21.6	3.6	0	0	12	16	6	0	0	0	0	0	0	0
23:00	23	26.7	22.7	3.8	0	0	4	16	1	2	0	0	0	0	0	0
Total																
2H(10-12)	368	22.9	19.4	3.4	0	18	208	125	15	2	0	0	0	0	0	0
2H(14-16)	468	24.5	19.7	4.6	4	26	232	183	21	0	0	0	0	0	0	2
12H(7-19)	2580	23.6	19.7	3.8	11	164	1228	1054	113	8	0	0	0	0	0	2
24H(0-24)	3080	23.9	20.0	3.8	11	176	1397	1311	170	11	2	0	0	0	0	2
AM Peak	08:00	05:00	00:00	05:00	08:00	08:00	08:00	09:00	06:00	07:00	00:00	00:00	00:00	00:00	00:00	00:00
	299	27.1	23.8	3.9	1	35	157	101	14	2	0	0	0	0	0	0
PM Peak	17:00	23:00	23:00	15:00	14:00	18:00	15:00	17:00	13:00	12:00	19:00	12:00	12:00	12:00	12:00	15:00
	255	26.7	22.7	5.3	4	19	132	127	15	2	1	0	0	0	0	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	12	29.2	23.8	5.3	0	1	2	2	7	0	0	0	0	0	0	0
01:00	8	28.6	26.3	2.3	0	0	0	2	6	0	0	0	0	0	0	0
02:00	7	31.8	28.2	3.5	0	0	0	1	4	2	0	0	0	0	0	0
03:00	0	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04:00	14	29.6	27.1	2.4	0	0	0	2	11	1	0	0	0	0	0	0
05:00	26	32.6	29.0	3.4	0	0	0	2	15	8	1	0	0	0	0	0
06:00	76	29.2	25.9	3.2	0	0	0	32	37	7	0	0	0	0	0	0
07:00	170	28.8	26.0	2.7	0	0	0	57	107	6	0	0	0	0	0	0
08:00	222	28.0	25.0	2.9	0	0	5	106	108	2	1	0	0	0	0	0
09:00	189	27.1	23.8	3.2	1	2	7	116	62	1	0	0	0	0	0	0
10:00	185	28.2	24.4	3.6	0	2	7	104	63	8	0	1	0	0	0	0
11:00	169	26.5	23.2	3.2	0	0	20	110	35	4	0	0	0	0	0	0
12:00	206	27.5	24.0	3.3	0	3	10	120	68	5	0	0	0	0	0	0
13:00	211	27.2	23.9	3.2	0	0	13	137	53	7	1	0	0	0	0	0
14:00	195	27.6	24.1	3.4	0	0	8	131	45	9	2	0	0	0	0	0
15:00	314	27.3	24.2	3.0	0	0	14	189	103	8	0	0	0	0	0	0
16:00	281	28.3	25.3	2.9	0	0	5	122	147	6	1	0	0	0	0	0
17:00	264	29.0	25.9	3.0	0	0	4	93	153	14	0	0	0	0	0	0
18:00	212	30.9	26.6	4.1	0	0	3	69	115	14	10	0	1	0	0	0
19:00	167	28.1	24.9	3.1	0	0	2	93	63	9	0	0	0	0	0	0
20:00	129	31.2	26.5	4.6	0	0	3	49	57	15	3	1	1	0	0	0
21:00	75	30.9	26.9	3.9	0	0	0	22	44	6	2	1	0	0	0	0
22:00	37	29.4	26.4	2.9	0	0	0	10	26	0	1	0	0	0	0	0
23:00	23	31.7	27.1	4.5	0	0	0	8	11	2	2	0	0	0	0	0
Total																
2H(10-12)	354	27.5	23.8	3.5	0	2	27	214	98	12	0	1	0	0	0	0
2H(14-16)	509	27.4	24.1	3.2	0	0	22	320	148	17	2	0	0	0	0	0
12H(7-19)	2618	28.2	24.7	3.4	1	7	96	1354	1059	84	15	1	1	0	0	0
24H(0-24)	3192	28.6	25.0	3.5	1	8	103	1577	1340	134	24	3	2	0	0	0
AM Peak	08:00	05:00	05:00	00:00	09:00	09:00	11:00	09:00	08:00	05:00	05:00	10:00	00:00	00:00	00:00	00:00
	222	32.6	29.0	5.3	1	2	20	116	108	8	1	1	0	0	0	0
PM Peak	15:00	23:00	23:00	20:00	12:00	12:00	15:00	15:00	17:00	20:00	18:00	20:00	18:00	12:00	12:00	12:00
	314	31.7	27.1	4.6	0	3	14	189	153	15	10	1	1	0	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	16	28.6	23.8	4.7	0	1	2	5	8	0	0	0	0	0	0	0
01:00	18	26.9	23.9	2.9	0	0	1	11	6	0	0	0	0	0	0	0
02:00	10	30.9	26.0	4.7	0	0	1	3	4	2	0	0	0	0	0	0
03:00	2	22.5	22.5	0.0	0	0	0	2	0	0	0	0	0	0	0	0
04:00	24	28.9	24.2	4.6	0	0	6	5	12	1	0	0	0	0	0	0
05:00	46	31.3	26.4	4.7	0	0	5	10	22	8	1	0	0	0	0	0
06:00	139	28.0	24.7	3.2	0	0	4	77	51	7	0	0	0	0	0	0
07:00	319	27.8	23.4	4.3	0	8	59	126	118	8	0	0	0	0	0	0
08:00	521	26.0	21.4	4.5	1	35	162	206	114	2	1	0	0	0	0	0
09:00	409	25.8	21.8	3.9	1	17	97	217	76	1	0	0	0	0	0	0
10:00	377	26.2	21.6	4.4	0	14	130	156	66	10	0	1	0	0	0	0
11:00	345	25.4	21.6	3.6	0	6	105	183	47	4	0	0	0	0	0	0
12:00	402	26.2	22.1	4.0	0	14	95	211	75	7	0	0	0	0	0	0
13:00	394	26.3	22.1	4.1	1	10	101	204	68	9	1	0	0	0	0	0
14:00	422	26.0	21.6	4.2	4	16	108	230	53	9	2	0	0	0	0	0
15:00	555	27.2	22.3	4.6	0	10	146	273	116	8	0	0	0	0	0	2
16:00	526	27.1	22.8	4.2	2	13	111	238	155	6	1	0	0	0	0	0
17:00	519	27.5	23.1	4.3	3	9	108	220	165	14	0	0	0	0	0	0
18:00	409	28.5	23.0	5.3	0	19	102	144	119	14	10	0	1	0	0	0
19:00	312	27.0	22.7	4.1	0	9	60	162	71	9	1	0	0	0	0	0
20:00	263	28.6	23.4	5.1	0	2	68	105	67	16	3	1	1	0	0	0
21:00	127	29.7	25.0	4.6	0	1	13	50	53	6	3	1	0	0	0	0
22:00	71	28.3	24.1	4.0	0	0	12	26	32	0	1	0	0	0	0	0
23:00	46	29.7	24.9	4.7	0	0	4	24	12	4	2	0	0	0	0	0
Total																
2H(10-12)	722	25.8	21.6	4.1	0	20	235	339	113	14	0	1	0	0	0	0
2H(14-16)	977	26.7	22.0	4.5	4	26	254	503	169	17	2	0	0	0	0	2
12H(7-19)	5198	26.8	22.2	4.4	12	171	1324	2408	1172	92	15	1	1	0	0	2
24H(0-24)	6272	27.1	22.5	4.4	12	184	1500	2888	1510	145	26	3	2	0	0	2
AM Peak	08:00	05:00	05:00	02:00	08:00	08:00	08:00	09:00	07:00	10:00	05:00	10:00	00:00	00:00	00:00	00:00
	521	31.3	26.4	4.7	1	35	162	217	118	10	1	1	0	0	0	0
PM Peak	15:00	23:00	21:00	18:00	14:00	18:00	15:00	15:00	17:00	20:00	18:00	20:00	18:00	12:00	12:00	15:00
	555	29.7	25.0	5.3	4	19	146	273	165	16	10	1	1	0	0	2

