

## Millom Leisure Centre

## Transport Assessment

230706/SK22263/TA01(-01)

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Project	Document	Rev	Description	Authorised by	Signed	Date
SK22263	TA01	00	-	LGS	LGS	13/06/2023
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## 1 Introduction

- 1.1 SK has been appointed by Alliance Leisure to prepare a Transport Assessment (TA) that examines the impact of developing a purpose-built leisure centre, with swimming pool, at the Millom School and Millom Hub site. The proposed layout is attached as Appendix A.
- 1.2 The Local Highway Authority is Cumberland Council (CC). A pre-application submission was issued to CC and the response is attached as Appendix B.
- 1.3 The TA has been prepared in accordance with the guidance set out below:
  - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places
  - Copeland Borough Council (2013), Copeland Local Plan 2013 – 2028
  - Copeland Borough Council (2022), Emerging Copeland Local Plan 2017 – 2035
  - Cumbria County Council (2017), Cumbria Design Guide
  - Ministry of Housing, Communities & Local Government (2016), Planning Practice Guidance
  - Ministry of Housing, Communities & Local Government (2021), National Planning Policy Framework

## 2 Existing Situation

### Site Location & Characteristics

- 2.1 The location of the site is shown on Figure 2.1.
- 2.2 Figure 2.1 shows that the site is located within an existing school complex (Millom School), just to the north of the centre of Millom. The site falls within a Key Service Centre.
- 2.3 The school complex includes secondary education facilities and community facilities at Millom Hub.
- 2.4 The area of the site to be used for the development is the site of the former swimming pool and the existing school changing rooms (floor area 390sqm) and public gym building (floor area of 215sqm). The changing rooms will be re-provided by the development and the gym building will be retained.
- 2.5 The location of the site offers opportunities for linked trips with the existing site education and community facilities, and also easy access from the town centre amenity destinations.

### Millom School

- 2.6 The school complex provides secondary education facilities for 515 students (including 31 sixth formers). The school employs a total of 86 staff (including part-time and casual staff).
- 2.7 The school is open between 8:45 and 15:00. Before and after school clubs are offered to students to help spread arrivals / departures and meet the requirements of parents / guardians.
- 2.8 The school complex currently provides indoor sports facilities and outdoor pitches, including a MUGA and running track (Millom Community Track).

### Millom Hub

- 2.9 Millom Hub offers extensive community services including a library, community learning, revenue and benefits advice, council services and NHS / police base.
- 2.10 Millom Hub has a floor area of 665qm.



**Figure 2.1: Site Location**

[source: ISO4]

#### Site Parking Arrangements

- 2.11 Parking is provided at various locations at the site. A marked parking area is located to the southwest of the school and provides circa 33 spaces. The parking area outside Millom Hub provides circa 32 spaces (including two disabled spaces). Parking activity also occurs to the north of the school building, with space for six cars. Three disabled spaces are located outside the existing sports area.
- 2.12 There are circa 74 parking spaces across the site in marked and unmarked locations.
- 2.13 There are cycle stands outside Millom Hub providing space for 26 bikes.

#### Site Access & Local Highway Network

- 2.14 Vehicle access to the site is provided from Salhouse Lane (A5093), which routes north-south along the site's western boundary. The vehicle access is a simple priority layout with setback gates. Keep clear zig zag markings are provided across the give-way line and opposite the access double yellow lines are provided on the western carriageway edge of Salhouse Lane. In the vicinity of the site, Salhouse Lane is a 30mph single carriageway road of 7m+ width and with 1.8-2.0m footways along both carriageway edges.
- 2.15 The access road is 6m wide with a 1.6m wide footway on the northern carriageway edge. Visibility splays of 2.4m x 43m are available in both directions. The visibility splay to the north crosses the boundary treatment on the northern side of the access junction but this is a low wall that would not impede a driver's view to a significant degree.
- 2.16 Travelling south on Salhouse Lane provides access to residential areas to the west of the site via the junction with Holborn Hill. Continuing south on Salhouse Lane from this point becomes Station Road (A5093) and it provides access to the centre of Millom and residential areas to the southeast of the town.

## Existing Parking Demand

- 2.17 A 12 hour in / out traffic survey was undertaken at the site access junction on Tuesday 1<sup>st</sup> November 2022. The survey was timed to occur when the facilities at Millom Hub and the school were operational.
- 2.18 The survey data is attached as Appendix C, with a summary provided below.

	Surveyed Traffic - All Site Uses			Total Existing Site Parking Demand
	In	Out	Total	
07:00-08:00	18	1	19	17
08:00-09:00	60	18	78	59
09:00-10:00	10	6	16	63
10:00-11:00	10	24	34	49
11:00-12:00	16	21	37	44
12:00-13:00	19	18	37	45
13:00-14:00	15	11	26	49
14:00-15:00	18	17	35	50
15:00-16:00	12	39	51	23
16:00-17:00	4	24	28	3
17:00-18:00	18	16	34	5
18:00-19:00	10	10	20	5
Total	210	205	415	-

**Table 2.1:** Existing Site Parking Demand

- 2.19 The survey shows that the maximum recorded parking demand at the site is 63 vehicles, occurring between 09:00 and 10:00.

## Existing Traffic Flows

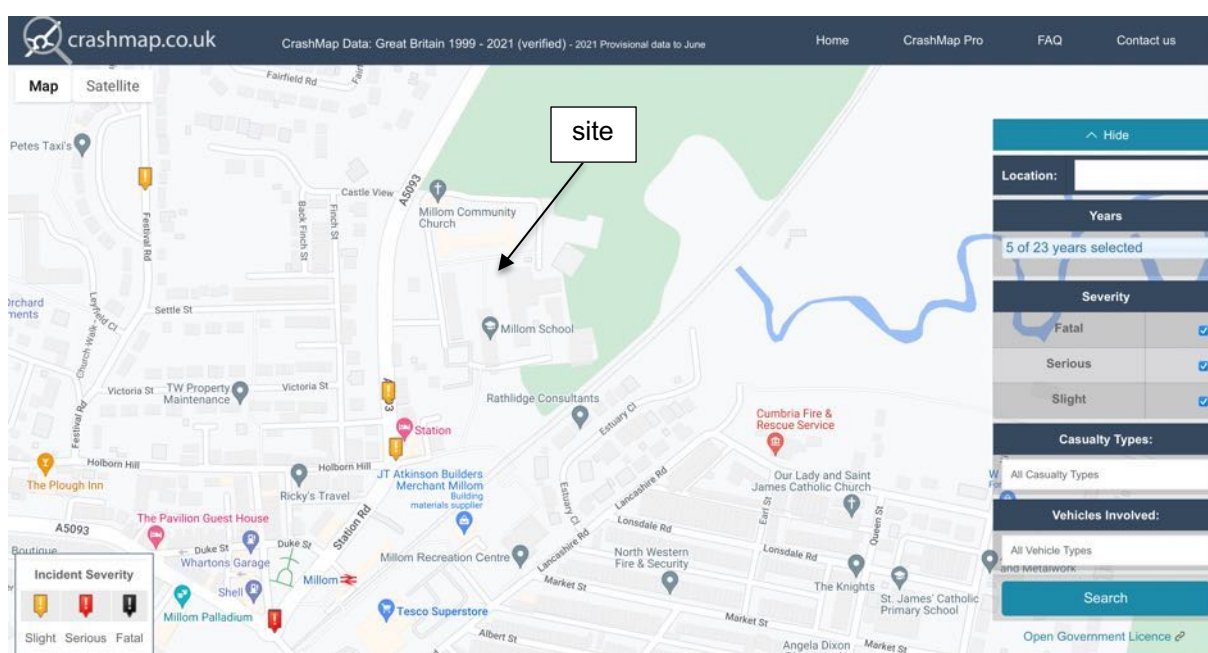
- 2.20 On the same day as the in / out survey (1<sup>st</sup> November 2023), AM and PM network peak and school peak period turning count surveys were undertaken at the following locations:
- Site Access / Salthouse Road
  - Station Road / St George's Road (A5093)
- 2.21 The traffic survey data is attached as Appendix C.
- 2.22 The traffic surveys show that the AM peak hour occurs between 08:00 and 09:00 and the PM peak occurs between 16:30 and 17:30. A survey was also undertaken between 14:30 and 15:30 to capture arrivals / departures associated with the end of the school day at 15:00.
- 2.23 The network and school peak hour flows have been converted to Passenger Car Units (PCU) using the following factors:
- Cycle: 0.2
  - Motorcycle: 0.4
  - Car / LGV: 1.0

- OGV1: 1.5
- OGV2: 2.3
- Bus: 2.0

2.24 The network and school peak hour flow charts are attached as Appendix D.

#### Road Safety Patterns

- 2.25 Personal injury collision data has been reviewed from the Crashmap database for the most recent five years available.
- 2.26 The data shows that there have been no collisions at the site access junction.
- 2.27 There have been two collisions to the south of the site on Salthouse Lane, both occurred at different locations and were classified as slight.
- 2.28 There has been a single collision at the Station Road roundabout, the collision was classified as severe.
- 2.29 None of the collisions involved a child, pedestrian, or cyclist.
- 2.30 The collision data shows that the study area has an average annual accident rate of 0.6 per annum. The frequency and location of accidents do not indicate a prevalent road safety issue.



**Figure 2.2: Road Safety Data**  
[source: Crashmap]

### 3 Proposed Development

- 3.1 The proposed layout is attached as Appendix A.
- 3.2 The proposal will construct a new leisure centre at the site with a floor area of 1,950qm. The leisure centre includes swimming facilities and changing facilities. The existing gym building (125sqm) is retained.
- 3.3 Vehicle access to the site is retained from its existing location on Salthouse Lane. The existing geometry of the access is shown in Appendix E.
- 3.4 Pedestrian access will continue to be taken principally from the main access point on Salthouse Lane, the additional pedestrian routes crossing the site as described in Section 2 would offer supplementary access routes for pedestrians.

- 3.5 The layout shows a total of 115 parking spaces, including eight disabled parking spaces and eight EV parking spaces. The parking is achieved by modifying the car park outside Millom Hub and providing new areas of disabled parking adjacent to the Hub and leisure centre buildings. The lower car park is not changed by the proposal. The appropriateness of this level of parking to serve all uses at the site is set out in Section 7.
- 3.6 Cycle parking is provided for 12 bikes close to the new leisure centre building. The 13 sheffield stands located near Millom Hub will be relocated as part of the proposal.
- 3.7 Service vehicles will be brought round the existing route past the Millom Hub to reach the leisure centre. Improvements to the route are proposed to provide segregation for pedestrians and to identify waiting locations at which vehicles can check whether another vehicle is approaching. A turning area will be provided to allow service and delivery vehicles to reverse to the service yard area. Swept path analysis for relevant vehicle types is provided in Appendix E.
- 3.8 A coach drop-off area will be provided in the main parking area in the western part of the site, with the parking area markings refreshed to ensure that a suitable circulation route is kept clear for coaches. Swept path analysis for a coach accessing the drop-off area is also shown in Appendix E.
- 3.9 An Interim Travel Plan has been prepared for the planning application and is attached as Appendix F. The Interim Travel Plan will form the basis for the full Travel Plan that will be adopted on occupation of the site. The requirement to prepare a full Travel Plan will be dealt with by a suitably worded planning condition.
- 3.10 A Construction Management Plan will be prepared prior to the start on site and this will be dealt with by a suitably worded planning condition.

## 4 Trip Forecast

### Trip Generation

- 4.1 TRICS has been used to forecast the traffic associated with the leisure centre. The following parameters have been set:
  - Land Use: 07 / Leisure / C / Leisure Centre
  - Parameter: Trip per 100sqm
  - Range: 1020 to 9600 (average: 3544sqm)
  - Days: Monday – Friday
  - Locations: Edge of Town Centre / Suburban Area / Edge of Town
- 4.2 The TRICS output is attached as Appendix G.
- 4.3 Table 4.1 provides a summary of the traffic flows. The flows are based on the leisure centre floor area of 1,950sqm. The retained gym building is an existing use at the site that is already allowed for in the existing site traffic flow surveys.

	Public Transport Trip Rate			Pedestrian Trip Rate			Cycle Trip Rate		
	(per 100sqm)			(per 100sqm)			(per 100sqm)		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	0.2	0.018	0.218	0.246	0.118	0.364	0.051	0.038	0.089
School Peak Hour	0.141	0.344	0.485	0.688	0.508	1.196	0.077	0.049	0.126
PM Peak Hour	0.2	0.177	0.377	0.826	0.79	1.616	0.059	0.074	0.133
	Vehicle Trip Rate			OGV Trip Rate			Coach Trip Rate		
	(per 100sqm)			(per 100sqm)			(per 100sqm)		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	0.454	0.423	0.877	0.003	0.003	0.006	0.005	0	0.005
School Peak Hour	0.893	0.567	1.46	0	0	0	0.003	0.003	0.006
PM Peak Hour	1.121	1.095	2.216	0	0	0	0	0	0

**Table 4.1:** Trip Rates

	Public Transport Trips			Pedestrian Trips			Cycle Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	4	0	4	5	2	7	1	1	2
School Peak Hour	3	7	9	13	10	23	2	1	2
PM Peak Hour	4	3	7	16	15	32	1	1	3
	Vehicle Trips			OGV Trips			Coach Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak Hour	9	8	17	0	0	0	0	0	0
School Peak Hour	17	11	28	0	0	0	0	0	0
PM Peak Hour	22	21	43	0	0	0	0	0	0

**Table 4.2:** Development Trips

#### Trip Distribution

- 4.4 The development vehicle trips have been distributed onto the network in line with surveyed patterns of movement. The development distribution is shown in Appendix C.

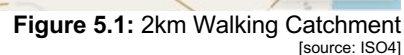
#### Base & Development Flows

- 4.5 The 2022 observed flows have been growthed to the future year (five years post-planning submission) using TEMPRO adjusted NTEM data for Copeland 008:

- AM Peak Hour: 1.0518
- School Peak Hour: 1.0475
- PM Peak Hour: 1.0475



- 5.1 A footway is provided on northern edge of the site access junction (circa 1.6m wide). Dropped kerbs and tactile paving are provided at the access. A further segregated pedestrian access to the site is available via Station Mews.
- 5.2 Continuing south from the site towards Millom, footways are provided on both sides of Salthouse Lane. 1.8-2.0m footways along both carriageway edges.
- 5.3 It is generally held that journeys under 2km offer the greatest potential to substitute a car trip. Figure 5.1 shows a 2km walking catchment from the site. This shows that the centre of Millom is within 500m of the site, the main residential areas all within a 1km catchment, and all of the built up area of Millom is within 2km.



- 5.4 The site is served by Millom train station, which is located 240m to the south. The station sits on the Cumbrian Coast Line which routes between Carlisle and Barrow-in-Furness. Monday to Saturday there are hourly services in each direction. A broadly hourly service is also provided on a Sunday.
- 5.5 There are no bus services in Millom (other than school services). School bus services stop to the south of the site in a lay-by area on Salthouse Lane, which is next to the junction with Station Mews and relates well to the segregated pedestrian site access.
- 5.6 Residents in Millom are eligible to sign up for a Rural Wheels smart card. Rural Wheels is an innovative solution for rural areas that enables members to organise transport from homes to key

destinations. Travel has to be organised in advance and is charged at 45p per mile for adults, 25p per mile for children between five and 18, and free for under five year olds. Transport is available between 8.30am and 6pm (Monday to Saturday). The service can be used for up to two return journeys per week for shopping, health and leisure trips.

- 5.7 The central location of the site and the proposed community use, means that there are ample opportunities to access on foot and by cycle for local trips, and train services for longer distance journeys.
- 5.8 The proposal includes clearly defined pedestrian routes across the site, cycle parking, and a Travel Plan. The proposal has also been designed to accommodate coach and school drop-off / collection movements. 10% of the modified car park area is EV standard.
- 5.9 The assessment shows that the site is well located within a short active mode trip distance of the community it will serve. NPPF states that planning decisions should ensure an integrated approach to considering the location of housing, economic uses and community facilities and services. NPPF supports developments in sustainable locations which allow a mix of uses to be provided across an area to minimise the number and length of journeys needed by residents. The proposed leisure centre is in line with this policy.

## 6 Impact Assessment

### Net Impact

- 6.1 Appendix C shows the net traffic impact at the junctions forming the study area for each period assessed and these are summarised in Table 6.1.

	AM Peak Hour	School Peak Hour	PM Peak Hour
Site Access Junction	14	23	31
Station Road / St George's Road Junction	17	28	43

**Table 6.1:** Net Impact

- 6.2 The assessment shows that the proposal will generate a minimal level of traffic in the periods assessed. The peak impact is forecast to occur in the PM when activity at the leisure centre will be highest. This is the only period when the traffic at the off-site junction will exceed DfT's significance threshold of 30 vehicles per hour.
- 6.3 The provision of a leisure centre on the site that already offers extensive community and education uses provides a good opportunity for existing site users to also visit the leisure centre while at the site, for example the school using the leisure centre or a parent dropping a student off at school or collecting a student from school may choose to visit the leisure centre as part of the existing trip. This type of activity would reduce the traffic impact from that shown in Table 4.2.
- 6.4 No allowance has been made for the above potential effects to allow a robust preliminary assessment of future conditions.

### Site Access Operation

- 6.5 The site access junction has been modelled using PICADY. The modelling output is attached as Appendix H with a summary provided below.

Movement	2028 AM Peak Hour				2028 School Peak Hour				2028 PM Peak Hour			
	Base		With Dev		Base		With Dev		Base		With Dev	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
Exiting site	0.04	0	0.05	0	0.09	0	0.11	0	0.05	0	0.09	0
Right turn in	0.09	0	0.11	0	0.04	0	0.06	0	0.01	0	0.04	0

**Table 6.1:** Modelling Output – Site Access

- 6.6 Table 6.1 shows that the site access will operate with sufficient spare capacity in both the AM and PM peak and school peak hours.

#### Station Road / St George's Road Operation

- 6.7 The roundabout has been modelled using ARCADY. The modelling output is attached as Appendix I with a summary provided below.
- 6.8 The junction is a three-arm mini-roundabout formed of St George's Road and Station Road but with a closely associated priority junction on the Station Road exit (Cambridge Street). Cambridge Street is marked as left turn only onto Station Road, away from the mini-roundabout. All movements have been captured in the survey, including those to and from Cambridge Street. The survey recorded some movements turning right from Cambridge Street which have been included in the roundabout flows for the modelling. Turns to Cambridge Street are also included, including those from Station Road which are modelled as a U-turn movement.

Approach	2028 AM Peak Hour				2028 School Peak Hour				2028 PM Peak Hour			
	Base		With Dev		Base		With Dev		Base		With Dev	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
SGR (N)	0.42	1	0.43	1	0.35	1	0.36	1	0.36	1	0.36	1
Station Rd	0.54	1	0.56	1	0.46	1	0.47	1	0.57	1	0.60	2
SGR (S)	0.62	2	0.63	2	0.56	1	0.57	1	0.64	2	0.66	2

**Table 6.2:** Modelling Output – Station Road / St George's Road

- 6.9 The baseline output shows that the roundabout operates well within capacity in both the AM and PM peak and school peak hours. The addition of the development traffic does not make a material difference when considered in this context.

#### Summary

- 6.10 The impact assessment has been undertaken using established appraisal methods. It shows that the junctions in the vicinity of the site are expected to operate within capacity with the forecast future demand levels with and without the development.
- 6.11 NPPF states that developments should only be prevented on highways grounds if there would be an unacceptable impact on highway safety or where residual cumulative impacts would be severe. The proposal is shown to not represent a severe impact in traffic terms.

## 7 Parking Assessment

### Parking Proposal

- 7.1 The layout provides a total of 115 parking spaces, including eight disabled parking spaces.

- 7.2 The current site is served by 74 parking spaces and the parking surveys show a maximum parking demand for 63 spaces.
- 7.3 CC's parking policy is set out in Appendix 1 of the Cumbria Design Guide. Appendix 1 shows that there are no adopted standards for leisure centre uses, in the absence of a parking standard the level of parking required for the new leisure centre has been based on a parking accumulation forecast using the TRICS traffic flows.

	Leisure Centre Traffic			Total Future Use Parking Demand
	In	Out	Total	
06:00-07:00	9	1	10	9
07:00-08:00	9	6	15	9
08:00-09:00	9	8	17	9
09:00-10:00	13	7	20	13
10:00-11:00	13	10	23	13
11:00-12:00	11	10	21	11
12:00-13:00	11	11	22	11
13:00-14:00	9	13	23	9
14:00-15:00	9	10	19	9
15:00-16:00	17	11	28	17
16:00-17:00	22	16	38	22
17:00-18:00	22	21	43	22
18:00-19:00	22	23	46	22

**Table 7.1:** Leisure Centre Parking Accumulation

- 7.4 The parking accumulation shows a maximum leisure centre demand of 22 spaces occurring between 4pm and 7pm.
- 7.5 The assessment shows that sufficient parking is provided to replace the existing provision (74 spaces) and accommodate the new leisure centre demand (22 spaces). Using this method a total of 96 parking spaces is required.
- 7.6 If future requirements are examined based on the surveyed maximum existing demand (63 spaces) and the maximum leisure centre demand, then 85 spaces is required. This level of demand is derived using a basic assessment where the two maximum demand levels are added together. This level of demand can be accommodated in the proposal.
- 7.7 In reality, the uses at the site generate maximum parking demand levels at different periods of the day. Table 7.2 shows the combined parking demand levels across the day.

	Total Future Traffic			Total Future Site Parking Demand
	In	Out	Total	
06:00-07:00	9	1	10	8
07:00-08:00	27	7	34	27
08:00-09:00	69	26	95	70
09:00-10:00	23	13	36	80
10:00-11:00	23	34	57	68
11:00-12:00	27	31	58	65
12:00-13:00	30	29	59	65
13:00-14:00	24	24	49	66
14:00-15:00	27	27	54	66
15:00-16:00	29	50	79	45
16:00-17:00	26	40	66	31
17:00-18:00	40	37	77	33
18:00-19:00	32	33	66	33

**Table 7.2:** Total Future Site Parking Accumulation

- 7.8 Table 7.2 shows that the combined site use parking demand level is 80 vehicles. This level of demand can be accommodated at the site.

#### Other Parking

- 7.9 While CC's adopted standard do not provide guidance on parking levels for leisure centre, it does provide advice on other leisure type uses that can be used to establish suitable levels of disabled and cycle parking at the site. The emerging Copeland Local Plan provides advice on EV charging levels. The standards are replicated in Table 7.3.

	Minimum Parking Standard
Disabled	5% of total car park
Bicycles	10% of total car park
EV	10% of total

**Table 7.3:** Minimum Parking Standards

- 7.10 The layout provides eight disabled parking spaces (a rate of 7%) in excess of the minimum standards.
- 7.11 12 cycle parking spaces are provided for the leisure centre, and these are located close to the new building. The proposal also requires the relocation of the 13 sheffield stand outside Millom Hub.
- 7.12 The proposal will provide at least eight EV parking spaces. Calculated as 10% of the reconfigured / new parking spaces in the layout (75 spaces affected).

#### Summary

- 7.13 There are no adopted parking standards for leisure centres, in the absence of this guidance a parking accumulation has been undertaken using the leisure centre traffic flows. This has been

combined with the surveyed parking demand at the site. The assessment confirms that sufficient parking is provided to meet existing and leisure centre demand at the site.

- 7.14 NPPF states that developments should only be prevented on highways grounds if there would be an unacceptable impact on highway safety or where residual cumulative impacts would be severe. The proposal provides sufficient parking to meet demand levels and will not result in severe road safety or amenity impacts.

