

The Seam – Phase 1

Transportation Assessment

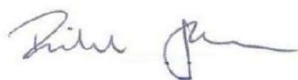
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1 Introduction

1.1 Background

In May 2020 Barnsley Metropolitan Borough Council (BMBC) appointed a consultant team to prepare a new Development Blueprint for the site known as *'The Seam, Barnsley's Digital Campus'*. The site is a 4.5 ha parcel of land located within Barnsley town centre, immediately adjacent to the Transport Interchange. The Digital Campus is home to DMC01, recently refurbished DMC02 and Barnsley College's new Scitech Digital Innovation hub. These buildings bring together digital and tech focused people, businesses, research and skills, enabling collaboration and innovation through a growing digital eco-system that operates on a regional, National and International level.

The Seam is a values driven concept, that brings together the 'soft' infrastructure of programmes, projects and support with the 'hard' infrastructure of an exciting urban village environment that provides a testbed for new ideas and technologies.

All activity and development will be aligned to the Campus values:

- Building pathways – a place of possibilities
- Trailblazing
- For Barnsley, not only for business
- A dynamic digital ecosystem
- Putting people first

The Development Blueprint aims to transform the physical environment of this growing Digital Campus with opportunities to create a highly sustainable live-work neighbourhood in the heart of the town, connected by smart infrastructure, high quality public realm and a testbed for technology led innovation in retail, Internet of Things, low / zero carbon and active travel.

The Blueprint provided a flexible plot-based plan for the site ensuring wider strategic objectives of BMBC and its stakeholders are met, and development is brought forward in line with key infrastructure and phasing requirements.

In October 2021 a multi-disciplinary team comprising of BDP and Arcadis with development consultants Aspinall Verdi were appointed to prepare concept designs for Phase 1, comprising of:

- Multi-Storey Car Park to RIBA Stage 2
- Active Travel Hub to RIBA Stage 2
- Public Realm to RIBA Stage 3
- Feasibility studies for development plots 1 and 2
- Road and services infrastructure to support the above

1.2 Purpose of Document

This Transportation Assessment (TA) has been produced to support a planning application for Phase 1 of the Seam Blueprint. The document undertakes an analysis of the current transportation and movement activities associated with the site and adjacent infrastructure; provides an analysis of the trip generation and movement emanating from the Phase 1 land uses; and an assessment of the impact upon the transport and movement network and infrastructure across all mode of travel.

This document has been prepared in accordance with Industry Standard guidelines.

2 Policy Context & Strategies

2.1 Barnsley Local Plan

Policy BTC21 and policy BTC22, shown below, set out the overall land uses and aims for the development of the area known as the Courthouse Campus District, which is now known as The Seam.

<p>Policy BTC21 Courthouse Campus</p> <p>We will allow the following types of development in the Courthouse Campus District.</p> <ul style="list-style-type: none">Education and community facilities.Offices.Developments designed to support the creative and digital industries.Residential development, including live-work units.Multi storey car parking.A new public park and improved public spaces.	<p>Policy BTC22 Development Site 3 - Courthouse Campus</p> <p>We will allow the following types of development:</p> <ul style="list-style-type: none">Education and community facilities.Offices.Developments designed to support the creative and digital industries.Residential development, including live-work units. <p>The development of the site will be expected to:</p> <ul style="list-style-type: none">Include the creation of a new public open space;Provide improvements to pedestrian links and public spaces; andConserve or enhance the Conservation Area. <p>We will use planning conditions or a planning obligation to ensure the above aspects are included in the development.</p>
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Paragraph 16.119 of the Local Plan states that *“The aim is for the comprehensive redevelopment of this major site in Barnsley town centre, to provide new jobs, places to live and learn and new public spaces for the town.”*

Chapter 12 of the Local Plan sets out the challenges, aims and policies relating to transportation for the Borough. Policy T3 sets out the expectations of new developments in terms of sustainable travel.

<p>Policy T3 New Development and Sustainable Travel</p> <p>New development will be expected to:</p> <ul style="list-style-type: none">Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists;Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant Supplementary Planning Document;Provide a transport statement or assessment in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts; andProvide a travel plan statement or a travel plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition. <p>Where levels of accessibility through public transport, cycling and walking are unacceptable, we will expect developers to take action or make financial contributions in accordance with policy I1.</p> <p>If it is not possible or appropriate for the minimum amount of parking for cycles, motorbikes, scooters and mopeds to be met on site, the developer must provide, or contribute towards, off-site parking, or improve or provide other forms of travel.</p>
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Paragraph 12.46 states:

“A fundamental goal of Barnsley's Local Plan is to provide for sustainable development and it includes a spatial strategy that reduces the need to travel by promoting growth in sustainable, accessible locations. This policy is about ensuring that sustainable and inclusive travel is embedded within any new development and providing the opportunities for people to change their travel behaviour where travel is necessary. It recognises that the availability of car parking is a key factor affecting whether people choose to travel by car or use a smarter alternative and aims to limit car parking associated with new development whilst providing appropriate facilities for cycles, motorbikes, scooters, mopeds and disabled people. This is balanced with the considerations of highway safety, living conditions and the economy, and the need to provide enough parking so people can use other forms of transport than the car.”

2.2 Supporting Strategies

2.2.1 Barnsley Transport Strategy

The 'Barnsley Transport Strategy – Moving from A to B' builds upon the policies within the Local Plan and provides a strategic vision for transportation in the Borough to 2030. The strategy sets out five objectives.

Objectives

These objectives have been formulated to reflect our priorities in a measurable context. They will provide the focus for the Transport Strategy and will inform the targets set out later in this document. This will enable the borough to measure progress against the objectives and therefore progress against the key policy areas reflected in the priorities. The Transport Strategy has also been subject to an Equalities Impact Assessment.

Objective 1 – To Transform our Streets and Places to Enable an Increase in Cycling and Walking

Increasing the uptake of cycling and walking will actively contribute to a reduction in congestion and air pollution and improve the health of Barnsley's residents. Use of public transport instead of the private car also contributes to reduced congestion and is important in enabling access to services. Uptake of all these modes can be influenced by effective travel planning measures and infrastructure.

Objective 2 – Support Economic Growth and Regeneration

With the adoption of the Local Plan, Barnsley is expected to see high levels of growth over the next 10 years. Transport investment will be required (which is likely to include the building of new roads / infrastructure) to ensure we maintain a high-quality strategic network as we grow. We need to ensure that development takes place on a sustainable basis, is accessible for all users and does not place undue pressure on the transport network.

Objective 3 – Reduce conventional vehicular trips on the network, for journeys of less than 2 miles

This is not about reducing the total number of trips on the network as mobility is highly important for our economic growth and for those residents who struggle to travel by other means and require motorised travel to facilitate independence.

Our focus is on reducing the number of journeys that occur at peak times and are 2 miles or under and encourage the use of less polluting vehicles (especially freight transport).

Objective 4 – To Reduce and Mitigate the Impact of Transport-based Emissions and Noise in Barnsley

Research and evidence has shown that particulate matter and nitrogen dioxide generated by a variety of sources has a significant adverse effect on the health of those who are regularly exposed. A proportion of these pollutants are generated by transport. Reduction in exposure to these pollutants could result in significant health benefits for Barnsley residents. Our focus is on reducing the number of journeys that occur at peak times and are 2 miles or under and encourage the use of less polluting vehicles (especially freight transport).

Objective 5 – Reduce Killed and Seriously Injured (KSI) incidents and slight accidents on our roads

Over the last 10 years our roads have become safer, but there is still considerable work to do to further reduce accidents and create safe and accessible streets for all.

2.2.2 Barnsley Active Travel Strategy

The 'Active Travel Barnsley Strategy (2019 to 2033)' sets out how active travel can be facilitated and encouraged across the Borough in alignment with the wider Transport Strategy, Local Plan and 2030 Vision for Barnsley. The strategy sets out that

"Delivering this vision will lead to more people walking and cycling and contribute to the following outcomes:

- *Improved health and reduced health inequalities by introducing active travel into everyday life;*
- *Increased economic growth and productivity leading to higher living standards;*
- *Reduced congestion on the highway network by providing better travel choices;*
- *Improved Air Quality;*
- *Safer active travel routes.*

These outcomes will be realised by delivering the following actions:

- *Action 1: Integrate Active Travel into the Planning Process;*
- *Action 2: Maintain and Expand our Active Travel Routes;*
- *Action 3: Support Active Travel in the Community.*

3 Site Context & Existing Transportation Network

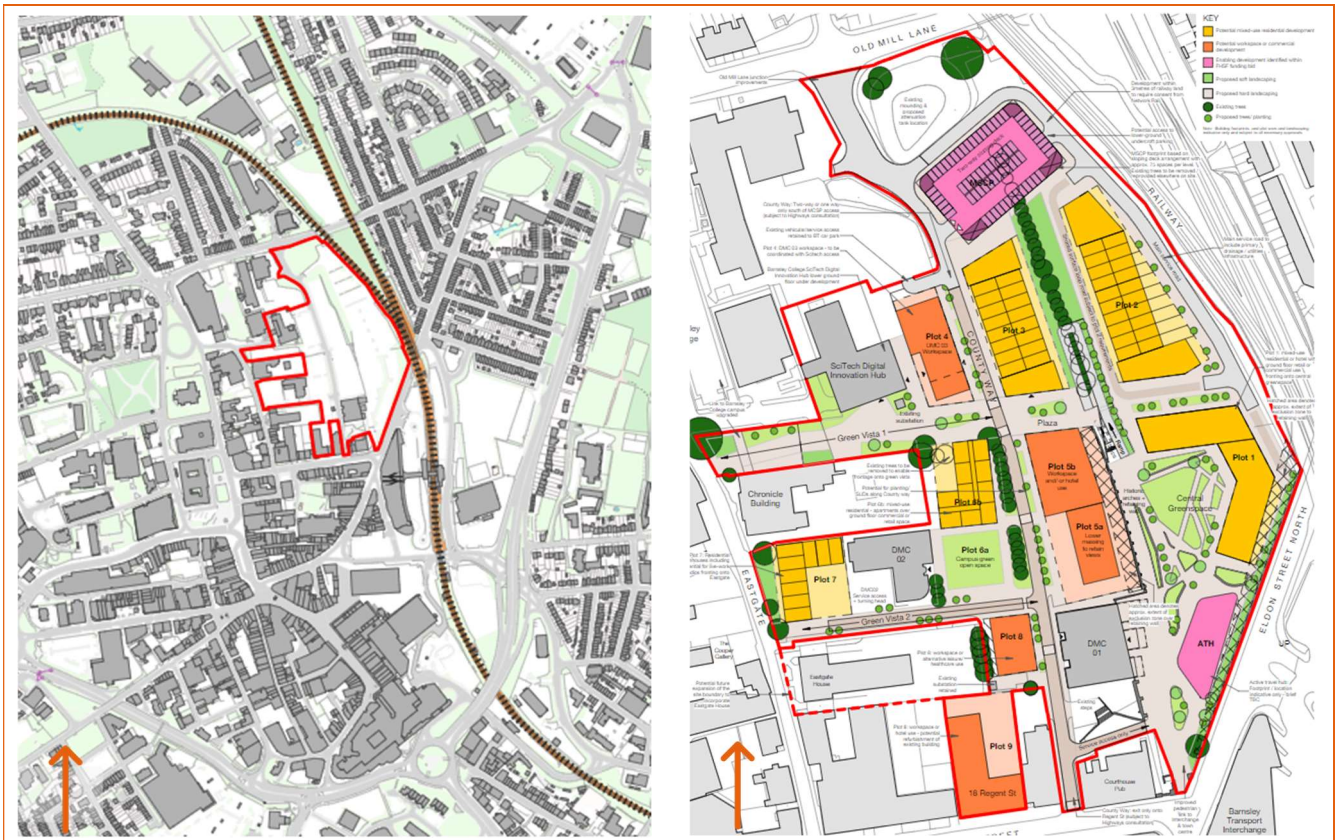
3.1 The Site

3.1.1 Location

The site forms part of the wider Seam Blueprint Masterplan area which is centred on the land either side of County Way, in the northeast quadrant of Barnsley town centre. An elongated rectangular site that culminates in a point at the southern end of the site, Phase 1 is bound on each side by the following:

- **West** – Retaining wall for County Way Upper Surface Car Park, lower entrance of the DCM-001 and the Courthouse Pub.
- **East** – Railway line for the northern half and Eldon Road (North) for the southern half.
- **North** – Old Mill Lane.
- **South** – Regent Street, where the site comes to a point.

Figure 1 – Seam Location & Seam Blueprint Layout



3.1.2 Land Uses

The current land uses within the boundary of Phase 1 is a public surface car park, long and short stay, with associated access routes and landscaping. Until recently a Covid 19 testing centre was located at the northern end of the site, but this has now ceased.

3.1.3 Access

Access to the site is for different modes are as follows:

- Cars – There are 2 access / egress points for cars into the car park from County Way, one from the north close to the junction with Old Mill Lane, and south using the short link road between the Courthouse and DCM-001.
- Pedestrians – Along with the access / egress for cars, pedestrians can access / egress the site via the ramp and steps at the very south of the site to / from Regent St and Eldon Rd (North).
 - There is also an entrance to the DCM-001 from the car park.

These are shown in Figure 2.

Figure 2 – Site Boundary, Land Uses and Access Points



3.2 Existing Transportation Network

3.2.1 Active Travel Modes

Pedestrians

A pedestrian footway of approximately 1.5m runs north-south through the current car park from the ramp / steps to Regent St, to a point approximately 145m and then terminates. There is small area of footway on the northern side of the southern access road and a similar one on the southern side of the northern access.

The key desire lines for pedestrians through Phase 1 both emanate from the ramp / step access to/from Regent St and links to the car park or short access road that links to County Way. Pedestrian surveys of this route undertaken in May 2022 for a 12-hour period (07:00 to 19:00) for both a weekday and a Saturday show that pedestrian movements at the southern end of Phase 1 is popular.

Table 1 and Table 2 provide a summary of the pedestrian count data at this location.

Table 1 – Summary of Pedestrian Counts at Ramp & Steps – Weekday

Movement	12 Hours	AM Peak (08:30 to 09:30)	PM Peak (15:30 to 16:30)	Inter Peak	Highest 15-Min
Northbound	940	93	250	157	49 (12:30 to 12:45)
Southbound	1,292	92	56	201	78 (12:00 to 12:15)

Table 2 – Summary of Pedestrian Counts at Ramp & Steps – Saturday

Movement	12 Hours	Peak Hour	Highest 15-Min
Northbound	1,970	299	100 (14:15 to 14:230)
Southbound	2,089	356	91 (11:15 to 11:20)

The 12-hour profile of movements, both directions, for a weekday and Saturday are shown in Figure 3 and Figure 4.