Paul Castle Associates

Penrhys ATC 4, B4512 Penrhys Road (Eastern Site)

Direction: Westbound

11/03/2025

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	20	25.8	23.3	2.4	0	0	1	15	4	0	0	0	0	0	0	0
01:00	2	29.8	22.5	7.1	0	0	1	0	1	0	0	0	0	0	0	0
02:00	4	27.5	27.5	0.0	0	0	0	0	4	0	0	0	0	0	0	0
03:00	2	28.7	25.0	3.5	0	0	0	1	1	0	0	0	0	0	0	0
04:00	7	27.7	22.5	5.0	0	0	3	1	3	0	0	0	0	0	0	0
05:00	23	25.9	22.3	3.5	0	0	6	12	5	0	0	0	0	0	0	0
06:00	62	25.3	22.3	2.9	0	0	11	42	9	0	0	0	0	0	0	0
07:00	154	24.7	20.9	3.6	0	8	47	84	15	0	0	0	0	0	0	0
08:00	331	23.0	19.4	3.4	3	20	167	130	11	0	0	0	0	0	0	0
09:00	264	23.4	19.5	3.7	4	19	118	113	9	1	0	0	0	0	0	0
10:00	200	23.4	19.7	3.6	0	14	95	82	7	2	0	0	0	0	0	0
11:00	182	24.4	20.3	4.0	0	15	71	76	20	0	0	0	0	0	0	0
12:00	184	24.9	20.8	4.0	1	10	61	92	18	2	0	0	0	0	0	0
13:00	205	24.0	19.7	4.2	0	25	83	79	17	1	0	0	0	0	0	0
14:00	233	24.4	20.2	4.0	3	16	88	106	19	1	0	0	0	0	0	0
15:00	273	25.7	20.0	5.5	0	29	111	114	16	1	0	0	0	0	0	2
16:00	277	23.8	19.0	4.6	10	38	108	102	18	1	0	0	0	0	0	0
17:00	236	24.3	20.4	3.7	0	12	95	109	19	0	1	0	0	0	0	0
18:00	195	24.2	20.4	3.7	0	11	78	88	18	0	0	0	0	0	0	0
19:00	159	23.9	20.6	3.2	0	4	61	85	9	0	0	0	0	0	0	0
20:00	107	25.0	21.4	3.5	0	0	40	52	14	1	0	0	0	0	0	0
21:00	73	24.8	20.7	4.0	0	6	23	37	6	1	0	0	0	0	0	0
22:00	35	26.1	22.5	3.4	0	1	5	22	7	0	0	0	0	0	0	0
23:00	32	26.0	21.9	4.0	0	0	11	15	5	1	0	0	0	0	0	0
Total																
2H(10-12)	382	23.9	20.0	3.8	0	29	166	158	27	2	0	0	0	0	0	0
2H(14-16)	506	25.1	20.1	4.9	3	45	199	220	35	2	0	0	0	0	0	2
12H(7-19)	2734	24.2	20.0	4.1	21	217	1122	1175	187	9	1	0	0	0	0	2
24H(0-24)	3260	24.4	20.2	4.0	21	228	1284	1457	255	12	1	0	0	0	0	2
AM Peak	08:00	01:00	02:00	01:00	09:00	08:00	08:00	08:00	11:00	10:00	00:00	00:00	00:00	00:00	00:00	00:00
	331	29.8	27.5	7.1	4	20	167	130	20	2	0	0	0	0	0	0
PM Peak	16:00	22:00	22:00	15:00	16:00	16:00	15:00	15:00	14:00	12:00	17:00	12:00	12:00	12:00	12:00	15:00
	277	26.1	22.5	5.5	10	38	111	114	19	2	1	0	0	0	0	2

Paul Castle Associates

Direction: Eastbound

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	22	29.8	24.8	4.8	0	0	3	10	5	4	0	0	0	0	0	0
01:00	5	40.6	30.5	9.7	0	0	0	1	3	0	0	0	1	0	0	0
02:00	1	-	27.5	-	0	0	0	0	1	0	0	0	0	0	0	0
03:00	3	31.8	25.8	5.8	0	0	0	2	0	1	0	0	0	0	0	0
04:00	7	30.4	26.8	3.5	0	0	0	2	4	1	0	0	0	0	0	0
05:00	31	32.1	27.5	4.5	0	0	0	12	7	12	0	0	0	0	0	0
06:00	62	31.5	27.3	4.0	0	0	1	14	36	9	1	1	0	0	0	0
07:00	192	29.1	25.8	3.2	0	0	3	74	103	11	1	0	0	0	0	0
08:00	276	29.4	25.7	3.6	1	0	3	115	140	13	3	0	1	0	0	0
09:00	170	28.1	25.0	2.9	0	0	4	80	82	4	0	0	0	0	0	0
10:00	185	26.7	23.7	2.9	0	0	12	118	53	2	0	0	0	0	0	0
11:00	195	27.3	23.1	4.1	0	8	18	115	52	1	0	0	1	0	0	0
12:00	201	27.3	23.5	3.6	0	0	30	104	62	5	0	0	0	0	0	0
13:00	187	28.8	24.2	4.4	0	0	24	95	51	14	2	1	0	0	0	0
14:00	190	29.3	24.5	4.6	0	1	19	98	52	16	3	0	1	0	0	0
15:00	308	27.7	24.0	3.5	0	4	21	168	109	4	2	0	0	0	0	0
16:00	328	28.1	24.8	3.2	0	0	13	164	141	8	2	0	0	0	0	0
17:00	246	31.1	26.5	4.5	0	0	5	83	132	17	5	2	0	2	0	0
18:00	225	30.2	26.8	3.2	0	0	2	57	136	29	1	0	0	0	0	0
19:00	167	29.4	25.4	3.9	0	0	5	77	74	7	2	2	0	0	0	0
20:00	131	31.0	26.5	4.4	0	0	3	50	53	21	3	1	0	0	0	0
21:00	77	31.6	27.5	4.0	0	0	1	17	43	14	1	1	0	0	0	0
22:00	62	30.3	26.5	3.6	0	0	0	20	36	5	0	1	0	0	0	0
23:00	30	30.3	26.3	3.9	0	0	1	10	14	5	0	0	0	0	0	0
Total																
2H(10-12)	380	27.1	23.4	3.6	0	8	30	233	105	3	0	0	1	0	0	0
2H(14-16)	498	28.3	24.2	4.0	0	5	40	266	161	20	5	0	1	0	0	0
12H(7-19)	2703	28.8	24.9	3.8	1	13	154	1271	1113	124	19	3	3	2	0	0
24H(0-24)	3301	29.2	25.1	3.9	1	13	168	1486	1389	203	26	9	4	2	0	0
AM Peak	08:00	01:00	01:00	01:00	08:00	11:00	11:00	10:00	08:00	08:00	08:00	06:00	01:00	00:00	00:00	00:00
	276	40.6	30.5	9.7	1	8	18	118	140	13	3	1	1	0	0	0
PM Peak	16:00	21:00	21:00	14:00	12:00	15:00	12:00	15:00	16:00	18:00	17:00	17:00	14:00	17:00	12:00	12:00
	328	31.6	27.5	4.6	0	4	30	168	141	29	5	2	1	2	0	0