## 8 Conclusions

- 8.1 SK has been appointed to prepare a TA to examine the impact of constructing a new purpose-built leisure centre, including swimming pool, on the Millom School site. The proposal includes a new leisure centre building (1,950sqm) and the retention of the existing gym building (215sqm). The existing changing rooms will be re-provided in the leisure centre building.
- 8.2 The assessment has been undertaken in line with standard appraisal methods. A 12-hour survey was undertaken at the site access junction to establish the existing parking demand associated with the current uses at the site (Millom School and Millom Hub). AM and PM peak period turning count surveys were also undertaken at the site access junction and the Station Road / St George's Road roundabout.
- 8.3 The accessibility analysis shows that the site is well located to in relation to the community it will serve, and existing infrastructure is in place to allow connections to these areas. The site is located near to Millom station. The proposal includes measures to support sustainable trip making including EV charging, cycle parking, clear pedestrian routes across the site, and a Travel Plan.
- 8.4 There are no adopted parking standards for a leisure centre development. The parking level at the site is based on the surveyed parking demand and the leisure centre parking demand forecast using TRICS. The assessment shows that sufficient parking is provided at the site to accommodate future forecast demand levels. Appropriate levels of disabled and EV parking is provided.
- 8.5 Vehicle access to the site is retained from the existing junction on Salthouse Lane. The site layout has been designed to accommodate the future parking demand and enable access by large vehicles (deliveries, refuse and coaches).
- 8.6 A trip forecast has been undertaken using TRICS and this has been combined with surveyed traffic flows to establish suitable base and base with development traffic flow scenarios. Industry standard modelling software has been used to test the operation of the development on the highway network. The assessments confirm that the additional traffic associated with the development will not have a significant impact on highway operation or road safety levels.
- 8.7 The traffic impact and road safety assessment show that the proposal will not have a severe impact on highway operation or unacceptable effects on road safety.

## Appendix A





**Roberts Limbrick**

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Registered Office England No. 06558029

**Project Name**

Millom Leisure Centre

**Client Name**

Alliance Leisure / Copeland BC

**Drawing Title**

Proposed Site Plan

**Scale**

1 : 500 • A1

**Project No.**

10930

**Status**

A3

**Purpose Of Issue**

Issued for Planning

Project	Org	Vol	Level	Form	Role
10930	• RL	• XX	• ZZ	• DR	• A

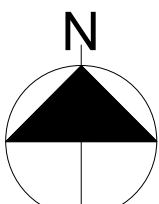
**Number**

**P2001**

**Revision**

**P02**

0 5 10 25 m



Site Boundary

Ownership Boundary



## Appendix B

Cohesion Consult  
Clarendon House  
Leeds  
LS27 7QT  
FAO Stuart Ainsley

Please Contact: Nick Hayhurst  
Officer Tel No: 07799075059  
My Ref: PAA/22/0077  
Date: 9 June 2022

Dear Sir

## **REQUEST FOR PRE-APPLICATION ADVICE**

**REFERENCE NUMBER: PAA/22/0077**

**RE: PROPOSED NEW LEISURE CENTRE ADJACENT TO THE SCHOOL**

**AT: MILLOM SCHOOL, SALTHOUSE ROAD, MILLOM**

Thank you for your pre-application request form which was received on 31/05/2022.

I have now had the opportunity to review the site on the Council's GIS mapping system and the information submitted as part of this enquiry. I would advise that planning permission will be required for this development.

### **Site Constraints**

- There are no protected trees on the site
- The site lies outside the Conservation Area and there are no Listed Buildings within the immediate vicinity of the site
- The site lies within the area where there is potential for natterjack toads to be present
- The southern section of the school complex is listed as an area where there may be potential contamination as it was formerly occupied by a brick and tile works and clay pit
- The site lies adjacent to Flood Zones 2 and 3

### **Planning Policy**

I would advise that the following policies of the Copeland Local Plan 2013 – 2028 relevant to this proposal are as follows:

- Policy ST1 – Strategic Development Principles

- Policy ST2 – Spatial Development Strategy
- Policy ST3 – Development Priorities
- Policy ST4 – Providing Infrastructure
- ER9 – Key Service Centres
- ER10 – Renaissance through tourism
- Policy T1 – Improving Accessibility and Transport
- SS4 – Community and Cultural Facilities and Services
- ENV 1 Flood Risk and Risk Management
- Policy ENV3 – Biodiversity and Geodiversity
- Policy ENV5 – Protecting and Enhancing the Borough's Landscapes
- Policy DM10 – Achieving Quality of Place
- Policy DM11 – Sustainable Development Standards
- DM21 – Protecting Community Facilities
- Policy DM22 – Accessible Developments
- DM24 – Development Proposals and Flood Risk
- Policy DM25 – Protecting Nature Conservation Sites, Habitats and Species
- Policy DM26 – Landscaping

You can access the Copeland Local Plan 2013 – 2028 using the link below. This contains details of the relevant policies listed above.

[http://www.copeland.gov.uk/sites/default/files/attachments/copeland\\_local\\_plan\\_2013\\_2028.pdf](http://www.copeland.gov.uk/sites/default/files/attachments/copeland_local_plan_2013_2028.pdf)

### **Emerging Copeland Local Plan**

The emerging Copeland Local Plan 2017-2035 has recently been the subject of a Publication Draft Consultation. The Publication Draft Consultation builds upon the previously completed Issues and Options and Preferred Options consultations. Given the stage of preparation of the Copeland Local Plan 2017-2035 some weight can be attached to policies within the Publication Draft where no objections have been received. The Publication Draft provides an indication of the direction of travel of the emerging planning policies, which themselves have been developed in accordance with the provisions of the National Planning Policy Framework.

The relevant policies include: DS2PU, DS3PU, DS5PU, SC1PU, SC2PU, SC3PU, DS1PU, DS6PU, DS7PU, DS8PU, DS9PU, DS10PU, DS11PU, SC4PU, N1PU and BE3PU.

You can access a copy of the Publication Draft using the link below:-

[Local Plan 2021-2038 Publication Draft Consultation | Copeland Borough Council](#)

### **Principle of Development**

The site is contained within the existing school complex which falls within the designated settlement boundary of Millom. Millom is listed under Policy ST2 as one of the Key Service Centres within the Borough where appropriately scaled development is supported.

You will recall that consideration has previously been given to a number of sites within Millom to accommodate the development proposed. The Local Planning Authority has previously advised that this site was the preferred location for a development of this nature as it relates well to the existing school complex and maximises sports provision on the site. The separation distances with nearby residential properties is also likely to help to mitigate its potential impact.

The proposals would provide enhanced sports and community facilities within Millom and the wider locality. This would accord with the provisions of Policies ST1 and SS4 and DM21 of the adopted Local Plan.

On this basis the principle of development on this site is considered to be acceptable.

## **Material Planning Considerations**

### Flood Risk and Drainage

The site lies adjacent to Flood Zones 2 and 3 as shown on the extract plan below which is taken from the Councils GIS layers:-



Consequently, any planning application should be accompanied by a Flood Risk Assessment and Drainage Strategy. It is important that any development on the site does not result in increased flood risk elsewhere. Any mitigation measures required should be clearly set out in the FRA.

### Highway Safety and Parking

Any planning application should be supported by a Transport Assessment to ensure that the existing highway network has capacity to accommodate the volume of traffic that is likely to be generated by this form of development.

Sustainable forms of transport should be encouraged, including connectivity between the site and the town centre for pedestrians and cyclists. A draft Travel Plan should also be submitted to support the application.

Parking should be provided to meet the requirements as set out in the Cumbria Development Design Guide.

### Ground Conditions

This site is not within an area known for coal mining.

Whilst the main area of the site is not known to have any contamination issues the southern section of the school land is known to have been occupied by a brick works and clay pit. On this basis any planning application should be accompanied by a Desktop Phase 1 report to cover these issues.

### Ecology and Nature Conservation

The whole of the school site and the surrounding land is listed as an area where there is potential for natterjack toads. You should submit an ecology assessment as part of your submission that provides clarity on this issue and sets out any mitigation measures that may be required.

The addition of additional landscaping to enhance the ecological benefit of the site is welcome and should be clearly documented.

### Trees and Landscaping

As the extension to the car park lies adjacent to some existing mature trees an Arboricultural Assessment should be provided to verify that this part of the site can be developed without having an adverse impact on these trees.

The application should also be supported by a full and detailed landscaping scheme which includes a scheme of proposed maintenance in order to help soften the visual appearance of the development.

### Landscape and Visual Assessment

Given that the proposed development will be within the existing school complex and will be viewed in connection with the existing building groups on site the impacts on the landscape are likely to be minimal. However, any Design and Access Statement should contain a section that considers this issue. Landscaping should be also considered in order to soften and minimise potential impacts from key view outside the site boundary.

### Layout, Scale and Appearance

It is assumed that the design of the building has not yet been finalised. As previously stated the siting adjacent to other buildings within the school complex will help to mitigate its impact within the locality.

It is accepted that the scale of the building is determined, to some extent, by its function. Notwithstanding this consideration should be given to the use of materials and colour to try and break up its bulk and scale and massing when viewed from outside the site.

The use of a contemporary design and the incorporation of active frontages is supported.

The use of appropriate boundary treatments needs to be given careful consideration to minimise the visual impact within the locality, particularly with regards to the service yard.

### Impacts on Residential Amenity

As the site is flanked by existing residential properties it is imperative that consideration is given to the potential impacts on residential amenity. Noise should be kept to a minimum and the buildings should be designed to contain noise. A Noise Assessment should be submitted to support the application.

The extent and positioning of any external lighting would also require careful consideration in order to minimise its impact on residential amenity.

### Sustainability

The incorporation of sustainable measures as part of the design of the building is welcome. Any generation of energy from on-site provision is also encouraged on the basis that any visual impact can be minimised.

### Impact on Provision of Sports Facilities

As the proposal involves the loss of some playground space it is essential that Sports England are involved in the proposals at an early stage. They are a key consultee and their support for the project is vital.

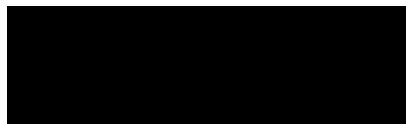
### **Summary**

The proposal to create additional sporting and community facilities on the existing school site is welcome. This is the best site to accommodate the scale and mixture of uses proposed. Its location within the settlement boundary of Millom, which is one of the Key Centres within the Local Plan, is acceptable in principle.

A number of material considerations need to be addressed as part of any planning application. This will require the submission of a number of supporting documents and relevant assessments as set out above.

The Local Planning Authority is keen to engage in proactive discussion to support the submission of a planning application for the proposals as outlined. We offer Pre application advice free of charge.

Please note that the advice in this letter is given in good faith on the basis of the information available at the present time. The advice may be subject to revision following further examination or consultation, or where additional information comes to light, and is therefore not binding on any future recommendation which may be made to the Council or any formal decision by the Council.



N. Hayhurst  
Head of Planning and Place

## Appendix C



**Site 1 of 2**  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

	Movement 1.1: Left from A5093 Salthouse Road (North) to Milom School Access								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	5	0	0	0	0	0	5	5.00
0745 - 0800	0	0	4	0	0	0	0	0	4	4.00
0800 - 0815	0	0	9	0	1	1	0	0	11	11.50
0815 - 0830	0	0	1	0	0	0	0	1	2	3.00
Hourly Total	0	0	19	0	1	1	0	1	22	23.50
Hourly Average	0.00	0.00	4.75	0.00	0.25	0.25	0.00	0.25	5.50	5.88
0830 - 0845	0	0	3	0	1	0	0	0	4	4.00
0845 - 0900	0	0	3	0	2	0	0	0	5	5.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	6	0	3	0	0	0	9	9.00
Hourly Average	0.00	0.00	1.50	0.00	0.75	0.00	0.00	0.00	2.25	2.25
Session Total	0	0	25	0	4	1	0	1	31	32.50
Session Average	0.00	0.00	3.13	0.00	0.50	0.13	0.00	0.13	3.88	4.06

**Weather**  
Sunny Intervals  
Temp: 12°C

	Movement 1.1: Left from A5093 Salthouse Road (North) to Milom School Access								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	1	0	1	0	0	0	2	2.00
1445 - 1500	0	0	2	0	0	0	0	0	2	2.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
Session Total	0	0	3	0	1	0	0	0	4	4.00
Session Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00

**Weather**  
Sunny Intervals  
Temp: 13°C

[illegible]

Cumbria  
Classified Junction Count

Site 1 of 2  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

Lat/Long  
lat 54.212977°° lon -3.270377°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 1.2: Southbound from A5093 Salthouse Road (North) to A5093 Salthouse Road (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	1	17	0	5	4	0	0	27	28.40
0745 - 0800	1	2	28	1	8	1	0	0	41	39.50
0800 - 0815	0	0	31	0	5	4	0	0	40	42.00
0815 - 0830	0	0	47	0	5	2	0	0	54	55.00
Hourly Total	1	3	123	1	23	11	0	0	162	164.90
Hourly Average	0.25	0.75	30.75	0.25	5.75	2.75	0.00	0.00	40.50	41.23
0830 - 0845	0	0	44	0	3	0	0	0	47	47.00
0845 - 0900	0	0	39	0	9	1	0	0	49	49.50
0900 - 0915	1	0	21	0	6	3	0	0	31	31.70
0915 - 0930	0	0	34	1	4	1	3	1	44	49.40
Hourly Total	1	0	138	1	22	5	3	1	171	177.60
Hourly Average	0.25	0.00	34.50	0.25	5.50	1.25	0.75	0.25	42.75	44.40
Session Total	2	3	261	2	45	16	3	1	333	342.50
Session Average	0.25	0.38	32.63	0.25	5.63	2.00	0.38	0.13	41.63	42.81

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 1.2: Southbound from A5093 Salthouse Road (North) to A5093 Salthouse Road (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	28	0	7	2	0	0	37	38.00
1445 - 1500	0	0	39	0	7	0	0	0	46	46.00
1500 - 1515	0	1	35	0	7	1	0	0	44	43.90
1515 - 1530	0	0	34	0	4	0	1	0	39	40.30
Hourly Total	0	1	136	0	25	3	1	0	166	168.20
Hourly Average	0.00	0.25	34.00	0.00	6.25	0.75	0.25	0.00	41.50	42.05
Session Total	0	1	136	0	25	3	1	0	166	168.20
Session Average	0.00	0.25	34.00	0.00	6.25	0.75	0.25	0.00	41.50	42.05

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 1.2: Southbound from A5093 Salthouse Road (North) to A5093 Salthouse Road (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	1	1	36	0	11	0	0	2	51	51.60
1645 - 1700	0	0	38	0	13	1	1	1	54	56.80
1700 - 1715	0	1	50	0	9	0	0	1	61	61.40
1715 - 1730	0	0	50	0	11	2	0	0	63	64.00
Hourly Total	1	2	174	0	44	3	1	4	229	233.80
Hourly Average	0.25	0.50	43.50	0.00	11.00	0.75	0.25	1.00	57.25	58.45
1730 - 1745	1	0	47	0	6	0	0	0	54	53.20
1745 - 1800	0	0	49	0	3	0	0	0	52	52.00
1800 - 1815	0	0	37	0	0	1	0	0	38	38.50
1815 - 1830	0	0	26	0	2	0	1	0	29	30.30
Hourly Total	1	0	159	0	11	1	1	0	173	174.00
Hourly Average	0.25	0.00	39.75	0.00	2.75	0.25	0.25	0.00	43.25	43.50
Session Total	2	2	333	0	55	4	2	4	402	407.80
Session Average	0.25	0.25	41.63	0.00	6.88	0.50	0.25	0.50	50.25	50.98

**Site 1 of 2**  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

Date  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

Date  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

Date  
Tuesday 01 November 2022

1630 - 1830 (Tuesday PM Peak)

[illegible]

**Site 1 of 2**  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

[illegible]

**Weather**  
Sunny Intervals  
Temp: 12°C

	Movement 1.4: Right from Millom School Access to A5093 Salhouse Road (North)								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
1500 - 1515	0	0	2	0	0	0	0	1	3	4.00
1515 - 1530	0	0	7	0	1	0	0	0	8	8.00
Hourly Total	0	0	9	0	1	0	0	1	11	12.00
Hourly Average	0.00	0.00	2.25	0.00	0.25	0.00	0.00	0.25	2.75	3.00
Session Total	0	0	9	0	1	0	0	1	11	12.00
Session Average	0.00	0.00	2.25	0.00	0.25	0.00	0.00	0.25	2.75	3.00

**Weather**  
Sunny Intervals  
Temp: 13°C

[illegible]

Cumbria  
Classified Junction Count

Site 1 of 2  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

Lat/Long  
lat 54.212977°° lon -3.270377°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 1.5: Northbound from A5093 Salthouse Road (South) to A5093 Salthouse Road (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	38	0	7	0	0	2	47	49.00
0745 - 0800	0	0	38	1	11	1	0	0	51	51.50
0800 - 0815	0	0	43	2	10	3	0	2	60	63.50
0815 - 0830	0	0	36	1	9	5	0	0	51	53.50
Hourly Total	0	0	155	4	37	9	0	4	209	217.50
Hourly Average	0.00	0.00	38.75	1.00	9.25	2.25	0.00	1.00	52.25	54.38
0830 - 0845	0	0	38	0	7	2	0	0	47	48.00
0845 - 0900	0	0	42	0	8	5	0	0	55	57.50
0900 - 0915	0	0	30	0	4	2	1	0	37	39.30
0915 - 0930	0	0	29	0	6	0	0	0	35	35.00
Hourly Total	0	0	139	0	25	9	1	0	174	179.80
Hourly Average	0.00	0.00	34.75	0.00	6.25	2.25	0.25	0.00	43.50	44.95
Session Total	0	0	294	4	62	18	1	4	383	397.30
Session Average	0.00	0.00	36.75	0.50	7.75	2.25	0.13	0.50	47.88	49.66

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 1.5: Northbound from A5093 Salthouse Road (South) to A5093 Salthouse Road (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	27	0	3	1	2	0	33	36.10
1445 - 1500	0	0	17	0	1	2	0	0	20	21.00
1500 - 1515	0	0	36	0	3	2	2	0	43	46.60
1515 - 1530	0	0	26	0	8	1	0	0	35	35.50
Hourly Total	0	0	106	0	15	6	4	0	131	139.20
Hourly Average	0.00	0.00	26.50	0.00	3.75	1.50	1.00	0.00	32.75	34.80
Session Total	0	0	106	0	15	6	4	0	131	139.20
Session Average	0.00	0.00	26.50	0.00	3.75	1.50	1.00	0.00	32.75	34.80

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 1.5: Northbound from A5093 Salthouse Road (South) to A5093 Salthouse Road (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	1	37	0	7	0	0	0	45	44.40
1645 - 1700	1	0	38	0	9	1	0	0	49	48.70
1700 - 1715	0	0	43	0	3	0	1	0	47	48.30
1715 - 1730	0	0	26	0	5	0	0	0	31	31.00
Hourly Total	1	1	144	0	24	1	1	0	172	172.40
Hourly Average	0.25	0.25	36.00	0.00	6.00	0.25	0.25	0.00	43.00	43.10
1730 - 1745	0	0	27	0	2	1	0	0	30	30.50
1745 - 1800	1	0	23	0	2	0	0	0	26	25.20
1800 - 1815	0	1	41	0	0	0	1	0	43	43.70
1815 - 1830	1	0	29	0	2	0	0	0	32	31.20
Hourly Total	2	1	120	0	6	1	1	0	131	130.60
Hourly Average	0.50	0.25	30.00	0.00	1.50	0.25	0.25	0.00	32.75	32.65
Session Total	3	2	264	0	30	2	2	0	303	303.00
Session Average	0.38	0.25	33.00	0.00	3.75	0.25	0.25	0.00	37.88	37.88

**Site 1 of 2**  
A5093 Salthouse Road (North)  
Millom School Access  
A5093 Salthouse Road (South)

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

	Movement 1.6: Right from A5093 Salthouse Road (South) to Milom School Access								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	2	0	0	0	0	0	2	2.00
0745 - 0800	0	0	6	0	0	0	0	0	6	6.00
0800 - 0815	0	0	6	0	0	1	0	0	7	7.50
0815 - 0830	0	0	9	0	2	0	0	1	12	13.00
Hourly Total	0	0	23	0	2	1	0	1	27	28.50
Hourly Average	0.00	0.00	5.75	0.00	0.50	0.25	0.00	0.25	6.75	7.13
0830 - 0845	0	0	11	1	0	0	0	4	16	20.00
0845 - 0900	0	0	6	0	0	0	0	0	6	6.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	1	0	2	0	0	0	0	0	3	2.20
Hourly Total	1	0	19	1	0	0	0	4	25	28.20
Hourly Average	0.25	0.00	4.75	0.25	0.00	0.00	0.00	1.00	6.25	7.05
Session Total	1	0	42	1	2	1	0	5	52	56.70
Session Average	0.13	0.00	5.25	0.13	0.25	0.13	0.00	0.63	6.50	7.09

**Weather**  
Sunny Intervals  
Temp: 12°C

	Movement 1.6: Right from A5093 Salthouse Road (South) to Milom School Access								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	1	0	0	0	0	1	2	3.00
1445 - 1500	0	0	2	0	0	0	0	4	6	10.00
1500 - 1515	0	0	2	0	1	0	0	0	3	3.00
1515 - 1530	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	8	0	1	0	0	5	14	19.00
Hourly Average	0.00	0.00	2.00	0.00	0.25	0.00	0.00	1.25	3.50	4.75
Session Total	0	0	8	0	1	0	0	5	14	19.00
Session Average	0.00	0.00	2.00	0.00	0.25	0.00	0.00	1.25	3.50	4.75

**Weather**  
Sunny Intervals  
Temp: 13°C

[illegible]

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.1: Left from Cambridge Street to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	2	0	0	0	0	0	2	2.00
0800 - 0815	0	0	3	0	0	0	0	0	3	3.00
0815 - 0830	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	8	0	0	0	0	0	8	8.00
Hourly Average	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
0830 - 0845	0	0	2	0	0	0	0	0	2	2.00
0845 - 0900	0	0	3	0	0	1	0	0	4	4.50
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
Hourly Total	0	0	6	0	1	1	0	0	8	8.50
Hourly Average	0.00	0.00	1.50	0.00	0.25	0.25	0.00	0.00	2.00	2.13
Session Total	0	0	14	0	1	1	0	0	16	16.50
Session Average	0.00	0.00	1.75	0.00	0.13	0.13	0.00	0.00	2.00	2.06

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.1: Left from Cambridge Street to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	1	0	0	0	0	0	1	1.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	2	0	0	0	0	0	2	2.00
Session Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.1: Left from Cambridge Street to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	2	0	0	0	0	0	2	2.00
1700 - 1715	0	0	1	0	0	0	0	0	1	1.00
1715 - 1730	0	0	2	0	2	0	0	0	4	4.00
Hourly Total	0	0	6	0	2	0	0	0	8	8.00
Hourly Average	0.00	0.00	1.50	0.00	0.50	0.00	0.00	0.00	2.00	2.00
1730 - 1745	0	0	1	0	0	0	0	0	1	1.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
1800 - 1815	0	0	3	0	0	0	0	0	3	3.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
Session Total	0	0	12	0	2	0	0	0	14	14.00
Session Average	0.00	0.00	1.50	0.00	0.25	0.00	0.00	0.00	1.75	1.75

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.2: Left from Cambridge Street to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	2	0	0	0	0	0	2	2.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	2	0	0	0	0	0	2	2.00
Session Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.2: Left from Cambridge Street to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	0	0	0	0	0	0	0	0.00
Session Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.2: Left from Cambridge Street to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
1800 - 1815	0	0	2	0	1	0	0	0	3	3.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
Session Total	0	0	2	0	1	0	0	0	3	3.00
Session Average	0.00	0.00	0.25	0.00	0.13	0.00	0.00	0.00	0.38	0.38



Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.3: Right from Cambridge Street to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
0800 - 0815	0	0	0	0	0	0	0	0	0	0.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0830 - 0845	0	0	0	0	2	0	0	0	2	2.00
0845 - 0900	0	0	0	0	0	0	0	0	0	0.00
0900 - 0915	0	0	0	0	0	0	0	0	0	0.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	2	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.50
Session Total	0	0	0	0	2	0	0	0	2	2.00
Session Average	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.3: Right from Cambridge Street to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	0	0	0	0	0	0	0	0.00
1445 - 1500	0	0	0	0	0	0	0	0	0	0.00
1500 - 1515	0	0	0	0	0	0	0	0	0	0.00
1515 - 1530	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
Session Total	0	0	1	0	0	0	0	0	1	1.00
Session Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.3: Right from Cambridge Street to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	0	0	0	0	0	0	0	0.00
1645 - 1700	0	0	0	0	0	0	0	0	0	0.00
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1730 - 1745	0	0	0	0	0	0	0	0	0	0.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	1	0	0	1	1.50
Hourly Total	0	0	0	0	0	1	0	0	1	1.50
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.38
Session Total	0	0	0	0	0	1	0	0	1	1.50
Session Average	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.13	0.19

**Site 2 of 2**  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

**Date**  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

Date  
Tuesday 01 November 2022

1630 - 1830 (Tuesday PM Peak)

[illegible]

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.5: Left from A5093 Station Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	18	0	4	2	0	0	24	25.00
0745 - 0800	0	1	22	1	5	1	0	0	30	29.90
0800 - 0815	0	0	34	0	4	4	0	0	42	44.00
0815 - 0830	1	0	48	0	6	2	0	0	57	57.20
Hourly Total	1	1	122	1	19	9	0	0	153	156.10
Hourly Average	0.25	0.25	30.50	0.25	4.75	2.25	0.00	0.00	38.25	39.03
0830 - 0845	0	0	55	0	4	0	0	3	62	65.00
0845 - 0900	0	0	42	0	6	1	0	0	49	49.50
0900 - 0915	0	0	23	0	5	2	0	1	31	33.00
0915 - 0930	0	0	30	1	6	0	1	1	39	41.30
Hourly Total	0	0	150	1	21	3	1	5	181	188.80
Hourly Average	0.00	0.00	37.50	0.25	5.25	0.75	0.25	1.25	45.25	47.20
Session Total	1	1	272	2	40	12	1	5	334	344.90
Session Average	0.13	0.13	34.00	0.25	5.00	1.50	0.13	0.63	41.75	43.11

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.5: Left from A5093 Station Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	32	0	5	1	0	0	38	38.50
1445 - 1500	0	0	40	0	8	0	0	0	48	48.00
1500 - 1515	0	1	28	0	4	1	0	0	34	33.90
1515 - 1530	0	1	32	0	5	0	1	0	39	39.70
Hourly Total	0	2	132	0	22	2	1	0	159	160.10
Hourly Average	0.00	0.50	33.00	0.00	5.50	0.50	0.25	0.00	39.75	40.03
Session Total	0	2	132	0	22	2	1	0	159	160.10
Session Average	0.00	0.50	33.00	0.00	5.50	0.50	0.25	0.00	39.75	40.03

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.5: Left from A5093 Station Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	1	2	41	0	11	0	0	1	56	55.00
1645 - 1700	0	0	38	0	10	0	0	0	48	48.00
1700 - 1715	1	1	51	0	7	0	1	2	63	64.90
1715 - 1730	0	0	46	0	10	0	0	0	56	56.00
Hourly Total	2	3	176	0	38	0	1	3	223	223.90
Hourly Average	0.50	0.75	44.00	0.00	9.50	0.00	0.25	0.75	55.75	55.98
1730 - 1745	0	0	38	0	4	0	0	1	43	44.00
1745 - 1800	0	1	42	0	3	0	0	0	46	45.40
1800 - 1815	0	0	34	0	2	1	0	0	37	37.50
1815 - 1830	0	0	17	0	0	0	1	0	18	19.30
Hourly Total	0	1	131	0	9	1	1	1	144	146.20
Hourly Average	0.00	0.25	32.75	0.00	2.25	0.25	0.25	0.25	36.00	36.55
Session Total	2	4	307	0	47	1	2	4	367	370.10
Session Average	0.25	0.50	38.38	0.00	5.88	0.13	0.25	0.50	45.88	46.26

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.6: Right from A5093 Station Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	1	7	0	1	2	0	0	11	11.40
0745 - 0800	0	1	9	0	4	0	0	0	14	13.40
0800 - 0815	0	0	9	0	2	1	0	0	12	12.50
0815 - 0830	0	0	10	0	0	0	0	1	11	12.00
Hourly Total	0	2	35	0	7	3	0	1	48	49.30
Hourly Average	0.00	0.50	8.75	0.00	1.75	0.75	0.00	0.25	12.00	12.33
0830 - 0845	0	0	21	0	1	0	0	1	23	24.00
0845 - 0900	0	0	13	0	1	0	0	0	14	14.00
0900 - 0915	0	0	3	0	0	1	0	0	4	4.50
0915 - 0930	0	0	5	0	2	2	2	0	11	14.60
Hourly Total	0	0	42	0	4	3	2	1	52	57.10
Hourly Average	0.00	0.00	10.50	0.00	1.00	0.75	0.50	0.25	13.00	14.28
Session Total	0	2	77	0	11	6	2	2	100	106.40
Session Average	0.00	0.25	9.63	0.00	1.38	0.75	0.25	0.25	12.50	13.30

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.6: Right from A5093 Station Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	11	0	2	1	0	0	14	14.50
1445 - 1500	0	0	11	0	1	0	0	0	12	12.00
1500 - 1515	0	0	29	0	3	0	0	5	37	42.00
1515 - 1530	0	0	13	0	1	0	0	0	14	14.00
Hourly Total	0	0	64	0	7	1	0	5	77	82.50
Hourly Average	0.00	0.00	16.00	0.00	1.75	0.25	0.00	1.25	19.25	20.63
Session Total	0	0	64	0	7	1	0	5	77	82.50
Session Average	0.00	0.00	16.00	0.00	1.75	0.25	0.00	1.25	19.25	20.63

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.6: Right from A5093 Station Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	17	0	3	0	0	0	20	20.00
1645 - 1700	0	0	10	0	2	1	0	0	13	13.50
1700 - 1715	0	0	10	0	3	0	0	0	13	13.00
1715 - 1730	0	0	20	0	2	2	0	0	24	25.00
Hourly Total	0	0	57	0	10	3	0	0	70	71.50
Hourly Average	0.00	0.00	14.25	0.00	2.50	0.75	0.00	0.00	17.50	17.88
1730 - 1745	0	0	16	0	2	0	0	0	18	18.00
1745 - 1800	0	0	16	0	0	0	0	0	16	16.00
1800 - 1815	0	1	12	0	1	0	0	0	14	13.40
1815 - 1830	0	0	11	0	1	0	0	0	12	12.00
Hourly Total	0	1	55	0	4	0	0	0	60	59.40
Hourly Average	0.00	0.25	13.75	0.00	1.00	0.00	0.00	0.00	15.00	14.85
Session Total	0	1	112	0	14	3	0	0	130	130.90
Session Average	0.00	0.13	14.00	0.00	1.75	0.38	0.00	0.00	16.25	16.36

**Site 2 of 2**  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

Date  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

**Date**  
Tuesday 01 November 2022

1630 - 1830 (Tuesday PM Peak)

[illegible]

**Site 2 of 2**  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

**Date**  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

Date  
Tuesday 01 November 2022

1630 - 1830 (Tuesday PM Peak)

[illegible]

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.9: Northbound from St George's Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	23	1	3	0	0	0	27	27.00
0745 - 0800	0	0	28	0	4	1	0	1	34	35.50
0800 - 0815	0	0	39	0	10	2	0	1	52	54.00
0815 - 0830	0	0	30	0	2	2	0	0	34	35.00
Hourly Total	0	0	120	1	19	5	0	2	147	151.50
Hourly Average	0.00	0.00	30.00	0.25	4.75	1.25	0.00	0.50	36.75	37.88
0830 - 0845	0	0	54	0	6	3	0	1	64	66.50
0845 - 0900	0	0	58	0	3	0	0	0	61	61.00
0900 - 0915	0	0	31	0	8	1	0	0	40	40.50
0915 - 0930	0	0	29	1	13	2	0	0	45	46.00
Hourly Total	0	0	172	1	30	6	0	1	210	214.00
Hourly Average	0.00	0.00	43.00	0.25	7.50	1.50	0.00	0.25	52.50	53.50
Session Total	0	0	292	2	49	11	0	3	357	365.50
Session Average	0.00	0.00	36.50	0.25	6.13	1.38	0.00	0.38	44.63	45.69

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.9: Northbound from St George's Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	44	0	2	0	0	0	46	46.00
1445 - 1500	0	0	45	0	7	1	0	0	53	53.50
1500 - 1515	0	0	68	0	3	0	0	0	71	71.00
1515 - 1530	0	0	68	0	5	0	0	0	73	73.00
Hourly Total	0	0	225	0	17	1	0	0	243	243.50
Hourly Average	0.00	0.00	56.25	0.00	4.25	0.25	0.00	0.00	60.75	60.88
Session Total	0	0	225	0	17	1	0	0	243	243.50
Session Average	0.00	0.00	56.25	0.00	4.25	0.25	0.00	0.00	60.75	60.88

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.9: Northbound from St George's Road to A5090 St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	62	0	7	0	0	1	70	71.00
1645 - 1700	0	0	71	0	6	0	0	1	78	79.00
1700 - 1715	1	0	66	0	2	1	0	0	70	69.70
1715 - 1730	2	0	39	0	3	0	0	0	44	42.40
Hourly Total	3	0	238	0	18	1	0	2	262	262.10
Hourly Average	0.75	0.00	59.50	0.00	4.50	0.25	0.00	0.50	65.50	65.53
1730 - 1745	1	0	43	0	0	0	0	0	44	43.20
1745 - 1800	0	0	42	0	2	0	0	0	44	44.00
1800 - 1815	0	0	42	0	2	0	0	0	44	44.00
1815 - 1830	1	1	40	0	5	0	0	0	47	45.60
Hourly Total	2	1	167	0	9	0	0	0	179	176.80
Hourly Average	0.50	0.25	41.75	0.00	2.25	0.00	0.00	0.00	44.75	44.20
Session Total	5	1	405	0	27	1	0	2	441	438.90
Session Average	0.63	0.13	50.63	0.00	3.38	0.13	0.00	0.25	55.13	54.86

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.10: Right from St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	1	0	1	0	0	0	2	2.00
0745 - 0800	0	0	5	0	2	0	0	0	7	7.00
0800 - 0815	0	0	4	0	3	0	0	0	7	7.00
0815 - 0830	0	0	7	1	0	0	0	0	8	8.00
Hourly Total	0	0	17	1	6	0	0	0	24	24.00
Hourly Average	0.00	0.00	4.25	0.25	1.50	0.00	0.00	0.00	6.00	6.00
0830 - 0845	0	0	1	0	1	0	0	0	2	2.00
0845 - 0900	0	0	10	0	0	0	0	0	10	10.00
0900 - 0915	0	0	6	0	4	0	0	0	10	10.00
0915 - 0930	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	20	0	5	0	0	0	25	25.00
Hourly Average	0.00	0.00	5.00	0.00	1.25	0.00	0.00	0.00	6.25	6.25
Session Total	0	0	37	1	11	0	0	0	49	49.00
Session Average	0.00	0.00	4.63	0.13	1.38	0.00	0.00	0.00	6.13	6.13

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.10: Right from St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	5	0	1	0	0	0	6	6.00
1445 - 1500	0	0	4	0	1	0	0	1	6	7.00
1500 - 1515	0	0	6	0	2	0	0	0	8	8.00
1515 - 1530	0	1	6	0	0	0	0	0	7	6.40
Hourly Total	0	1	21	0	4	0	0	1	27	27.40
Hourly Average	0.00	0.25	5.25	0.00	1.00	0.00	0.00	0.25	6.75	6.85
Session Total	0	1	21	0	4	0	0	1	27	27.40
Session Average	0.00	0.25	5.25	0.00	1.00	0.00	0.00	0.25	6.75	6.85

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.10: Right from St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	6	0	1	0	0	0	7	7.00
1645 - 1700	0	0	2	0	0	0	0	0	2	2.00
1700 - 1715	0	0	8	0	0	0	0	0	8	8.00
1715 - 1730	0	0	9	0	1	0	0	0	10	10.00
Hourly Total	0	0	25	0	2	0	0	0	27	27.00
Hourly Average	0.00	0.00	6.25	0.00	0.50	0.00	0.00	0.00	6.75	6.75
1730 - 1745	0	0	9	0	0	0	0	0	9	9.00
1745 - 1800	0	0	6	0	2	0	0	0	8	8.00
1800 - 1815	0	0	6	0	1	0	0	0	7	7.00
1815 - 1830	0	0	7	0	0	0	0	0	7	7.00
Hourly Total	0	0	28	0	3	0	0	0	31	31.00
Hourly Average	0.00	0.00	7.00	0.00	0.75	0.00	0.00	0.00	7.75	7.75
Session Total	0	0	53	0	5	0	0	0	58	58.00
Session Average	0.00	0.00	6.63	0.00	0.63	0.00	0.00	0.00	7.25	7.25



Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.11: Right from St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	23	0	9	0	0	1	33	34.00
0745 - 0800	0	0	21	1	5	1	0	0	28	28.50
0800 - 0815	0	0	28	2	6	2	0	2	40	43.00
0815 - 0830	0	0	31	0	7	3	0	0	41	42.50
Hourly Total	0	0	103	3	27	6	0	3	142	148.00
Hourly Average	0.00	0.00	25.75	0.75	6.75	1.50	0.00	0.75	35.50	37.00
0830 - 0845	0	0	33	1	5	2	0	1	42	44.00
0845 - 0900	0	0	31	0	6	3	0	0	40	41.50
0900 - 0915	0	0	23	0	3	1	0	1	28	29.50
0915 - 0930	0	0	17	0	4	0	0	0	21	21.00
Hourly Total	0	0	104	1	18	6	0	2	131	136.00
Hourly Average	0.00	0.00	26.00	0.25	4.50	1.50	0.00	0.50	32.75	34.00
Session Total	0	0	207	4	45	12	0	5	273	284.00
Session Average	0.00	0.00	25.88	0.50	5.63	1.50	0.00	0.63	34.13	35.50

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.11: Right from St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	17	0	1	1	1	1	21	23.80
1445 - 1500	0	0	15	0	1	0	1	3	20	24.30
1500 - 1515	0	0	26	0	3	1	1	0	31	32.80
1515 - 1530	0	0	13	0	4	1	0	0	18	18.50
Hourly Total	0	0	71	0	9	3	3	4	90	99.40
Hourly Average	0.00	0.00	17.75	0.00	2.25	0.75	0.75	1.00	22.50	24.85
Session Total	0	0	71	0	9	3	3	4	90	99.40
Session Average	0.00	0.00	17.75	0.00	2.25	0.75	0.75	1.00	22.50	24.85

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.11: Right from St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	1	28	0	6	0	0	0	35	34.40
1645 - 1700	0	0	28	0	7	1	0	0	36	36.50
1700 - 1715	0	0	39	0	3	0	1	0	43	44.30
1715 - 1730	0	0	24	0	3	0	0	0	27	27.00
Hourly Total	0	1	119	0	19	1	1	0	141	142.20
Hourly Average	0.00	0.25	29.75	0.00	4.75	0.25	0.25	0.00	35.25	35.55
1730 - 1745	0	0	26	0	1	1	0	0	28	28.50
1745 - 1800	0	0	22	0	1	0	0	0	23	23.00
1800 - 1815	0	0	41	0	1	0	1	0	43	44.30
1815 - 1830	0	0	24	0	2	0	0	0	26	26.00
Hourly Total	0	0	113	0	5	1	1	0	120	121.80
Hourly Average	0.00	0.00	28.25	0.00	1.25	0.25	0.25	0.00	30.00	30.45
Session Total	0	1	232	0	24	2	2	0	261	264.00
Session Average	0.00	0.13	29.00	0.00	3.00	0.25	0.25	0.00	32.63	33.00

**Site 2 of 2**  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Date  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

Date  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

Date  
Tuesday 01 November 2022

1630 - 1830 (Tuesday PM Peak)

[illegible]

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.13: Left from A5090 St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	3	0	0	0	0	0	3	3.00
0745 - 0800	0	0	0	0	1	0	0	0	1	1.00
0800 - 0815	0	0	5	0	0	0	0	0	5	5.00
0815 - 0830	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	0	0	13	0	2	0	0	0	15	15.00
Hourly Average	0.00	0.00	3.25	0.00	0.50	0.00	0.00	0.00	3.75	3.75
0830 - 0845	0	0	1	0	0	0	0	0	1	1.00
0845 - 0900	0	0	3	0	0	0	0	0	3	3.00
0900 - 0915	0	0	1	0	1	0	0	0	2	2.00
0915 - 0930	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	0	0	10	0	1	0	0	0	11	11.00
Hourly Average	0.00	0.00	2.50	0.00	0.25	0.00	0.00	0.00	2.75	2.75
Session Total	0	0	23	0	3	0	0	0	26	26.00
Session Average	0.00	0.00	2.88	0.00	0.38	0.00	0.00	0.00	3.25	3.25

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.13: Left from A5090 St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	2	0	0	0	0	0	2	2.00
1445 - 1500	0	0	2	0	1	0	0	0	3	3.00
1500 - 1515	0	0	1	0	1	1	0	0	3	3.50
1515 - 1530	0	0	8	0	0	0	0	0	8	8.00
Hourly Total	0	0	13	0	2	1	0	0	16	16.50
Hourly Average	0.00	0.00	3.25	0.00	0.50	0.25	0.00	0.00	4.00	4.13
Session Total	0	0	13	0	2	1	0	0	16	16.50
Session Average	0.00	0.00	3.25	0.00	0.50	0.25	0.00	0.00	4.00	4.13

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.13: Left from A5090 St George's Road to Cambridge Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	1	2	0	1	0	0	0	4	3.40
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
1700 - 1715	0	0	2	0	0	0	0	0	2	2.00
1715 - 1730	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	1	6	0	1	0	0	0	8	7.40
Hourly Average	0.00	0.25	1.50	0.00	0.25	0.00	0.00	0.00	2.00	1.85
1730 - 1745	0	0	2	0	0	0	0	0	2	2.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
1800 - 1815	0	0	4	0	0	0	0	0	4	4.00
1815 - 1830	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	12	0	0	0	0	0	12	12.00
Hourly Average	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00
Session Total	0	1	18	0	1	0	0	0	20	19.40
Session Average	0.00	0.13	2.25	0.00	0.13	0.00	0.00	0.00	2.50	2.43

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.14: Left from A5090 St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	13	0	0	0	0	0	13	13.00
0745 - 0800	0	0	12	0	3	1	0	0	16	16.50
0800 - 0815	0	0	12	0	4	1	0	0	17	17.50
0815 - 0830	0	0	14	1	3	2	0	1	21	23.00
Hourly Total	0	0	51	1	10	4	0	1	67	70.00
Hourly Average	0.00	0.00	12.75	0.25	2.50	1.00	0.00	0.25	16.75	17.50
0830 - 0845	0	0	19	0	3	0	0	3	25	28.00
0845 - 0900	0	0	12	0	2	1	0	0	15	15.50
0900 - 0915	0	0	4	0	0	1	1	0	6	7.80
0915 - 0930	0	0	8	0	1	0	0	0	9	9.00
Hourly Total	0	0	43	0	6	2	1	3	55	60.30
Hourly Average	0.00	0.00	10.75	0.00	1.50	0.50	0.25	0.75	13.75	15.08
Session Total	0	0	94	1	16	6	1	4	122	130.30
Session Average	0.00	0.00	11.75	0.13	2.00	0.75	0.13	0.50	15.25	16.29

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.14: Left from A5090 St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	10	0	2	0	1	1	14	16.30
1445 - 1500	0	0	13	0	1	2	0	0	16	17.00
1500 - 1515	0	0	12	0	1	1	0	0	14	14.50
1515 - 1530	0	0	9	0	3	0	0	0	12	12.00
Hourly Total	0	0	44	0	7	3	1	1	56	59.80
Hourly Average	0.00	0.00	11.00	0.00	1.75	0.75	0.25	0.25	14.00	14.95
Session Total	0	0	44	0	7	3	1	1	56	59.80
Session Average	0.00	0.00	11.00	0.00	1.75	0.75	0.25	0.25	14.00	14.95

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.14: Left from A5090 St George's Road to A5093 Station Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	8	0	1	0	0	0	9	9.00
1645 - 1700	0	0	6	0	1	0	0	0	7	7.00
1700 - 1715	0	0	9	0	1	0	0	0	10	10.00
1715 - 1730	0	0	9	0	1	0	0	0	10	10.00
Hourly Total	0	0	32	0	4	0	0	0	36	36.00
Hourly Average	0.00	0.00	8.00	0.00	1.00	0.00	0.00	0.00	9.00	9.00
1730 - 1745	0	0	5	0	2	0	0	0	7	7.00
1745 - 1800	0	0	12	0	0	0	0	0	12	12.00
1800 - 1815	0	0	11	0	0	0	0	0	11	11.00
1815 - 1830	1	0	3	0	0	0	0	0	4	3.20
Hourly Total	1	0	31	0	2	0	0	0	34	33.20
Hourly Average	0.25	0.00	7.75	0.00	0.50	0.00	0.00	0.00	8.50	8.30
Session Total	1	0	63	0	6	0	0	0	70	69.20
Session Average	0.13	0.00	7.88	0.00	0.75	0.00	0.00	0.00	8.75	8.65

Cumbria  
Classified Junction Count

Site 2 of 2  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

Lat/Long  
lat 54.210665°° lon -3.271908°°

Date  
Tuesday 01 November 2022

Weather  
Cloudy  
Temp: 9°C

0730 - 0930 (Tuesday AM Peak)

Movement 2.15: Southbound from A5090 St George's Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0730 - 0745	0	0	15	1	4	0	0	0	20	20.00
0745 - 0800	0	0	38	0	4	1	0	0	43	43.50
0800 - 0815	1	0	31	0	1	1	0	1	35	35.70
0815 - 0830	0	0	28	0	2	3	0	0	33	34.50
Hourly Total	1	0	112	1	11	5	0	1	131	133.70
Hourly Average	0.25	0.00	28.00	0.25	2.75	1.25	0.00	0.25	32.75	33.43
0830 - 0845	0	0	61	0	5	1	0	1	68	69.50
0845 - 0900	1	0	72	2	7	1	0	0	83	82.70
0900 - 0915	0	0	40	1	3	1	0	0	45	45.50
0915 - 0930	0	0	34	0	5	0	0	0	39	39.00
Hourly Total	1	0	207	3	20	3	0	1	235	236.70
Hourly Average	0.25	0.00	51.75	0.75	5.00	0.75	0.00	0.25	58.75	59.18
Session Total	2	0	319	4	31	8	0	2	366	370.40
Session Average	0.25	0.00	39.88	0.50	3.88	1.00	0.00	0.25	45.75	46.30

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 12°C

1430 - 1530 (Tuesday 1H Session)

Movement 2.15: Southbound from A5090 St George's Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1430 - 1445	0	0	45	0	9	1	0	0	55	55.50
1445 - 1500	0	0	50	0	2	0	0	0	52	52.00
1500 - 1515	0	0	42	0	3	0	0	0	45	45.00
1515 - 1530	0	0	52	0	5	0	0	0	57	57.00
Hourly Total	0	0	189	0	19	1	0	0	209	209.50
Hourly Average	0.00	0.00	47.25	0.00	4.75	0.25	0.00	0.00	52.25	52.38
Session Total	0	0	189	0	19	1	0	0	209	209.50
Session Average	0.00	0.00	47.25	0.00	4.75	0.25	0.00	0.00	52.25	52.38