Figure 3 – 12-Hour Profile of Pedestrian Counts – Weekday

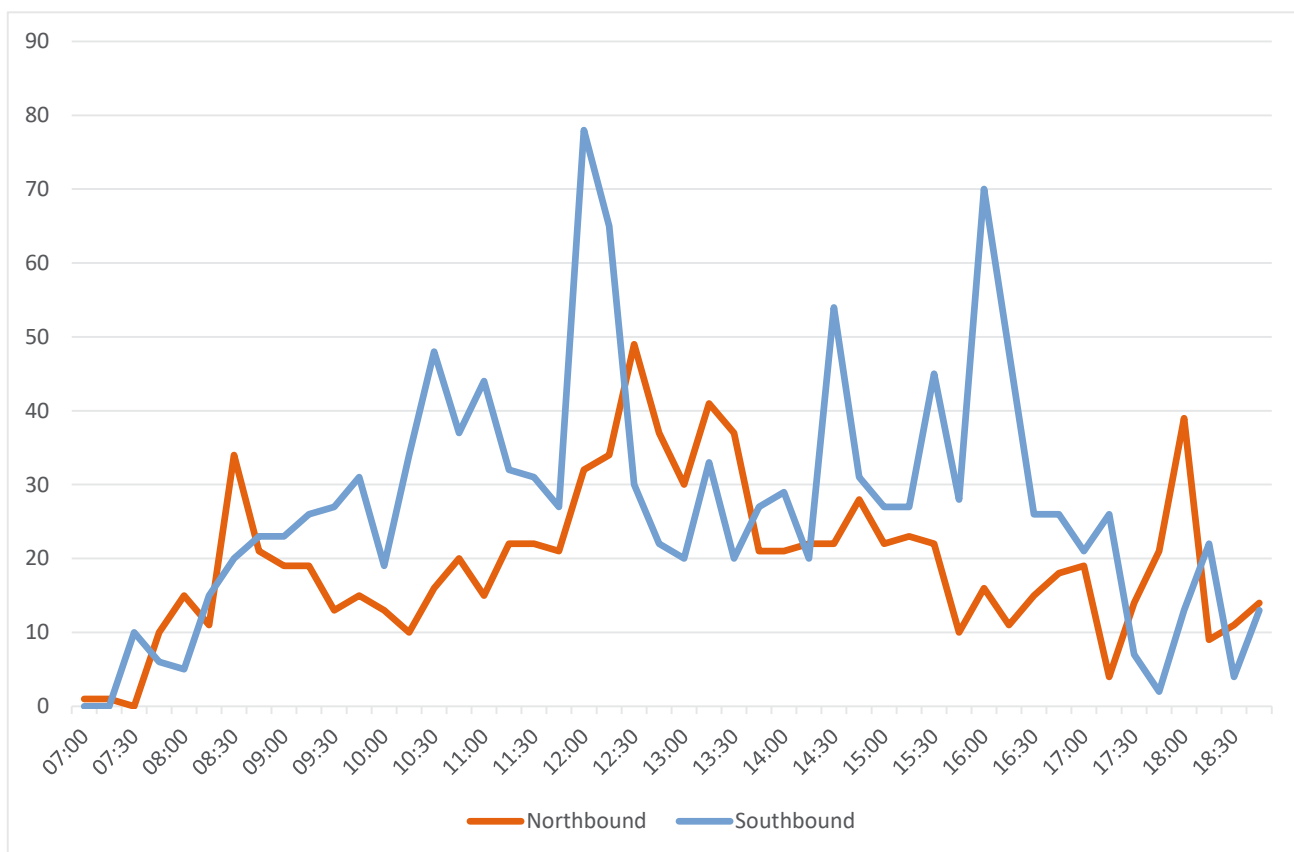
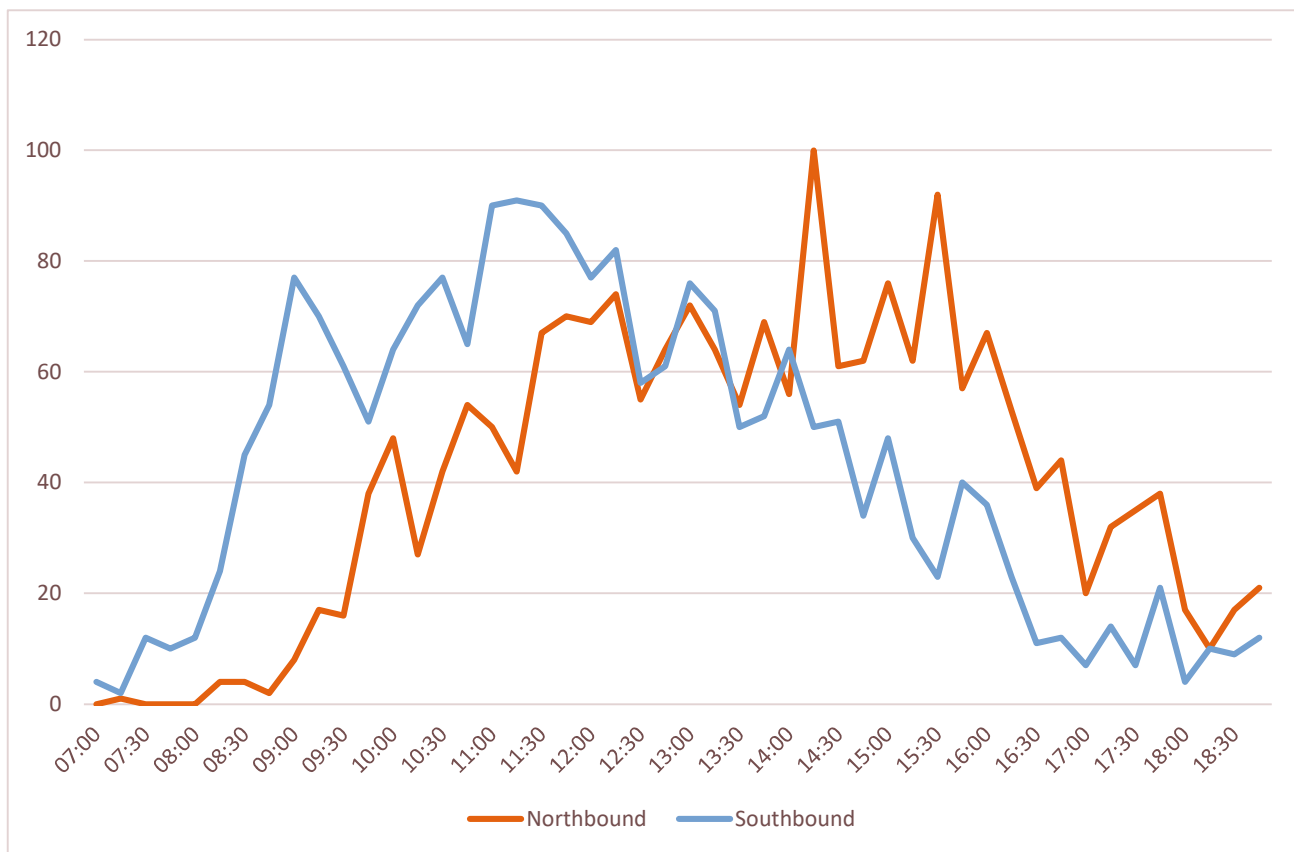


Figure 4 – 12-Hour Profile of Pedestrian Counts – Saturday



The provision of pedestrian infrastructure in streets surrounding Phase 1 typically have footways on both sides of the carriageway that vary in width and quality of surfacing but are of the expected provision in a town centre location. There are formal pedestrian crossing points in close proximity to Phase 1 at:

- Junction of Regent St with Eldon St – Pelican
- Junction County Way with Regent St – Integrated into Signals

Cyclists

There are no formal cycle infrastructure or designated routes within close proximity of the Phase 1. The nearest cycle route starts at Barnsley Interchange and heads east to link with NCN 67.

Cycle count surveys undertaken at the same times as the pedestrian surveys show that the number of cyclists moving through Phase 1 via the ramp and steps is nominal. A total of 3 cyclists (2 northbound; 1 southbound) were recorded on a weekday, with a total of 8 cyclists (5 northbound; 3 southbound) were recorded on the Saturday.

The route through the southern part of Phase 1 is likely cyclists ‘cutting the corner’ southbound to avoid the junction of County Way with Regent St, and northbound as there is a circuitous route for legal cycling to travel between Barnsley Interchange and County Way.

3.2.2 Car Parking – County Way Surface Car Parks (Public)

There public car parks on the Seam are referred to as Upper Seam Car Park and Low Seam Car Park.

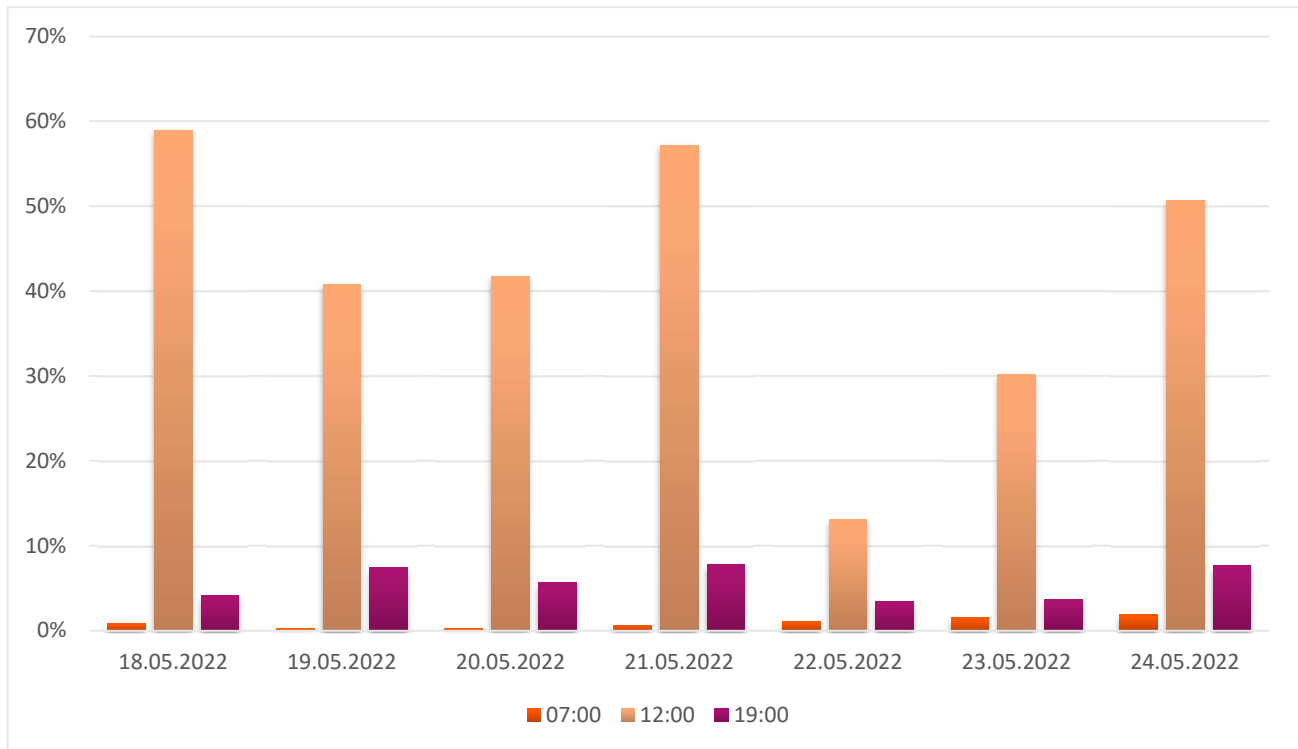
Phase 1 (Lower Seam Car Park) currently consists of a 460-space surface car park that is divided into spaces for leisure and retail space (marked red) and commuter and season ticket holders (marked white). Parking beat surveys were undertaken of the car park over a 7-day period. The key patterns of occupancy of the Lower Seam car park are:

- Average occupancy for Monday to Friday is 44% / 204 vehicles.

The Seam – Phase 1

- Busiest weekday is the Tuesday with 59% / 270 vehicles occupancy.
- The next busiest is Saturday with 57% / 262 vehicles occupancy.
- No illegally parked vehicles were observed within Lower Seam car park.

Figure 5 – Summary of Occupancy Surveys of Lower Seam Car Park by Day and Time



The Upper Seam Car Park is divided between 3 parcels of land these are set out below and show in Figure 6.

1. Upper Seam Car Park – East of County Way
2. West of County Way – Opposite DMC-001 & Outside DMC-002
3. West of County Way – Outside Barnsley College

Figure 6 – Location of Upper Seam Car Parks

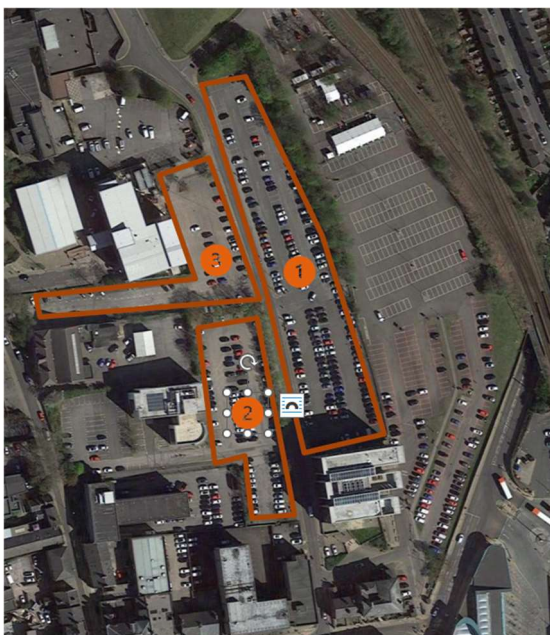
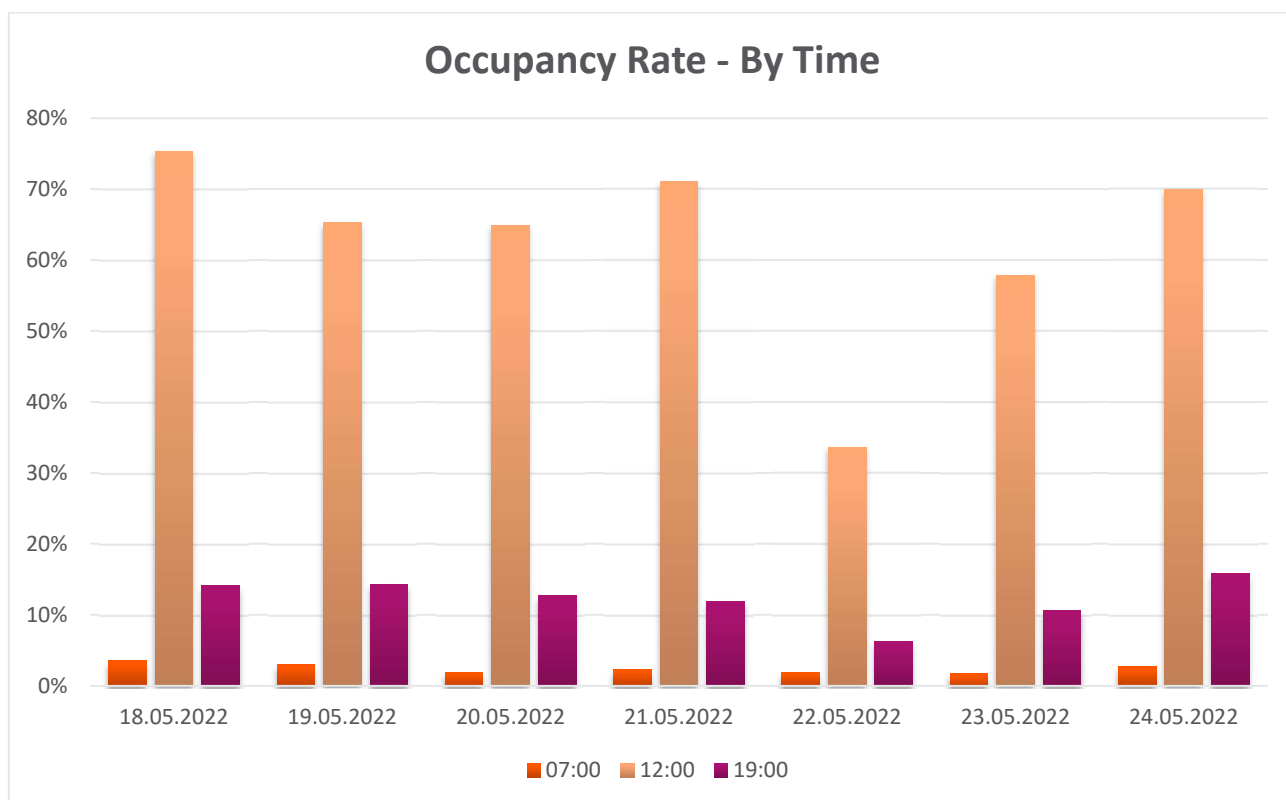


Figure 7 shows a summary of the occupancy counts across the seven-day period for all of the Upper Seam Car Parks (Public). The key observations from the data are:

- The occupancy of the Upper Seam Car Parks for all weekdays and a Saturday is very high with between 25% and 35% spare capacity.
- Sunday all car parks have a reduced demand and have capacity 65%
- West of County – Opposite DMC-001 and Outside DMC-002 is the most popular during weekdays and on a Saturday with between 1% and 13% spare capacity.

Data collected by the Council for these car parks between the weeks beginning 02nd October 2021 and 19th December 2021 reflects a similar pattern of occupancy as the survey data, across all County Way car parks.

Figure 7 – Summary of Seam Upper Car Parks by Day and by Time



3.2.3 Buses

Barnsley Interchange is located diagonally opposite the southern entrance to Phase 1. This is main bus terminal and the focus of the majority of bus services in Barnsley. Multiple services are accessible from the Barnsley Interchange providing bus accessibility for to travel from Phase 1 to destinations across the borough, and beyond.

The proximity to the Barnsley Interchange also provides opportunities for visitors to Phase 1 to travel more sustainably with a very short onward walk.

3.2.4 Rail

Along with the buses, Barnsley Interchange also contains the railway station. Barnsley train station most popular routes operated are from Barnsley to the stations listed below, which are within commutable times.