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
00:00	42	28.1	24.0	3.9	0	0	4	25	9	4	0	0	0	0	0	0
01:00	7	37.9	28.2	9.3	0	0	1	1	4	0	0	0	1	0	0	0
02:00	5	27.5	27.5	0.0	0	0	0	0	5	0	0	0	0	0	0	0
03:00	5	30.1	25.5	4.5	0	0	0	3	1	1	0	0	0	0	0	0
04:00	14	29.5	24.6	4.7	0	0	3	3	7	1	0	0	0	0	0	0
05:00	54	30.3	25.3	4.8	0	0	6	24	12	12	0	0	0	0	0	0
06:00	124	29.3	24.8	4.3	0	0	12	56	45	9	1	1	0	0	0	0
07:00	346	27.9	23.6	4.1	0	8	50	158	118	11	1	0	0	0	0	0
08:00	607	27.1	22.2	4.7	4	20	170	245	151	13	3	0	1	0	0	0
09:00	434	26.2	21.7	4.4	4	19	122	193	91	5	0	0	0	0	0	0
10:00	385	25.6	21.6	3.8	0	14	107	200	60	4	0	0	0	0	0	0
11:00	377	26.2	21.8	4.3	0	23	89	191	72	1	0	0	1	0	0	0
12:00	385	26.4	22.2	4.0	1	10	91	196	80	7	0	0	0	0	0	0
13:00	392	26.9	21.9	4.8	0	25	107	174	68	15	2	1	0	0	0	0
14:00	423	27.1	22.1	4.8	3	17	107	204	71	17	3	0	1	0	0	0
15:00	581	27.3	22.2	5.0	0	33	132	282	125	5	2	0	0	0	0	2
16:00	605	27.2	22.1	4.8	10	38	121	266	159	9	2	0	0	0	0	0
17:00	482	28.8	23.5	5.1	0	12	100	192	151	17	6	2	0	2	0	0
18:00	420	28.7	23.8	4.7	0	11	80	145	154	29	1	0	0	0	0	0
19:00	326	27.5	23.1	4.3	0	4	66	162	83	7	2	2	0	0	0	0
20:00	238	29.1	24.2	4.7	0	0	43	102	67	22	3	1	0	0	0	0
21:00	150	29.6	24.2	5.3	0	6	24	54	49	15	1	1	0	0	0	0
22:00	97	29.2	25.1	4.0	0	1	5	42	43	5	0	1	0	0	0	0
23:00	62	28.7	24.0	4.5	0	0	12	25	19	6	0	0	0	0	0	0
Total																
2H(10-12)	762	25.9	21.7	4.1	0	37	196	391	132	5	0	0	1	0	0	0
2H(14-16)	1004	27.2	22.1	4.9	3	50	239	486	196	22	5	0	1	0	0	2
12H(7-19)	5437	27.2	22.4	4.7	22	230	1276	2446	1300	133	20	3	3	2	0	2
24H(0-24)	6561	27.6	22.7	4.7	22	241	1452	2943	1644	215	27	9	4	2	0	2
AM Peak	08:00	01:00	01:00	01:00	08:00	11:00	08:00	08:00	08:00	08:00	08:00	06:00	01:00	00:00	00:00	00:00
	607	37.9	28.2	9.3	4	23	170	245	151	13	3	1	1	0	0	0
PM Peak	16:00	21:00	22:00	21:00	16:00	16:00	15:00	15:00	16:00	18:00	17:00	17:00	14:00	17:00	12:00	15:00
	605	29.6	25.1	5.3	10	38	132	282	159	29	6	2	1	2	0	2

Paul Castle Associates

Penrhys, Thursday 6th March 2025

Junction: 2
Approach: Heol Pendyrus North

	To B4512 Penrhys Road (East)					To Car Park					To B4512 Penrhys Road (West)					To Heol Pendyrus (West)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
07:15 - 07:30	1	0	0	1	1.0	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0
07:30 - 07:45	4	0	0	4	4.0	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0
07:45 - 08:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**6**	**0**	**0**	**6**	**6.0**	**0**	**0**	**0**	**0**	**0.0**	**8**	**0**	**0**	**8**	**8.0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	3	0	0	3	3.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
08:15 - 08:30	3	0	0	3	3.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
08:30 - 08:45	4	0	0	4	4.0	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0
08:45 - 09:00	10	0	0	10	10.0	0	0	0	0	0.0	4	0	0	4	4.0	1	0	0	1	1.0
Hourly Total	**20**	**0**	**0**	**20**	**20.0**	**0**	**0**	**0**	**0**	**0.0**	**11**	**0**	**0**	**11**	**11.0**	**1**	**0**	**0**	**1**	**1.0**
09:00 - 09:15	5	0	0	5	5.0	0	0	0	0	0.0	4	0	0	4	4.0	1	0	0	1	1.0
09:15 - 09:30	3	0	0	3	3.0	0	0	0	0	0.0	2	0	0	2	2.0	1	0	0	1	1.0
09:30 - 09:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
09:45 - 10:00	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
Hourly Total	**11**	**0**	**0**	**11**	**11.0**	**0**	**0**	**0**	**0**	**0.0**	**8**	**0**	**0**	**8**	**8.0**	**2**	**0**	**0**	**2**	**2.0**
TOTAL	**37**	**0**	**0**	**37**	**37.0**	**0**	**0**	**0**	**0**	**0.0**	**27**	**0**	**0**	**27**	**27.0**	**3**	**0**	**0**	**3**	**3.0**
16:00 - 16:15	11	0	0	11	11.0	0	0	0	0	0.0	6	0	0	6	6.0	2	0	0	2	2.0
16:15 - 16:30	7	0	0	7	7.0	0	0	0	0	0.0	5	0	0	5	5.0	1	0	0	1	1.0
16:30 - 16:45	7	0	0	7	7.0	0	0	0	0	0.0	6	0	0	6	6.0	0	0	0	0	0.0
16:45 - 17:00	4	0	0	4	4.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
Hourly Total	**29**	**0**	**0**	**29**	**29.0**	**0**	**0**	**0**	**0**	**0.0**	**19**	**0**	**0**	**19**	**19.0**	**3**	**0**	**0**	**3**	**3.0**
17:00 - 17:15	1	0	0	1	1.0	0	0	0	0	0.0	3	0	0	3	3.0	1	0	0	1	1.0
17:15 - 17:30	1	0	0	1	1.0	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0
17:30 - 17:45	2	0	0	2	2.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
17:45 - 18:00	5	0	0	5	5.0	0	0	0	0	0.0	2	0	0	2	2.0	1	0	0	1	1.0
Hourly Total	**9**	**0**	**0**	**9**	**9.0**	**0**	**0**	**0**	**0**	**0.0**	**9**	**0**	**0**	**9**	**9.0**	**2**	**0**	**0**	**2**	**2.0**
18:00 - 18:15	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
18:15 - 18:30	5	0	0	5	5.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0.0	0	0	0	0	0.0	9	0	0	9	9.0	2	0	0	2	2.0
18:45 - 19:00	6	0	0	6	6.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
Hourly Total	**13**	**0**	**0**	**13**	**13.0**	**0**	**0**	**0**	**0**	**0.0**	**14**	**0**	**0**	**14**	**14.0**	**2**	**0**	**0**	**2**	**2.0**
TOTAL	**51**	**0**	**0**	**51**	**51.0**	**0**	**0**	**0**	**0**	**0.0**	**42**	**0**	**0**	**42**	**42.0**	**7**	**0**	**0**	**7**	**7.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Penrhys, Thursday 6th March 2025