Date  
Tuesday 01 November 2022

Weather  
Sunny Intervals  
Temp: 13°C

1630 - 1830 (Tuesday PM Peak)

Movement 2.15: Southbound from A5090 St George's Road to St George's Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1630 - 1645	0	0	56	0	8	0	0	1	65	66.00
1645 - 1700	0	0	57	0	5	0	0	2	64	66.00
1700 - 1715	0	0	56	0	1	0	0	0	57	57.00
1715 - 1730	0	0	46	0	4	0	0	0	50	50.00
Hourly Total	0	0	215	0	18	0	0	3	236	239.00
Hourly Average	0.00	0.00	53.75	0.00	4.50	0.00	0.00	0.75	59.00	59.75
1730 - 1745	0	0	46	0	2	0	0	0	48	48.00
1745 - 1800	0	0	50	0	2	0	0	0	52	52.00
1800 - 1815	0	0	35	0	5	0	0	0	40	40.00
1815 - 1830	0	1	27	0	3	0	0	0	31	30.40
Hourly Total	0	1	158	0	12	0	0	0	171	170.40
Hourly Average	0.00	0.25	39.50	0.00	3.00	0.00	0.00	0.00	42.75	42.60
Session Total	0	1	373	0	30	0	0	3	407	409.40
Session Average	0.00	0.13	46.63	0.00	3.75	0.00	0.00	0.38	50.88	51.18

**Site 2 of 2**  
Cambridge Street  
A5093 Station Road  
St George's Road  
A5090 St George's Road

**Date**  
Tuesday 01 November 2022

0730 - 0930 (Tuesday AM Peak)

**Date**  
Tuesday 01 November 2022

1430 - 1530 (Tuesday 1H Session)

Date  
Tuesday 01 November 2022

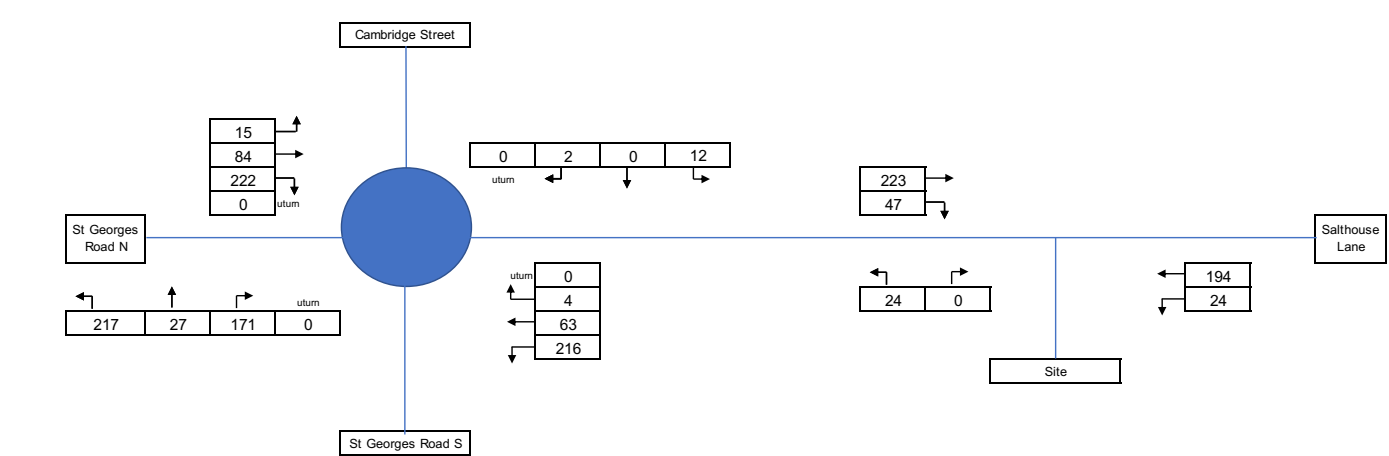
1630 - 1830 (Tuesday PM Peak)

[illegible]

## Appendix D

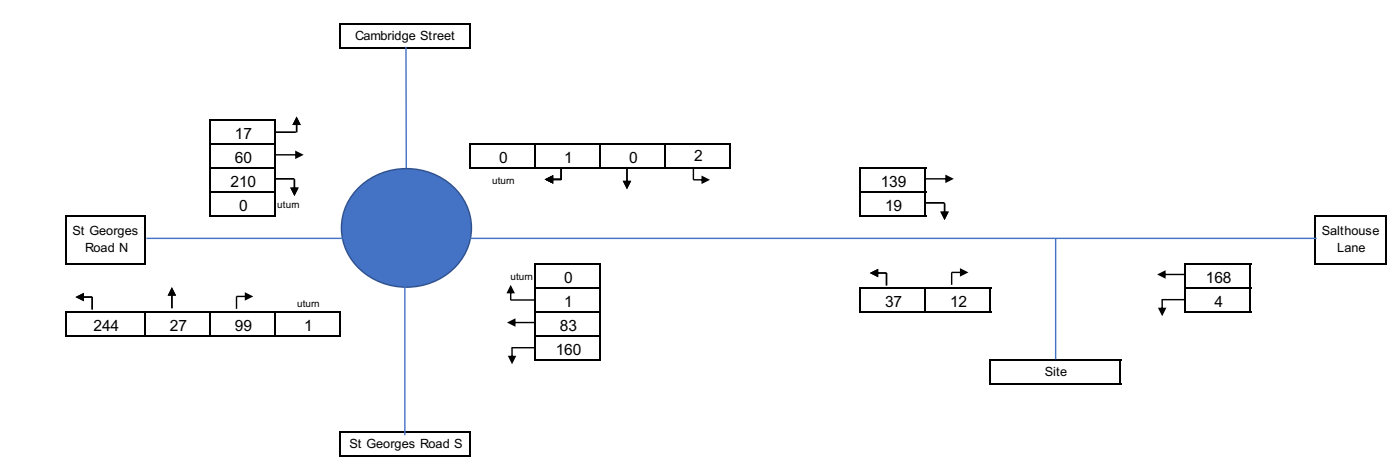
Millom Leisure Centre

AM Peak 2022 Observed Traffic Flows (in pcu): 8am - 9am



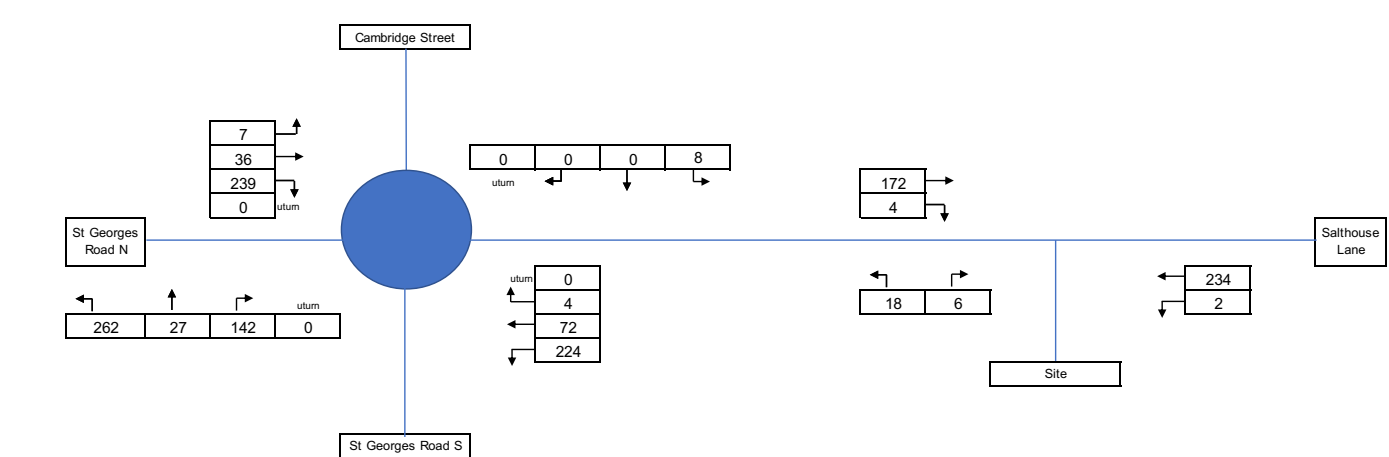
Millom Leisure Centre

School Peak 2022 Observed Traffic Flows (in pcu): 2.30pm - 3.30pm



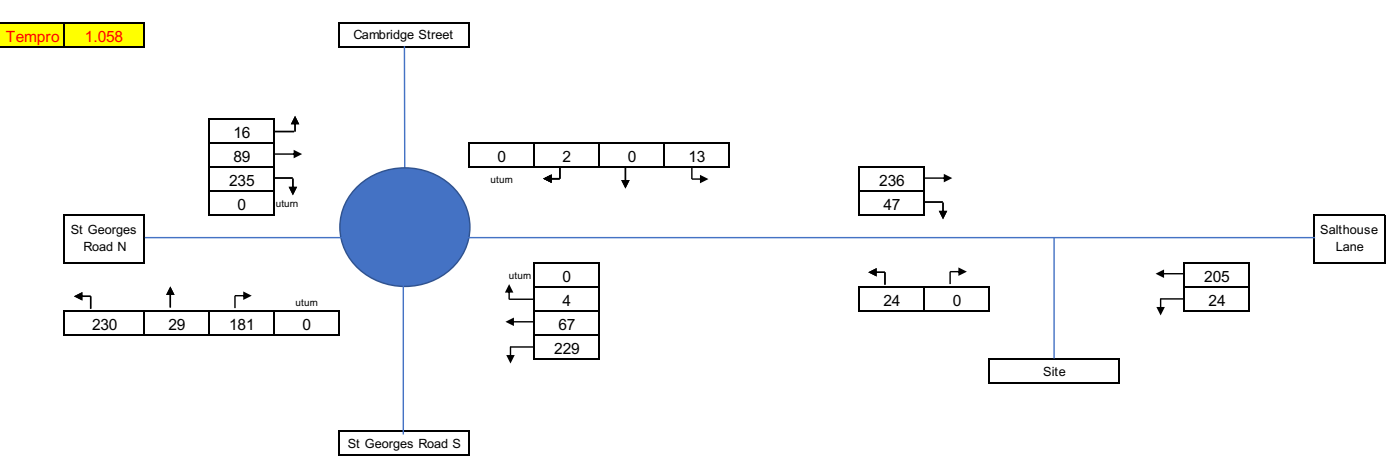
Millom Leisure Centre

PM Peak 2022 Observed Traffic Flows (in pcu): 4.30pm - 5.30pm



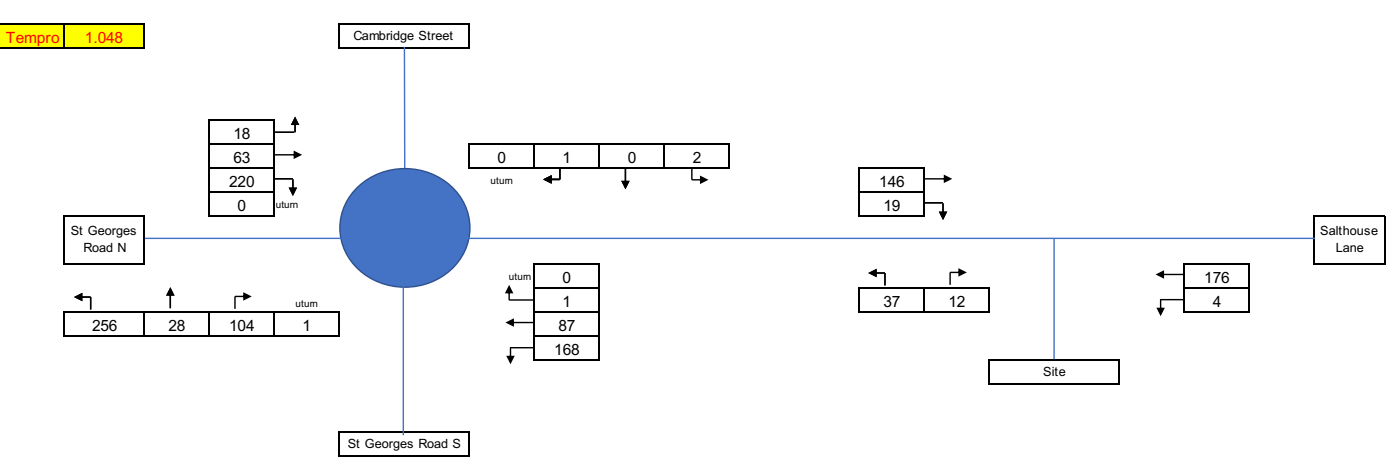
Millom Leisure Centre

AM Peak 2028 Observed Traffic Flows (in pcu)



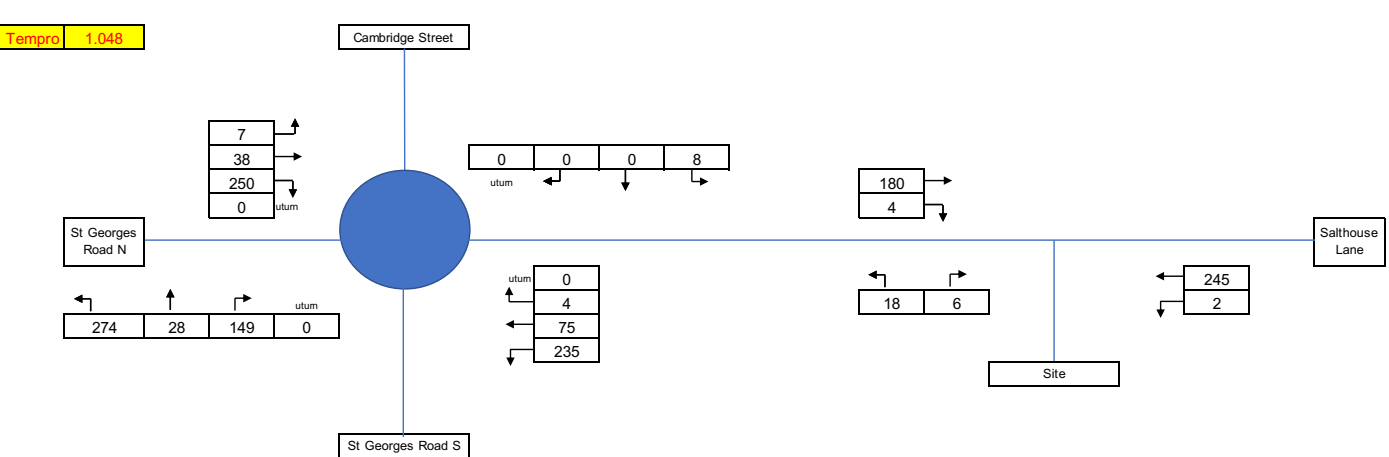
Millom Leisure Centre

School Peak 2028 Observed Traffic Flows (in pcu)



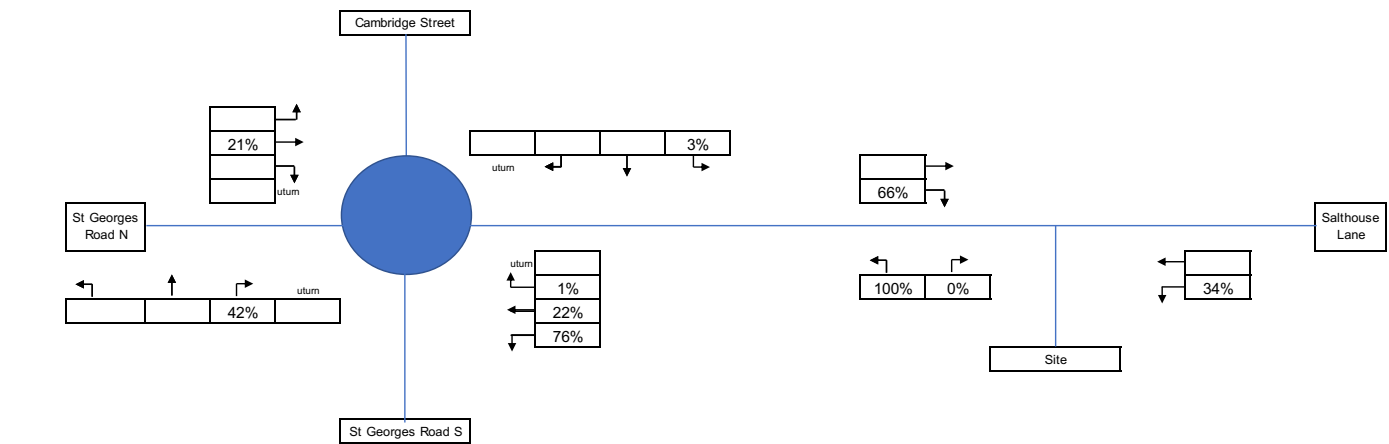
Millom Leisure Centre

PM Peak 2028 Observed Traffic Flows (in pcu)

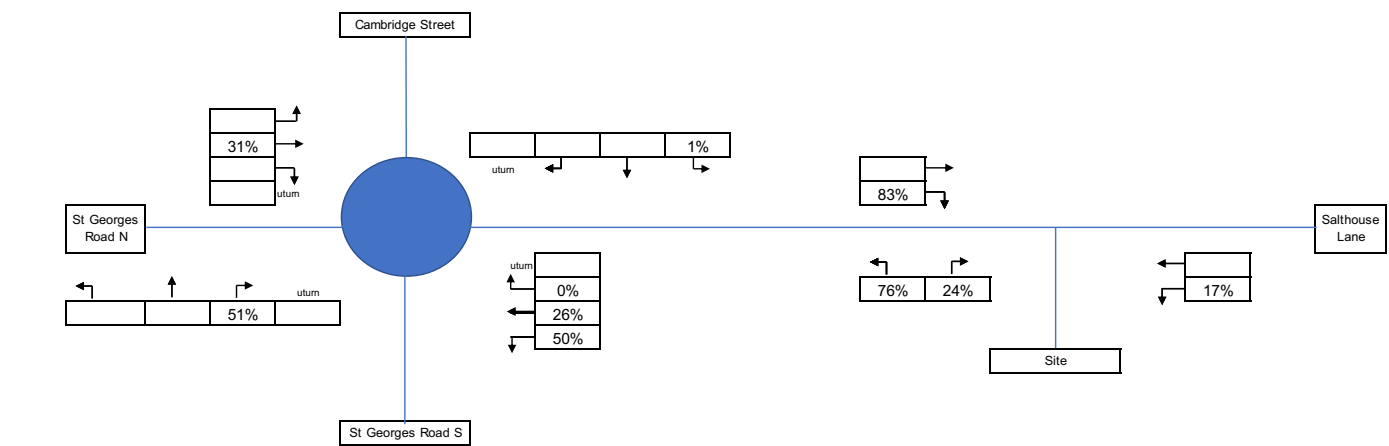




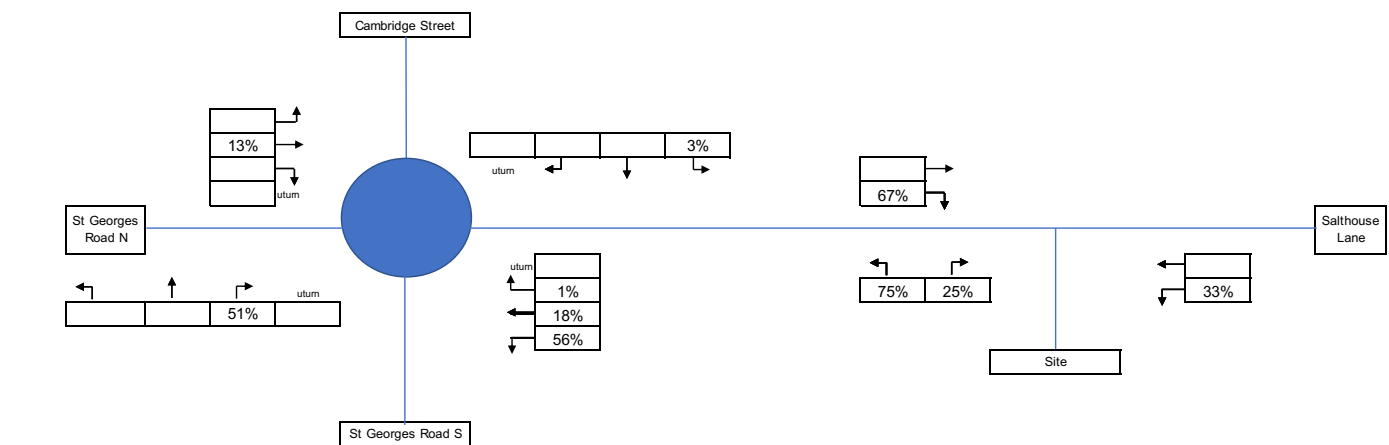
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AM Peak Distribution



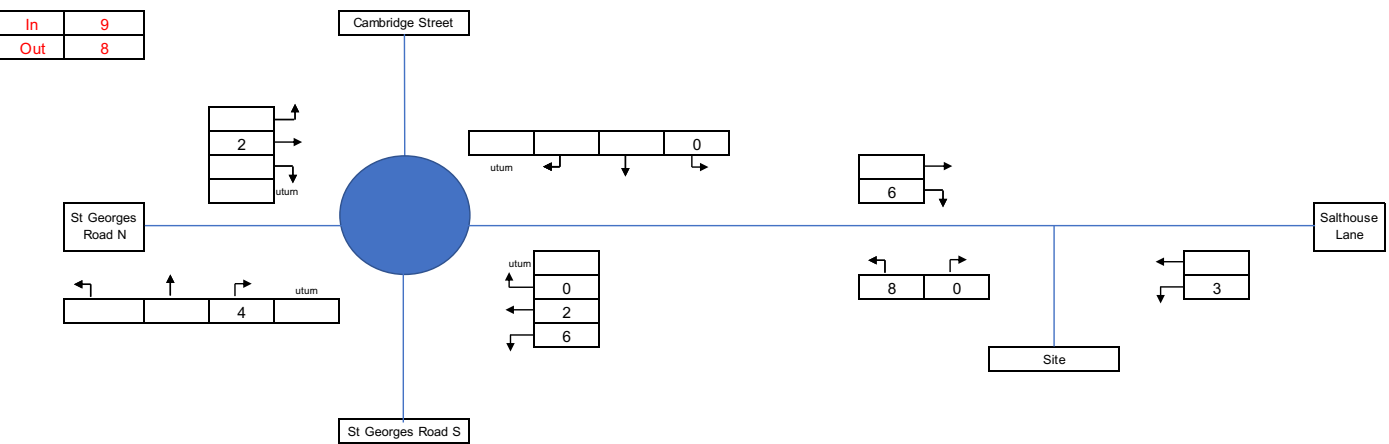
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School Peak Distribution



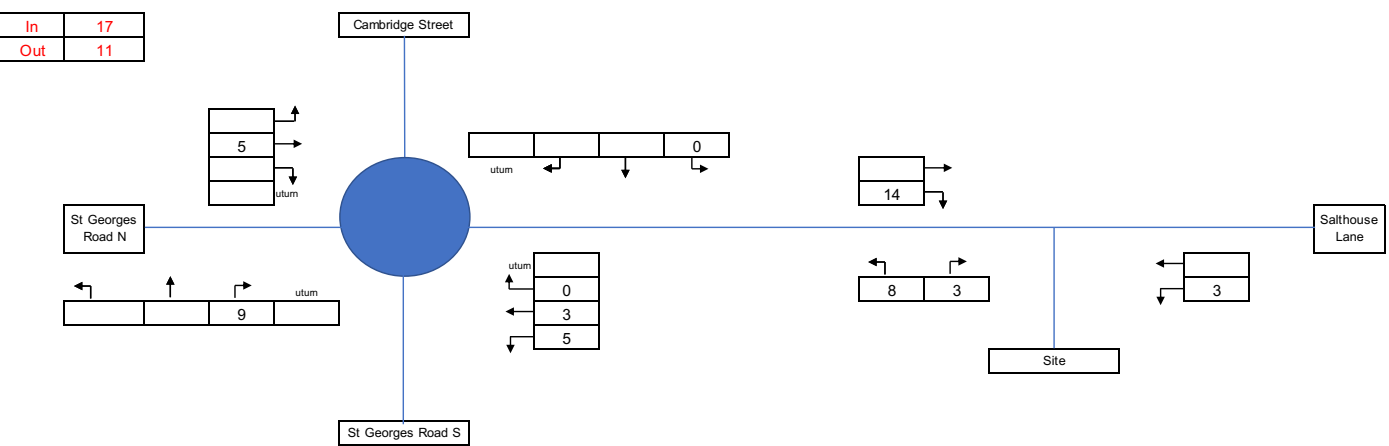
Millom Leisure Centre  
PM Peak Distribution