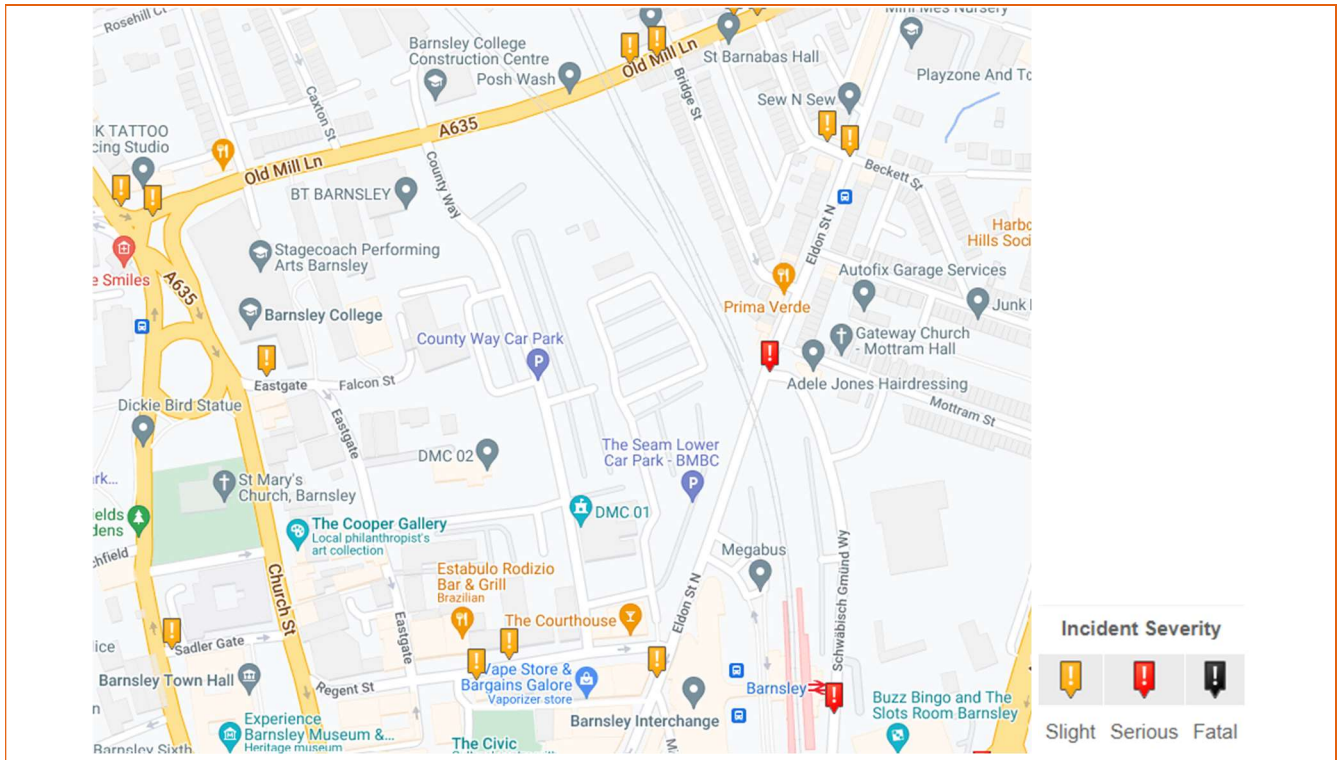
- Wakefield (Kirkgate) = 17 minutes
- Sheffield = 24 minutes
- Leeds = 42 minutes

- Huddersfield = 50 minutes

3.2.5 Collision Data

A high-level analysis of available collision data for the past 5 years (2016 – 2021) in and around Phase 1 has been undertaken using the www.crashmap.co.uk. Figure 8 provides a summary of the collision data by severity.

Figure 8 – Map of Collision Data for All Modes of Transport



The data shows that there have been no recorded collisions across the Seam, including Phase 1 during this period. There have been 3 Slight collisions to the south of the Seam.

- Regent St – Pedestrian and Bus.
- Regent St – Car and Car.
- Eldon St – Car and Car.

3.2.6 Servicing & Access Existing Buildings

DMC-001

The DCM-001 has a pedestrian access from the Lower County Way Car Park with a pedestrian access into a lobby via 4 steps, and there is also level-access into a small lobby to 2 lifts.

Deliveries take place from both Lower County Way Car Park and also County Way.

Refuse collection takes place from Lower County Way Car Park.

Courthouse Public House

Both commercial refuse collection and deliveries by a dray wagon take place from the car park access road. Both vehicles turn around at the bottom of the car park access road, on the edge of the car park.

4 Proposed Development & Movement Strategy

4.1 Land Uses

The land uses and quantum, where applicable to transport and movement, that make up the Phase 1 proposal are set out in Table 3.

Table 3 – Seam Phase 1 Land Uses and Quantum

Land Use	Quantum
Residential	20 houses
	116 apartments
Multi Storey Car Park	386 standard spaces
Active Travel Hub	72 sqm GFA Café
	175 space cycle storage
	Cycle Hire, Repair & Servicing
Public Realm	

The proposed layout of the Seam Phase 1 is show in Figure 9.

Figure 9 – Layout of Proposed Phase 1 Development



4.2 Movement Strategy

This section of the TA provides an overview of the movement strategy for the Phase 1 land uses. The Movement Strategy also sets out measures for other properties or users that are impacted by the proposals. In particular, the creation of the new public realm.

All of the vehicle required to travel along a particular route have been subject to swept-path analysis using the appropriate design vehicles and to the current highway design standards. Drawings of the swept-path analysis are contained in Appendix A.

For servicing of the DCM-001, Courthouse Public House, and the Active Travel Hub, a number of options were explored and evaluated against criteria such as:

- Safety for pedestrians, cyclists and other highway users.
- Impact upon the design of the public realm.
- Deliverability.
- Cost.

The preferred strategy for each use is described in the appropriate section.

4.2.1 Residential Units

Resident's Vehicles

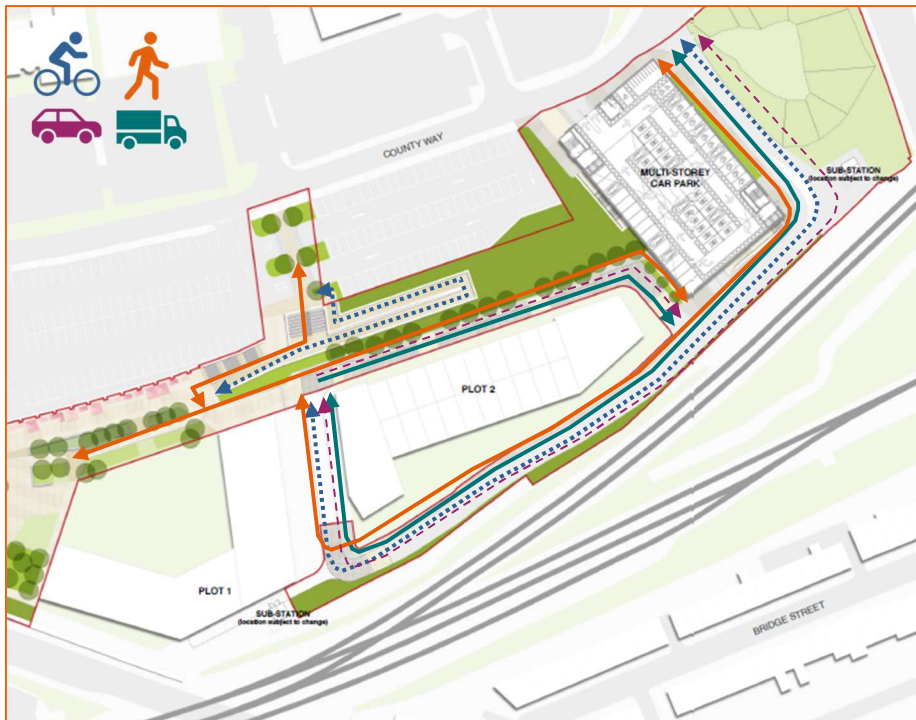
An access road is taken from County Way via a priority junction to the north of the MSCP. This route turns south between Plot 2 and the site boundary and is two-way providing access to off-street parking for Plot 2.

At the end southern end of Plot 2, the road turns west between Plot 1 and Plot 2. Also two-way, it provides kerbside pick-up/drop-off for residents of Plot 1, with the possibility of parking bays for residents with mobility impairments.

At the south-west corner of Plot 2, the access road turns north and runs to the west and the north of Plot 2, exiting back onto the access road. This is one-way clockwise and provides access to the houses on the west side of Plot 2.

If residents parking is to be provided within Plot 1, there short section of service road that runs between Plot 1 and the site boundary.

Figure 10 – Residential Access Routes – All Modes



Servicing / Refuse Collection

- Servicing, such as online retail deliveries, will access Plot 1 and Plot 2 via the route described above.
- Refuse collection for Plot 1:
 - Along access road, collect on-street, and exit using the access road, which is the more likely.
 - Reverse a short distance down the service road to the east of Plot 1 and depart using the access road.
- Refuse collection Plot 2 will follow the residential access road using the clockwise one-way section.

Refuse collection would take place once a week using potentially 3 vehicles

Pedestrians

Pedestrian routes to serve the residents are:

- Footway alongside the access road(s).
- Footway running north-south linking the MSCP with the public realm.
- Footway via a ramp from Phase 1 to the central and northern section of County Way.

Cyclists

Cycle routes to serve the residents are:

- The residential access road. The road will be low trafficked and low speed and as such cyclists can use the carriageway.
- Through the public realm between the junction of Regent St with Eldon St.
- The ramp that links Phase 1 to County Way.

4.2.2 Active Travel Hub

Pedestrians & Cyclists

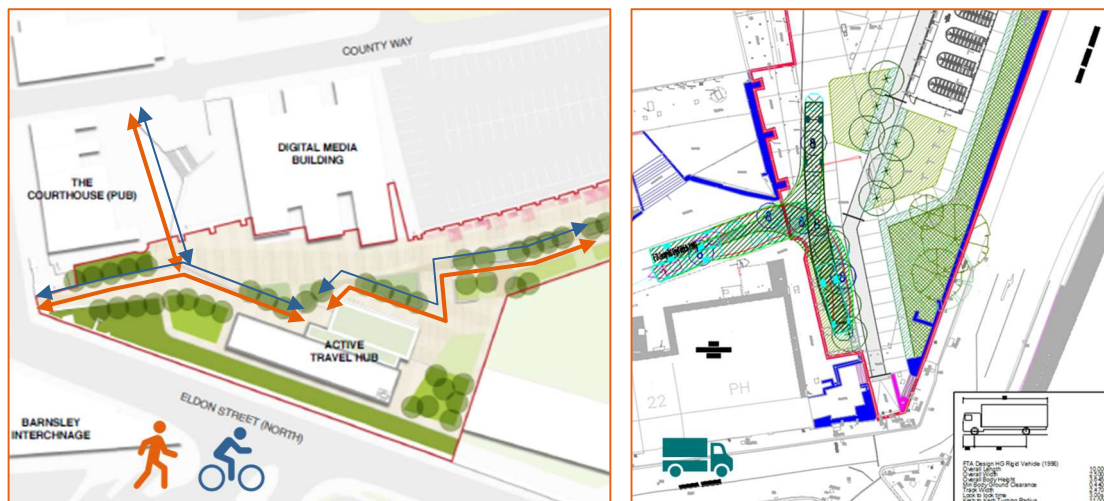
Pedestrian routes to the ATH are through the public realm, which will be closed to vehicles for the majority of the time, with connections from the wider network via:

- County Way and the car park access route to the rear of the Courthouse Pub.
- Ramp and steps from Regent St / Eldon St North.
- Ramp between County Way and Phase 1 and onwards using the space in the public realm between the ATH and DCM-001.

Servicing / Refuse Collection

Service vehicles, such as delivery of stock / parts, is to take place from an area to the west of the public realm at the eastern end of the car park access route to the rear of the Courthouse Pub. A dedicated ‘hammerhead’ space is to be provided to allow for refuse trucks and up to 12m HGV rigids to turn using a 3-point turn manoeuvre. Figure 11 shows the arrangement for large vehicle and pedestrian and cycle route.

Figure 11 – Pedestrian & Cycle Routes + Servicing



4.2.3 DMC-001

Servicing / Refuse Collection

Service vehicles, such as delivery of stock / parts, is to take place from an area to the west of the public realm at the eastern end of the car park access route to the rear of the Courthouse Pub. A dedicated ‘hammerhead’ space is to be provided to allow for refuse trucks and up to 12m HGV rigids to turn using a 3-point turn manoeuvre. Figure 11 shows the arrangement for large vehicle.

It is estimated that the ATH would have refuse collection once a week and deliveries potential 2 to 3 vehicles a week, typically a large van.

Maintenance / Roof Lifts

It has been identified that the DMC-001 requires occasional access for a mobile crane to undertake maintenance and lift equipment on and off the roof.

Space has been provided within the public realm design to allow a mobile crane to operate. This vehicle would have managed access to the public realm and supported by a HSE plan, have a cordoned off work zone and banksman to manage safe entry and departure of the vehicle.

4.2.4 Public Square

The public realm is intended to be a new space for pedestrians to pass through and to congregate. We propose that cyclists are allowed to cycle through the square using the key shared route, but not with dedicated and segregated infrastructure. It is considered to be a risk to pedestrians with cyclists passing through the space at speed, rather than in a considered manner.

From time to time, there will be the need for vehicles to access the heart of the public realm to undertake maintenance of the soft / hard landscaping, set up and hold events such as markets, maintenance of the ATH and DCM-001, access the rail corridor for maintenance and inspection.

Access would be undertaken a managed way in accordance with the appropriate HSE plan.

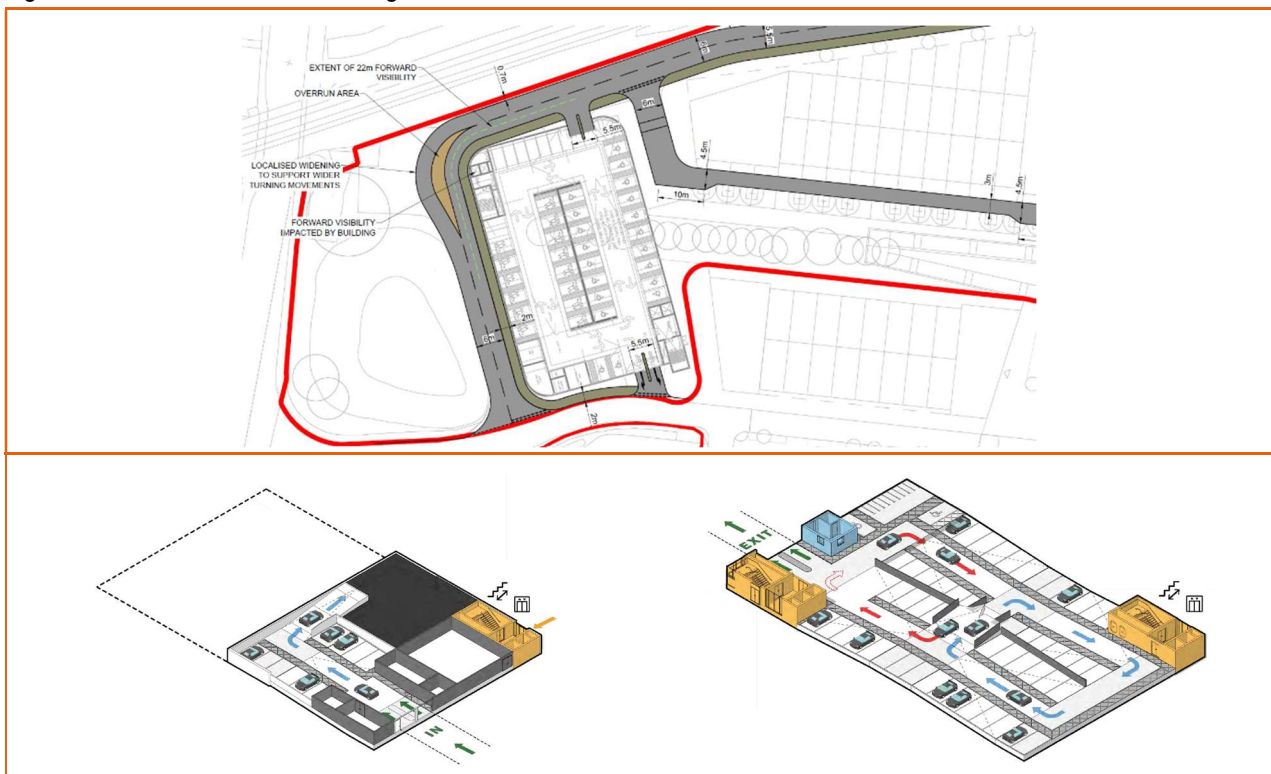
4.2.5 MSCP

Cars

Access to the MSCP is from County Way via the northern section of the residential access road, with the entrance on the east side into the lower ground floor and spiral up through the floors to find a space. Vehicles then spiral back down to exit onto County Way.

Figure 12 shows the highway route to access the entrance, the internal layout, and the egress from the MSCP.

Figure 12 – Vehicular Access and Egress for the MSCP





Pedestrians

Pedestrian access and egress points are located on the southwest corner of the building on County Way, and the northeast corner of the building on the residential access road at the lower ground floor level. These are marked as orange in Figure 12.

4.2.6 Courthouse Public House

The Courthouse requires refuse collection and deliveries, including a dray wagon (10m HGV Rigid), to take place to the rear of the building on the car park access road from County Way. Currently the vehicles undertake a turnaround manoeuvre at the bottom of the car park access road; however, this will need to be managed.

A dedicated 'hammerhead' space is to be provided to allow for refuse trucks and up to 12m HGV rigids to turn using a 3-point turn manoeuvre, which also serves the DCM-001 and ATH. Figure 11 demonstrates this.

4.2.7 Emergency Vehicles – Site Wide

Emergency vehicles are able to access the MSCP, Plot 1 and Plot 2 via the residential access road from County Way at the northern end of Phase 1. In the event of a blockage of this access road, emergency vehicles have a clear route through the public realm

A Technical Note of the optioneering and the evaluation discussion as provided in Appendix B.