Junction: 2
Approach: B4512 Penrhys Road East

	To Car Park					To B4512 Penrhys Road (West)					To Heol Pendyrus (West)					To Heol Pendyrus (North)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	32	0	0	32	32.0	1	0	0	1	1.0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0.0	25	0	1	26	27.0	4	0	0	4	4.0	1	0	0	1	1.0
07:30 - 07:45	0	0	0	0	0.0	37	0	2	39	41.0	1	0	0	1	1.0	1	0	0	1	1.0
07:45 - 08:00	1	0	0	1	1.0	59	2	0	61	63.6	0	0	0	0	0.0	4	0	3	7	10.0
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**153**	**2**	**3**	**158**	**163.6**	**6**	**0**	**0**	**6**	**6.0**	**6**	**0**	**3**	**9**	**12.0**
08:00 - 08:15	1	0	0	1	1.0	51	0	2	53	55.0	3	0	0	3	3.0	4	0	0	4	4.0
08:15 - 08:30	0	0	0	0	0.0	73	0	0	73	73.0	2	0	0	2	2.0	5	0	0	5	5.0
08:30 - 08:45	1	0	0	1	1.0	68	2	1	71	74.6	7	0	0	7	7.0	4	0	1	5	6.0
08:45 - 09:00	1	0	0	1	1.0	70	1	1	72	74.3	8	0	0	8	8.0	12	0	0	12	12.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**262**	**3**	**4**	**269**	**276.9**	**20**	**0**	**0**	**20**	**20.0**	**25**	**0**	**1**	**26**	**27.0**
09:00 - 09:15	1	0	0	1	1.0	55	2	0	57	59.6	4	0	0	4	4.0	0	0	1	1	2.0
09:15 - 09:30	2	0	0	2	2.0	50	1	0	51	52.3	9	0	0	9	9.0	2	0	0	2	2.0
09:30 - 09:45	2	0	0	2	2.0	51	1	0	52	53.3	3	0	0	3	3.0	2	0	0	2	2.0
09:45 - 10:00	1	0	0	1	1.0	50	0	0	50	50.0	3	0	0	3	3.0	3	0	0	3	3.0
Hourly Total	**6**	**0**	**0**	**6**	**6.0**	**206**	**4**	**0**	**210**	**215.2**	**19**	**0**	**0**	**19**	**19.0**	**7**	**0**	**1**	**8**	**9.0**
TOTAL	**10**	**0**	**0**	**10**	**10.0**	**621**	**9**	**7**	**637**	**655.7**	**45**	**0**	**0**	**45**	**45.0**	**38**	**0**	**5**	**43**	**48.0**
16:00 - 16:15	1	0	0	1	1.0	55	0	0	55	55.0	14	0	0	14	14.0	3	0	0	3	3.0
16:15 - 16:30	0	0	0	0	0.0	45	0	0	45	45.0	12	0	0	12	12.0	4	0	0	4	4.0
16:30 - 16:45	1	0	0	1	1.0	49	0	0	49	49.0	5	0	0	5	5.0	2	0	0	2	2.0
16:45 - 17:00	0	0	0	0	0.0	57	1	0	58	59.3	4	0	0	4	4.0	2	0	0	2	2.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**206**	**1**	**0**	**207**	**208.3**	**35**	**0**	**0**	**35**	**35.0**	**11**	**0**	**0**	**11**	**11.0**
17:00 - 17:15	1	0	0	1	1.0	51	0	0	51	51.0	7	0	0	7	7.0	4	0	0	4	4.0
17:15 - 17:30	1	0	0	1	1.0	53	0	0	53	53.0	5	0	0	5	5.0	2	0	0	2	2.0
17:30 - 17:45	0	0	0	0	0.0	46	0	0	46	46.0	6	0	0	6	6.0	2	0	1	3	4.0
17:45 - 18:00	0	0	0	0	0.0	52	0	0	52	52.0	15	0	0	15	15.0	1	0	0	1	1.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**202**	**0**	**0**	**202**	**202.0**	**33**	**0**	**0**	**33**	**33.0**	**9**	**0**	**1**	**10**	**11.0**
18:00 - 18:15	1	0	0	1	1.0	47	0	0	47	47.0	12	0	0	12	12.0	2	0	0	2	2.0
18:15 - 18:30	1	0	0	1	1.0	42	0	0	42	42.0	7	0	0	7	7.0	4	0	0	4	4.0
18:30 - 18:45	0	0	0	0	0.0	49	0	0	49	49.0	10	0	0	10	10.0	7	0	0	7	7.0
18:45 - 19:00	0	0	0	0	0.0	40	0	1	41	42.0	4	0	0	4	4.0	2	0	0	2	2.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**178**	**0**	**1**	**179**	**180.0**	**33**	**0**	**0**	**33**	**33.0**	**15**	**0**	**0**	**15**	**15.0**
TOTAL	**6**	**0**	**0**	**6**	**6.0**	**586**	**1**	**1**	**588**	**590.3**	**101**	**0**	**0**	**101**	**101.0**	**35**	**0**	**1**	**36**	**37.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Penrhys, Thursday 6th March 2025

Junction: 2
Approach: Car Park

	To B4512 Penrhys Road (West)					To Heol Pendyrus (West)					To Heol Pendyrus (North)					To B4512 Penrhys Road (East)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:30 - 08:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**0**	**1**	**1.0**
09:00 - 09:15	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
09:15 - 09:30	3	0	0	3	3.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
09:30 - 09:45	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
09:45 - 10:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**7**	**0**	**0**	**7**	**7.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**3**	**0**	**0**	**3**	**3.0**
TOTAL	**8**	**0**	**0**	**8**	**8.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**4**	**0**	**0**	**4**	**4.0**
16:00 - 16:15	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
16:15 - 16:30	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
16:30 - 16:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	**5**	**0**	**0**	**5**	**5.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**3**	**0**	**0**	**3**	**3.0**
17:00 - 17:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
17:15 - 17:30	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
17:45 - 18:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**3**	**0**	**0**	**3**	**3.0**
18:00 - 18:15	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
18:15 - 18:30	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**9**	**0**	**0**	**9**	**9.0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0.0**	**7**	**0**	**0**	**7**	**7.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Penrhys, Thursday 6th March 2025