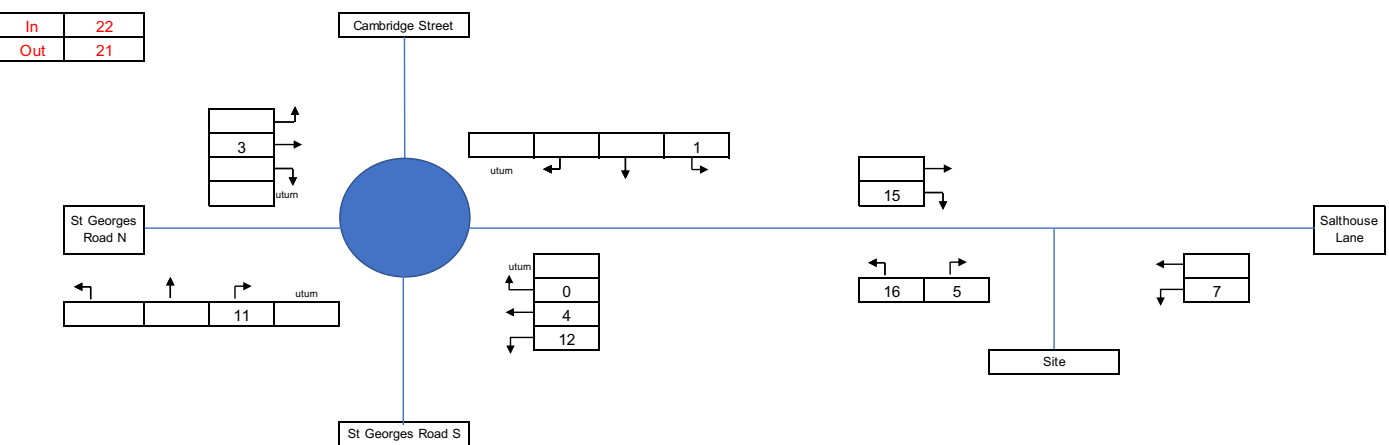
Millom Leisure Centre  
AM Peak Development Traffic Flows



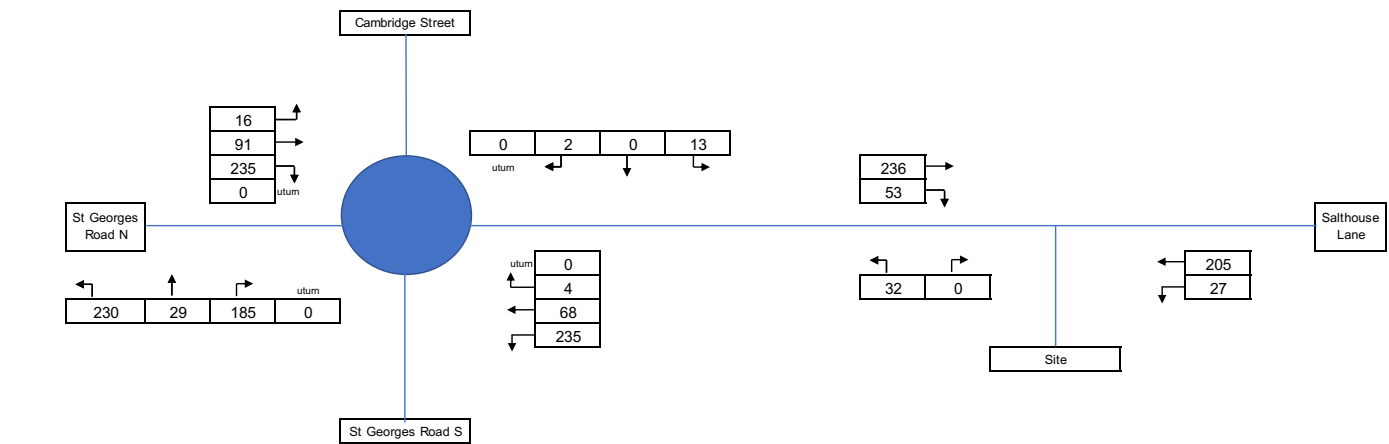
Millom Leisure Centre  
School Peak Development Traffic Flows



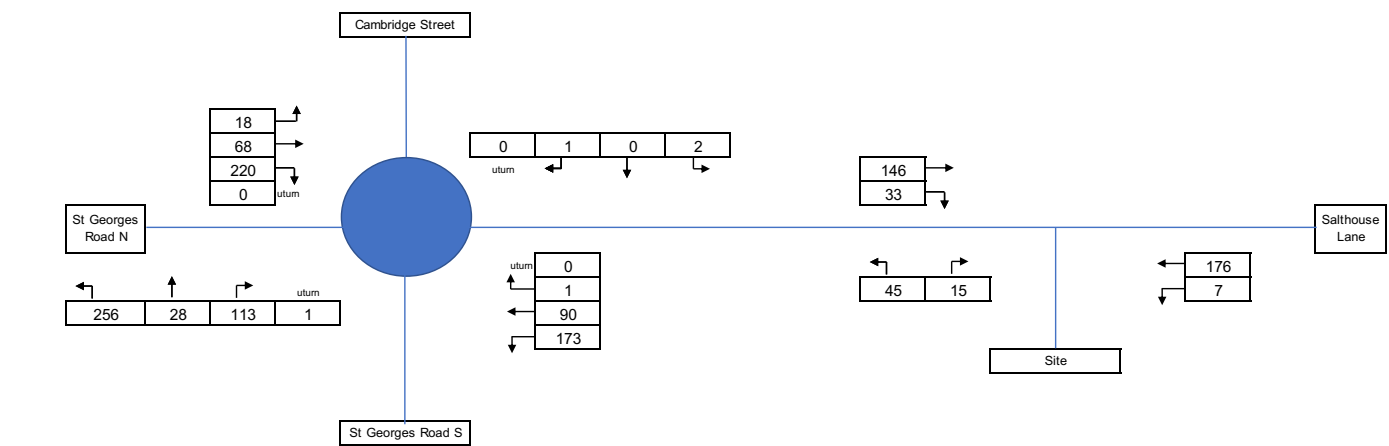
Millom Leisure Centre  
PM Peak Development Traffic Flows



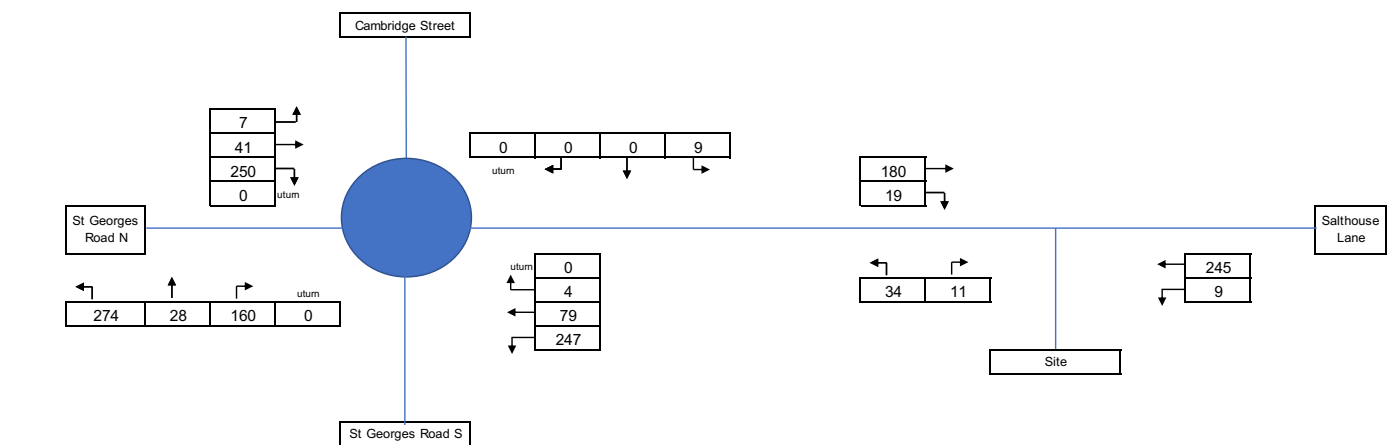
Millom Leisure Centre  
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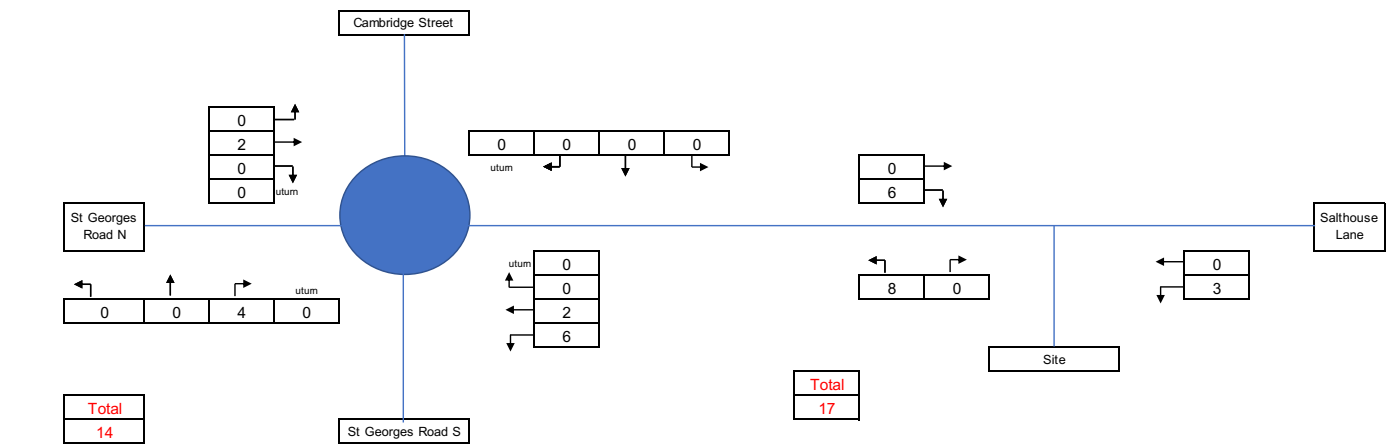
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AM Peak 2028 Base & Development Traffic Flows



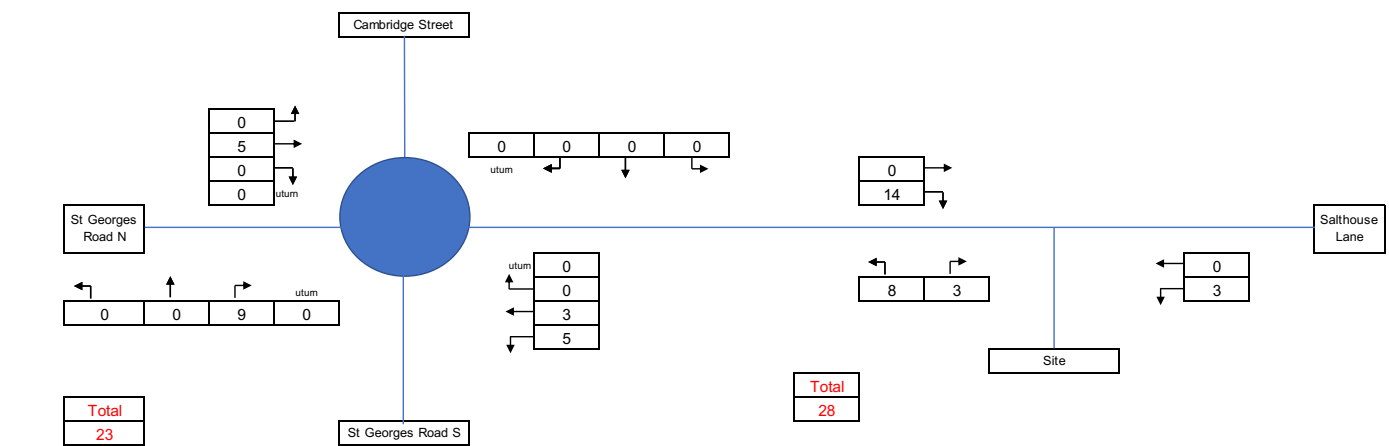
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AM Peak 2028 Base & Development Traffic Flows



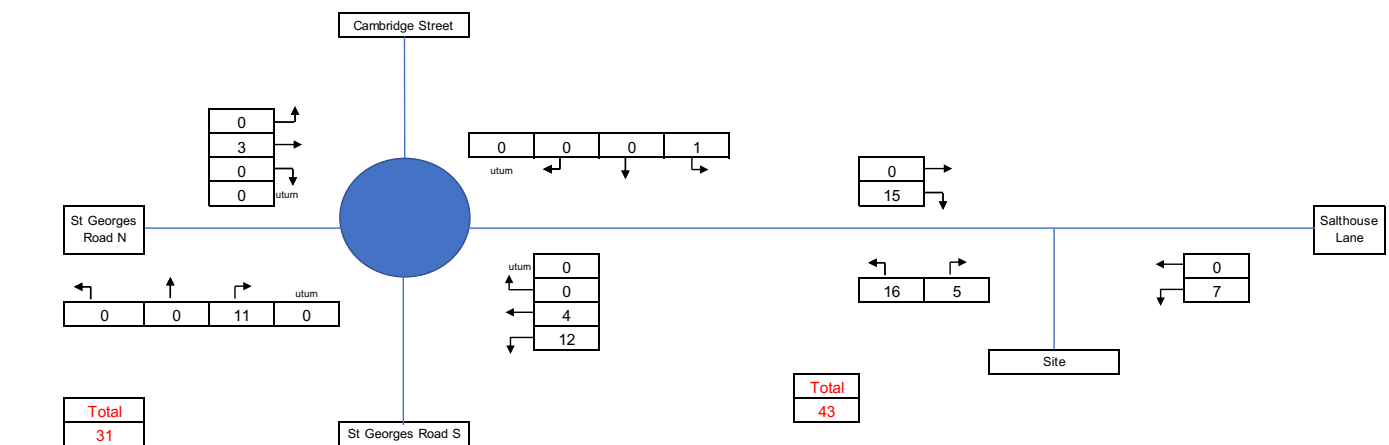
Millom Leisure Centre  
AM Peak Net Impact



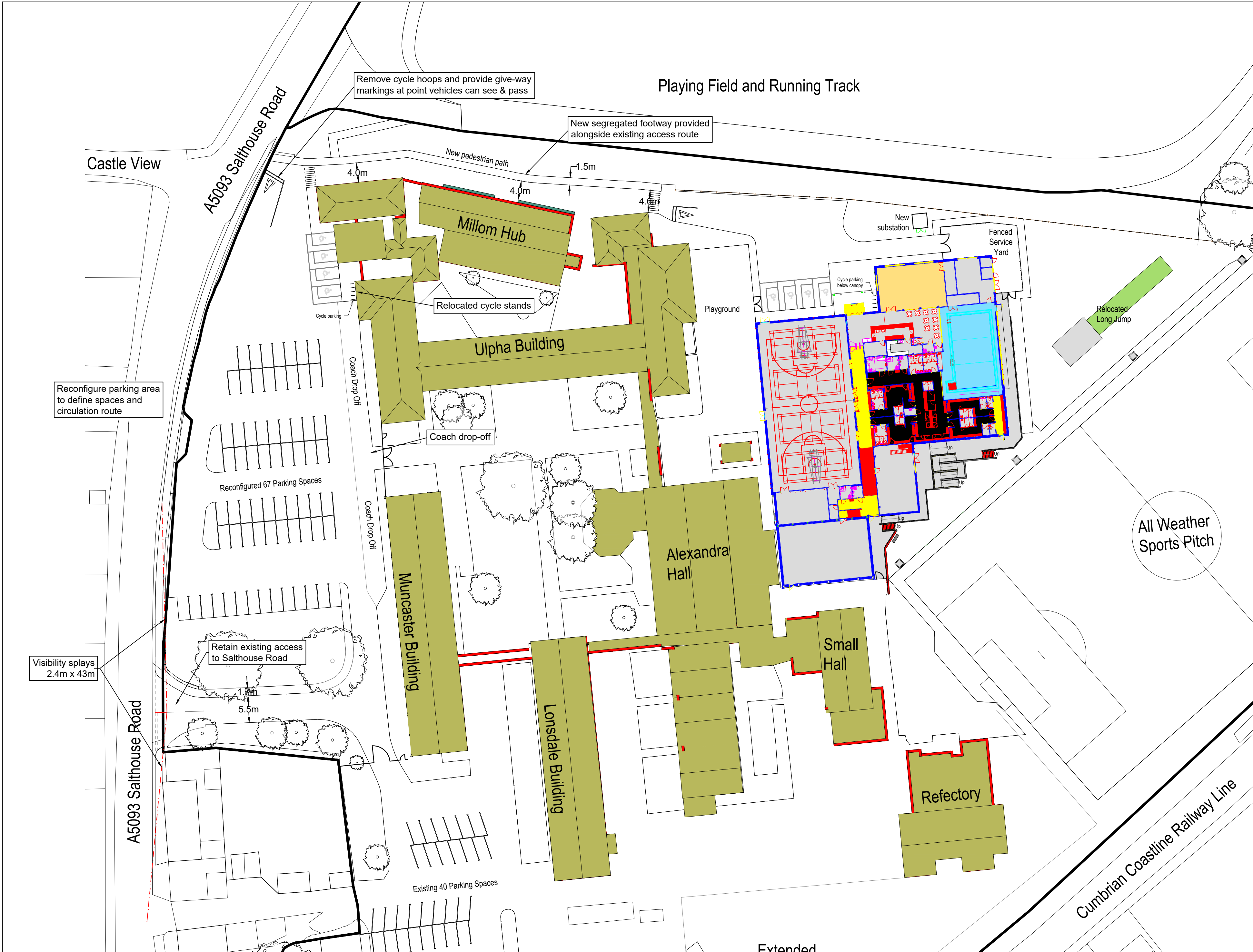
Millom Leisure Centre  
AM Peak Net Impact



Millom Leisure Centre  
AM Peak Net Impact



## Appendix E



THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES

Layout subject to detailed design and confirmation of statutory undertakers' equipment.

Revision Details		By Check	Date Suffix
Drawing Number			
SK22263-001			
Millom Leisure Centre			
Drawing Title			
Proposed Access Arrangement			
Scale at A2			
1:500			
Drawn		Approved	
JAT		LGS	
Check		Date	
LGS		06.07.23	
<div>SK</div> <div>SK Transport Planning Ltd Albion Wharf   Manchester   M1 5LN <a href="http://www.sktransport.co.uk">www.sktransport.co.uk</a> 0161 234 6509</div>			





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NOTES

Vehicle Profile

Large Refuse Vehicle (3 axle)	9.800m
Overall Length	2.450m
Overall Width	3.814m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Look to Look Time	4.00 sec
Kerb to Kerb Turning Radius	9.500m

Revision Details	By	Date	Suffix
	Check		

Drawing Number	SK22263-002		
Drawing Title	Millom Leisure Centre		
	Swept Path Analysis Refuse Collection Vehicle Accessing / Manoeuvring		
Scale at A2	1:500		
Drawn	JAT	Approved	LGS
Check	LGS	Date	06.07.23

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www.sktransport.co.uk  
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**NOTES**

Vehicle Profile

Large Refuse Vehicle (3 axle)	
Overall Length	9.800m
Overall Width	2.450m
Overall Body Height	3.814m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	9.500m

Revision Details	By	Date	Suffix
	Check		
Drawing Number			
SK22263-003			
Drawing Title			
Swept Path Analysis Refuse Collection Vehicle Leaving			
Scale at A2			
1:500			
Drawn	JAT	Approved	LGS
Check	LGS	Date	06.07.23
SK Transport Planning Ltd Albion Wharf   Manchester   M1 5LN www.sktransport.co.uk 0161 234 6509			

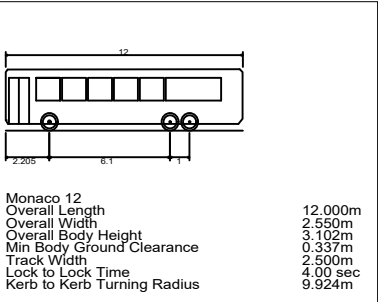





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WRITTEN DIMENSIONS SHALL BE USED

NOTES

Vehicle Profile



Revision Details		By	Date	Suffix
		Check		
Drawing Number				
SK22263-004				
Millom Leisure Centre				
Drawing Title				
Swept Path Analysis				
12m Coach				
Scale at A2				
1:500				
Drawn	JAT	Approved	LGS	
Check	LGS	Date	06.07.23	
				
SK Transport Planning Ltd				
Albion Wharf   Manchester   M1 5LN				
<a href="http://www.sktransport.co.uk">www.sktransport.co.uk</a>				
0161 234 6509				

## Appendix F



Millom Leisure Centre

Interim Travel Plan

230613/SK22263/ITP01(-00)

## Contents

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7 Objectives, Mode Share & Targets	9
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Project	Document	Rev	Description	Authorised by	Signed	Date
SK22263	ITP01	-00	-	L Speers	LGS	13/06/2023

## 1 Introduction & Background to the Development

### Background

- 1.1 SK has been appointed by Alliance Leisure to prepare an Interim Travel Plan to accompany a planning application for a purpose-built leisure centre, with swimming pool, at the Millom School and Millom Hub site.
- 1.2 A Transport Assessment (TA) has been prepared for the development and this should be referred to for details of the development layout and impact.

### Proposed Development

- 1.3 The proposed layout is attached as Appendix A of the TA.
- 1.4 The proposal will construct a new leisure centre at the site with a floor area of 1,950qm. The leisure centre includes swimming facilities and changing facilities. The existing gym building (125sqm) is retained.
- 1.5 Vehicle access to the site is retained from its existing location on Salthouse Lane. The existing geometry of the access is shown in Appendix E of the TA.
- 1.6 Pedestrian access will continue to be taken principally from the main access point on Salthouse Lane, the additional pedestrian routes crossing the site as described in Section 2 of the TA would offer supplementary access routes for pedestrians.
- 1.7 The layout shows a total of 115 parking spaces, including eight disabled parking spaces and eight EV parking spaces. The parking is achieved by modifying the car park outside Millom Hub and providing new areas of disabled parking adjacent to the Hub and leisure centre buildings. The lower car park is not changed by the proposal. The appropriateness of this level of parking to serve all uses at the site is set out in Section 7 of the TA.
- 1.8 Cycle parking is provided for 12 bikes close to the new leisure centre building. The 13 sheffield stands located near Millom Hub will be relocated as part of the proposal.
- 1.9 Service vehicles will be brought round the existing route past the Millom Hub to reach the leisure centre. Improvements to the route are proposed to provide segregation for pedestrians and to identify waiting locations at which vehicles can check whether another vehicle is approaching. A turning area will be provided to allow service and delivery vehicles to reverse to the service yard area. Swept path analysis for relevant vehicle types is provided in Appendix E of the TA.
- 1.10 A coach drop-off area will be provided in the main parking area in the western part of the site, with the parking area markings refreshed to ensure that a suitable circulation route is kept clear for coaches. Swept path analysis for a coach accessing the drop-off area is also shown in Appendix E of the TA.