5 Trip Generation / Distribution / Assignment

5.1 Scoping Assessment

In advance of preparing this Transport Assessment the design team have met with the Local Highway Authority (LHA) regarding the scope of the impact assessment to support the planning application for Phase 1. At the time of writing Arcadis has not received formal feedback in relation to the scope of the TA. However, we have met with the LHA a number of times and through these discussions the following key points that have been raised, and our response within this document, are:

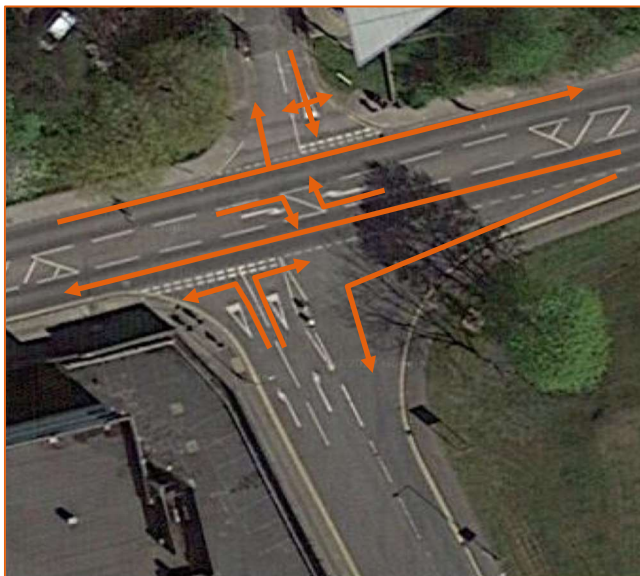
- Phase 1 results in the loss of just over 460 car parking spaces and replaced with a 386 space MSCP. Data collected by the Council during 2021 and early 2022 suggests that there is sufficient capacity in the town centre to deal with this reduction in spaces. Due to the effect of Covid19, in particular the Council's work from home policy, further occupancy surveys were undertaken at the end of May 2022 for a 7-day period to provide a comparable dataset to that of the Council to establish current demand. Details of the assessment are provided in this report.
- During the pre-planning phase the LHA requested that the TA cover all phases of the Seam Blue Print and in particular the impact of the displacement of car parking demand to alternative locations within the town on the network. However, there is uncertainty in relation to the timescales for subsequent phases would come forward and the details of the proposed land use. As such the planning application, including the TA, focuses upon Phase 1 only. The creation of a new town centre traffic model was discussed but the scale of impact Phase 1 does not necessitate the development of a new town centre model. However, a model can be developed as part of the next phase of delivery of the Blueprint.
- Queries were raised in relation to how different modes would access and travel through Phase 1, how the new and existing buildings would be serviced, and access for maintenance and emergency vehicles would be provided for. Options have been considered and discussed with the LHA, particularly for the servicing of existing and new buildings, and a preferred approach has been selected and described in this report.

5.2 Trip Generation

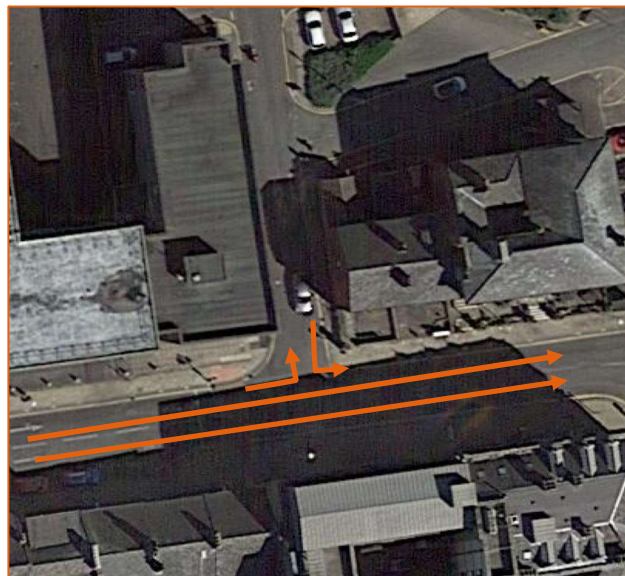
5.2.1 Network Peak Hours

The weekday peak hours and Saturday peak hour for the network adjacent to Phase 1 have been identified through the analysis of traffic survey data (Manual Turning Count and Queue Length Surveys) at the junctions of County Way with Old Mill Lane and Regent Street. Figure 13 refers.

Figure 13 – Location of MTCs and Turning Movements Collected



County Way / Old Mill Lane



County Way / Regent Street

For County Way / Old Mill Lane junction these are:

- Weekday AM Peak Hour – 08:00 to 09:00
- Weekday PM Peak Hour – 16:15 to 17:15
- Saturday Peak Hour – 11:00 to 12:00

For County Way / Regent St junction these are:

- Weekday AM Peak Hour – 08:00 to 09:00
- Weekday PM Peak Hour – 16:30 to 17:30
- Saturday Peak Hour – 12:45 to 13:45

Apart from the AM weekday peak period, there are different peak hours at both junctions. As such, when examining the trip rates to use for these junctions as they overlap the hour periods in TRICS, the highest 2-way trip rate has been used for robustness.

The TRICS outputs are contained in Appendix C.

5.2.2 Residential

Trip generation, particularly by private vehicle, for the proposed residential units will be influenced by three factors, namely:

- Location of development in relation to jobs, services and leisure.
- Accessibility to Public Transport.
- Availability of parking space(s).

Phase 1 is located in a high sustainable location within Barnsley town centre, adjacent to Barnsley Transportation Interchange with direct access to bus and rail travel. This provides an opportunity for the residential units parking provision to be minimal or even car-free.

The aspiration for the site is to reduce carbon emissions and attract residents that want to live in a sustainable development. This includes minimising the impact of vehicles on the site. The public realm areas will not be accessible to vehicles (except refuse and servicing / emergency) and Plots 1 and 2 will seek to minimise vehicles

on site, particularly the private car. As a worst case scenario, we have assumed 1 private vehicle will be available for the houses and that some town centre level of parking provision for the apartments.

It is anticipated that the apartments will be car free, or at the most a small provision of accessible parking spaces and potential to lease spaces in the MSCP. Notwithstanding this, the trip generation is based upon town centre apartments that have parking to ensure robustness of this assessment.

The TRICS database (7.9.1) has been integrated to provide vehicular trip rates for the houses and the apartments for both a typical weekday and Saturday. Sites selected reflect the highly accessible location of Phase 1.

Table 4 and Table 5 set out the vehicle trips generated for the houses and apartments, respectively, proposed for Seam Phase 1 for a typical weekday.

The TRICS database has limited surveys for a Saturday, particularly within / adjacent to a town centre. Trip rates for mixed houses and apartments have been used for the Saturday peak. The TRICS outputs show that the number of vehicular trips for Phase 1 is low and reflects the town centre location. The TRICS outputs show that the number of vehicular trips generated by the residential element of the Seam Phase 1 is very low, with a total of 34 two-way movements in the AM Peak and 47 two-way movements in the PM peak. This is reflective of the highly accessible location of the Seam Phase 1 within the town centre and close proximity to the Barnsley public transport interchange.

Table 6 sets out the vehicle trips for all residential properties for the Saturday peak.

Table 4 – Houses Vehicular Trip Generation Weekday AM and PM Peak Periods

Modes	AM Peak			PM Peak		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Vehicles	3	6	9	5	4	9

Table 5 – Apartment Vehicular Trips Generation Weekday Peak Periods

Modes	AM Peak			PM Peak		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Vehicles	5	17	22	18	10	28

The TRICS outputs show that the number of vehicular trips generated by the residential element of the Seam Phase 1 is very low, with a total of 34 two-way movements in the AM Peak and 47 two-way movements in the PM peak. This is reflective of the highly accessible location of the Seam Phase 1 within the town centre and close proximity to the Barnsley public transport interchange.

Table 6 – All Residential Vehicular Trips Saturday Peak Period

Modes	Saturday Peak		
	Arrival	Departure	Two-Way
Vehicles	21	26	47

The anticipated low vehicular movements mean there are likely to be a higher modal share for walking and cycling and potentially out-commuting by rail. Table 7 summarises the non-car trips for pedestrians, cyclists, and public transport users for a weekday.

There are no appropriate TRICS sites for a Saturday for residential to provide a trip rate for non-car modes of travel. Given the town centre location, it is reasonable to assume that walking to and from the town centre is likely to be higher than the weekday, but more likely in the evening accessing the evening economy.

The Seam – Phase 1

Table 7 – Non-Car Trips by Mode AM, PM & Daily (12 Hour) – Weekday

Mode	Land Use	AM Peak			PM Peak			All Day (07:00 to 19:00)		
		Arrivals	Departures	2-Way	Arrivals	Departures	2-Way	Arrivals	Departures	2-Way
Pedestrians	Houses	1	5	6	4	2	6	20	24	44
	Apartments	3	10	13	9	7	16	72	72	144
Cyclists	Houses	0	1	1	1	0	1	2	2	4
	Apartments	1	2	3	1	1	2	5	5	10
Bus	Houses	0	1	1	1	1	2	2	2	4
	Apartments	1	10	11	7	2	9	31	31	62
Train	Houses	0	0	0	0	0	0	0	1	1
	Apartments	1	4	5	3	1	4	10	10	20
Total Non-Car Trips		7	33	40	26	14	40	142	147	289

The residential element of Phase 1 is predicted to generate nearly 300 person trips by non-car modes.

The highest of these are pedestrian movements are pedestrians with 188 two-way movements between their residence and the town centre on a weekday, as would be expected given the location of Phase 1.

5.2.3 ATC and Café

The vision for the new ATC is to service the needs of existing and future cyclists; facilitate and encourage greater levels of cycling, in accordance with wider policy objectives; and act as a hub for information relating to options for non-private car travel. Some of the cycle trips to the ATC will be transferred from the existing facility.

There is also a café contained within the building.

New vehicular trips on the network would be limited to occasion servicing and refuse collection, but these may already be on the network servicing other town centre properties.

We have integrated TRICS for a café and one site had multi-modal data and only for a weekday. Table 8 sets out the total potential all day two-way pedestrian trips for the Café for a weekday, based upon a GFA of 135sqm.

Table 8 – ATC Café Pedestrian Trips – Weekday

Modes	Total Pedestrian Trips 08:00 to 17:00		
	Arrival	Departure	Two-Way
Pedestrians	35	35	70

There are no TRICS sites for a Saturday, so the weekday figures have been factored up using the difference in footfall through the Seam site compared to a weekday. There are 55% increase in footfall on a Saturday compared to a weekday. This has been applied to the TRICS data to provide a robust assessment of likely two-way trips to the Café and are shown in Table 9.

Table 9 – ATC Café Pedestrian Trips – Saturday

Modes	Total Pedestrian Trips 08:00 to 17:00		
	Arrival	Departure	Two-Way
Pedestrians	54	54	108

The trips pedestrian trips generated by the café are likely to be a combination of pass-by, linked and diverted trips within the town centre. It is considered that very few single purpose vehicular trips would be attracted to the Café.

No sites exist within the TRICS database to provide a comparator site for an ATH. Given the nature of the facility the trips will be for the most would be linked trips for parking and ad hoc repairs parts or diverted for servicing / repairs / parts from the ATH and other town centre stores offering the same services.

5.2.4 MSCP

The vehicles that would be using the MSCP are those already on the network and using the existing car parking accessed from County Way. As such, no new vehicular trips will be generated on the network, other than a very small number of servicing and maintenance vehicles.

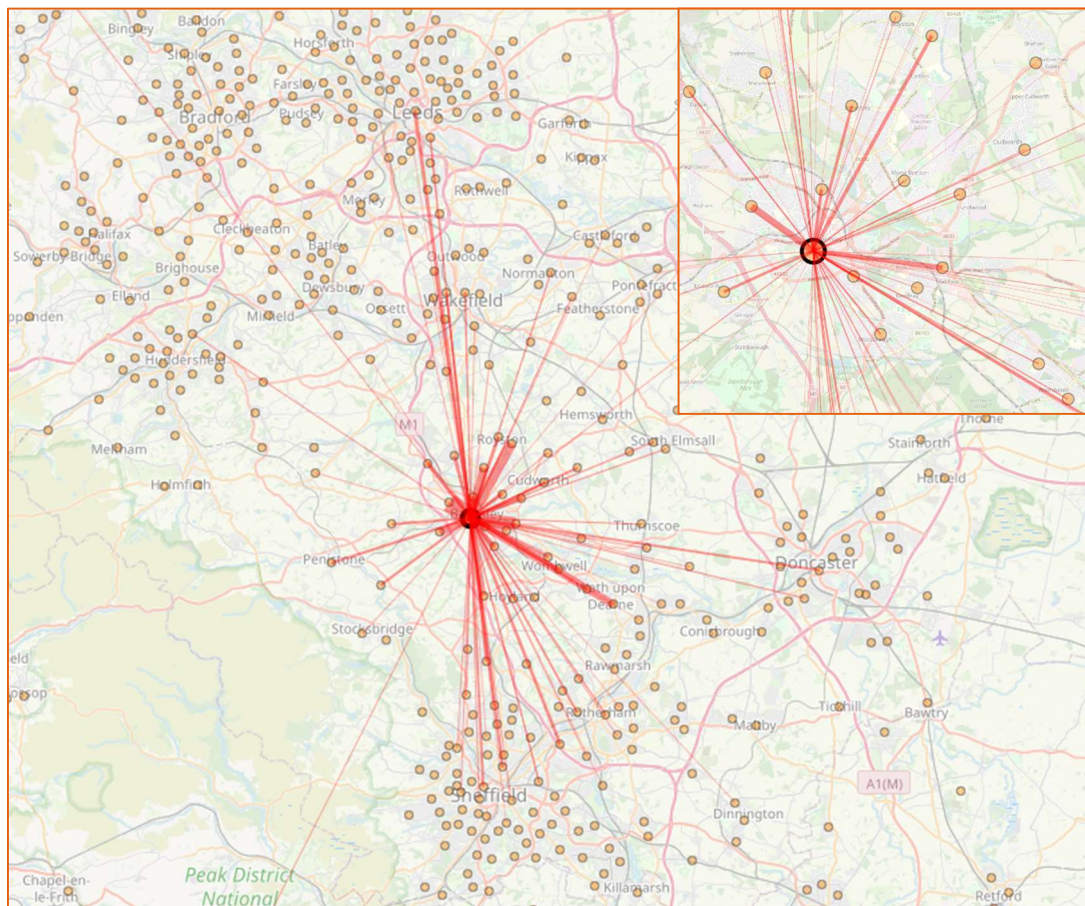
5.3 Distribution & Assignment

5.3.1 Residential Vehicles

Any vehicular trips generated by the residents of Seam Phase 1 are likely to be destinations outside the town centre that are beyond reasonable walking / cycling distance; require a longer trip on public transport, particularly by bus, compared to by private car; and those not accessible by public transport.

Analysis of the 2011 Census for journey to work by car for the MOSA that covers part of the town centre and residential area to the immediate southwest, shows that out-commuting by private car is to a wide range of destinations, as shown in Figure 14.

Figure 14 – Out-Commuting Destinations by Private Car for Work



Analysis of the data shows that the top five destinations are to the areas that contain the following employment areas:

1. Barnsley Hospital
2. Stairfoot Industrial Estate / Retail Park
3. Royston
4. Carlton Industrial Estate

Beyond these there are a wealth of other destinations located around Barnsley, with a concentration of destinations to the north, east and south, as Figure 14 demonstrates.

Utilising satellite navigation function within online mapping and testing route choices for the 4 key destinations during the peak periods it showed that the quickest journey times from Phase 1 is via the junction of County Way with Old Mill Lane. This scenario is reasonable as the route via Regents Street is less direct to and from gain access to and from the ring-road.

Notwithstanding this, we have assumed that there may be a very small number of residents for whom this route may be preferable when travelling to the west.

- 95% of the vehicular trips depart and arrive via Old Mill Lane.
- 5% of vehicular trips depart and arrive via Regent Street.

This assumption has been implemented for both the weekday and Saturday peaks.

The Census data showed that the likely split of development traffic at the junction of County Way and Old Mill Lane would be:

- 30% turn left (west & north)
- 70% turn right (north, east and south).

This proportion is also the same for AM arrival and PM departure.

All vehicles using the junction of County Way and Regent St turn left into and out of County Way, reflecting the one-way east operation of Regent St.

5.3.2 Residential Non-Car Modes

The highest non-car movement (pedestrians) are likely to heading into the different areas of the town centre either for work, education, leisure or retail. Seam Phase 1 sits in the northwest quadrant of the town centre routing of pedestrians is likely to be split fairly evenly along the following routes:

- South through the public realm to Regent St and onwards into the town centre.
- West using the ramp from Phase 1 to County Way to access other Seam uses, or onwards towards the employment located in the southwest quadrant, for example, the Town Hall and Council Offices.
- North towards Barnsley Hospital and other smaller employers on that edge of the town centre.

All public transport users would be connecting to Barnsley Interchange, via the public realm.

Cyclists are more likely to be making journeys outside of the town centre to access destinations such as:

- Barnsley Hospital via County Way, Old Mill Lane and on to the hospital.
- Employment area centre on Whaley Road via County Way, Old Mill Lane and Huddersfield Rd (A637) or a relatively quieter route past the hospital.

5.3.3 MSCP

The MSCP for Phase 1 replaces existing parking on the site. It is assumed that the MSCP will not likely materially result in re-routing of users of the County Way parking, public and private.

5.4 Traffic Growth

The baseline for the impact assessment is 2022.

The assessment has utilised the DfT's Trip End Model Presentation Programme (TEMPro) to calculate the traffic growth for the local highway network for the future year scenarios.

The growth factors to be applied to the traffic count data for the weekday and Saturday for 2025 and 2033 are shown in Table 10.