Junction: 2
Approach: B4512 Penrhys Road West

	To Heol Pendyrus (West)					To Heol Pendyrus (North)					To B4512 Penrhys Road (East)					To Car Park				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	1	0	0	1	1.0	0	0	0	0	0.0	24	0	0	24	24.0	0	0	0	0	0.0
07:15 - 07:30	1	0	0	1	1.0	2	0	0	2	2.0	30	0	0	30	30.0	0	0	0	0	0.0
07:30 - 07:45	2	0	0	2	2.0	1	0	0	1	1.0	29	0	0	29	29.0	0	0	0	0	0.0
07:45 - 08:00	2	0	0	2	2.0	4	0	0	4	4.0	60	0	0	60	60.0	0	0	0	0	0.0
Hourly Total	**6**	**0**	**0**	**6**	**6.0**	**7**	**0**	**0**	**7**	**7.0**	**143**	**0**	**0**	**143**	**143.0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	2	0	0	2	2.0	3	0	0	3	3.0	42	0	1	43	44.0	1	0	0	1	1.0
08:15 - 08:30	1	0	0	1	1.0	4	0	0	4	4.0	57	0	0	57	57.0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0.0	4	0	1	5	6.0	57	2	1	60	63.6	0	0	0	0	0.0
08:45 - 09:00	1	0	0	1	1.0	4	0	0	4	4.0	39	1	0	40	41.3	3	0	0	3	3.0
Hourly Total	**4**	**0**	**0**	**4**	**4.0**	**15**	**0**	**1**	**16**	**17.0**	**195**	**3**	**2**	**200**	**205.9**	**4**	**0**	**0**	**4**	**4.0**
09:00 - 09:15	3	0	0	3	3.0	0	0	0	0	0.0	55	1	0	56	57.3	0	0	0	0	0.0
09:15 - 09:30	3	0	0	3	3.0	2	0	0	2	2.0	47	0	0	47	47.0	0	0	0	0	0.0
09:30 - 09:45	5	0	0	5	5.0	2	0	0	2	2.0	29	0	0	29	29.0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	0	0.0	1	0	0	1	1.0	21	2	0	23	25.6	0	0	0	0	0.0
Hourly Total	**11**	**0**	**0**	**11**	**11.0**	**5**	**0**	**0**	**5**	**5.0**	**152**	**3**	**0**	**155**	**158.9**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**21**	**0**	**0**	**21**	**21.0**	**27**	**0**	**1**	**28**	**29.0**	**490**	**6**	**2**	**498**	**507.8**	**4**	**0**	**0**	**4**	**4.0**
16:00 - 16:15	5	0	0	5	5.0	3	0	2	5	7.0	67	0	0	67	67.0	0	0	0	0	0.0
16:15 - 16:30	3	0	0	3	3.0	4	0	0	4	4.0	52	0	1	53	54.0	1	0	0	1	1.0
16:30 - 16:45	7	0	0	7	7.0	2	0	0	2	2.0	70	1	0	71	72.3	0	0	0	0	0.0
16:45 - 17:00	6	0	0	6	6.0	2	0	0	2	2.0	61	2	0	63	65.6	1	0	0	1	1.0
Hourly Total	**21**	**0**	**0**	**21**	**21.0**	**11**	**0**	**2**	**13**	**15.0**	**250**	**3**	**1**	**254**	**258.9**	**2**	**0**	**0**	**2**	**2.0**
17:00 - 17:15	2	0	0	2	2.0	4	0	0	4	4.0	37	0	0	37	37.0	0	0	0	0	0.0
17:15 - 17:30	3	0	0	3	3.0	2	0	0	2	2.0	66	0	0	66	66.0	1	0	0	1	1.0
17:30 - 17:45	6	0	0	6	6.0	2	0	0	2	2.0	62	0	0	62	62.0	0	0	0	0	0.0
17:45 - 18:00	2	0	0	2	2.0	1	0	0	1	1.0	42	0	0	42	42.0	2	0	0	2	2.0
Hourly Total	**13**	**0**	**0**	**13**	**13.0**	**9**	**0**	**0**	**9**	**9.0**	**207**	**0**	**0**	**207**	**207.0**	**3**	**0**	**0**	**3**	**3.0**
18:00 - 18:15	2	0	0	2	2.0	2	0	0	2	2.0	52	0	0	52	52.0	2	0	0	2	2.0
18:15 - 18:30	2	0	0	2	2.0	4	0	0	4	4.0	40	0	0	40	40.0	0	0	0	0	0.0
18:30 - 18:45	4	0	0	4	4.0	3	0	0	3	3.0	35	0	0	35	35.0	0	0	0	0	0.0
18:45 - 19:00	1	0	0	1	1.0	2	0	0	2	2.0	40	0	0	40	40.0	0	0	0	0	0.0
Hourly Total	**9**	**0**	**0**	**9**	**9.0**	**11**	**0**	**0**	**11**	**11.0**	**167**	**0**	**0**	**167**	**167.0**	**2**	**0**	**0**	**2**	**2.0**
TOTAL	**43**	**0**	**0**	**43**	**43.0**	**31**	**0**	**2**	**33**	**35.0**	**624**	**3**	**1**	**628**	**632.9**	**7**	**0**	**0**	**7**	**7.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Penrhys, Thursday 6th March 2025

Junction: 2
Approach: Heol Pendyrus West

	To Heol Pendyrus (North)					To B4512 Penrhys Road (East)					To Car Park					To B4512 Penrhys Road (West)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0
07:15 - 07:30	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0	2	0	0	2	2.0
07:30 - 07:45	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0	3	0	0	3	3.0
07:45 - 08:00	0	0	0	0	0.0	6	0	1	7	8.0	0	0	0	0	0.0	5	0	0	5	5.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**14**	**0**	**1**	**15**	**16.0**	**0**	**0**	**0**	**0**	**0.0**	**12**	**0**	**0**	**12**	**12.0**
08:00 - 08:15	1	0	0	1	1.0	4	0	1	5	6.0	0	0	0	0	0.0	4	0	0	4	4.0
08:15 - 08:30	1	0	0	1	1.0	3	0	0	3	3.0	0	0	0	0	0.0	4	0	0	4	4.0
08:30 - 08:45	1	0	0	1	1.0	5	0	2	7	9.0	0	0	0	0	0.0	3	0	0	3	3.0
08:45 - 09:00	2	0	0	2	2.0	4	0	0	4	4.0	0	0	0	0	0.0	5	0	0	5	5.0
Hourly Total	**5**	**0**	**0**	**5**	**5.0**	**16**	**0**	**3**	**19**	**22.0**	**0**	**0**	**0**	**0**	**0.0**	**16**	**0**	**0**	**16**	**16.0**
09:00 - 09:15	1	0	0	1	1.0	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0
09:15 - 09:30	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0	3	0	1	4	5.0
09:30 - 09:45	1	0	0	1	1.0	2	0	0	2	2.0	0	0	0	0	0.0	4	0	0	4	4.0
09:45 - 10:00	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**10**	**0**	**0**	**10**	**10.0**	**0**	**0**	**0**	**0**	**0.0**	**11**	**0**	**1**	**12**	**13.0**
TOTAL	**7**	**0**	**0**	**7**	**7.0**	**40**	**0**	**4**	**44**	**48.0**	**0**	**0**	**0**	**0**	**0.0**	**39**	**0**	**1**	**40**	**41.0**
16:00 - 16:15	1	0	0	1	1.0	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0
16:15 - 16:30	1	0	0	1	1.0	5	0	0	5	5.0	0	0	0	0	0.0	3	0	0	3	3.0
16:30 - 16:45	2	0	0	2	2.0	4	0	0	4	4.0	0	0	0	0	0.0	3	0	0	3	3.0
16:45 - 17:00	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0	3	0	0	3	3.0
Hourly Total	**4**	**0**	**0**	**4**	**4.0**	**15**	**0**	**0**	**15**	**15.0**	**0**	**0**	**0**	**0**	**0.0**	**11**	**0**	**0**	**11**	**11.0**
17:00 - 17:15	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0	4	0	0	4	4.0
17:15 - 17:30	1	0	0	1	1.0	6	0	0	6	6.0	0	0	0	0	0.0	8	0	0	8	8.0
17:30 - 17:45	1	0	0	1	1.0	6	0	1	7	8.0	0	0	0	0	0.0	6	0	0	6	6.0
17:45 - 18:00	0	0	0	0	0.0	7	0	0	7	7.0	0	0	0	0	0.0	3	0	0	3	3.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**21**	**0**	**1**	**22**	**23.0**	**0**	**0**	**0**	**0**	**0.0**	**21**	**0**	**0**	**21**	**21.0**
18:00 - 18:15	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0	4	0	0	4	4.0
18:15 - 18:30	1	0	0	1	1.0	2	0	0	2	2.0	0	0	0	0	0.0	4	0	0	4	4.0
18:30 - 18:45	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0	4	0	0	4	4.0
18:45 - 19:00	2	0	0	2	2.0	3	0	0	3	3.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**15**	**0**	**0**	**15**	**15.0**	**0**	**0**	**0**	**0**	**0.0**	**14**	**0**	**0**	**14**	**14.0**
TOTAL	**9**	**0**	**0**	**9**	**9.0**	**51**	**0**	**1**	**52**	**53.0**	**0**	**0**	**0**	**0**	**0.0**	**46**	**0**	**0**	**46**	**46.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Penrhys, Thursday 6th March 2025