## 2 Travel Plan Process, Benefits & Objectives

### Travel Plan Process

- 2.1 Annex 2 (page 73) of NPPF<sup>1</sup> states that a Travel Plan is:  
  
‘A long-term management strategy for an organization or site that seeks to deliver sustainable transport objectives and is regularly reviewed.’
- 2.2 A Travel Plan is a tool for managing access to a site that sets out a management strategy that seeks to promote sustainable travel choices and reduce single occupancy car use to achieve stated objectives. It should contain a package of measures designed to meet the objective to

<sup>1</sup> Ministry of Housing, Communities & Local Government (2021), National Planning Policy Framework

reduce single-occupancy car use generated from the site by supporting sustainable modes of transport, where practicable.

- 2.3 A Travel Plan should include a mixture of site infrastructure measures and marketing measures to assist the plan to meet defined objectives. Within a Travel Plan there is a need to set objectives, targets and indicators, the purpose of which is to monitor change and review policies overtime to allow it to meet the needs of the users of a site.
- 2.4 In line with NPPF, the measures adopted in a Travel Plan should be commensurate with the scale of impact from the development and should acknowledge the infrastructure that is delivered as part of the development, and the type and use of the development.
- 2.5 The preparation of an Interim Travel Plan is the first stage of the process that is prepared for a planning application and allows measures and management methods to be set out that will be considered for inclusion in the full Travel Plan for a site on occupation. This report is an Interim Plan that presents a number of elements for consideration for inclusion in the full version of the Plan. The requirement to prepare a full Travel Plan will be a condition of planning.
- 2.6 The Travel Plan draws on the following guidance and best practice:
  - Department for Transport (2008), Delivering Travel Plans through the Planning Process
  - Department for Transport (2020), Decarbonising Transport: Setting the Challenge
  - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places
  - Copeland Borough Council (2013), Copeland Local Plan 2013 – 2028
  - Copeland Borough Council (2022), Emerging Copeland Local Plan 2017 – 2035
  - Cumbria County Council (2017), Cumbria Design Guide
  - Ministry of Housing, Communities & Local Government (2016), Planning Practice Guidance
  - Ministry of Housing, Communities & Local Government (2021), National Planning Policy Framework

#### Travel Plan Pyramid

- 2.7 Department for Transport<sup>2</sup> (DfT) states it is helpful to:

‘... view the Travel Plan as a pyramid of measures and actions, some of which may form the foundations of the Travel Plan and part of which will be outcomes from the Transport Assessment.’
- 2.8 The DfT pyramid (shown in Figure 2.1) views the Travel Plan process as a series of considerations that is constructed from the ground up, with each new layer building on the last within the context of objectives sought.
- 2.9 At the bottom of the pyramid is the location of the site and at this stage characteristics of access to the site by all modes of travel. This assessment is set out in Section 3 and 4 of the Plan.
- 2.10 At the next level the physical aspects of the proposed development are set out to allow acknowledgement of that some Travel Plan measures are built-in to the layout to influence travel. This information is as set out above in Section 1 and in Section 6.
- 2.11 The remaining levels outline the management, promotion and *soft* measures that are to be adopted as part of the travel plan to reinforce the site location, infrastructure proposals and access opportunities. These are set out in Sections 5 and 6 of the Plan.
- 2.12 Sections 7 and 8 sets out the monitoring plan which details how and when the Travel Plan will be reviewed. This includes how and when surveys will be undertaken, and the targets that will be set to meet the stated objectives.
- 2.13 Section 9 provides a summary of the actions identified in the Travel Plan along with initial timescales for implementation.

---

<sup>2</sup> Department for Transport (2007), Making Residential Travel Plans Work



**Figure 2.1: Travel Plan Pyramid**  
[source: DfT]

#### Travel Plan Benefits

- 2.14 Travel Plans result in a variety of health, financial, environmental and site operation benefits, which are set out below.
- 2.15 Reduced levels of single occupancy car use can lead to an improvement in air quality both surrounding the site and across the wider area. In addition, increases in active travel have very real impact on community health as moderate physical activity can help prevent obesity, mental health issues, cancer, high blood pressure and cardiovascular disease.
- 2.16 The financial benefits of Travel Plans include personal cost savings from using more cost-effective modes of travel and indirect and wider cost savings relating to reduced illness and reduced accident rates.
- 2.17 The environmental benefits of Travel Plans include reduced carbon emissions and air quality issues.
- 2.18 Travel Plans also bring societal benefits including a happier and healthier community, and more social interaction.

#### Travel Plan Aims

- 2.19 The aims of the Travel Plan are to:

**Aim 1:** To maximise trips by active / sustainable modes of travel.

**Aim 2:** To reduce the number of single occupancy private car trips.

## Travel Plan Objectives

- 2.20 The aims of the Travel Plan will be achieved through the delivery of the following objectives:

- Objective 1:** Raise awareness of the travel options available to site users.
- Objective 2:** Provide travel information site users.
- Objective 3:** Investigate measures to promote the use of alternative modes of travel.
- Objective 4:** Periodically evaluate / review the transport needs of site users.

## 3 Site Location & Local Highway Network

### Site Location

- 3.1 Figure 3.1 shows that the site is located within an existing school complex (Millom School), just to the north of the centre of Millom. The site falls within a Key Service Centre.
- 3.2 The school complex includes secondary education facilities and community facilities at Millom Hub.
- 3.3 The area of the site to be used for the development is the site of the former swimming pool and the existing school changing rooms (floor area 390sqm) and public gym (floor area of 215sqm). The changing rooms will be re-provided by the development and the gym building will be retained.
- 3.4 The location of the site offers opportunities for linked trips with the existing site education and community facilities, and also easy access from the town centre amenity destinations.

### Millom School

- 3.5 The school complex provides secondary education facilities for 515 students (including 31 sixth formers). The school employs a total of 86 staff (including part-time and casual staff).
- 3.6 The school is open between 8:45 and 15:00. Before and after school clubs are offered to students to help spread arrivals / departures and meet the requirements of parents / guardians.
- 3.7 The school complex currently provides indoor sports facilities and outdoor pitches, including a MUGA and running track (Millom Community Track).

### Millom Hub

- 3.8 Millom Hub offers extensive community services including a library, community learning, revenue and benefits advice, council services and NHS / police base.
- 3.9 Millom Hub has a floor area of 665qm.



**Figure 3.1: Site Location**  
[source: ISO4]

#### Site Parking Arrangements & Access

- 3.10 Parking is provided at various locations at the site. A marked parking area is located to the southwest of the school and provides circa 33 spaces. The parking area outside Millom Hub provides circa 32 spaces (including two disabled spaces). Parking activity also occurs to the north of the school building, with space for six cars. Three disabled spaces are located outside the existing sports area.
- 3.11 There are circa 74 parking spaces across the site in marked and unmarked locations.
- 3.12 There are cycle stands outside Millom Hub providing space for 26 bikes.
- 3.13 Vehicle access to the site is provided from Salthouse Lane (A5093), which routes north-south along the site's western boundary. The vehicle access is a simple priority layout with setback gates. Keep clear zig zag markings are provided across the give-way line and opposite the access double yellow lines are provided on the western carriageway edge of Salthouse Lane. In the vicinity of the site, Salthouse Lane is a 30mph single carriageway road of 7m+ width and with 1.8-2.0m footways along both carriageway edges.
- 3.14 The access road is 6m wide with a 1.6m wide footway on the northern carriageway edge. Visibility splays of 2.4m x 43m are available in both directions. The visibility splay to the north crosses the boundary treatment on the northern side of the access junction, but this is a low wall that would not impede a driver's view to a significant degree.
- 3.15 Travelling south on Salthouse Lane provides access to residential areas to the west of the site via the junction with Holborn Hill. Continuing south on Salthouse Lane from this point becomes Station Road (A5093) and it provides access to the centre of Millom and residential areas to the southeast of the town.

#### Road Safety & Traffic Flows

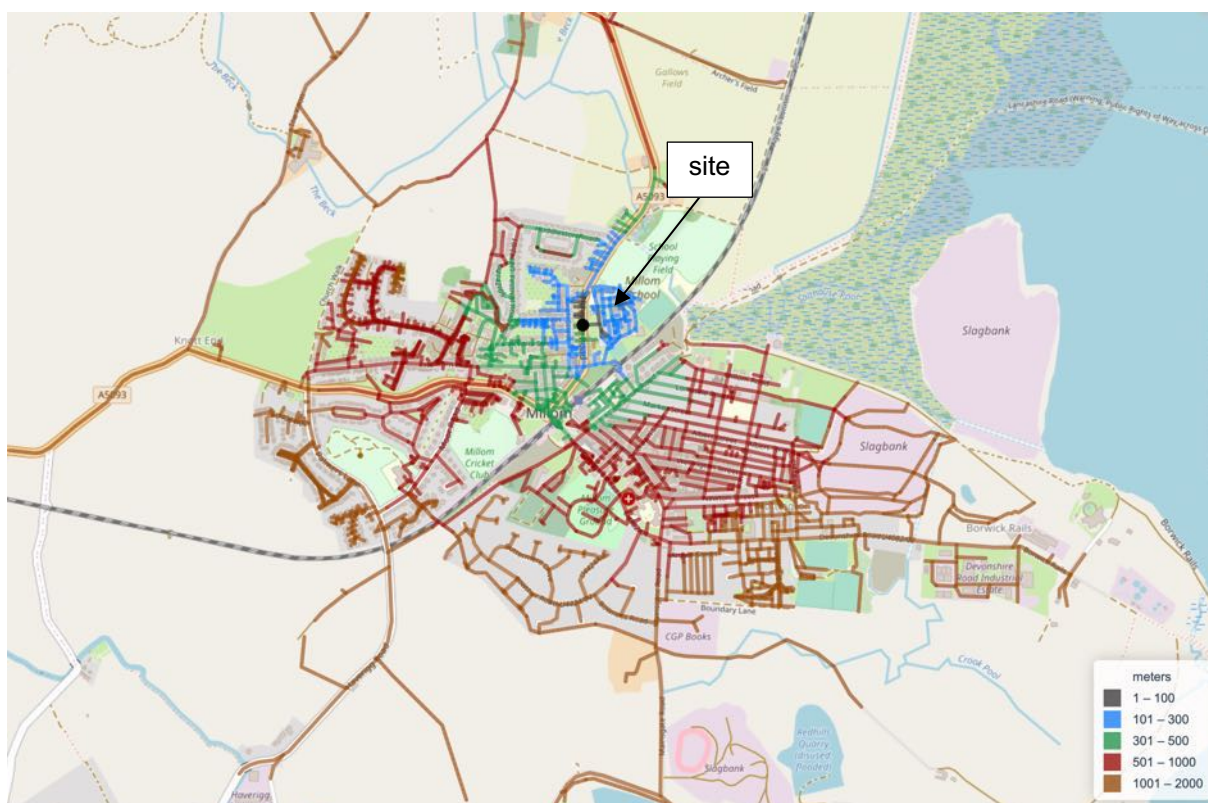
- 3.16 Information on road safety patterns and existing network traffic / speed data is provided in Section 2 of the TA.



## 4 Accessibility Audit

### Walking & Cycling Routes

- 4.1 footway is provided on northern edge of the site access junction (circa 1.6m wide). Dropped kerbs and tactile paving are provided at the access. A further segregated pedestrian access to the site is available via Station Mews.
- 4.2 Continuing south from the site towards Millom, footways are provided on both sides of Salthouse Lane. 1.8-2.0m footways along both carriageway edges.
- 4.3 It is generally held that journeys under 2km offer the greatest potential to substitute a car trip. Figure 4.1 shows a 2km walking catchment from the site. This shows that the centre of Millom is within 500m of the site, the main residential areas all within a 1km catchment, and all of the built up area of Millom is within 2km.



**Figure 4.1: 2km Walking Catchment**  
[source: ISO4]

- 4.4 The site is served by Millom train station, which is located 240m to the south. The station sits on the Cumbrian Coast Line which routes between Carlisle and Barrow-in-Furness. Monday to Saturday there are hourly services in each direction. A broadly hourly service is also provided on a Sunday.
- 4.5 There are no bus services in Millom (other than school services). School bus services stop to the south of the site in a lay-by area on Salthouse Lane, which is next to the junction with Station Mews and relates well to the segregated pedestrian site access.
- 4.6 Residents in Millom are eligible to sign up for a Rural Wheels smart card. Rural Wheels is an innovative solution for rural areas that enables members to organise transport from homes to key destinations. Travel has to be organised in advance and is charged at 45p per mile for adults, 25p per mile for children between five and 18, and free for under five year olds. Transport is available between 8.30am and 6pm (Monday to Saturday). The service can be used for up to two return journeys per week for shopping, health and leisure trips.
- 4.7 The central location of the site and the proposed community use, means that there are ample opportunities to access on foot and by cycle for local trips, and train services for longer distance journeys.



## 5 Travel Plan Management & Funding

### Management & Ownership

- 5.1 The leisure centre operator has been involved in the production of the Travel Plan and is supportive of the measures included within the document.

### Travel Plan Co-ordinator

- 5.2 An effective Travel Plan needs a clear hierarchy of responsibility. Travel Co-ordinators play an important role in developing, managing, and promoting Travel Plans. The Travel Co-ordinator for the centre will be the General Manager.
- 5.3 Full contact details of the General Manager will be provided to the Local Planning Authority, Cumberland Council (CC).
- 5.4 The Travel Co-ordinator will be responsible for the day-to-day running of the Travel Plan and will also develop, implement, and monitor the Travel Plan's effectiveness. The Co-ordinator will form the main point of contact for the local authority, staff, site users and the local community.
- 5.5 In summary, the Travel Co-ordinator's main responsibilities are:
- Implementing the Travel Plan measure package.
  - Obtaining and maintaining commitment and support from staff.
  - Providing a point of contact for staff and site users.
  - Issuing staff Travel Packs.
  - Maintaining a publicly located travel noticeboard.
  - Monitoring the effectiveness of the Travel Plan and reporting to stakeholders and the Council.

### Travel Plan Co-ordinator Replacement

- 5.6 Should the Travel Plan Co-ordinator change the responsibility for the Travel Plan will be handed over to the successor. Contact details for the successor will be provided to the Council in a timely manner to allow the Travel Plan to continue uninterrupted at the site.

### Funding & Handover Arrangements

- 5.7 Funding for the implementation of the Travel Plan and the measures promoted will be covered by the leisure centre operator.
- 5.8 Should the interest in the site be sold, the responsibility for the Travel Plan implementation will transfer to the successor in title. If this should be the case, then full contact details of the new site operator and the new Travel Plan Co-ordinator will be provided to the Council in a timely manner to allow the Travel Plan to continue uninterrupted at the site.

## 6 Measures Toolkit

### Information Provision

- 6.1 Good communication is a vital component of the Travel Plan to ensure that site users and staff are fully aware of the options available to them. To increase awareness, staff and visitors will be provided with the information set out below.
- 6.2 Copies of the full Travel Plan will be made available to staff and site users on request.
- 6.3 All new staff will be provided with a travel pack on appointment. The travel packs will provide:
1. Travel Plan Co-ordinator contact details
  2. A map showing the site location and access routes
  3. Website link to [Traveline](https://www.traveline.info)<sup>3</sup> journey planning software

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<sup>3</sup> <https://www.traveline.info>

4. Website links to walking / cycling information on [Active Cumbria](https://www.activecumbria.org)<sup>4</sup>
5. Website link to [Rural Wheels](https://eforms.cumbria.gov.uk/Runtime/Runtime/Form/Rural+Wheels)<sup>5</sup>
6. Website link to [National Rail](https://www.nationalrail.co.uk)<sup>6</sup>
7. Website links to NHS fitness resources such as the [Active 10 walking tool](https://www.nhs.uk/better-health/get-active/)<sup>7</sup>
8. Website link to Sustrans [cycle mapping and advice](https://www.sustrans.org.uk)<sup>8</sup>
9. Website links to Lift Share [car sharing scheme](https://liftshare.com/uk)<sup>9</sup>
10. Website links to Governments [Cycle to Work](https://www.gov.uk/expenses-and-benefits-bikes-for-employees)<sup>10</sup>

- 6.4 The information set out above will also be provided on a travel noticeboard, so it is available to all site users.

#### Staff Induction & Training

- 6.5 The Travel Plan and its features and benefits will be incorporated into the induction process for all new and existing staff.
- 6.6 The Travel Plan will feature on an agenda item on any staff-based forum or meeting (or equivalent) for all occupants of the facility at least once a year.

#### Walking Measures

- 6.7 Walking is the cheapest and most sustainable mode of travel. Most people of relatively fair health will be able to incorporate some walking as part of a daily journey and this can have very real impacts on the health and wellbeing of the individual.
- 6.8 Section 4 of the Travel Plan shows that the site is well located for walking trips to the community it serves.
- 6.9 The Travel Plan Co-ordinator will be responsible for raising awareness of the health benefits of walking using the travel pack and noticeboard. The weblinks listed previously will be included in these information resources.

#### Cycling Measures

- 6.10 The proposal includes 12 cycle parking spaces. The cycle parking will be secure and covered.
- 6.11 Changing facilities are provided in the leisure centre that can be used by staff and visitors.
- 6.12 The Travel Plan Co-ordinator will raise awareness of the cycle-based information contained on the websites included in the travel pack and noticeboards. This will include information regarding weblinks to cycle information websites and route mapping.
- 6.13 The leisure centre operator will be given to setting up a cycle to work scheme operated by the Government, to review if this would be suitable for adoption for their staff.

#### Public Transport Measures

- 6.14 To support public transport trips information will be provided to site such as how to purchase season tickets, view timetables and details of journey planning software, such as Traveline and National Rail.
- 6.15 The travel pack will include a plan showing the location of the nearest public transport nodes and a summary of the services available. This information will also be provided on the noticeboard.

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<sup>4</sup> <https://www.activecumbria.org>

<sup>5</sup> <https://eforms.cumbria.gov.uk/Runtime/Runtime/Form/Rural+Wheels>

<sup>6</sup> <https://www.nationalrail.co.uk>

<sup>7</sup> <https://www.nhs.uk/better-health/get-active/>

<sup>8</sup> <https://www.sustrans.org.uk>

<sup>9</sup> <https://liftshare.com/uk>

<sup>10</sup> <https://www.gov.uk/expenses-and-benefits-bikes-for-employees>

- 6.16 The Travel Plan Co-ordinator will be responsible for regularly reviewing the websites listed previously to check for service changes and any new public transport initiatives.
- 6.17 The leisure centre management will give consideration will be given to the appropriateness of introducing interest-free public transport travel loans to staff.

#### Car Measures

- 6.18 The car park will be operated by the operator. Parking will be free and open for use by the general public. Users of the disabled parking spaces will be required to display a valid Blue Badge.
- 6.19 Appropriate levels of EV charging will be provided in the car park and use of this will be managed to ensure it is only electric vehicles parking in the spaces.
- 6.20 It is recognised that it is not always possible for people to travel without using a car. The Travel Co-ordinator will promote the financial, environmental, and social benefits of car sharing for these circumstances. Details will be given to site users on established car share databases, such as Lift Share.
- 6.21 The Travel Plan Co-ordinator will also consider setting up an informal site-based car share scheme for staff.

## 7 Objectives, Mode Share & Targets

### Objectives

- 7.1 The main objectives of a Travel Plan are to reduce the environmental effects of transport associated with developments and raise awareness of sustainable means of access. In this instance, the main objective of the Travel Plan is to achieve the lowest practical level of single occupancy car trips and to support sustainable trip making where practicable.
- 7.2 A secondary objective of the Travel Plan is to outline an Action Plan for the site that clearly defines the strategy and monitoring measures to be adopted to meet the defined objectives of the Plan. To this end, the Plan seeks to:
  - Encourage site users and staff to evaluate their travel patterns and needs.
  - Support site users and staff to make informed travel choices.
  - Set out a suitable monitoring and management structure.

### Baseline Mode Share

- 7.3 On occupation of the development, mode share surveys will be undertaken in line with the monitoring strategy set out in this Travel Plan.

### Targets

- 7.4 Targets are measurable goals against which the progress of the Travel Plan can be assessed. Targets should be SMART: Specific, Measurable, Achievable, Realistic and Time-Related.
- 7.5 The targets are split into two different types, Output Targets and Outcome Targets. Output Targets are non-quantifiable and action-based that need to be achieved in a set time period. Outcome Targets are quantifiable and will be based on the results of the travel surveys.
- 7.6 The following Output Targets have been set:
  - Appoint Travel Plan Co-ordinator three months prior to occupation.
  - Provide the travel pack for issue to all new staff.
  - Provide a publicly located travel noticeboard on occupation of the development.
  - Undertake the baseline staff travel survey within six months of occupation.
  - Undertake cycle parking / EV parking usage audit within six months of occupation.

- Update Travel Plan with the baseline survey results and issue to the Council within three months of the baseline survey.
- Undertake monitoring staff travel surveys at years one, three and five.
- Undertake further cycle parking / EV parking usage in line with monitoring travel survey programme.
- Prepare a monitoring report and issue to the Council within three months of the monitoring travel surveys.

- 7.7 The Outcome Target for the Travel Plan is to increase the proportion of staff undertaking commuting trips by sustainable modes (walking, cycling, public transport and car sharing) from the baseline mode share. The baseline travel surveys at the site will allow a more targeted approach to the Outcome Target and this will be reviewed once the survey data is available.
- 7.8 Table 7.2 summarises the draft SMART targets for the Interim Travel Plan. The draft targets will be reviewed and updated as necessary following the baseline travel surveys.

#### Provision of Travel Packs & Noticeboard

Specific	The Travel Plan Co-ordinator will provide staff with the travel pack and will prepare a publicly available travel noticeboard. These resources will be kept up to date.
Measurable	Verified as part of the monitoring reports.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	The travel packs will be provided to each new staff member. The travel noticeboard will be regularly updated.
Timebound	Ongoing

#### Audit of Cycle Parking / EV Parking & Travel Surveys

Specific	The use of the cycle / EV parking areas will be reviewed and audited, and if required additional spaces may be provided. Staff travel patterns will be periodically monitored.
Measurable	Will be recorded as part of the baseline and monitoring survey programme.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	Yes.
Timebound	Ongoing.

#### Increase the Proportion of Staff Commuting Sustainably

Specific	Increase the proportion of staff travelling by walking, cycling, public transport and car sharing.
Measurable	Verified using the baseline and monitoring surveys.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	Yes.
Timebound	Monitoring programme set out (baseline and then years one, three and five).

**Figure 7.2:** Draft Travel Plan Targets

## 8 Monitoring & Review Mechanisms

### Data Collection & Analysis

- 8.1 To ensure that the Travel Plan is achieving the stated targets requires regular monitoring and review of travel practices of both staff. Baseline travel surveys will be undertaken within six months of occupation of the development. Following the baseline surveys, the Travel Plan will be reviewed every two years for a period of five years. The monitoring plan is set out below.

Type	Data Collected	Occurrence	Responsibility
Staff travel surveys	Mode split / travel attitudes	Baseline - within 6 months of leisure centre opening. Monitoring – every 2 years, Year 1, 3 and 5	Travel Plan Co-ordinator
Site Audit	Cycle parking usage / EV parking usage	Within 6 months of occupation and then in line with monitoring travel survey programme	Travel Plan Co-ordinator
Monitoring reports	Summary of staff surveys & cycle / EV parking audit	Within three months of each survey period	Travel Plan Co-ordinator

**Table 8.1:** Monitoring Schedule

### Reporting

- 8.2 The Travel Co-ordinator will report the survey results to the Council within one month of each survey. If found necessary by the Council, the Travel Co-ordinator will revise the Travel Plan targets. The results of the travel survey and revised targets will be included in the following revision of the Plan.
- 8.3 The Travel Co-ordinator will be responsible for communicating the results of the monitoring surveys and resulting amendments to the Travel Plan to site users. This will be achieved through the production of a newsletter and information located on noticeboards.