Table 10 – TEMPro Growth Factors

Scenario	Growth Factor AM	Growth Factor PM	Growth Factor Saturday
2022 to 2025	1.025	1.024	1.026
2022 to 2033	1.087	1.084	1.089

It is likely that TEMPro does not contain the proposed Seam development, so there has been no discounting of the growth rates to avoid double counting the residential trips. This assessment has not speculated on the schedule of land uses that may come forward with the other phases of the Seam as this is still to be determined in detail at the next stage of the master planning process.

6 Assessment of Impact

6.1 Active Travel

6.1.1 Walking

The Seam Phase 1 development is predicted to increase the daily pedestrian movements during a weekday. This is to be expected given the highly sustainable location of the Seam development within very close proximity to Barnsley Interchange and being within a thriving town centre.

The key pinch point is the ramp and steps at the southern end of Phase 1. The pedestrian surveys show that this route is a busy throughout the day, especially on a Saturday. The Phase 1 development will add additional pedestrians for the residential plots and the café at the ATH; however, there will be a corresponding reduction in pedestrian flows over time with the removal of the public surface car parking as the Seam Blueprint is implemented. In the short term this is unlikely to materialise as the MSCP will re-provide similar parking capacity, depending upon payment regime to allow for shopper trips.

6.1.2 Cycling

The trip generation exercise suggests that the residential and café land uses are unlikely to result in a material increase in cycle trips.

The relocation of the ATH will transfer existing cycle parking demand for secure parking (33 two-way trips) with the potential for an additional 142 two-way trips with the expansion of capacity potentially attracting more users. The impact upon the public realm will mean there will be cyclists wishing to cross the space, and this will be allowed with cyclists using caution to move across the public realm.

6.2 Public Transport

Given the town centre location of Phase 1 and its scale there is a nominal increase in the demand placed upon public transport for both buses and rail. The TRICS assessment shows that on a typical weekday the number of new trips on the buses (66 two-way trips) and rail (21 two-way trips) network can be easily absorbed by the current infrastructure.

6.3 Car Parking

6.3.1 Seam Phase 1

Car park beat surveys were undertaken to establish the occupancy levels of all of the public car parks accessed from County Way. Phase 1 will remove the existing 460 car parking spaces on Lower Seam Car Park with the MSCP re-providing 386 spaces, will result in a reduction of 74 spaces.

The occupancy survey data summarised in Section 3.2.2 demonstrates that the peak demand for parking on the Lower Seam Car Park of 59% / 270 vehicles can be serviced with a headroom of 116 spaces to allow for an increase in demand with the lifting of Covid19 restrictions and a return to the office. In particular, the return to the office of Barnsley Council officers.

6.3.2 Construction Phase

It is anticipated that the Phase 1 will be constructed in one phase, the result of this is that all of the Seam Lower car park will not be available to the public to park during the construction period but will be replaced by the new multi storey car park once built.

The car parking occupancy surveys show that there is a limited level of spare capacity to absorb the displaced vehicles, particularly the availability of short stay (red bays) parking. It is anticipated that the spare capacity will be taken up in Upper Seam car parks, there will be temporary displacement of vehicles to other car parks across the town centre.

Discussion with the Council’s Commercial Services Manager, with the support of the Council’s parking occupancy data, it was agreed that there is sufficient capacity across the town centre car parks. In particular short-stay shopper parking would be more appropriate to be relocated to the Glass Works shopping centre, which can assist in driving footfall to the benefit of the current business and attracting future businesses.

Table 11 – Summary of Council Car Parking Data (Peak Average Occupancy) October to December 2021

Car Park	Type	Spaces	Weekday Average Occupancy	Weekend Average Occupancy
Berneslai Close	commuter	22	11%	1%
Burleigh st East	commuter	70	0%	0%
Burleigh Street West	commuter	28	37%	38%
Churchfields	commuter	112	73%	21%
The Seam Lower (Red bays)	shopper	182	40%	78%
The Seam Lower (White bays)	commuter	262	25%	28%
The Seam Upper Commuter (All Sides)	commuter	477	67%	76%
Grahams Orchard	shopper	46	66%	92%
John Street	shopper	113	21%	72%
Mark Street	commuter	57	22%	39%
Market Gate Car Park	shopper	170	9%	19%
Pitt Street	commuter	79	11%	25%
Sackville Street	shopper	101	33%	40%
St Marys Place	shopper	11	65%	58%
The Glass Works	shopper	465	21%	50%

The construction impacts will be for between 18 to 24 months; however, the proposed changes support and begin the implementation of the wider parking strategy for town centre to better manage and allocate parking supply within the town. A construction management plan will need to be produced by the contractor to examine the requirements for signagion, potentially using VMS, to direct shoppers and commuters to those car parks that have capacity.

6.4 Local Highway

6.4.1 Scenarios

The junction capacity assessments of the impact of Phase 1 on the local highway network have been undertaken for the scenarios listed below.

- Baseline (2022)
- Phase 1 Opening Year with Growth (2025)
- Phase 1 Opening Year with Growth + Development (2025)
- Future Year (2033)
- Future Year + Development (2033)

Based upon the current programme, including covenants relating to funding streams, the opening year of Seam Phase 1 is assumed to be 2025.

The future year has been taken as the end of the current Barnsley Local Plan, being 2033.

6.4.2 Capacity Assessment Results

Baseline – 2022

Table 12 and the The baseline results show that the junction operates within its capacity, although it can be influenced by the high demand on Old Mill Lane, particularly during the weekday peak periods. The highest level of delay is experienced in all peak periods for the right turn from County Way into Old Mill Lane across the street of westbound traffic.

Table 13 summarise the baseline results of the junction modelling undertaken using the traffic surveys on the 19th of May (Thursday) and 21st of May (Saturday) 2022 for the junctions of County Way with Old Mill Lane and County Way with Regent St, respectively.

Table 12 – County Way / Old Mill Lane Baseline 2022

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
CW Left	0.1	8.2	0.08	A	0.3	8.83	0.22	A	0.3	8.94	0.23	B
CW Right	0.2	17.46	0.16	C	0.5	19.19	0.32	C	0.8	22.04	0.43	C
OLM -WB Right	0	7.6	0.01	A	0	8.18	0	A	0	0	0	A
College R/L/AH	0	13.5	0.03	B	0.1	13.41	0.06	B	0	0	0	A
OML – EB Right	0.3	10.13	0.21	B	0.1	7.57	0.09	A	0.4	9.56	0.28	B

The baseline results show that the junction operates within its capacity, although it can be influenced by the high demand on Old Mill Lane, particularly during the weekday peak periods. The highest level of delay is experienced in all peak periods for the right turn from County Way into Old Mill Lane across the street of westbound traffic.

Table 13 – County Way / Regent Street Baseline 2022

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ
CW Left	47	14.5%	22.8	0.7	188	45.9%	30.6	4.1	163	45.0%	26.5	2.7
RS – AH(R)	130	6.6%	1.0	0.0	382	19.3%	1.1	0.1	235	11.9%	1.0	0.1
RS – AH(R)	247	12.5%	1.0	0.1	279	14.1%	1.1	0.1	254	12.8%	1.0	0.1
RS – Left	188	19.2%	8.9	1.7	246	24.4%	13.8	3.5	184	19.9%	10.2	1.8
RS – AH	247	22.2%	8.8	2.2	279	26.3%	13.9	4.1	254	23.9%	10.2	2.6
CW North	105	5.6%	1.0	0.0	52	2.8%	1.0	0.0	112	5.9%	1.0	0.0

The analysis shows that overall, the junction operates within its capacity with the side road of County Way experiencing the most amount of delay as a side road onto the main road of Regent Street.

Opening Year – 2025

Analysis of the impact of Phase 1 upon opening, which is assumed to be 2025, has been undertaken and the results summarised in Table 14 to Table 17.

Table 14 – County Way / Old Mill Lane Opening Year (2025) – Without Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
CW Left	0.1	8.34	0.08	A	0.3	9.01	0.23	A	0.4	9.14	0.24	B
CW Right	0.2	18.17	0.17	C	0.5	20.04	0.34	C	0.8	23.37	0.45	C
OLM - WB Right	0	7.67	0.01	A	0	8.28	0	A	0	0	0	A
College	0	13.86	0.03	B	0.1	13.79	0.06	B	0	0	0	A
OML – EB Right	0.3	10.34	0.22	B	0.1	7.63	0.1	A	0.4	9.71	0.29	B

Table 15 – County Way / Old Mill Lane Opening Year (2025) – With Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
CW Left	0.1	8.72	0.1	A	0.4	9.36	0.25	B	0.5	12.5	9.69	0.27
CW Right	0.3	20.45	0.25	C	0.7	22.33	0.39	C	1.2	29.92	27.78	0.53
OLM - WB Right	0	7.7	0.01	A	0	8.38	0	A	0	0	0	0
College R/L/AH	0	14.03	0.03	B	0.1	14.11	0.06	B	0	0	0	0
OML – EB Right	0.3	10.53	0.23	B	0.1	7.93	0.12	A	0.5	10.59	10.14	0.32

The results show that there is a slight deterioration in performance of the junction in the opening year. With development traffic the right turn from County Way into Old Mill Lane deteriorates slightly, but the junction still operates within capacity.

Table 16 – County Way / Regent St Opening Year (2025) – Without Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ
CW Left	48	14.8%	22.8	0.7	193	47.1%	30.9	4.3	167	46.2%	26.7	2.8
RS – AH(R)	132	6.7%	1.0	0.0	393	19.8%	1.1	0.1	242	12.2%	1.0	0.1
RS – AH(R)	254	12.8%	1.0	0.1	285	14.4%	1.1	0.1	259	13.1%	1.0	0.1
RS – Left	192	19.6%	8.9	1.7	253	25.1%	13.9	3.6	190	20.5%	10.2	1.9
RS – AH	254	22.8%	8.8	2.3	285	26.9%	14.0	4.1	259	24.4%	10.2	2.6
CW North	108	5.7%	1.0	0.0	53	2.8%	1.0	0.0	115	6.1%	1.0	0.0

Table 17 – County Way / Regent St Opening Year (2025) – With Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ
CW Left	51	15.7%	22.9	0.7	195	47.6%	31.0	4.3	170	47.0%	26.9	2.8
RS – AH(R)	134	6.8%	1.0	0.0	393	19.8%	1.1	0.1	242	12.2%	1.0	0.1
RS – AH(R)	255	12.9%	1.0	0.1	287	14.5%	1.1	0.1	262	13.2%	1.0	0.1
RS – Left	193	19.8%	8.9	1.7	254	25.3%	13.9	3.6	190	20.6%	10.3	1.9
RS – AH	255	22.9%	8.9	2.3	287	27.1%	14.0	4.2	262	24.7%	10.2	2.6
CW North	110	5.8%	1.0	0.0	56	3.0%	1.0	0.0	118	6.3%	1.0	0.0

There is a very nominal change in the performance of the junction with the small volume of development traffic that is predicted to use this junction with the DoS of County Way rising by 0.6% in the AM Peak, 0.5% PM peak, and 0.4% in the Saturday peak.

The other movements see very little increase in DoS, if any.

Future Year – 2033

Analysis of the impact of Phase 1 at the end of the Local Plan period, which is 2033, has been undertaken and the results summarised in Table 18 to Table 21.

Table 18 – County Way / Old Mill Lane Future Year (2033) – Without Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
CW Left	0.1	8.65	0.09	A	0.3	9.48	0.25	B	0.4	9.69	0.27	B
CW Right	0.2	20.2	0.19	C	0.6	22.74	0.38	C	1	27.54	0.5	D
OLM - WB Right	0	7.87	0.01	A	0	8.55	0	A	0	0	0	A
College R/L/AH	0	14.87	0.04	B	0.1	15.05	0.07	B	0	0	0	A
OML – EB Right	0.3	10.91	0.24	B	0.1	7.82	0.1	A	0.5	10.18	0.31	B

Table 19 – County Way / Old Mill Lane Future Year (2033) – With Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
CW Left	0.1	9.08	0.11	A	0.4	9.88	0.27	B	0.4	10.33	0.29	C
CW Right	0.4	23.01	0.28	C	0.8	25.73	0.44	D	1.4	33.84	0.59	E
OLM - WB Right	0	7.9	0.01	A	0	8.66	0	A	0	0	0	A
College R/L/AH	0	15.06	0.04	B	0.1	15.44	0.07	B	0	0	0	A
OML – EB Right	0.3	11.09	0.25	B	0.2	8.13	0.13	A	0.5	10.63	0.34	B

The results show that with further traffic growth that the junction still operates within capacity, but there is a further decrease in performance of the right turn from County Way to Old Mill Lane. With the development in place there is a further deterioration and increase in delays for that movement.

It should be noted that it is anticipated that some or all of the future phases of the Seam could be delivered, and this would significantly reduce the number of vehicles with the removal circa 460 public car parking spaces.

Table 20 – County Way / Regent St Future Year (2033) – Without Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ
CW Left	51	15.7%	22.9	0.7	204	49.8%	31.6	4.6	177	48.9%	27.4	3.0
RS – AH(R)	143	7.2%	1.0	0.0	416	21.0%	1.1	0.1	258	13.0%	1.0	0.1
RS – AH(R)	267	13.5%	1.0	0.1	302	15.2%	1.1	0.1	273	13.8%	1.1	0.1
RS – Left	206	21.0%	9.0	1.8	269	26.7%	14.0	3.9	203	21.9%	10.3	2.1
RS – AH	267	24.0%	8.9	2.5	302	28.5%	14.1	4.4	273	25.7%	10.3	2.8
CW North	114	6.1%	1.0	0.0	57	3.0%	1.0	0.0	122	6.5%	1.0	0.0

Table 21 – County Way / Regent St Future Year (2033) – With Development

	AM Peak Weekday				PM Peak Weekday				Saturday Peak			
	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ	Demand (PCU)	DoS	Ave Delay (sec/PCU)	MMQ
CW Left	54	16.6%	23.1	0.8	206	50.3%	31.7	4.6	180	49.7%	27.6	3.1
RS – AH(R)	145	7.3%	1.0	0.0	416	21.0%	1.1	0.1	258	13.0%	1.0	0.1
RS – AH(R)	268	13.5%	1.0	0.1	304	15.3%	1.1	0.1	276	13.9%	1.1	0.1
RS – Left	207	21.1%	9.0	1.9	270	26.9%	14.1	3.9	203	22.0%	10.4	2.1
RS – AH	268	24.1%	8.9	2.5	304	28.7%	14.1	4.4	276	26.0%	10.3	2.8
CW North	116	6.2%	1.0	0.0	60	3.2%	1.0	0.0	125	6.6%	1.0	0.0

As with the Opening Year (2025) scenario, there is a very nominal change in the performance of the junction with the small volume of development traffic that is predicted to use this junction with the DoS of County Way rising by 0.6% in the AM Peak, 0.5% PM peak, and 0.6% in the Saturday peak.

The other movements see very little increase in DoS, if any.

Model output summary sheets for Junctions 9 and LinSig are contained in Appendix D.

7 Conclusions

This Transportation Assessment has been produced in support of the planning application for Phase 1 of the Seam development area in Barnsley Town Centre. The document assess potential impact of the proposed land uses upon the existing movement network, the neighbouring land uses / properties, and meeting the existing demand for parking.

The key conclusions from the assessment are:

- Phase 1 provides residential development within a sustainable location in compliance with Local Plan policy BTC21 and BTC22 and supports the delivery of the aims of the Transport Strategy and Active Travel Strategy by reducing travel by private car and providing improved facilities for cyclists through the Active Travel Hub.
- The trips generated by the Phase 1, in particular the 20 houses and 116 apartments, will not have a detrimental impact upon the local highway network, in terms of vehicle movements, and the existing and future active travel networks around the development. This for both a typical weekday and Saturday.
- The current demand for car parking on Lower Seam Car Park (270 vehicles / 59% of capacity) can be accommodated within the proposed 386 MSCP with spare capacity available.
- A strategy for servicing the new and existing land uses has been developed that meets their needs within the existing constraints and minimising interactions with existing and future pedestrian flows.

Based upon the assessments undertaken and summarised within this Transportation Assessment we considered that the Seam Phase 1 will not have a detrimental impact on the current or future highway and movement network.