From: 1) 07:00

To: 1) 10:00

Class: All Vehicles

Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

PCUs in red

Heol Pendyrus (North)			
To E	To D	To C	To B
3	27	0	37
3	27	0	37

Heol Pendyrus (West)			
To A	7	7
To B	44	48
To C	0	0
To D	40	41

B4512 Penrhys Road (East)			
48	43	To A
45	45	To E
655.7	637	To D
10	10	To C

B4512 Penrhys Road (West)			
To E	21	21
To A	28	29
To B	498	507.8
To C	4	4

8	0	0	4
8	0	0	4
To D	To E	To A	To B
Car Park			

Penrhys, Thursday 6th March 2025

From: 2) 16:00

To: 2) 19:00

Class: All Vehicles

Show Peak Hour: ☐

Show PCUs: ☑

Show Session 2

PCUs in red

Heol Pendyrus (North)			
To E	To D	To C	To B
7	42	0	51
7	42	0	51

Heol Pendyrus (West)			
To A	9	9
To B	52	53
To C	0	0
To D	46	46

B4512 Penrhys Road (East)			
37	36	To A
101	101	To E
590.3	588	To D
6	6	To C

B4512 Penrhys Road (West)			
To E	43	43
To A	33	35
To B	628	632.9
To C	7	7

9	0	0	7
9	0	0	7
To D	To E	To A	To B
Car Park			

Appendix F TRICS Outputs

Penrhys Regeneration – Phase 1A

Transport Assessment

Trivallis

SLR Project No.: 407.064582.00001

9 September 2025

Filtering Summary:

Land Use: 03/A RESIDENTIAL/HOUSES PRIVATELY OWNED

Selected Trip Rate Calculation Parameter Range: 20 - 120 DWELLS

Actual Trip Rate Calculation Parameter Range: N/A DWELLS

Date Range: Minimum: 1/1/2022 Maximum: 5/22/3924

Parking Spaces Range: All Surveys Selected

Parking Spaces Per Dwelling Range: All Surveys Selected

Bedrooms Per Dwelling Range: All Surveys Selected

Percentage of Dwellings Privately Owned: All Surveys Selected

Population Within 500m Range: 237 2350

Days of the week selected:

Thursday	3
Tuesday	3
Wednesday	3

Main Location Types selected:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	8

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	9

Population <1 Mile ranges selected:

1,001 to 5,000	5
10,001 to 15,000	1
5,001 to 10,000	3

Population <5 Mile ranges selected:

100,001 to 125,000	2
25,001 to 50,000	2
5,000 or Less	1
5,001 to 25,000	4

Car Ownership <5 Mile ranges selected:

1.1 to 1.5	5
1.6 to 2.0	4

PTAL Rating:

No PTAL Present	9

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 day
	SC	SURREY	1 day
	WS	WEST SUSSEX	2 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 day
	NF	NORFOLK	1 day
08	**NORTH WEST**		
	AC	CHESHIRE WEST & CHESTER	1 day
09	**NORTH**		
	IM	ISLE OF MAN	3 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:	DWELLS
Actual Range:	1.42 to 6.99 (units:DWELLS)
Range Selected by User:	20 to 120 (units:DWELLS)
Parking Spaces Range:	6 - 2604

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/22 to 22/05/24

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	1 days
Thursday	3 days
Tuesday	3 days
Wednesday	3 days

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

Selected survey types:

Manual count	10
Direction ATC Count	0

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	1 days
Neighbourhood Centre (PPS6 Local Centre)	9 days

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:

Out of Town	1 days
Village	9 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Excluded	10 days

Secondary Filtering Selection:

Use Class:

C3	10 surveys

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

Population within 500m Range:

237 - 2350

Population within 1 mile:

1,001 to 5,000	6 surveys
10,001 to 15,000	1 surveys
5,001 to 10,000	3 surveys

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

Population within 5 miles:

100,001 to 125,000	2 surveys
25,001 to 50,000	2 surveys
5,000 or Less	1 surveys
5,001 to 25,000	4 surveys
75,001 to 100,000	1 surveys

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

Car ownership within 5 miles:

1.1 to 1.5	6 surveys
1.6 to 2.0	4 surveys

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:

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	4 surveys
Yes	6 surveys

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	10 surveys

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.

COVID-19 Restrictions:

No

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.

LIST OF SITES relevant to selection parameters:

Site 1:	AC-03-A-06	**Site area:**	6.8 hect
Development Name:	DETACHED HOUSES	**Number of dwellings:**	99 DWELLS
Location:	NEAR CHESTER	**Housing density:**	14.9546827794562
Postcode:	CH3 7QJ	**Total Bedrooms:**	311
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	29/04/2022
		Survey Day:	Friday
Sub Location Type:	Village		
PTAL:	n/a		

Site 2:	CA-03-A-08	**Site area:**	2.68 hect
Development Name:	DETACHED & SEMI-DETACHED	**Number of dwellings:**	83 DWELLS
Location:	SAWTRY	**Housing density:**	33.0677290836653
Postcode:	PE28 5WE	**Total Bedrooms:**	251
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	13/10/2022
		Survey Day:	Thursday
Sub Location Type:	Village		
PTAL:	n/a		

Site 3:	ES-03-A-11	**Site area:**	4.34 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	105 DWELLS
Location:	RINGMER	**Housing density:**	32.0121951219512
Postcode:	BN8 5LQ	**Total Bedrooms:**	292
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	28/09/2023
		Survey Day:	Thursday
Sub Location Type:	Village		
PTAL:	n/a		

Site 4:	IM-03-A-01	**Site area:**	2.12 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	31 DWELLS
Location:	COLBY	**Housing density:**	16.0621761658031
Postcode:	IM9 1TQ	**Total Bedrooms:**	137
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	21/05/2024
		Survey Day:	Tuesday
Sub Location Type:	Village		
PTAL:	n/a		

Site 5:	IM-03-A-02	**Site area:**	1.61 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	27 DWELLS
Location:	KIRK MICHAEL	**Housing density:**	18.6206896551724
Postcode:	IM6 1HT	**Total Bedrooms:**	106
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	23/05/2024
		Survey Day:	Thursday
Sub Location Type:	Village		
PTAL:	n/a		

Site 6:	IM-03-A-03	**Site area:**	6.99 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	111 DWELLS
Location:	COLBY	**Housing density:**	18.1372549019608
Postcode:	IM9 4LN	**Total Bedrooms:**	364
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	21/05/2024
		Survey Day:	Tuesday
Sub Location Type:	Village		
PTAL:	n/a		

Site 7:	NF-03-A-34	**Site area:**	3.15 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	80 DWELLS
Location:	SWAFFHAM	**Housing density:**	31.1284046692607
Postcode:	PE37 8GY	**Total Bedrooms:**	256
Main Location Type:	Edge of Town	**Survey Date:**	27/09/2022
Sub Location Type:	Out of Town	**Survey Day:**	Tuesday
PTAL:	n/a		

Site 8:	SC-03-A-10	**Site area:**	1.42 hect
Development Name:	MIXED HOUSES	**Number of dwellings:**	32 DWELLS
Location:	ASH	**Housing density:**	25.1968503937008
Postcode:	GU12 6BT	**Total Bedrooms:**	93
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	14/09/2022
		Survey Day:	Wednesday
Sub Location Type:	Village		
PTAL:	n/a		

Site 9:	WS-03-A-16	**Site area:**	1.9 hect
Development Name:	DETACHED & SEMI-DETACHED	**Number of dwellings:**	58 DWELLS
Location:	BRACKLESHAM BAY	**Housing density:**	
Postcode:	PO20 8JE	**Total Bedrooms:**	158
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	09/11/2022
		Survey Day:	Wednesday
Sub Location Type:	Village		
PTAL:	n/a		

Site 10:	WS-03-A-25	**Site area:**	2.4 hect
Development Name:	PRIVATE HOUSES & FLATS	**Number of dwellings:**	65 DWELLS
Location:	WOODGATE	**Housing density:**	52
Postcode:	PO20 3SU	**Total Bedrooms:**	153
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	**Survey Date:**	18/09/2024
		Survey Day:	Wednesday
Sub Location Type:	Village		
PTAL:	n/a		