## 9 Action Plan

- 9.1 The Action Plan provides a summary of the package of measures that will be used as part of the Travel Plan.

Element	Action	Responsibility	Target Delivery / Method
Management	Appoint Travel Plan Co-ordinator	Applicant	Prior to occupation
	Provide new Travel Plan Co-ordinator details	Applicant	As part of preparation of full Travel Plan
	Set Travel Plan budget	Travel Plan Co-ordinator	As part of preparation of full Travel Plan
	Undertake surveys and reviews as set out in Section 8 and Table 8.1	Travel Plan Co-ordinator	On-going for five years
	Prepare progress updates	Travel Plan Co-ordinator	Three months after each survey period for the Council / on-going as part of regular staff meetings
Marketing / Communication	Prepare travel packs	Travel Plan Co-ordinator	Prior to occupation
	Prepare noticeboards	Travel Plan Co-ordinator	Prior to occupation
	Periodically review contents and re-issue	Travel Plan Co-ordinator	On-going
	Undertaken other communication measures as set out in Section 5	Travel Plan Co-ordinator	Included in travel pack / noticeboard – on occupation / on-going
Walking	Development walking infrastructure as set out in Section 1	Applicant	Prior to occupation
	Promote and support walking as set out in Section 6	Travel Plan Co-ordinator	Included in travel pack / noticeboard – on occupation / on-going
Cycling	Development cycling infrastructure as set out in Section 1	Applicant	Prior to occupation
	Promote and support cycling as set out in Section 6	Travel Plan Co-ordinator	Included in travel pack / noticeboard – on occupation / on-going
Public Transport	Promote and support public transport as set out in Section 6	Travel Plan Co-ordinator	Included in travel pack – on occupation / on-going
Car Sharing / EV	Development car infrastructure	Applicant	Prior to occupation
	Promote and support efficient vehicle use as set out in Section 6	Travel Plan Co-ordinator	Included in travel pack / noticeboard – on occupation / on-going

**Table 9.1: Initial Action Plan**

## Appendix G

Calculation Reference: AUDIT-443201-220721-0700

# TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE  
Category : C - LEISURE CENTRE  
MULTI-MODAL TOTAL VEHICLES

## Selected regions and areas:

02	SOUTH EAST	
	BU BUCKINGHAMSHIRE	1 days
	HC HAMPSHIRE	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
11	SCOTLAND	
	EL EAST LoTHIAN	1 days

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

## Primary Filtering selection:

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

Parameter: Gross floor area  
Actual Range: 1020 to 9600 (units: sqm)  
Range Selected by User: 1000 to 10000 (units: sqm)

Parking Spaces Range: Selected: 10 to 419 Actual: 10 to 419

## Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 16/10/21

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

## Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	4 days
Thursday	3 days

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

## Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

## Selected Locations:

Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	3

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

## Selected Location Sub Categories:

Development Zone	1
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*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Secondary Filtering selection:

Use Class:

n/a	9 days
F2(d)	2 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
15,001 to 20,000	1 days
20,001 to 25,000	3 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	2 days
500,001 or More	2 days

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

Car ownership within 5 miles:

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

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

Travel Plan:

No	11 days
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*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	11 days
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*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	BU-07-C-01 TICKFORD STREET NEWPORT PAGNELL	SWIM. POOL		BUCKINGHAMSHIRE
	Edge of Town No Sub Category Total Gross floor area:		1020 sqm	
	Survey date: TUESDAY		19/10/10	Survey Type: MANUAL
2	CA-07-C-01 POOL WAY CAMBRIDGE COLDHAM'S COMMON Suburban Area (PPS6 Out of Centre) Residential Zone	SWIMMING POOL		CAMBRIDGESHIRE
	Total Gross floor area:		2925 sqm	
	Survey date: MONDAY		19/10/09	Survey Type: MANUAL
3	EL-07-C-01 NEWBIGGING MUSSELBURGH	LEISURE CENTRE		EAST LOTHIAN
	Edge of Town Centre No Sub Category Total Gross floor area:		4125 sqm	
	Survey date: WEDNESDAY		25/04/18	Survey Type: MANUAL
4	GM-07-C-07 BOOTH STREET MANCHESTER	SWIMMING POOL		GREATER MANCHESTER
	Edge of Town Centre Built-Up Zone Total Gross floor area:		6800 sqm	
	Survey date: WEDNESDAY		25/11/09	Survey Type: MANUAL
5	HC-07-C-09 WORTING ROAD BASINGSTOKE BASINGSTOKE LEISURE PK Suburban Area (PPS6 Out of Centre) Development Zone	SWIMMING POOL		HAMPSHIRE
	Total Gross floor area:		5250 sqm	
	Survey date: MONDAY		18/10/10	Survey Type: MANUAL
6	LE-07-C-01 STATION ROAD LEICESTER WIGSTON Edge of Town No Sub Category	SWIMMING POOL		LEICESTERSHIRE
	Total Gross floor area:		1200 sqm	
	Survey date: WEDNESDAY		24/06/09	Survey Type: MANUAL
7	NF-07-C-04 WHERRY ROAD NORWICH	LEISURE CENTRE		NORFOLK
	Edge of Town Centre Built-Up Zone Total Gross floor area:		2910 sqm	
	Survey date: THURSDAY		28/11/19	Survey Type: MANUAL
8	NY-07-C-01 MILL LANE PICKERING	SWIMMING POOL		NORTH YORKSHIRE
	Edge of Town Centre No Sub Category Total Gross floor area:		1100 sqm	
	Survey date: THURSDAY		13/10/11	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WL-07-C-01	LEISURE CENTRE	WILTSHIRE
	NORTH STAR AVENUE		
	SWINDON		
	Edge of Town Centre		
	Built-Up Zone		
	Total Gross floor area:	9600 sqm	
	Survey date: WEDNESDAY	21/09/16	Survey Type: MANUAL
10	WM-07-C-02	LEISURE CENTRE	WEST MIDLANDS
	BEECHES ROAD		
	BIRMINGHAM		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	2600 sqm	
	Survey date: THURSDAY	26/09/19	Survey Type: MANUAL
11	WS-07-C-05	LEISURE CEN.	WEST SUSSEX
	STATION ROAD		
	BILLINGSHURST		
	Edge of Town Centre		
	No Sub Category		
	Total Gross floor area:	1700 sqm	
	Survey date: TUESDAY	08/12/09	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AG-07-C-01	no swimming pool
CA-07-C-02	no swimming pool
CF-07-C-01	no swimming pool
EX-07-C-01	no swimming pool
EX-07-C-02	no swimming pool

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

### MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.66

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.441	10	3218	0.056	10	3218	0.497
07:00 - 08:00	11	3544	0.457	11	3544	0.310	11	3544	0.767
08:00 - 09:00	11	3544	0.454	11	3544	0.423	11	3544	0.877
09:00 - 10:00	11	3544	0.659	11	3544	0.364	11	3544	1.023
10:00 - 11:00	11	3544	0.646	11	3544	0.528	11	3544	1.174
11:00 - 12:00	11	3544	0.587	11	3544	0.511	11	3544	1.098
12:00 - 13:00	11	3544	0.549	11	3544	0.559	11	3544	1.108
13:00 - 14:00	11	3544	0.482	11	3544	0.672	11	3544	1.154
14:00 - 15:00	11	3544	0.464	11	3544	0.490	11	3544	0.954
15:00 - 16:00	11	3544	0.893	11	3544	0.567	11	3544	1.460
16:00 - 17:00	11	3544	1.108	11	3544	0.831	11	3544	1.939
17:00 - 18:00	11	3544	1.121	11	3544	1.095	11	3544	2.216
18:00 - 19:00	11	3544	1.152	11	3544	1.185	11	3544	2.337
19:00 - 20:00	11	3544	0.803	11	3544	1.147	11	3544	1.950
20:00 - 21:00	11	3544	0.431	11	3544	0.780	11	3544	1.211
21:00 - 22:00	11	3544	0.156	11	3544	0.659	11	3544	0.815
22:00 - 23:00	3	2237	0.089	3	2237	0.551	3	2237	0.640
23:00 - 24:00									
Total Rates:			10.492			10.728			21.220

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

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

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#### Parameter summary

Trip rate parameter range selected:	1020 - 9600 (units: sqm)
Survey date range:	01/01/09 - 16/10/21
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

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

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.000	10	3218	0.000	10	3218	0.000
07:00 - 08:00	11	3544	0.003	11	3544	0.000	11	3544	0.003
08:00 - 09:00	11	3544	0.003	11	3544	0.003	11	3544	0.006
09:00 - 10:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
10:00 - 11:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
11:00 - 12:00	11	3544	0.000	11	3544	0.003	11	3544	0.003
12:00 - 13:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
13:00 - 14:00	11	3544	0.005	11	3544	0.003	11	3544	0.008
14:00 - 15:00	11	3544	0.003	11	3544	0.005	11	3544	0.008
15:00 - 16:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
16:00 - 17:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
17:00 - 18:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
18:00 - 19:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
19:00 - 20:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
20:00 - 21:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
21:00 - 22:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
22:00 - 23:00	3	2237	0.000	3	2237	0.000	3	2237	0.000
23:00 - 24:00									
Total Rates:			0.014			0.014			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.*

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.000	10	3218	0.000	10	3218	0.000
07:00 - 08:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
08:00 - 09:00	11	3544	0.005	11	3544	0.000	11	3544	0.005
09:00 - 10:00	11	3544	0.023	11	3544	0.005	11	3544	0.028
10:00 - 11:00	11	3544	0.023	11	3544	0.026	11	3544	0.049
11:00 - 12:00	11	3544	0.013	11	3544	0.026	11	3544	0.039
12:00 - 13:00	11	3544	0.005	11	3544	0.005	11	3544	0.010
13:00 - 14:00	11	3544	0.005	11	3544	0.008	11	3544	0.013
14:00 - 15:00	11	3544	0.000	11	3544	0.005	11	3544	0.005
15:00 - 16:00	11	3544	0.003	11	3544	0.003	11	3544	0.006
16:00 - 17:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
17:00 - 18:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
18:00 - 19:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
19:00 - 20:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
20:00 - 21:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
21:00 - 22:00	11	3544	0.000	11	3544	0.000	11	3544	0.000
22:00 - 23:00	3	2237	0.000	3	2237	0.000	3	2237	0.000
23:00 - 24:00									
Total Rates:			0.077			0.078			0.155

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

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

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.047	10	3218	0.003	10	3218	0.050
07:00 - 08:00	11	3544	0.051	11	3544	0.031	11	3544	0.082
08:00 - 09:00	11	3544	0.051	11	3544	0.038	11	3544	0.089
09:00 - 10:00	11	3544	0.051	11	3544	0.041	11	3544	0.092
10:00 - 11:00	11	3544	0.033	11	3544	0.044	11	3544	0.077
11:00 - 12:00	11	3544	0.044	11	3544	0.044	11	3544	0.088
12:00 - 13:00	11	3544	0.059	11	3544	0.049	11	3544	0.108
13:00 - 14:00	11	3544	0.059	11	3544	0.062	11	3544	0.121
14:00 - 15:00	11	3544	0.046	11	3544	0.044	11	3544	0.090
15:00 - 16:00	11	3544	0.077	11	3544	0.049	11	3544	0.126
16:00 - 17:00	11	3544	0.110	11	3544	0.072	11	3544	0.182
17:00 - 18:00	11	3544	0.059	11	3544	0.074	11	3544	0.133
18:00 - 19:00	11	3544	0.074	11	3544	0.108	11	3544	0.182
19:00 - 20:00	11	3544	0.056	11	3544	0.090	11	3544	0.146
20:00 - 21:00	11	3544	0.046	11	3544	0.064	11	3544	0.110
21:00 - 22:00	11	3544	0.005	11	3544	0.046	11	3544	0.051
22:00 - 23:00	3	2237	0.000	3	2237	0.000	3	2237	0.000
23:00 - 24:00									
Total Rates:			0.868			0.859			1.727

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

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

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.078	10	3218	0.012	10	3218	0.090
07:00 - 08:00	11	3544	0.159	11	3544	0.064	11	3544	0.223
08:00 - 09:00	11	3544	0.246	11	3544	0.118	11	3544	0.364
09:00 - 10:00	11	3544	0.282	11	3544	0.226	11	3544	0.508
10:00 - 11:00	11	3544	0.334	11	3544	0.280	11	3544	0.614
11:00 - 12:00	11	3544	0.552	11	3544	0.423	11	3544	0.975
12:00 - 13:00	11	3544	0.485	11	3544	0.541	11	3544	1.026
13:00 - 14:00	11	3544	0.918	11	3544	0.641	11	3544	1.559
14:00 - 15:00	11	3544	0.521	11	3544	0.852	11	3544	1.373
15:00 - 16:00	11	3544	0.688	11	3544	0.508	11	3544	1.196
16:00 - 17:00	11	3544	0.664	11	3544	0.516	11	3544	1.180
17:00 - 18:00	11	3544	0.826	11	3544	0.790	11	3544	1.616
18:00 - 19:00	11	3544	0.603	11	3544	0.759	11	3544	1.362
19:00 - 20:00	11	3544	0.564	11	3544	0.564	11	3544	1.128
20:00 - 21:00	11	3544	0.359	11	3544	0.495	11	3544	0.854
21:00 - 22:00	11	3544	0.128	11	3544	0.341	11	3544	0.469
22:00 - 23:00	3	2237	0.000	3	2237	0.343	3	2237	0.343
23:00 - 24:00									
Total Rates:			7.407			7.473			14.880

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

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



TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE  
 MULTI-MODAL PUBLIC TRANSPORT USERS  
 Calculation factor: 100 sqm  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.012	10	3218	0.000	10	3218	0.012
07:00 - 08:00	11	3544	0.056	11	3544	0.018	11	3544	0.074
08:00 - 09:00	11	3544	0.200	11	3544	0.018	11	3544	0.218
09:00 - 10:00	11	3544	0.957	11	3544	0.026	11	3544	0.983
10:00 - 11:00	11	3544	1.047	11	3544	0.888	11	3544	1.935
11:00 - 12:00	11	3544	0.457	11	3544	1.144	11	3544	1.601
12:00 - 13:00	11	3544	0.274	11	3544	0.421	11	3544	0.695
13:00 - 14:00	11	3544	0.452	11	3544	0.334	11	3544	0.786
14:00 - 15:00	11	3544	0.108	11	3544	0.323	11	3544	0.431
15:00 - 16:00	11	3544	0.141	11	3544	0.344	11	3544	0.485
16:00 - 17:00	11	3544	0.174	11	3544	0.095	11	3544	0.269
17:00 - 18:00	11	3544	0.200	11	3544	0.177	11	3544	0.377
18:00 - 19:00	11	3544	0.105	11	3544	0.185	11	3544	0.290
19:00 - 20:00	11	3544	0.092	11	3544	0.139	11	3544	0.231
20:00 - 21:00	11	3544	0.064	11	3544	0.126	11	3544	0.190
21:00 - 22:00	11	3544	0.033	11	3544	0.092	11	3544	0.125
22:00 - 23:00	3	2237	0.000	3	2237	0.000	3	2237	0.000
23:00 - 24:00									
Total Rates:			4.372			4.330			8.702

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

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

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.66

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	10	3218	0.612	10	3218	0.056	10	3218	0.668
07:00 - 08:00	11	3544	0.777	11	3544	0.446	11	3544	1.223
08:00 - 09:00	11	3544	1.034	11	3544	0.636	11	3544	1.670
09:00 - 10:00	11	3544	2.099	11	3544	0.662	11	3544	2.761
10:00 - 11:00	11	3544	2.265	11	3544	1.837	11	3544	4.102
11:00 - 12:00	11	3544	1.806	11	3544	2.237	11	3544	4.043
12:00 - 13:00	11	3544	1.580	11	3544	1.732	11	3544	3.312
13:00 - 14:00	11	3544	2.104	11	3544	1.916	11	3544	4.020
14:00 - 15:00	11	3544	1.267	11	3544	1.906	11	3544	3.173
15:00 - 16:00	11	3544	2.517	11	3544	1.647	11	3544	4.164
16:00 - 17:00	11	3544	3.104	11	3544	2.063	11	3544	5.167
17:00 - 18:00	11	3544	2.886	11	3544	3.181	11	3544	6.067
18:00 - 19:00	11	3544	2.453	11	3544	2.960	11	3544	5.413
19:00 - 20:00	11	3544	1.747	11	3544	2.540	11	3544	4.287
20:00 - 21:00	11	3544	1.034	11	3544	1.860	11	3544	2.894
21:00 - 22:00	11	3544	0.336	11	3544	1.383	11	3544	1.719
22:00 - 23:00	3	2237	0.045	3	2237	0.909	3	2237	0.954
23:00 - 24:00									
Total Rates:			27.666			27.971			55.637

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

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

## Appendix H

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.5.1.7462 © Copyright TRL Limited, 2019															
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Filename: Salthouse Road - Site Access.j9

Path: C:\Users\JohnThompson\CloudStation\SK22263 Millom\Junction Assessments

Report generation date: 16/06/2023 16:13:12

- »Existing Junction - 2022 Observed, AM Peak
- »Existing Junction - 2022 Observed, School Peak
- »Existing Junction - 2022 Observed, PM Peak
- »Existing Junction - 2028 Base, AM Peak
- »Existing Junction - 2028 Base, School Peak
- »Existing Junction - 2028 Base, PM Peak
- »Existing Junction - 2028 with Development, AM Peak
- »Existing Junction - 2028 with Development, School Peak
- »Existing Junction - 2028 with Development, PM Peak

#### Summary of junction performance

	AM Peak					School Peak					PM Peak				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Junction - 2022 Observed														
Stream B-AC	D1	0.0	6.40	0.04	A	D2	0.1	7.29	0.09	A	D3	0.0	7.15	0.05	A
Stream C-AB		0.2	5.42	0.09	A		0.0	5.44	0.03	A		0.0	5.23	0.01	A
	Existing Junction - 2028 Base														
Stream B-AC	D4	0.0	6.43	0.04	A	D5	0.1	7.32	0.09	A	D6	0.0	7.20	0.05	A
Stream C-AB		0.2	5.38	0.09	A		0.0	5.42	0.04	A		0.0	5.20	0.01	A
	Existing Junction - 2028 with Development														
Stream B-AC	D7	0.1	6.53	0.05	A	D8	0.1	7.19	0.11	A	D9	0.1	7.53	0.09	A
Stream C-AB		0.2	5.46	0.11	A		0.1	5.40	0.06	A		0.1	5.37	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

## File summary

### File Description

<b>Title</b>	Station Road - Site Access
<b>Location</b>	Millom
<b>Site number</b>	
<b>Date</b>	16/06/2023
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	SK22263
<b>Enumerator</b>	
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

## Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Observed	AM Peak	FLAT	08:00	09:00	60	15	✓
D2	2022 Observed	School Peak	FLAT	14:30	15:30	60	15	✓
D3	2022 Observed	PM Peak	FLAT	16:30	17:30	60	15	✓
D4	2028 Base	AM Peak	FLAT	08:00	09:00	60	15	✓
D5	2028 Base	School Peak	FLAT	14:30	15:30	60	15	✓
D6	2028 Base	PM Peak	FLAT	16:30	17:30	60	15	✓
D7	2028 with Development	AM Peak	FLAT	08:00	09:00	60	15	✓
D8	2028 with Development	School Peak	FLAT	14:30	15:30	60	15	✓
D9	2028 with Development	PM Peak	FLAT	16:30	17:30	60	15	✓

## Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Junction	✓	100.000	100.000

# Existing Junction - 2022 Observed, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.02	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	A5093 Salthouse Road (N)		Major
B	Site Access		Minor
C	A5093 Salthouse Road (S)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.25			100.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	15	15

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	490	0.084	0.213	0.134	0.305
B-C	633	0.092	0.232	-	-
C-B	632	0.232	0.232	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Observed	AM Peak	FLAT	08:00	09:00	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	218	100.000
B		FLAT	✓	24	100.000
C		FLAT	✓	270	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
From	A	0	24	194
	B	0	0	24
	C	223	47	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.04	6.40	0.0	A	24	24
C-AB	0.09	5.42	0.2	A	68	68
C-A					202	202
A-B					24	24
A-C					194	194

## Main Results for each time segment

### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	586	0.041	24	0.0	0.0	6.400	A
C-AB	68	17	732	0.092	67	0.0	0.2	5.408	A
C-A	202	51			202				
A-B	24	6			24				
A-C	194	49			194				

### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	586	0.041	24	0.0	0.0	6.403	A
C-AB	68	17	733	0.093	68	0.2	0.2	5.418	A
C-A	202	51			202				
A-B	24	6			24				
A-C	194	49			194				

### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	586	0.041	24	0.0	0.0	6.403	A
C-AB	68	17	733	0.093	68	0.2	0.2	5.420	A
C-A	202	51			202				
A-B	24	6			24				
A-C	194	49			194				

### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	586	0.041	24	0.0	0.0	6.403	A
C-AB	68	17	733	0.093	68	0.2	0.2	5.418	A
C-A	202	51			202				
A-B	24	6			24				
A-C	194	49			194				



# Existing Junction - 2022 Observed, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.28	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2022 Observed	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	172	100.000
B		FLAT	✓	49	100.000
C		FLAT	✓	158	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
	A	0	4	168
	B	12	0	37
	C	139	19	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	7.29	0.1	A	49	49
C-AB	0.03	5.44	0.0	A	24	24
C-A					134	134
A-B					4	4
A-C					168	168

### Main Results for each time segment

#### 14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	543	0.090	49	0.0	0.1	7.270	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.439	A
C-A	134	34			134				
A-B	4	1			4				
A-C	168	42			168				

#### 14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	543	0.090	49	0.1	0.1	7.286	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.444	A
C-A	134	34			134				
A-B	4	1			4				
A-C	168	42			168				

#### 15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	543	0.090	49	0.1	0.1	7.286	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.442	A
C-A	134	34			134				
A-B	4	1			4				
A-C	168	42			168				

#### 15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	543	0.090	49	0.1	0.1	7.286	A
C-AB	24	6	685	0.035	24	0.0	0.0	5.444	A
C-A	134	34			134				
A-B	4	1			4				
A-C	168	42			168				

# Existing Junction - 2022 Observed, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2022 Observed	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	236	100.000
B		FLAT	✓	24	100.000
C		FLAT	✓	176	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
	A	0	2	234
	B	6	0	18
	C	172	4	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.05	7.15	0.0	A	24	24
C-AB	0.01	5.23	0.0	A	5	5
C-A					171	171
A-B					2	2
A-C					234	234

### Main Results for each time segment

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	527	0.046	24	0.0	0.0	7.152	A
C-AB	5	1	694	0.008	5	0.0	0.0	5.226	A
C-A	171	43			171				
A-B	2	0.50			2				
A-C	234	59			234				

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	527	0.046	24	0.0	0.0	7.155	A
C-AB	5	1	694	0.008	5	0.0	0.0	5.226	A
C-A	171	43			171				
A-B	2	0.50			2				
A-C	234	59			234				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	527	0.046	24	0.0	0.0	7.155	A
C-AB	5	1	694	0.008	5	0.0	0.0	5.228	A
C-A	171	43			171				
A-B	2	0.50			2				
A-C	234	59			234				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	527	0.046	24	0.0	0.0	7.155	A
C-AB	5	1	694	0.008	5	0.0	0.0	5.228	A
C-A	171	43			171				
A-B	2	0.50			2				
A-C	234	59			234				

# Existing Junction - 2028 Base, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.98	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2028 Base	AM Peak	FLAT	08:00	09:00	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	229	100.000
B		FLAT	✓	24	100.000
C		FLAT	✓	283	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
	A	0	24	205
	B	0	0	24
	C	236	47	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.04	6.43	0.0	A	24	24
C-AB	0.09	5.38	0.2	A	69	69
C-A					214	214
A-B					24	24
A-C					205	205