Appendix A

Swept Path Analysis of Movement Strategy



NOTES:

Rev	Date	Description	Prod.	Chk.	Rev.	App.
P01.1	16/06/22	First Issue	---	---	---	---

Project:	THE SEAM
Site:	The Seam, Barnsley
Client:	Barnsley Metropolitan Borough Council Barnsley Council, PO Box 634, Barnsley S70 9GG www.barnsley.gov.uk

ARCADIS

Registered office: 80 Fenchurch Street, London EC3M 4BY
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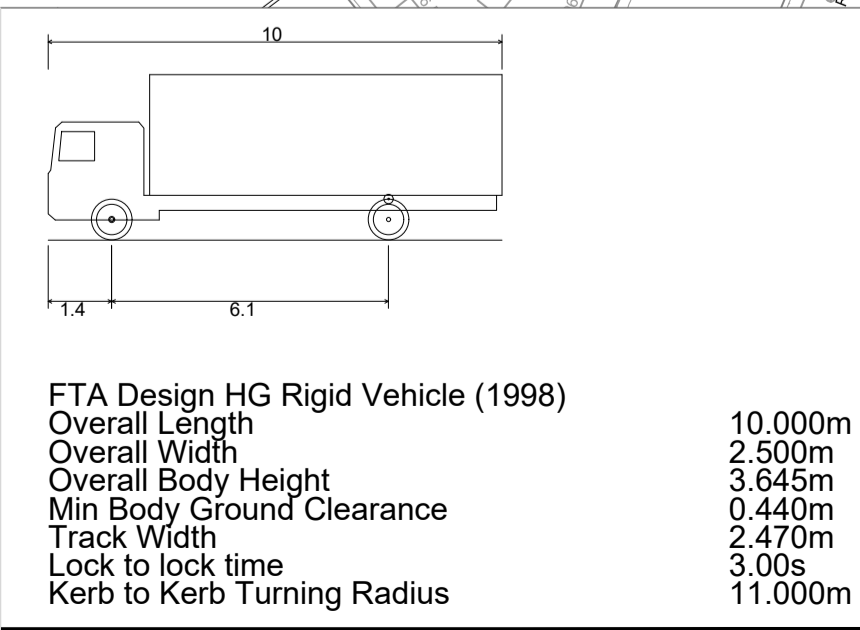
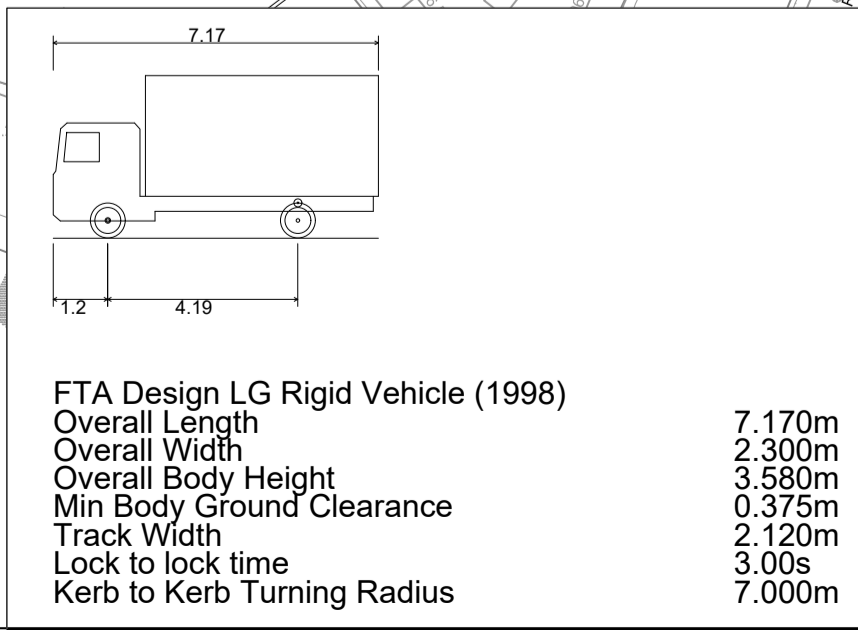
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Drawing Title: **The Seam Public Realm Design: Phase 1 Vehicle Tracking Sheet 02 of 02**

Designed:	H. Mullan	Signed:	Digitally Signed	Date:	16/06/22
Produced:	---	Signed:	---	Date:	---
Checked:	---	Signed:	---	Date:	---
Reviewed:	---	Signed:	---	Date:	---
Approved:	---	Signed:	---	Date:	---
Design Stage:	Final / Sited	Design:	Final Design		
Original Size:	A1	OS:	OS	Datum:	AOD
Suitability Code:	S0	Scale:	1:200	Project Number:	10052406

Initial Status or WIP

Drawing Number: **10052406 - ARC - HGN - XX - DS - HE - 00002** Revision: **P01.1**





NOTES:

Rev	Date	Description	Prod.	Chk.	Rev.	App.
P01.1		First Issue				

Project: THE SEAM	
Site: The Seam, Barnsley	Client: Barnsley Metropolitan Borough Council, PO Box 634, Barnsley S70 9GG, www.barnsley.gov.uk

ARCADIS

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The Seam
 Public Realm Design: Phase 1
 Vehicle Tracking
 Sheet 01 of 02

Designed: H. Mullan	Signed: [Signature]	Date: 09/06/22
Produced: [Signature]	Signed: [Signature]	Date: [Date]
Checked: [Signature]	Signed: [Signature]	Date: [Date]
Reviewed: [Signature]	Signed: [Signature]	Date: [Date]
Approved: [Signature]	Signed: [Signature]	Date: [Date]
Design Stage: [Stage]	Design Stage: [Stage]	
Original Size: A1	OS: OS	Datum: AOD
Suitability Code: S0	Scale: 1:200	Project Number: 10052406
Suitability Description: Initial Status		
Drawing Number: 10052406 - ARC - HGN - XX - DS - HE - 00001	Revision: P01.1	

FTA Design HG Rigid Vehicle (1998)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

Rigid Truck

Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.900m

Rigid Truck

Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.900m

Appendix B

Movement Strategy Technical Note

SUBJECT
Servicing Strategy for the Seam Phase 1 Public Realm

TO
Barnsley Council

COPIES TO
Arcadis – PD / PM
Arcadis – Civil Engineering
Arcadius – Landscape Architecture
BDP – All Departments

FROM
Huw Nicholas – Arcadis Mobility

huw.nicholas@arcadis.com

Purpose of Technical Note

The purpose of this technical note is to set out the strategy for servicing the buildings around and within the public realm that would be impacted by the implementation of the new public realm and Active Travel Hub (ATH).

The note identifies the vehicle types that would be required by each of the buildings, the likely frequency of visits, and uses this information to develop options to manage these whilst seeking to achieve the vision for the public realm. These options are evaluated and a recommendation on the preferred option, and a fallback option, is made.

Vision for Public Realm

The Blueprint for Seam identified the opportunity to create a new public space that provides a gateway to the area from the public transport interchange

Servicing Requirements

This section considers the servicing requirements for each of the buildings that currently or could require use of the public realm to undertake their servicing activities.

For the purposes of this exercise, it is assumed that emergency services and maintenance vehicles, for example a crane to access the DMC-001, would directly manage their interaction with pedestrians as part of their workplan.

The serving of each of the properties are:

- **Active Travel Hub**
 - Weekly refuse collection, standard refuse vehicle.
 - 3 x weekly delivery to café, large transit van.
 - Weekly delivery to bike hire shop (bikes / parts), large transit van or up to 10m rigid HGV.
- **DMC-001**
 - Weekly refuse collection, standard refuse vehicle.
 - Weekly delivery to businesses vehicle up to 10m rigid HGV.
- **Public House**
 - 5 to 6 days a week refuse collection, standard refuse vehicle.
 - 3 to 4 days a week delivery to businesses vehicle up to 12m rigid HGV.

Options Development and Evaluation

Options

The table sets out a series of options to facilitate the servicing of the ATH, DMC-001 and the Courthouse Public House when the public realm has been implemented, the benefits, disbenefits and any supporting measures to realise the option(s). The options either address the needs of all buildings or in certain instances an individual building. Where it is required, swept path analysis has been undertaken and is included within Appendix A.

Option Ref	Option	Benefits	Disbenefits	Supporting Measures
1	<p>Provide a corridor of a sufficient geometry within the public realm to allow the largest of servicing vehicles (12m HGV Rigid) to access and -U-turn in a forward gear.</p> <p>This is located to the south of the ATH.</p>	<ul style="list-style-type: none"> - Allows for safe manoeuvring at low speeds within a space that will be dominated by pedestrian and cycle movements. - Provides an obvious route for drivers, particularly those not familiar with The Seam. - Addresses the servicing needs of all units. 	<ul style="list-style-type: none"> - Authorised and unauthorised vehicles can enter the public realm at any time. - Conflict with pedestrians and cyclists. - Public realm design centred around highway infrastructure, rather than pedestrians and cyclists. - Increased construction and maintenance costs to protect the vehicle route. - Large and heavy laden vehicles come within proximity of the retaining wall to Eldon Road (N) which has been identified has having issues with its integrity. 	<ul style="list-style-type: none"> - Restrict access to specific time periods through TRO and possibly physical barriers.
2	<p>Provide a corridor of a sufficient geometry within the public realm to allow the largest of servicing vehicles (12m HGV Rigid) to access and -U-turn in a forward gear.</p> <p>This is located between the ATH and DMC-001.</p>	<ul style="list-style-type: none"> - Allows for safe manoeuvring at low speeds within a space that will be dominated by pedestrian and cycle movements. - Provides an obvious route for drivers, particularly those not familiar with The Seam. - Addresses the servicing needs of all units. 	<ul style="list-style-type: none"> - Authorised and unauthorised vehicles can enter the public realm at any time. - Conflict with pedestrians and cyclists. - Public realm design centred around highway infrastructure, rather than pedestrians and cyclists. - Increased construction and maintenance costs to protect the vehicle route. - There is insufficient space for forward gear U-Turn movements. - Large and heavy laden vehicles come within proximity of the retaining wall to Eldon Street (N) which has been identified has having issues with its stability. 	<ul style="list-style-type: none"> - Reposition the ATH to allow for the turning circle. - Restrict access to specific time periods through TRO and possibly physical barriers.
3	<p>Provide a corridor of a sufficient geometry within the public realm to</p>	<ul style="list-style-type: none"> - Allows for safe manoeuvring at low speeds within a space that will be dominated by 	<ul style="list-style-type: none"> - Authorised and unauthorised vehicles can enter the public realm at any time. 	<ul style="list-style-type: none"> - Restrict access to specific time periods through TRO

Technical Note

Option Ref	Option	Benefits	Disbenefits	Supporting Measures
	<p>allow the largest of servicing vehicles (12m HGV Rigid) to access and -U-turn through 3-point turn.</p> <p>This is located between the ATH and DMC-001.</p>	<p>pedestrian and cycle movements.</p> <ul style="list-style-type: none"> - Provides an obvious route for drivers, particularly those not familiar with The Seam. - Addresses the servicing needs of all units. 	<ul style="list-style-type: none"> - Conflict with pedestrians and cyclists, particularly when reversing. - Public realm design centred around highway infrastructure, rather than pedestrians and cyclists. - Increased construction and maintenance costs to protect the vehicle route with a reinforced pavement. - There is insufficient space for forward gear U-Turn movements. 	<p>and possibly physical barriers.</p>
4	<p>Provide a 'hammer-head' turning facility at the eastern end of the road between DMC-001 and Courthouse of sufficient length to allow a 3-point turn.</p> <p>DMC-001 and ATH can place bins in dedicated pick-up point at the hammer head.</p>	<ul style="list-style-type: none"> - Addresses the servicing needs of all units. - Reduces the footprint of the servicing requirements within the public realm. - Limits the space for potential conflicts with pedestrians and cyclists. - Always allows for access and egress, almost all by forward gear. 	<ul style="list-style-type: none"> - Requires space within the area for the public realm. - Need for the public realm to allow the wheeling of bins along a corridor that is level and free from obstructions. - Reduced cost for the public realm as no vehicles regularly entering and need to reinforce the pavement. Make use of existing pavement. 	<ul style="list-style-type: none"> - TROs to prevent unauthorised parking.
5	<p>Relocated the bins and servicing for DMC-001 to the areas of the site accessed from County Way.</p>	<ul style="list-style-type: none"> - Eliminates the vehicles servicing the DMC-001 from the public realm. 	<ul style="list-style-type: none"> - Does not address the servicing needs of ATH or Courthouse. 	<ul style="list-style-type: none"> - Requires the agreement with building management, provision of storage units and notification of Council (or private) refuse collection and suppliers.
6	<p>Large delivery and refuse vehicles reverse from County Way down the road between DMC-001 and Courthouse.</p> <p>Smaller vehicles can 3-point turn within the carriageway.</p>	<ul style="list-style-type: none"> - Removes the need for a dedicate turning facility within the public realm. 	<ul style="list-style-type: none"> - Need for the public realm to allow the wheeling of bins along a corridor that is level and free from obstructions. - Impact on the operation of County Way and Regent Street when a vehicle is seeking to reverse. - Potential conflict with pedestrians on access road between DMC-001 and Courthouse. - Reduced cost for the public realm as no vehicles regularly entering and need to reinforce the pavement. 	<ul style="list-style-type: none"> - Requires the provision of a dedicated space to place bins for DMC-001 and ATH. - Require the agreement of the refuse operators (Council & private) regular delivery providers, including the brewery for the Courthouse. <ul style="list-style-type: none"> o Principle of reversing. o Direction of approach

Technical Note



Option Ref	Option	Benefits	Disbenefits	Supporting Measures
				to minimise disruption on County Way and Regent Street.
7	Restrict access to the public realm to specific time periods.	<ul style="list-style-type: none"> - Reduces the potential conflict with pedestrians. - Reduces the need for dedicated route as vehicles can manoeuvre in the space available. 	<ul style="list-style-type: none"> - Increased construction and maintenance costs to protect the vehicle route with a reinforced pavement. - May not suit needs for the business to deliver during a restricted window. 	<ul style="list-style-type: none"> - Relevant TRO and ability to manage access.
8	Refuse collection and delivery for the Courthouse takes place on County Way.	<ul style="list-style-type: none"> - Vehicle do not require a facility to U-Turn in or adjacent to the public realm. 	<ul style="list-style-type: none"> - Stopping dray wagon would be for a prolonged length of time and impede the flow of traffic along County Way, particularly if this takes place during the day. 	
9	One-Way servicing route through from County Way northbound linking into the service road for Plot 1 and Plot 2.	<ul style="list-style-type: none"> - Vehicle do not require a facility to U-Turn in or adjacent to the public realm. 	<ul style="list-style-type: none"> - Increased construction and maintenance costs to protect the vehicle route with a reinforced pavement. - May become a rat-run without appropriate enforcement, even with implementation of managed access (Option 7). 	Relevant TRO and ability to manage access.

Evaluation of Options

The optioneering exercise has identified benefits and disbenefits of each. Within the context of the infrequency of these movements, the likely times of day / night and the vision for public realm, we have summarised the key considerations in selecting

- **Options 1 to 3, and Option 9**
 - Contrary to the vision for public realm.
 - Dominates the landscape design.
 - Introduces conflicts with pedestrians by crossing the main north/south route.
 - Increasing cost for construction and long-term maintenance.
- **Option 4**
 - Compromising the vision for the public realm.
 - Continues the existing conflict with pedestrians, although the new public realm will guide pedestrians past this area.
 - Increasing costs for construction and maintenance, particularly if reconstructed using public realm pallet of materials.
- **Option 5**
 - Assists in delivering the vision for the public realm by removing vehicles.
 - Removes conflict with pedestrians.
 - Resolves the issue of only one building.
 - May slightly reduce the increase in cost for construction and maintenance for Options 1 to 4.
- **Option 6**
 - Assisting in achieving the vision for the public realm.
 - Removes conflicts with pedestrians in the public realm.
 - Is possible, safely within the carriageway, for vehicles up to 12m HGV rigid.
 - Minimises the costs for construction and maintenance to accommodate large vehicles, where this is allowed.
- **Option 7**
 - Conflicts with the vision during those periods for permitted access.
 - Overly influencing landscape design, akin to Option 4.
 - Introduces a conflict with pedestrians.
 - Increases the cost of construction and maintenance.
- **Option 8**
 - Partially assists in achieving the vision for the public realm.
 - Causes a conflict with pedestrians and vehicles using County Way.
 - Minimises the costs for construction and maintenance to accommodate large vehicles, where this is allowed.

Servicing Access Strategy

The evaluation of the options shows that development of an appropriate servicing access strategy for the DCM-001, ATH and Courthouse Pub is a combination of the options.

Options that allow access to the public realm are both contrary to the vision and influence the design and cost disproportionately, given the infrequency of these vehicles to their respective buildings.

Preferred Strategy

We recommend proceeding with the following servicing access strategy:

- **DMC-001 – Option 5:** relocation of the bin store and deliveries to the car parking area accessed from County Way.
- **ATH – Option 6:** Refuse trucks reverse from County Way and small delivery vehicles 3-point turn.
- **Courthouse – Option 6 & Option 8:** Delivery (Dray Wagon) reverses from County Way and refuse vehicles stop (briefly) on County Way to make their collection.

Fallback Strategy

In the event this strategy, in whole or part, cannot be delivered or receives objections then we would recommend that the fallback position of

- **Option 4** (hammerhead turn), with the potential integration of **Option 7** (time limited access to the hammerhead turn area).

The layout of the public realm can be either reduced to retain the existing asphalt area where this takes place now, or design in the ability to adapt the space required to achieve this.