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

Total Vehicles

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.067**	**0.250**	**0.317**
08:00-09:00	**10**	**69**	**0.135**	**0.370**	**0.505**
09:00-10:00	**10**	**69**	**0.174**	**0.205**	**0.379**
10:00-11:00	**10**	**69**	**0.145**	**0.158**	**0.303**
11:00-12:00	**10**	**69**	**0.117**	**0.142**	**0.259**
12:00-13:00	**10**	**69**	**0.164**	**0.164**	**0.328**
13:00-14:00	**10**	**69**	**0.164**	**0.159**	**0.323**
14:00-15:00	**10**	**69**	**0.149**	**0.152**	**0.301**
15:00-16:00	**10**	**69**	**0.265**	**0.165**	**0.430**
16:00-17:00	**10**	**69**	**0.294**	**0.171**	**0.465**
17:00-18:00	**10**	**69**	**0.308**	**0.159**	**0.467**
18:00-19:00	**10**	**69**	**0.233**	**0.132**	**0.365**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**2.215**	**2.227**	**4.442**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Total People

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.104**	**0.408**	**0.512**
08:00-09:00	**10**	**69**	**0.205**	**0.825**	**1.030**
09:00-10:00	**10**	**69**	**0.262**	**0.340**	**0.602**
10:00-11:00	**10**	**69**	**0.230**	**0.265**	**0.495**
11:00-12:00	**10**	**69**	**0.214**	**0.230**	**0.444**
12:00-13:00	**10**	**69**	**0.253**	**0.245**	**0.498**
13:00-14:00	**10**	**69**	**0.258**	**0.250**	**0.508**
14:00-15:00	**10**	**69**	**0.263**	**0.245**	**0.508**
15:00-16:00	**10**	**69**	**0.570**	**0.301**	**0.871**
16:00-17:00	**10**	**69**	**0.564**	**0.317**	**0.881**
17:00-18:00	**10**	**69**	**0.582**	**0.302**	**0.884**
18:00-19:00	**10**	**69**	**0.392**	**0.230**	**0.622**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**3.897**	**3.958**	**7.855**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Cyclists

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.001**	**0.001**	**0.002**
08:00-09:00	**10**	**69**	**0.000**	**0.009**	**0.009**
09:00-10:00	**10**	**69**	**0.001**	**0.004**	**0.005**
10:00-11:00	**10**	**69**	**0.004**	**0.001**	**0.005**
11:00-12:00	**10**	**69**	**0.003**	**0.003**	**0.006**
12:00-13:00	**10**	**69**	**0.003**	**0.000**	**0.003**
13:00-14:00	**10**	**69**	**0.003**	**0.001**	**0.004**
14:00-15:00	**10**	**69**	**0.003**	**0.001**	**0.004**
15:00-16:00	**10**	**69**	**0.001**	**0.003**	**0.004**
16:00-17:00	**10**	**69**	**0.006**	**0.006**	**0.012**
17:00-18:00	**10**	**69**	**0.004**	**0.001**	**0.005**
18:00-19:00	**10**	**69**	**0.003**	**0.003**	**0.006**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.032**	**0.033**	**0.065**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

PSVs

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.001**	**0.000**	**0.001**
08:00-09:00	**10**	**69**	**0.000**	**0.001**	**0.001**
09:00-10:00	**10**	**69**	**0.000**	**0.000**	**0.000**
10:00-11:00	**10**	**69**	**0.000**	**0.000**	**0.000**
11:00-12:00	**10**	**69**	**0.000**	**0.000**	**0.000**
12:00-13:00	**10**	**69**	**0.000**	**0.000**	**0.000**
13:00-14:00	**10**	**69**	**0.000**	**0.000**	**0.000**
14:00-15:00	**10**	**69**	**0.000**	**0.000**	**0.000**
15:00-16:00	**10**	**69**	**0.000**	**0.000**	**0.000**
16:00-17:00	**10**	**69**	**0.001**	**0.001**	**0.002**
17:00-18:00	**10**	**69**	**0.000**	**0.000**	**0.000**
18:00-19:00	**10**	**69**	**0.000**	**0.000**	**0.000**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.002**	**0.002**	**0.004**

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 - 120 (units: DWELLS)
Survey date date range:	27/09/2022 - 27/09/2022
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

OGVs

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.001**	**0.000**	**0.001**
08:00-09:00	**10**	**69**	**0.001**	**0.001**	**0.002**
09:00-10:00	**10**	**69**	**0.006**	**0.003**	**0.009**
10:00-11:00	**10**	**69**	**0.003**	**0.004**	**0.007**
11:00-12:00	**10**	**69**	**0.001**	**0.001**	**0.002**
12:00-13:00	**10**	**69**	**0.003**	**0.004**	**0.007**
13:00-14:00	**10**	**69**	**0.003**	**0.003**	**0.006**
14:00-15:00	**10**	**69**	**0.000**	**0.000**	**0.000**
15:00-16:00	**10**	**69**	**0.000**	**0.001**	**0.001**
16:00-17:00	**10**	**69**	**0.000**	**0.000**	**0.000**
17:00-18:00	**10**	**69**	**0.000**	**0.000**	**0.000**
18:00-19:00	**10**	**69**	**0.000**	**0.000**	**0.000**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.018**	**0.017**	**0.035**

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

*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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Taxis

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.001**	**0.003**	**0.004**
08:00-09:00	**10**	**69**	**0.007**	**0.007**	**0.014**
09:00-10:00	**10**	**69**	**0.003**	**0.003**	**0.006**
10:00-11:00	**10**	**69**	**0.000**	**0.000**	**0.000**
11:00-12:00	**10**	**69**	**0.000**	**0.001**	**0.001**
12:00-13:00	**10**	**69**	**0.003**	**0.001**	**0.004**
13:00-14:00	**10**	**69**	**0.001**	**0.001**	**0.002**
14:00-15:00	**10**	**69**	**0.003**	**0.003**	**0.006**
15:00-16:00	**10**	**69**	**0.006**	**0.006**	**0.012**
16:00-17:00	**10**	**69**	**0.006**	**0.007**	**0.013**
17:00-18:00	**10**	**69**	**0.003**	**0.001**	**0.004**
18:00-19:00	**10**	**69**	**0.001**	**0.001**	**0.002**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.034**	**0.034**	**0.068**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Cars

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.054**	**0.219**	**0.273**
08:00-09:00	**10**	**69**	**0.110**	**0.330**	**0.440**
09:00-10:00	**10**	**69**	**0.145**	**0.175**	**0.320**
10:00-11:00	**10**	**69**	**0.111**	**0.124**	**0.235**
11:00-12:00	**10**	**69**	**0.096**	**0.117**	**0.213**
12:00-13:00	**10**	**69**	**0.132**	**0.127**	**0.259**
13:00-14:00	**10**	**69**	**0.127**	**0.120**	**0.247**
14:00-15:00	**10**	**69**	**0.111**	**0.117**	**0.228**
15:00-16:00	**10**	**69**	**0.223**	**0.139**	**0.362**
16:00-17:00	**10**	**69**	**0.260**	**0.149**	**0.409**
17:00-18:00	**10**	**69**	**0.278**	**0.139**	**0.417**
18:00-19:00	**10**	**69**	**0.211**	**0.124**	**0.335**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**1.858**	**1.880**	**3.738**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

LGVs

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.009**	**0.027**	**0.036**
08:00-09:00	**10**	**69**	**0.016**	**0.029**	**0.045**
09:00-10:00	**10**	**69**	**0.020**	**0.025**	**0.045**
10:00-11:00	**10**	**69**	**0.030**	**0.029**	**0.059**
11:00-12:00	**10**	**69**	**0.020**	**0.022**	**0.042**
12:00-13:00	**10**	**69**	**0.026**	**0.030**	**0.056**
13:00-14:00	**10**	**69**	**0.027**	**0.027**	**0.054**
14:00-15:00	**10**	**69**	**0.032**	**0.030**	**0.062**
15:00-16:00	**10**	**69**	**0.032**	**0.017**	**0.049**
16:00-17:00	**10**	**69**	**0.025**	**0.012**	**0.037**
17:00-18:00	**10**	**69**	**0.027**	**0.017**	**0.044**
18:00-19:00	**10**	**69**	**0.017**	**0.006**	**0.023**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.281**	**0.271**	**0.552**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Motorcycles