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	584	0.041	24	0.0	0.0	6.429	A
C-AB	69	17	739	0.093	68	0.0	0.2	5.367	A
C-A	214	53			214				
A-B	24	6			24				
A-C	205	51			205				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	584	0.041	24	0.0	0.0	6.432	A
C-AB	69	17	739	0.094	69	0.2	0.2	5.379	A
C-A	214	53			214				
A-B	24	6			24				
A-C	205	51			205				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	584	0.041	24	0.0	0.0	6.432	A
C-AB	69	17	739	0.094	69	0.2	0.2	5.379	A
C-A	214	53			214				
A-B	24	6			24				
A-C	205	51			205				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	584	0.041	24	0.0	0.0	6.432	A
C-AB	69	17	739	0.094	69	0.2	0.2	5.377	A
C-A	214	53			214				
A-B	24	6			24				
A-C	205	51			205				

# Existing Junction - 2028 Base, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.24	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2028 Base	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	180	100.000
B		FLAT	✓	49	100.000
C		FLAT	✓	165	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
	A	0	4	176
	B	12	0	37
	C	146	19	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	7.32	0.1	A	49	49
C-AB	0.04	5.42	0.0	A	24	24
C-A					141	141
A-B					4	4
A-C					176	176

### Main Results for each time segment

#### 14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	541	0.091	49	0.0	0.1	7.307	A
C-AB	24	6	688	0.035	24	0.0	0.0	5.417	A
C-A	141	35			141				
A-B	4	1			4				
A-C	176	44			176				

#### 14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	541	0.091	49	0.1	0.1	7.319	A
C-AB	24	6	688	0.035	24	0.0	0.0	5.420	A
C-A	141	35			141				
A-B	4	1			4				
A-C	176	44			176				

#### 15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	541	0.091	49	0.1	0.1	7.319	A
C-AB	24	6	688	0.035	24	0.0	0.0	5.420	A
C-A	141	35			141				
A-B	4	1			4				
A-C	176	44			176				

#### 15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	541	0.091	49	0.1	0.1	7.319	A
C-AB	24	6	688	0.035	24	0.0	0.0	5.422	A
C-A	141	35			141				
A-B	4	1			4				
A-C	176	44			176				



# Existing Junction - 2028 Base, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2028 Base	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	247	100.000
B		FLAT	✓	24	100.000
C		FLAT	✓	184	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		A	B	C
	A	0	2	245
	B	6	0	18
	C	180	4	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.05	7.20	0.0	A	24	24
C-AB	0.01	5.20	0.0	A	5	5
C-A					179	179
A-B					2	2
A-C					245	245

### Main Results for each time segment

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	524	0.046	24	0.0	0.0	7.194	A
C-AB	5	1	697	0.008	5	0.0	0.0	5.203	A
C-A	179	45			179				
A-B	2	0.50			2				
A-C	245	61			245				

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	524	0.046	24	0.0	0.0	7.197	A
C-AB	5	1	697	0.008	5	0.0	0.0	5.205	A
C-A	179	45			179				
A-B	2	0.50			2				
A-C	245	61			245				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	524	0.046	24	0.0	0.0	7.197	A
C-AB	5	1	697	0.008	5	0.0	0.0	5.205	A
C-A	179	45			179				
A-B	2	0.50			2				
A-C	245	61			245				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	524	0.046	24	0.0	0.0	7.197	A
C-AB	5	1	697	0.008	5	0.0	0.0	5.205	A
C-A	179	45			179				
A-B	2	0.50			2				
A-C	245	61			245				

# Existing Junction - 2028 with Development, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.15	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2028 with Development	AM Peak	FLAT	08:00	09:00	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	232	100.000
B		FLAT	✓	32	100.000
C		FLAT	✓	289	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	27	205
	B	0	0	32
	C	236	53	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.05	6.53	0.1	A	32	32
C-AB	0.11	5.46	0.2	A	78	78
C-A					211	211
A-B					27	27
A-C					205	205

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	583	0.055	32	0.0	0.1	6.523	A
C-AB	78	19	738	0.106	77	0.0	0.2	5.443	A
C-A	211	53			211				
A-B	27	7			27				
A-C	205	51			205				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	583	0.055	32	0.1	0.1	6.528	A
C-AB	78	20	739	0.106	78	0.2	0.2	5.454	A
C-A	211	53			211				
A-B	27	7			27				
A-C	205	51			205				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	583	0.055	32	0.1	0.1	6.528	A
C-AB	78	20	739	0.106	78	0.2	0.2	5.454	A
C-A	211	53			211				
A-B	27	7			27				
A-C	205	51			205				

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	583	0.055	32	0.1	0.1	6.528	A
C-AB	78	20	739	0.106	78	0.2	0.2	5.456	A
C-A	211	53			211				
A-B	27	7			27				
A-C	205	51			205				

# Existing Junction - 2028 with Development, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.04	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2028 with Development	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	83	100.000
B		FLAT	✓	60	100.000
C		FLAT	✓	179	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To		
	A	B	C
From	A	0	7
	B	15	0
	C	146	33

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	0	
	0	0	0	
	0	0	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	7.19	0.1	A	60	60
C-AB	0.06	5.40	0.1	A	42	42
C-A					137	137
A-B					7	7
A-C					76	76

### Main Results for each time segment

#### 14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	561	0.107	60	0.0	0.1	7.176	A
C-AB	42	10	709	0.059	41	0.0	0.1	5.391	A
C-A	137	34			137				
A-B	7	2			7				
A-C	76	19			76				

#### 14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	561	0.107	60	0.1	0.1	7.187	A
C-AB	42	10	709	0.059	42	0.1	0.1	5.397	A
C-A	137	34			137				
A-B	7	2			7				
A-C	76	19			76				

#### 15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	561	0.107	60	0.1	0.1	7.187	A
C-AB	42	10	709	0.059	42	0.1	0.1	5.395	A
C-A	137	34			137				
A-B	7	2			7				
A-C	76	19			76				

## 15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	561	0.107	60	0.1	0.1	7.187	A
C-AB	42	10	709	0.059	42	0.1	0.1	5.397	A
C-A	137	34			137				
A-B	7	2			7				
A-C	76	19			76				



# Existing Junction - 2028 with Development, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.96	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2028 with Development	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	254	100.000
B		FLAT	✓	45	100.000
C		FLAT	✓	199	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	9	245
	B	11	0	34
	C	180	19	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	7.53	0.1	A	45	45
C-AB	0.04	5.37	0.1	A	26	26
C-A					173	173
A-B					9	9
A-C					245	245

### Main Results for each time segment

#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	523	0.086	45	0.0	0.1	7.530	A
C-AB	26	6	696	0.037	25	0.0	0.1	5.369	A
C-A	173	43			173				
A-B	9	2			9				
A-C	245	61			245				

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	523	0.086	45	0.1	0.1	7.535	A
C-AB	26	6	696	0.037	26	0.1	0.1	5.372	A
C-A	173	43			173				
A-B	9	2			9				
A-C	245	61			245				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	523	0.086	45	0.1	0.1	7.535	A
C-AB	26	6	696	0.037	26	0.1	0.1	5.372	A
C-A	173	43			173				
A-B	9	2			9				
A-C	245	61			245				

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	523	0.086	45	0.1	0.1	7.535	A
C-AB	26	6	696	0.037	26	0.1	0.1	5.374	A
C-A	173	43			173				
A-B	9	2			9				
A-C	245	61			245				

## Appendix I

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.5.1.7462 © Copyright TRL Limited, 2019															
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Filename: St Georges Rd - Station Rd.j9

Path: C:\Users\JohnThompson\CloudStation\SK22263 Millom\Junction Assessments

Report generation date: 16/06/2023 16:54:10

- »Existing Junction - 2022 Observed, AM Peak
- »Existing Junction - 2022 Observed, School Peak
- »Existing Junction - 2022 Observed, PM Peak
- »Existing Junction - 2028 Base, AM Peak
- »Existing Junction - 2028 Base, School Peak
- »Existing Junction - 2028 Base, PM Peak
- »Existing Junction - 2028 with Development, AM Peak
- »Existing Junction - 2028 with Development, School Peak
- »Existing Junction - 2028 with Development, PM Peak

#### Summary of junction performance

	AM Peak					School Peak					PM Peak				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Junction - 2022 Observed														
Arm 1	D1	0.6	7.30	0.39	A	D2	0.5	6.29	0.33	A	D3	0.5	6.55	0.34	A
Arm 2		1.0	12.91	0.51	B		0.7	11.06	0.43	B		1.2	14.20	0.54	B
Arm 3		1.4	12.09	0.58	B		1.1	10.83	0.53	B		1.5	12.96	0.61	B
	Existing Junction - 2028 Base														
Arm 1	D4	0.7	7.71	0.42	A	D5	0.5	6.49	0.35	A	D6	0.6	6.77	0.36	A
Arm 2		1.2	14.17	0.54	B		0.8	11.71	0.46	B		1.3	15.45	0.57	C
Arm 3		1.6	13.31	0.62	B		1.2	11.54	0.56	B		1.7	14.06	0.64	B
	Existing Junction - 2028 with Development														
Arm 1	D7	0.7	7.79	0.43	A	D8	0.6	6.62	0.36	A	D9	0.6	6.89	0.36	A
Arm 2		1.2	14.58	0.56	B		0.9	12.02	0.47	B		1.5	16.59	0.60	C
Arm 3		1.7	13.54	0.63	B		1.3	11.95	0.57	B		1.9	14.84	0.66	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

## File summary

### File Description

<b>Title</b>	St George's Rd - Statton Rd
<b>Location</b>	Millom
<b>Site number</b>	
<b>Date</b>	16/06/2023
<b>Version</b>	
<b>Status</b>	
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	SK22263
<b>Enumerator</b>	
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

## Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Observed	AM Peak	FLAT	08:00	09:00	60	15	✓
D2	2022 Observed	School Peak	FLAT	14:30	15:30	60	15	✓
D3	2022 Observed	PM Peak	FLAT	16:30	17:30	60	15	✓
D4	2028 Base	AM Peak	FLAT	08:00	09:00	60	15	✓
D5	2028 Base	School Peak	FLAT	14:30	15:30	60	15	✓
D6	2028 Base	PM Peak	FLAT	16:30	17:30	60	15	✓
D7	2028 with Development	AM Peak	FLAT	08:00	09:00	60	15	✓
D8	2028 with Development	School Peak	FLAT	14:30	15:30	60	15	✓
D9	2028 with Development	PM Peak	FLAT	16:30	17:30	60	15	✓

## Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Junction	✓	100.000	100.000

# Existing Junction - 2022 Observed, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	10.81	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	St George's Road (N)	
2	Station Road	
3	St George's Road (S)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.50	3.50	3.50	0.0	14.00	3.00	0.0	
2	4.50	3.40	3.40	0.0	10.00	5.00	0.0	
3	3.50	3.00	3.00	0.0	17.00	10.00	0.0	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.609	937
2	0.605	698
3	0.592	754

The slope and intercept shown above include any corrections and adjustments.

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2022 Observed	AM Peak	FLAT	08:00	09:00	60	15	✓

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

## Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	321	100.000
2		FLAT	✓	285	100.000
3		FLAT	✓	415	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
From	1	0	99	222
	2	65	4	216
	3	217	198	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.39	7.30	0.6	A	321	321
2	0.51	12.91	1.0	B	285	285
3	0.58	12.09	1.4	B	415	415

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	321	80	199	816	0.394	318	278	0.0	0.6	7.207	A
2	285	71	220	565	0.505	281	298	0.0	1.0	12.520	B
3	415	104	68	713	0.582	410	433	0.0	1.3	11.661	B

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	321	80	202	814	0.394	321	282	0.6	0.6	7.302	A
2	285	71	222	564	0.506	285	301	1.0	1.0	12.903	B
3	415	104	69	713	0.582	415	438	1.3	1.4	12.079	B



**08:30 - 08:45**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	321	80	202	814	0.394	321	282	0.6	0.6	7.302	A
2	285	71	222	564	0.506	285	301	1.0	1.0	12.909	B
3	415	104	69	713	0.582	415	438	1.4	1.4	12.087	B

**08:45 - 09:00**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	321	80	202	814	0.394	321	282	0.6	0.6	7.302	A
2	285	71	222	564	0.506	285	301	1.0	1.0	12.911	B
3	415	104	69	713	0.582	415	438	1.4	1.4	12.089	B

# Existing Junction - 2022 Observed, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	9.45	A

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2022 Observed	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	287	100.000
2		FLAT	✓	245	100.000
3		FLAT	✓	371	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
	1	0	77	210
	2	84	1	160
	3	244	126	1

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	6.29	0.5	A	287	287
2	0.43	11.06	0.7	B	245	245
3	0.53	10.83	1.1	B	371	371

### Main Results for each time segment

#### 14:30 - 14:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	72	126	860	0.334	285	324	0.0	0.5	6.241	A
2	245	61	210	571	0.429	242	202	0.0	0.7	10.842	B
3	371	93	84	704	0.527	367	368	0.0	1.1	10.547	B

#### 14:45 - 15:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	72	128	859	0.334	287	328	0.5	0.5	6.292	A
2	245	61	211	570	0.430	245	204	0.7	0.7	11.058	B
3	371	93	85	703	0.528	371	371	1.1	1.1	10.828	B

#### 15:00 - 15:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	72	128	859	0.334	287	328	0.5	0.5	6.292	A
2	245	61	211	570	0.430	245	204	0.7	0.7	11.060	B
3	371	93	85	703	0.528	371	371	1.1	1.1	10.833	B

#### 15:15 - 15:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	287	72	128	859	0.334	287	328	0.5	0.5	6.293	A
2	245	61	211	570	0.430	245	204	0.7	0.7	11.062	B
3	371	93	85	703	0.528	371	371	1.1	1.1	10.833	B

# Existing Junction - 2022 Observed, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	11.54	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2022 Observed	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	282	100.000
2		FLAT	✓	300	100.000
3		FLAT	✓	431	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
From	1	0	43	239
	2	72	4	224
	3	262	169	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.34	6.55	0.5	A	282	282
2	0.54	14.20	1.2	B	300	300
3	0.61	12.96	1.5	B	431	431

### Main Results for each time segment

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	71	171	833	0.339	280	329	0.0	0.5	6.486	A
2	300	75	237	554	0.541	295	213	0.0	1.1	13.676	B
3	431	108	75	709	0.608	425	458	0.0	1.5	12.422	B

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	71	173	832	0.339	282	334	0.5	0.5	6.549	A
2	300	75	239	553	0.542	300	216	1.1	1.2	14.185	B
3	431	108	76	709	0.608	431	463	1.5	1.5	12.951	B

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	71	173	832	0.339	282	334	0.5	0.5	6.549	A
2	300	75	239	553	0.542	300	216	1.2	1.2	14.194	B
3	431	108	76	709	0.608	431	463	1.5	1.5	12.961	B

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	71	173	832	0.339	282	334	0.5	0.5	6.549	A
2	300	75	239	553	0.542	300	216	1.2	1.2	14.197	B
3	431	108	76	709	0.608	431	463	1.5	1.5	12.964	B

# Existing Junction - 2028 Base, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	11.79	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2028 Base	AM Peak	FLAT	08:00	09:00	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	340	100.000
2		FLAT	✓	302	100.000
3		FLAT	✓	440	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
	1	0	105	235
	2	69	4	229
	3	230	210	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.42	7.71	0.7	A	340	340
2	0.54	14.17	1.2	B	302	302
3	0.62	13.31	1.6	B	440	440

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	85	211	808	0.421	337	295	0.0	0.7	7.594	A
2	302	76	233	557	0.542	297	315	0.0	1.1	13.638	B
3	440	110	72	711	0.619	434	459	0.0	1.6	12.718	B

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	85	214	807	0.421	340	299	0.7	0.7	7.712	A
2	302	76	235	556	0.543	302	319	1.1	1.2	14.161	B
3	440	110	73	710	0.619	440	464	1.6	1.6	13.294	B

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	85	214	807	0.422	340	299	0.7	0.7	7.714	A
2	302	76	235	556	0.543	302	319	1.2	1.2	14.170	B
3	440	110	73	710	0.619	440	464	1.6	1.6	13.305	B

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	85	214	807	0.422	340	299	0.7	0.7	7.714	A
2	302	76	235	556	0.543	302	319	1.2	1.2	14.173	B
3	440	110	73	710	0.619	440	464	1.6	1.6	13.310	B

# Existing Junction - 2028 Base, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	9.98	A

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2028 Base	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	301	100.000
2		FLAT	✓	257	100.000
3		FLAT	✓	389	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
	1	0	81	220
	2	88	1	168
	3	256	132	1

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	6.49	0.5	A	301	301
2	0.46	11.71	0.8	B	257	257
3	0.56	11.54	1.2	B	389	389

### Main Results for each time segment

#### 14:30 - 14:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	301	75	132	856	0.351	299	340	0.0	0.5	6.433	A
2	257	64	219	565	0.455	254	212	0.0	0.8	11.441	B
3	389	97	88	702	0.555	384	385	0.0	1.2	11.184	B

#### 14:45 - 15:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	301	75	134	855	0.352	301	344	0.5	0.5	6.493	A
2	257	64	221	564	0.455	257	214	0.8	0.8	11.707	B
3	389	97	89	701	0.555	389	389	1.2	1.2	11.533	B

#### 15:00 - 15:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	301	75	134	855	0.352	301	344	0.5	0.5	6.493	A
2	257	64	221	564	0.455	257	214	0.8	0.8	11.709	B
3	389	97	89	701	0.555	389	389	1.2	1.2	11.538	B

#### 15:15 - 15:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	301	75	134	855	0.352	301	344	0.5	0.5	6.493	A
2	257	64	221	564	0.455	257	214	0.8	0.8	11.712	B
3	389	97	89	701	0.555	389	389	1.2	1.2	11.540	B

# Existing Junction - 2028 Base, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	12.45	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2028 Base	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	295	100.000
2		FLAT	✓	314	100.000
3		FLAT	✓	451	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To		
	1	2	3
From	1	0	45
	2	75	4
	3	274	177
			0

## Vehicle Mix

### Heavy Vehicle Percentages

	To		
	1	2	3
From	1	0	0
	2	0	0
	3	0	0
			0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	6.77	0.6	A	295	295
2	0.57	15.45	1.3	C	314	314
3	0.64	14.06	1.7	B	451	451

### Main Results for each time segment

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	178	828	0.356	293	344	0.0	0.5	6.696	A
2	314	79	248	548	0.573	309	223	0.0	1.3	14.761	B
3	451	113	78	708	0.637	444	479	0.0	1.7	13.357	B

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	181	827	0.357	295	349	0.5	0.6	6.769	A
2	314	79	250	547	0.574	314	226	1.3	1.3	15.436	C
3	451	113	79	707	0.638	451	485	1.7	1.7	14.042	B

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	181	827	0.357	295	349	0.6	0.6	6.769	A
2	314	79	250	547	0.574	314	226	1.3	1.3	15.450	C
3	451	113	79	707	0.638	451	485	1.7	1.7	14.059	B

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	181	827	0.357	295	349	0.6	0.6	6.769	A
2	314	79	250	547	0.574	314	226	1.3	1.3	15.454	C
3	451	113	79	707	0.638	451	485	1.7	1.7	14.065	B

# Existing Junction - 2028 with Development, AM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	12.03	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2028 with Development	AM Peak	FLAT	08:00	09:00	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	342	100.000
2		FLAT	✓	309	100.000
3		FLAT	✓	444	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To		
	1	2	3
From	1	0	107
	2	70	4
	3	230	214

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
	0	0	0
	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.43	7.79	0.7	A	342	342
2	0.56	14.58	1.2	B	309	309
3	0.63	13.54	1.7	B	444	444

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	86	215	806	0.424	339	296	0.0	0.7	7.662	A
2	309	77	233	557	0.555	304	321	0.0	1.2	13.985	B
3	444	111	73	710	0.625	438	464	0.0	1.6	12.912	B

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	86	218	804	0.425	342	300	0.7	0.7	7.786	A
2	309	77	235	556	0.556	309	325	1.2	1.2	14.560	B
3	444	111	74	710	0.626	444	470	1.6	1.6	13.521	B

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	86	218	804	0.425	342	300	0.7	0.7	7.788	A
2	309	77	235	556	0.556	309	325	1.2	1.2	14.572	B
3	444	111	74	710	0.626	444	470	1.6	1.6	13.535	B

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	86	218	804	0.425	342	300	0.7	0.7	7.788	A
2	309	77	235	556	0.556	309	325	1.2	1.2	14.575	B
3	444	111	74	710	0.626	444	470	1.6	1.7	13.538	B

# Existing Junction - 2028 with Development, School Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	10.29	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2028 with Development	School Peak	FLAT	14:30	15:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	306	100.000
2		FLAT	✓	265	100.000
3		FLAT	✓	398	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
		1	2	3
	From	1	0	86
		2	91	1
		3	256	141
				1

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	1	2	3
	0	0	0
	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	6.62	0.6	A	306	306
2	0.47	12.02	0.9	B	265	265
3	0.57	11.95	1.3	B	398	398

### Main Results for each time segment

#### 14:30 - 14:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	77	141	851	0.360	304	343	0.0	0.6	6.553	A
2	265	66	219	565	0.469	262	226	0.0	0.9	11.724	B
3	398	100	91	700	0.569	393	390	0.0	1.3	11.548	B

#### 14:45 - 15:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	77	143	850	0.360	306	347	0.6	0.6	6.618	A
2	265	66	221	564	0.470	265	228	0.9	0.9	12.018	B
3	398	100	92	699	0.569	398	394	1.3	1.3	11.944	B

#### 15:00 - 15:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	77	143	850	0.360	306	347	0.6	0.6	6.618	A
2	265	66	221	564	0.470	265	228	0.9	0.9	12.022	B
3	398	100	92	699	0.569	398	394	1.3	1.3	11.951	B

#### 15:15 - 15:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	306	77	143	850	0.360	306	347	0.6	0.6	6.618	A
2	265	66	221	564	0.470	265	228	0.9	0.9	12.025	B
3	398	100	92	699	0.569	398	394	1.3	1.3	11.953	B

# Existing Junction - 2028 with Development, PM Peak

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	13.20	B

### Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2028 with Development	PM Peak	FLAT	16:30	17:30	60	15	✓

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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		FLAT	✓	298	100.000
2		FLAT	✓	330	100.000
3		FLAT	✓	462	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
From		1	2	3
	1	0	48	250
	2	79	4	247
	3	274	188	0

## Vehicle Mix



### Heavy Vehicle Percentages

From	To			
		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	6.89	0.6	A	298	298
2	0.60	16.59	1.5	C	330	330
3	0.66	14.84	1.9	B	462	462

### Main Results for each time segment

#### 16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	298	75	189	822	0.363	296	347	0.0	0.6	6.814	A
2	330	83	248	548	0.602	324	237	0.0	1.4	15.716	C
3	462	116	82	705	0.655	455	491	0.0	1.8	13.996	B

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	298	75	192	820	0.363	298	353	0.6	0.6	6.894	A
2	330	83	250	547	0.604	330	240	1.4	1.5	16.563	C
3	462	116	83	704	0.656	462	497	1.8	1.9	14.810	B

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	298	75	192	820	0.363	298	353	0.6	0.6	6.895	A
2	330	83	250	547	0.604	330	240	1.5	1.5	16.585	C
3	462	116	83	704	0.656	462	497	1.9	1.9	14.828	B

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	298	75	192	820	0.363	298	353	0.6	0.6	6.895	A
2	330	83	250	547	0.604	330	240	1.5	1.5	16.592	C
3	462	116	83	704	0.656	462	497	1.9	1.9	14.837	B