Appendix C

TRICS Report

Calculation Reference: AUDIT-111301-220620-0642

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	3 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	CO CONWY	1 days
11	SCOTLAND	
	SA SOUTH AYRSHIRE	1 days
	SR STIRLING	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 37 to 175 (units:)
 Range Selected by User: 6 to 200 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 15/10/21

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

Selected survey days:

Monday	1 days
Tuesday	4 days
Wednesday	2 days
Thursday	3 days

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

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	1
Edge of Town Centre	9

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

Selected Location Sub Categories:

Residential Zone	4
Built-Up Zone	4
No Sub Category	2

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

Secondary Filtering selection:

Use Class:

C3 10 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

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

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

Population within 5 miles:

50,001 to 75,000	6 days
75,001 to 100,000	3 days
125,001 to 250,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	8 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 10 days

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

PTAL Rating:

No PTAL Present 10 days

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

LIST OF SITES relevant to selection parameters

1	BD-03-C-01 WING ROAD LEIGHTON BUZZARD LINSLADE Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	BLOCKS OF FLATS 175 <i>15/05/18</i>	BEDFORDSHIRE	<i>Survey Type: MANUAL</i>
2	BD-03-C-02 STANBRIDGE ROAD LEIGHTON BUZZARD Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	BLOCKS OF FLATS 62 <i>15/05/18</i>	BEDFORDSHIRE	<i>Survey Type: MANUAL</i>
3	BD-03-C-03 COURT DRIVE DUNSTABLE Edge of Town Centre No Sub Category Total No of Dwellings: <i>Survey date: TUESDAY</i>	BLOCKS OF FLATS 146 <i>15/05/18</i>	BEDFORDSHIRE	<i>Survey Type: MANUAL</i>
4	CB-03-C-01 KING STREET CARLISLE Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BLOCK OF FLATS 40 <i>12/06/14</i>	CUMBRIA	<i>Survey Type: MANUAL</i>
5	CO-03-C-01 MOSTYN BROADWAY LLANDUDNO Edge of Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	BLOCKS OF FLATS 37 <i>26/03/18</i>	CONWY	<i>Survey Type: MANUAL</i>
6	NF-03-C-01 PAGE STAIR LANE KING'S LYNN Edge of Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BLOCKS OF FLATS 51 <i>11/12/14</i>	NORFOLK	<i>Survey Type: MANUAL</i>
7	SA-03-C-01 RACECOURSE ROAD AYR Edge of Town Centre Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	BLOCK OF FLATS 51 <i>16/09/14</i>	SOUTH AYRSHIRE	<i>Survey Type: MANUAL</i>
8	SF-03-C-01 STATION HILL BURY ST EDMUNDS Edge of Town Centre Built-Up Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BLOCKS OF FLATS 85 <i>18/12/14</i>	SUFFOLK	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	SR-03-C-01 FORTH SIDE WAY STIRLING	FLATS		STIRLING
	Edge of Town Centre No Sub Category Total No of Dwellings:		80	
	<i>Survey date: WEDNESDAY</i>		<i>18/06/14</i>	<i>Survey Type: MANUAL</i>
10	SR-03-C-02 ROSEBERRY TERRACE STIRLING	FLATS		STIRLING
	Edge of Town Centre Residential Zone Total No of Dwellings:		48	
	<i>Survey date: WEDNESDAY</i>		<i>18/06/14</i>	<i>Survey Type: MANUAL</i>

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
MA-03-C-01	covid
MS-03-C-04	covid
SF-03-C-05	covid

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.44

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.043	10	78	0.164	10	78	0.207
08:00 - 09:00	10	78	0.059	10	78	0.190	10	78	0.249
09:00 - 10:00	10	78	0.065	10	78	0.077	10	78	0.142
10:00 - 11:00	10	78	0.071	10	78	0.084	10	78	0.155
11:00 - 12:00	10	78	0.076	10	78	0.101	10	78	0.177
12:00 - 13:00	10	78	0.116	10	78	0.088	10	78	0.204
13:00 - 14:00	10	78	0.071	10	78	0.097	10	78	0.168
14:00 - 15:00	10	78	0.072	10	78	0.088	10	78	0.160
15:00 - 16:00	10	78	0.107	10	78	0.071	10	78	0.178
16:00 - 17:00	10	78	0.143	10	78	0.085	10	78	0.228
17:00 - 18:00	10	78	0.191	10	78	0.112	10	78	0.303
18:00 - 19:00	10	78	0.208	10	78	0.126	10	78	0.334
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.222			1.283			2.505

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: 37 - 175 (units:)
 Survey date range: 01/01/14 - 15/10/21
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 3

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 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.001	10	78	0.008	10	78	0.009
08:00 - 09:00	10	78	0.004	10	78	0.015	10	78	0.019
09:00 - 10:00	10	78	0.003	10	78	0.004	10	78	0.007
10:00 - 11:00	10	78	0.003	10	78	0.006	10	78	0.009
11:00 - 12:00	10	78	0.004	10	78	0.006	10	78	0.010
12:00 - 13:00	10	78	0.001	10	78	0.003	10	78	0.004
13:00 - 14:00	10	78	0.003	10	78	0.001	10	78	0.004
14:00 - 15:00	10	78	0.004	10	78	0.000	10	78	0.004
15:00 - 16:00	10	78	0.008	10	78	0.005	10	78	0.013
16:00 - 17:00	10	78	0.004	10	78	0.001	10	78	0.005
17:00 - 18:00	10	78	0.006	10	78	0.004	10	78	0.010
18:00 - 19:00	10	78	0.004	10	78	0.001	10	78	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.045			0.054			0.099

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.014	10	78	0.055	10	78	0.069
08:00 - 09:00	10	78	0.026	10	78	0.108	10	78	0.134
09:00 - 10:00	10	78	0.046	10	78	0.072	10	78	0.118
10:00 - 11:00	10	78	0.061	10	78	0.052	10	78	0.113
11:00 - 12:00	10	78	0.045	10	78	0.052	10	78	0.097
12:00 - 13:00	10	78	0.062	10	78	0.052	10	78	0.114
13:00 - 14:00	10	78	0.053	10	78	0.063	10	78	0.116
14:00 - 15:00	10	78	0.063	10	78	0.057	10	78	0.120
15:00 - 16:00	10	78	0.086	10	78	0.072	10	78	0.158
16:00 - 17:00	10	78	0.079	10	78	0.068	10	78	0.147
17:00 - 18:00	10	78	0.097	10	78	0.057	10	78	0.154
18:00 - 19:00	10	78	0.083	10	78	0.074	10	78	0.157
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.715			0.782			1.497

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.000	10	78	0.044	10	78	0.044
08:00 - 09:00	10	78	0.003	10	78	0.103	10	78	0.106
09:00 - 10:00	10	78	0.006	10	78	0.034	10	78	0.040
10:00 - 11:00	10	78	0.014	10	78	0.013	10	78	0.027
11:00 - 12:00	10	78	0.015	10	78	0.010	10	78	0.025
12:00 - 13:00	10	78	0.025	10	78	0.021	10	78	0.046
13:00 - 14:00	10	78	0.017	10	78	0.031	10	78	0.048
14:00 - 15:00	10	78	0.026	10	78	0.015	10	78	0.041
15:00 - 16:00	10	78	0.072	10	78	0.019	10	78	0.091
16:00 - 17:00	10	78	0.036	10	78	0.014	10	78	0.050
17:00 - 18:00	10	78	0.067	10	78	0.014	10	78	0.081
18:00 - 19:00	10	78	0.053	10	78	0.013	10	78	0.066
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.334			0.331			0.665

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.001	10	78	0.037	10	78	0.038
08:00 - 09:00	10	78	0.001	10	78	0.034	10	78	0.035
09:00 - 10:00	10	78	0.000	10	78	0.010	10	78	0.010
10:00 - 11:00	10	78	0.008	10	78	0.008	10	78	0.016
11:00 - 12:00	10	78	0.000	10	78	0.005	10	78	0.005
12:00 - 13:00	10	78	0.009	10	78	0.004	10	78	0.013
13:00 - 14:00	10	78	0.003	10	78	0.004	10	78	0.007
14:00 - 15:00	10	78	0.004	10	78	0.001	10	78	0.005
15:00 - 16:00	10	78	0.012	10	78	0.001	10	78	0.013
16:00 - 17:00	10	78	0.022	10	78	0.001	10	78	0.023
17:00 - 18:00	10	78	0.031	10	78	0.000	10	78	0.031
18:00 - 19:00	10	78	0.013	10	78	0.000	10	78	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.105			0.209

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	78	0.001	10	78	0.081	10	78	0.082
08:00 - 09:00	10	78	0.004	10	78	0.137	10	78	0.141
09:00 - 10:00	10	78	0.006	10	78	0.044	10	78	0.050
10:00 - 11:00	10	78	0.022	10	78	0.023	10	78	0.045
11:00 - 12:00	10	78	0.028	10	78	0.017	10	78	0.045
12:00 - 13:00	10	78	0.034	10	78	0.025	10	78	0.059
13:00 - 14:00	10	78	0.019	10	78	0.035	10	78	0.054
14:00 - 15:00	10	78	0.028	10	78	0.017	10	78	0.045
15:00 - 16:00	10	78	0.085	10	78	0.021	10	78	0.106
16:00 - 17:00	10	78	0.058	10	78	0.015	10	78	0.073
17:00 - 18:00	10	78	0.098	10	78	0.014	10	78	0.112
18:00 - 19:00	10	78	0.066	10	78	0.013	10	78	0.079
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.449			0.442			0.891

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.

Calculation Reference: AUDIT-111301-220620-0626

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	PS POWYS	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: No of Dwellings
 Actual Range: 16 to 180 (units:)
 Range Selected by User: 4 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 24/11/21

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	3 days
Tuesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	7
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:

C3 7 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	2 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	4 days
125,001 to 250,000	1 days
250,001 to 500,000	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	3 days

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

Travel Plan:

No 7 days

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

PTAL Rating:

No PTAL Present 7 days

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

LIST OF SITES relevant to selection parameters

1	CB-03-A-05 MACADAM WAY PENRITH	DETACHED/TERRACED HOUSING	CUMBRIA
	Edge of Town Centre Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 21/06/16</i>		<i>Survey Type: MANUAL</i>
2	LN-03-A-04 EGERTON ROAD LINCOLN	DETACHED & SEMI-DETACHED	LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 30 <i>Survey date: MONDAY 29/06/15</i>		<i>Survey Type: MANUAL</i>
3	NE-03-A-03 STATION ROAD SCUNTHORPE	PRIVATE HOUSES	NORTH EAST LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 180 <i>Survey date: TUESDAY 20/05/14</i>		<i>Survey Type: MANUAL</i>
4	NY-03-A-12 RACECOURSE LANE NORTHALLERTON	TOWN HOUSES	NORTH YORKSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 47 <i>Survey date: TUESDAY 27/09/16</i>		<i>Survey Type: MANUAL</i>
5	PS-03-A-01 BRYN GLAS WELSHPOOL	MIXED HOUSES	POWYS
	Edge of Town Centre Residential Zone Total No of Dwellings: 16 <i>Survey date: MONDAY 11/05/15</i>		<i>Survey Type: MANUAL</i>
6	ST-03-A-06 STANFORD ROAD WOLVERHAMPTON BLAKENHALL	SEMI-DET. & TERRACED	STAFFORDSHIRE
	Edge of Town Centre No Sub Category Total No of Dwellings: 17 <i>Survey date: FRIDAY 09/05/14</i>		<i>Survey Type: MANUAL</i>
7	WM-03-A-05 COUNDON ROAD COVENTRY	TERRACED & DETACHED	WEST MIDLANDS
	Edge of Town Centre Residential Zone Total No of Dwellings: 89 <i>Survey date: MONDAY 21/11/16</i>		<i>Survey Type: MANUAL</i>

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
HO-03-A-02	London
MA-03-A-02	covid
MG-03-A-02	covid
WC-03-A-02	station not in town centre
WF-03-A-02	London

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.02

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.051	7	61	0.186	7	61	0.237
08:00 - 09:00	7	61	0.147	7	61	0.294	7	61	0.441
09:00 - 10:00	7	61	0.142	7	61	0.103	7	61	0.245
10:00 - 11:00	7	61	0.100	7	61	0.110	7	61	0.210
11:00 - 12:00	7	61	0.114	7	61	0.112	7	61	0.226
12:00 - 13:00	7	61	0.119	7	61	0.138	7	61	0.257
13:00 - 14:00	7	61	0.124	7	61	0.128	7	61	0.252
14:00 - 15:00	7	61	0.107	7	61	0.147	7	61	0.254
15:00 - 16:00	7	61	0.182	7	61	0.152	7	61	0.334
16:00 - 17:00	7	61	0.210	7	61	0.131	7	61	0.341
17:00 - 18:00	7	61	0.233	7	61	0.184	7	61	0.417
18:00 - 19:00	7	61	0.152	7	61	0.152	7	61	0.304
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.681			1.837			3.518

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:	16 - 180 (units:)
Survey date range:	01/01/14 - 24/11/21
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are 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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.002	7	61	0.021	7	61	0.023
08:00 - 09:00	7	61	0.002	7	61	0.009	7	61	0.011
09:00 - 10:00	7	61	0.005	7	61	0.000	7	61	0.005
10:00 - 11:00	7	61	0.007	7	61	0.005	7	61	0.012
11:00 - 12:00	7	61	0.002	7	61	0.002	7	61	0.004
12:00 - 13:00	7	61	0.005	7	61	0.002	7	61	0.007
13:00 - 14:00	7	61	0.002	7	61	0.005	7	61	0.007
14:00 - 15:00	7	61	0.005	7	61	0.014	7	61	0.019
15:00 - 16:00	7	61	0.019	7	61	0.005	7	61	0.024
16:00 - 17:00	7	61	0.009	7	61	0.000	7	61	0.009
17:00 - 18:00	7	61	0.007	7	61	0.007	7	61	0.014
18:00 - 19:00	7	61	0.009	7	61	0.012	7	61	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.074			0.082			0.156

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.021	7	61	0.086	7	61	0.107
08:00 - 09:00	7	61	0.028	7	61	0.252	7	61	0.280
09:00 - 10:00	7	61	0.035	7	61	0.079	7	61	0.114
10:00 - 11:00	7	61	0.033	7	61	0.079	7	61	0.112
11:00 - 12:00	7	61	0.072	7	61	0.093	7	61	0.165
12:00 - 13:00	7	61	0.061	7	61	0.084	7	61	0.145
13:00 - 14:00	7	61	0.075	7	61	0.110	7	61	0.185
14:00 - 15:00	7	61	0.098	7	61	0.089	7	61	0.187
15:00 - 16:00	7	61	0.142	7	61	0.124	7	61	0.266
16:00 - 17:00	7	61	0.159	7	61	0.072	7	61	0.231
17:00 - 18:00	7	61	0.168	7	61	0.072	7	61	0.240
18:00 - 19:00	7	61	0.065	7	61	0.054	7	61	0.119
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.957			1.194			2.151

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.000	7	61	0.007	7	61	0.007
08:00 - 09:00	7	61	0.000	7	61	0.012	7	61	0.012
09:00 - 10:00	7	61	0.002	7	61	0.007	7	61	0.009
10:00 - 11:00	7	61	0.016	7	61	0.002	7	61	0.018
11:00 - 12:00	7	61	0.005	7	61	0.014	7	61	0.019
12:00 - 13:00	7	61	0.009	7	61	0.005	7	61	0.014
13:00 - 14:00	7	61	0.012	7	61	0.005	7	61	0.017
14:00 - 15:00	7	61	0.002	7	61	0.005	7	61	0.007
15:00 - 16:00	7	61	0.005	7	61	0.005	7	61	0.010
16:00 - 17:00	7	61	0.005	7	61	0.005	7	61	0.010
17:00 - 18:00	7	61	0.012	7	61	0.000	7	61	0.012
18:00 - 19:00	7	61	0.000	7	61	0.000	7	61	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.068			0.067			0.135

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.000	7	61	0.000	7	61	0.000
08:00 - 09:00	7	61	0.000	7	61	0.002	7	61	0.002
09:00 - 10:00	7	61	0.000	7	61	0.000	7	61	0.000
10:00 - 11:00	7	61	0.000	7	61	0.002	7	61	0.002
11:00 - 12:00	7	61	0.000	7	61	0.000	7	61	0.000
12:00 - 13:00	7	61	0.000	7	61	0.000	7	61	0.000
13:00 - 14:00	7	61	0.000	7	61	0.000	7	61	0.000
14:00 - 15:00	7	61	0.000	7	61	0.000	7	61	0.000
15:00 - 16:00	7	61	0.000	7	61	0.000	7	61	0.000
16:00 - 17:00	7	61	0.000	7	61	0.000	7	61	0.000
17:00 - 18:00	7	61	0.002	7	61	0.000	7	61	0.002
18:00 - 19:00	7	61	0.000	7	61	0.000	7	61	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.004			0.006

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	61	0.000	7	61	0.007	7	61	0.007
08:00 - 09:00	7	61	0.000	7	61	0.014	7	61	0.014
09:00 - 10:00	7	61	0.002	7	61	0.007	7	61	0.009
10:00 - 11:00	7	61	0.016	7	61	0.005	7	61	0.021
11:00 - 12:00	7	61	0.005	7	61	0.014	7	61	0.019
12:00 - 13:00	7	61	0.009	7	61	0.005	7	61	0.014
13:00 - 14:00	7	61	0.012	7	61	0.005	7	61	0.017
14:00 - 15:00	7	61	0.002	7	61	0.005	7	61	0.007
15:00 - 16:00	7	61	0.005	7	61	0.005	7	61	0.010
16:00 - 17:00	7	61	0.005	7	61	0.005	7	61	0.010
17:00 - 18:00	7	61	0.014	7	61	0.000	7	61	0.014
18:00 - 19:00	7	61	0.000	7	61	0.000	7	61	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.070			0.072			0.142

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.