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.000**	**0.001**	**0.001**
08:00-09:00	**10**	**69**	**0.000**	**0.001**	**0.001**
09:00-10:00	**10**	**69**	**0.000**	**0.000**	**0.000**
10:00-11:00	**10**	**69**	**0.000**	**0.000**	**0.000**
11:00-12:00	**10**	**69**	**0.000**	**0.000**	**0.000**
12:00-13:00	**10**	**69**	**0.000**	**0.000**	**0.000**
13:00-14:00	**10**	**69**	**0.004**	**0.007**	**0.011**
14:00-15:00	**10**	**69**	**0.003**	**0.001**	**0.004**
15:00-16:00	**10**	**69**	**0.004**	**0.001**	**0.005**
16:00-17:00	**10**	**69**	**0.001**	**0.001**	**0.002**
17:00-18:00	**10**	**69**	**0.000**	**0.001**	**0.001**
18:00-19:00	**10**	**69**	**0.003**	**0.000**	**0.003**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.015**	**0.013**	**0.028**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 21/05/2024
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Vehicle Occupants

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.072**	**0.334**	**0.406**
08:00-09:00	**10**	**69**	**0.168**	**0.676**	**0.844**
09:00-10:00	**10**	**69**	**0.217**	**0.274**	**0.491**
10:00-11:00	**10**	**69**	**0.184**	**0.204**	**0.388**
11:00-12:00	**10**	**69**	**0.153**	**0.184**	**0.337**
12:00-13:00	**10**	**69**	**0.217**	**0.213**	**0.430**
13:00-14:00	**10**	**69**	**0.217**	**0.203**	**0.420**
14:00-15:00	**10**	**69**	**0.185**	**0.191**	**0.376**
15:00-16:00	**10**	**69**	**0.436**	**0.205**	**0.641**
16:00-17:00	**10**	**69**	**0.447**	**0.239**	**0.686**
17:00-18:00	**10**	**69**	**0.492**	**0.237**	**0.729**
18:00-19:00	**10**	**69**	**0.327**	**0.191**	**0.518**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**3.115**	**3.151**	**6.266**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Pedestrians

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.030**	**0.054**	**0.084**
08:00-09:00	**10**	**69**	**0.035**	**0.114**	**0.149**
09:00-10:00	**10**	**69**	**0.042**	**0.045**	**0.087**
10:00-11:00	**10**	**69**	**0.038**	**0.055**	**0.093**
11:00-12:00	**10**	**69**	**0.054**	**0.041**	**0.095**
12:00-13:00	**10**	**69**	**0.033**	**0.027**	**0.060**
13:00-14:00	**10**	**69**	**0.032**	**0.046**	**0.078**
14:00-15:00	**10**	**69**	**0.067**	**0.046**	**0.113**
15:00-16:00	**10**	**69**	**0.119**	**0.093**	**0.212**
16:00-17:00	**10**	**69**	**0.090**	**0.068**	**0.158**
17:00-18:00	**10**	**69**	**0.068**	**0.061**	**0.129**
18:00-19:00	**10**	**69**	**0.054**	**0.036**	**0.090**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.662**	**0.686**	**1.348**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Public Transport Users

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.000**	**0.019**	**0.019**
08:00-09:00	**10**	**69**	**0.003**	**0.023**	**0.026**
09:00-10:00	**10**	**69**	**0.001**	**0.017**	**0.018**
10:00-11:00	**10**	**69**	**0.004**	**0.004**	**0.008**
11:00-12:00	**10**	**69**	**0.004**	**0.003**	**0.007**
12:00-13:00	**10**	**69**	**0.000**	**0.004**	**0.004**
13:00-14:00	**10**	**69**	**0.006**	**0.000**	**0.006**
14:00-15:00	**10**	**69**	**0.007**	**0.006**	**0.013**
15:00-16:00	**10**	**69**	**0.013**	**0.000**	**0.013**
16:00-17:00	**10**	**69**	**0.022**	**0.003**	**0.025**
17:00-18:00	**10**	**69**	**0.013**	**0.000**	**0.013**
18:00-19:00	**10**	**69**	**0.009**	**0.000**	**0.009**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.082**	**0.079**	**0.161**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Bus/Tram Passengers

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.000**	**0.017**	**0.017**
08:00-09:00	**10**	**69**	**0.001**	**0.019**	**0.020**
09:00-10:00	**10**	**69**	**0.001**	**0.009**	**0.010**
10:00-11:00	**10**	**69**	**0.004**	**0.004**	**0.008**
11:00-12:00	**10**	**69**	**0.004**	**0.001**	**0.005**
12:00-13:00	**10**	**69**	**0.000**	**0.004**	**0.004**
13:00-14:00	**10**	**69**	**0.006**	**0.000**	**0.006**
14:00-15:00	**10**	**69**	**0.007**	**0.006**	**0.013**
15:00-16:00	**10**	**69**	**0.013**	**0.000**	**0.013**
16:00-17:00	**10**	**69**	**0.016**	**0.003**	**0.019**
17:00-18:00	**10**	**69**	**0.012**	**0.000**	**0.012**
18:00-19:00	**10**	**69**	**0.003**	**0.000**	**0.003**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.067**	**0.063**	**0.130**

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 - 120 (units: DWELLS)
Survey date date range:	29/04/2022 - 18/09/2024
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Coach Passengers

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.000**	**0.000**	**0.000**
08:00-09:00	**10**	**69**	**0.000**	**0.003**	**0.003**
09:00-10:00	**10**	**69**	**0.000**	**0.000**	**0.000**
10:00-11:00	**10**	**69**	**0.000**	**0.000**	**0.000**
11:00-12:00	**10**	**69**	**0.000**	**0.000**	**0.000**
12:00-13:00	**10**	**69**	**0.000**	**0.000**	**0.000**
13:00-14:00	**10**	**69**	**0.000**	**0.000**	**0.000**
14:00-15:00	**10**	**69**	**0.000**	**0.000**	**0.000**
15:00-16:00	**10**	**69**	**0.000**	**0.000**	**0.000**
16:00-17:00	**10**	**69**	**0.003**	**0.000**	**0.003**
17:00-18:00	**10**	**69**	**0.000**	**0.000**	**0.000**
18:00-19:00	**10**	**69**	**0.000**	**0.000**	**0.000**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.003**	**0.003**	**0.006**

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

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

Parameter Summary:

Trip rate parameter range selected:	20 - 120 (units: DWELLS)
Survey date date range:	27/09/2022 - 27/09/2022
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

Total Rail Passengers

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**10**	**69**	**0.000**	**0.001**	**0.001**
08:00-09:00	**10**	**69**	**0.001**	**0.001**	**0.002**
09:00-10:00	**10**	**69**	**0.000**	**0.009**	**0.009**
10:00-11:00	**10**	**69**	**0.000**	**0.000**	**0.000**
11:00-12:00	**10**	**69**	**0.000**	**0.001**	**0.001**
12:00-13:00	**10**	**69**	**0.000**	**0.000**	**0.000**
13:00-14:00	**10**	**69**	**0.000**	**0.000**	**0.000**
14:00-15:00	**10**	**69**	**0.000**	**0.000**	**0.000**
15:00-16:00	**10**	**69**	**0.000**	**0.000**	**0.000**
16:00-17:00	**10**	**69**	**0.003**	**0.000**	**0.003**
17:00-18:00	**10**	**69**	**0.001**	**0.000**	**0.001**
18:00-19:00	**10**	**69**	**0.006**	**0.000**	**0.006**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**0.011**	**0.012**	**0.023**

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 - 120 (units: DWELLS)
Survey date date range:	14/09/2022 - 14/09/2022
Number of weekdays (Monday-Friday):	1
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.

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