Calculation Reference: AUDIT-111301-220620-0603

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : M - MIXED PRIVATE/AFFORDABLE HOUSING
 TOTAL VEHICLES

Selected regions and areas:

04 EAST ANGLIA
 NF NORFOLK 4 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 120 to 300 (units:)
 Range Selected by User: 9 to 1874 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 25/11/21

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:

Saturday 4 days

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

Selected survey types:

Manual count 0 days
 Directional ATC Count 4 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 4

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

Selected Location Sub Categories:

Residential Zone 3
 No Sub Category 1

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

Secondary Filtering selection:

Use Class:

C3 4 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

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

Population within 5 miles:

5,001 to 25,000 3 days
125,001 to 250,000 1 days

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

Car ownership within 5 miles:

1.1 to 1.5 3 days
1.6 to 2.0 1 days

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

Travel Plan:

Yes 4 days

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

PTAL Rating:

No PTAL Present 4 days

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

LIST OF SITES relevant to selection parameters

1	NF-03-M-07 MENDHAM LANE HARLESTON	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 120 <i>Survey date: SATURDAY 21/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>
2	NF-03-M-08 DEREHAM ROAD NORWICH	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 248 <i>Survey date: SATURDAY 14/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>
3	NF-03-M-10 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 <i>Survey date: SATURDAY 28/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>
4	NF-03-M-12 BRANDON ROAD SWAFFHAM	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 181 <i>Survey date: SATURDAY 14/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>

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

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
 TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	212	0.037	4	212	0.097	4	212	0.134
08:00 - 09:00	4	212	0.080	4	212	0.177	4	212	0.257
09:00 - 10:00	4	212	0.124	4	212	0.197	4	212	0.321
10:00 - 11:00	4	212	0.167	4	212	0.188	4	212	0.355
11:00 - 12:00	4	212	0.184	4	212	0.210	4	212	0.394
12:00 - 13:00	4	212	0.178	4	212	0.187	4	212	0.365
13:00 - 14:00	4	212	0.180	4	212	0.178	4	212	0.358
14:00 - 15:00	4	212	0.184	4	212	0.158	4	212	0.342
15:00 - 16:00	4	212	0.173	4	212	0.124	4	212	0.297
16:00 - 17:00	4	212	0.237	4	212	0.165	4	212	0.402
17:00 - 18:00	4	212	0.257	4	212	0.176	4	212	0.433
18:00 - 19:00	4	212	0.179	4	212	0.143	4	212	0.322
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.980			2.000			3.980

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: 120 - 300 (units:)
 Survey date range: 01/01/14 - 25/11/21
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 4
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

Appendix D

Model Output Summary Reports

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: A635 Old Mill Lane - County Way - Access Road Junction_2022_v2.j9

Path: C:\Users\pji01191\ARCADIS\10052406 - SEAMS Barnsley - Transport Planning\Junctions 9\Junction Layout 2022

Report generation date: 30-06-2022 18:02:11

- »2022, AM - Weekday
- »2022, PM - Weekday
- »2022, Peak - Saturday
- »2025, AM - Weekday
- »2025, PM - Weekday
- »2025, Peak - Saturday
- »2033, AM - Weekday
- »2033, PM - Weekday
- »2033, Peak - Saturday
- »2025, AM - Weekday - With Development
- »2025, PM - Weekday - With Development
- »2025, Peak - Saturday - With Development
- »2033, AM - Weekday - With Development
- »2033, PM - Weekday - With Development
- »2033, Peak - Saturday - With Development

Summary of junction performance

	AM - Weekday					PM - Weekday					Peak - Saturday					AM - Weekday - Developme			
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LO
2022																			
Stream B-CD	0.1	8.20	0.08	A	32 % [Stream B-AD]	0.3	8.83	0.22	A	25 % [Stream B-AD]	0.3	8.94	0.23	A	17 % [Stream B-AD]				
Stream B-AD	0.2	17.46	0.16	C		0.5	19.19	0.32	C		0.7	22.04	0.43	C					
Stream A-BCD	0.0	7.60	0.01	A		0.0	8.18	0.00	A		0.0	0.00	0.00	A					
Stream D-ABC	0.0	13.50	0.03	B		0.1	13.41	0.06	B		0.0	0.00	0.00	A					
Stream C-ABD	0.3	10.13	0.21	B		0.1	7.57	0.09	A		0.4	9.56	0.28	A					
2025																			
Stream B-CD	0.1	8.34	0.08	A	29 % [Stream B-AD]	0.3	9.01	0.23	A	22 % [Stream B-AD]	0.3	9.14	0.24	A	14 % [Stream B-AD]	0.1	8.72	0.10	A
Stream B-AD	0.2	18.17	0.17	C		0.5	20.04	0.34	C		0.8	23.37	0.45	C		0.3	20.45	0.25	C
Stream A-BCD	0.0	7.67	0.01	A		0.0	8.28	0.00	A		0.0	0.00	0.00	A		0.0	7.70	0.01	A
Stream D-ABC	0.0	13.86	0.03	B		0.1	13.79	0.06	B		0.0	0.00	0.00	A		0.0	14.03	0.03	E
Stream C-ABD	0.3	10.34	0.22	B		0.1	7.63	0.10	A		0.4	9.71	0.29	A		0.3	10.53	0.23	E
2033																			
Stream B-CD	0.1	8.65	0.09	A	22 % [Stream B-AD]	0.3	9.48	0.25	A	15 % [Stream B-AD]	0.4	9.69	0.27	A	7 % [Stream B-AD]	0.1	9.08	0.11	A
Stream B-AD	0.2	20.20	0.19	C		0.6	22.74	0.38	C		1.0	27.54	0.50	D		0.4	23.01	0.28	C
Stream A-BCD	0.0	7.87	0.01	A		0.0	8.55	0.00	A		0.0	0.00	0.00	A		0.0	7.90	0.01	A
Stream D-ABC	0.0	14.87	0.04	B		0.1	15.05	0.07	C		0.0	0.00	0.00	A		0.0	15.06	0.04	C
Stream C-ABD	0.3	10.91	0.24	B		0.1	7.82	0.10	A		0.5	10.18	0.31	B		0.3	11.09	0.25	E

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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

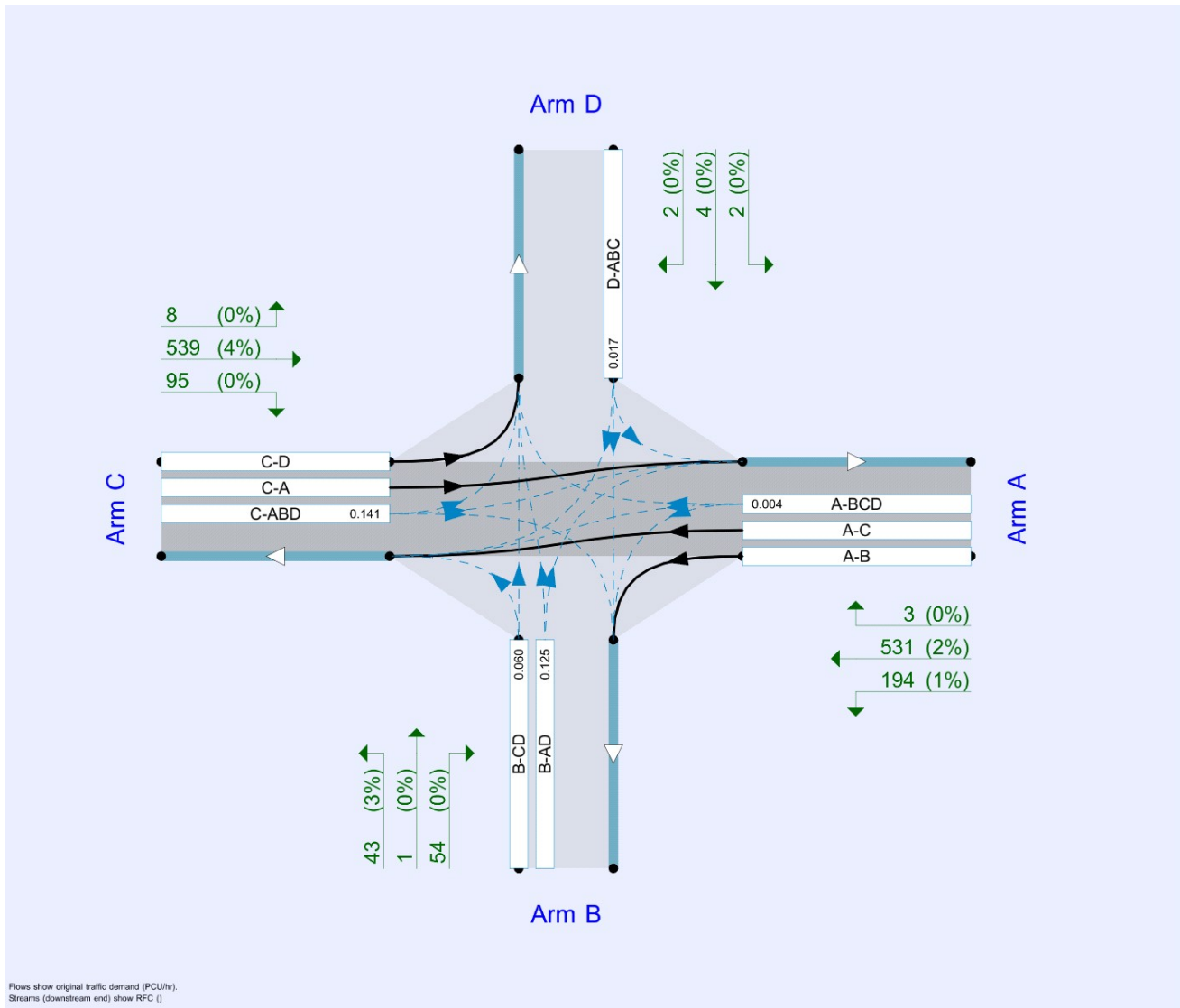
File summary

File Description

Title	A635 Old Mill Lane/County Way/Access Road
Location	The Seam, Barnsley
Site number	
Date	21-06-2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ARCADIS\pji01191
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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 segment length (min)	Run automatically
D1	2022	AM - Weekday	ONE HOUR	07:45	09:15	15	✓
D2	2022	PM - Weekday	ONE HOUR	16:45	18:15	15	✓
D3	2022	Peak - Saturday	ONE HOUR	10:45	12:15	15	✓
D4	2025	AM - Weekday	ONE HOUR	07:45	09:15	15	✓
D5	2025	PM - Weekday	ONE HOUR	16:45	18:15	15	✓
D6	2025	Peak - Saturday	ONE HOUR	10:45	12:15	15	✓
D7	2033	AM - Weekday	ONE HOUR	07:45	09:15	15	✓
D8	2033	PM - Weekday	ONE HOUR	16:45	18:15	15	✓
D9	2033	Peak - Saturday	ONE HOUR	10:45	12:15	15	✓
D10	2025	AM - Weekday - With Development	ONE HOUR	07:45	09:15	15	✓
D11	2025	PM - Weekday - With Development	ONE HOUR	16:45	18:15	15	✓
D12	2025	Peak - Saturday - With Development	ONE HOUR	10:45	12:15	15	✓
D13	2033	AM - Weekday - With Development	ONE HOUR	07:45	09:15	15	✓
D14	2033	PM - Weekday - With Development	ONE HOUR	16:45	18:15	15	✓
D15	2033	Peak - Saturday - With Development	ONE HOUR	10:45	12:15	15	✓

Analysis Set Details

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

2022, AM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		1.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	Stream B-AD

Arms

Arms

Arm	Name	Description	Arm type
A	A635 Old Mill Lane (E)	Eastern Arm	Major
B	County Way (S)	Southern Arm	Minor
C	A635 Old Mill Lane (W)	Western Arm	Major
D	Access Road (N)	Northern Arm	Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00		✓	2.50	120.0	✓	4.20
C	6.00		✓	2.65	73.0	✓	4.20

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes		3.70	3.36	44	39
D	One lane	3.30			19	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	664	-	-	-	-	-	-	0.257	0.368	0.257	-	-	-
1	B-A	529	0.096	0.244	0.244	-	-	-	0.153	0.348	-	0.244	0.244	0.122
1	B-C	694	0.106	0.269	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	547	0.100	0.252	0.252	-	-	-	0.158	0.360	0.158	-	-	-
1	B-D, offside lane	529	0.096	0.244	0.244	-	-	-	0.153	0.348	0.153	-	-	-
1	C-B	646	0.250	0.250	0.358	-	-	-	-	-	-	-	-	-
1	D-A	655	-	-	-	-	-	-	0.254	-	0.100	-	-	-
1	D-B, nearside lane	508	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
1	D-B, offside lane	508	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
1	D-C	508	-	0.147	0.334	0.117	0.234	0.234	0.234	0.234	0.093	-	-	-

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 segment length (min)	Run automatically
D1	2022	AM - Weekday	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	706	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	622	100.000
D		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	185	518	3
	B	35	0	34	1
	C	526	88	0	8
	D	2	4	2	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.26	0.73	0.00
	B	0.50	0.00	0.49	0.01
	C	0.85	0.14	0.00	0.01
	D	0.25	0.50	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	1	2	0
	B	0	0	3	0
	C	4	0	0	0
	D	0	0	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.005	1.015	1.000
	B	1.000	1.000	1.029	1.000
	C	1.036	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	532	532
	B	53	53
	C	468	468
	D	6	6
08:00-08:15	A	635	635
	B	63	63
	C	559	559
	D	7	7
08:15-08:30	A	777	777
	B	77	77
	C	685	685
	D	9	9
08:30-08:45	A	777	777
	B	77	77
	C	685	685
	D	9	9
08:45-09:00	A	635	635
	B	63	63
	C	559	559
	D	7	7
09:00-09:15	A	532	532
	B	53	53
	C	468	468
	D	6	6

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-CD	0.08	8.20	0.1	A	32	48
B-AD	0.16	17.46	0.2	C	33	49
A-BCD	0.01	7.60	0.0	A	3	4
A-B					170	255
A-C					475	713
D-ABC	0.03	13.50	0.0	B	7	11
C-ABD	0.21	10.13	0.3	B	81	121
C-D					7	11
C-A					483	724

Main Results for each time segment

07:45 - 08:00

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-CD	26	7	557	0.047	26	0.0	0.0	6.967	A
B-AD	27	7	335	0.080	26	0.0	0.1	11.638	B
A-BCD	2	0.56	537	0.004	2	0.0	0.0	6.736	A
A-B	139	35			139				
A-C	390	97			390				
D-ABC	6	2	362	0.017	6	0.0	0.0	10.112	B
C-ABD	66	17	513	0.129	66	0.0	0.1	8.035	A
C-D	6	2			6				
C-A	396	99			396				

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-CD	31	8	529	0.059	31	0.0	0.1	7.428	A
B-AD	32	8	297	0.107	32	0.1	0.1	13.541	B
A-BCD	3	0.67	512	0.005	3	0.0	0.0	7.073	A
A-B	166	42			166				
A-C	466	116			466				
D-ABC	7	2	326	0.022	7	0.0	0.0	11.287	B
C-ABD	79	20	487	0.162	79	0.1	0.2	8.811	A
C-D	7	2			7				
C-A	473	118			473				

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-CD	38	10	489	0.078	38	0.1	0.1	8.197	A
B-AD	39	10	245	0.159	39	0.1	0.2	17.407	C
A-BCD	3	0.83	477	0.007	3	0.0	0.0	7.595	A
A-B	204	51			204				
A-C	570	143			570				
D-ABC	9	2	276	0.032	9	0.0	0.0	13.490	B
C-ABD	97	24	452	0.215	97	0.2	0.3	10.117	B
C-D	9	2			9				
C-A	579	145			579				

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-CD	38	10	489	0.078	38	0.1	0.1	8.204	A
B-AD	39	10	245	0.159	39	0.2	0.2	17.459	C
A-BCD	3	0.83	477	0.007	3	0.0	0.0	7.597	A
A-B	204	51			204				
A-C	570	143			570				
D-ABC	9	2	276	0.032	9	0.0	0.0	13.497	B
C-ABD	97	24	452	0.215	97	0.3	0.3	10.135	B
C-D	9	2			9				
C-A	579	145			579				

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-CD	31	8	529	0.059	31	0.1	0.1	7.434	A
B-AD	32	8	297	0.107	32	0.2	0.1	13.590	B
A-BCD	3	0.67	511	0.005	3	0.0	0.0	7.079	A
A-B	166	42			166				
A-C	466	116			466				
D-ABC	7	2	326	0.022	7	0.0	0.0	11.297	B
C-ABD	79	20	487	0.162	79	0.3	0.2	8.832	A
C-D	7	2			7				
C-A	473	118			473				

09:00 - 09:15

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-CD	26	7	557	0.047	26	0.1	0.1	6.977	A
B-AD	27	7	335	0.080	27	0.1	0.1	11.687	B
A-BCD	2	0.56	536	0.004	2	0.0	0.0	6.742	A
A-B	139	35			139				
A-C	390	97			390				
D-ABC	6	2	362	0.017	6	0.0	0.0	10.121	B
C-ABD	66	17	513	0.129	66	0.2	0.1	8.062	A
C-D	6	2			6				
C-A	396	99			396				

2022, PM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		2.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	Stream B-AD

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	444	100.000
B		ONE HOUR	✓	188	100.000
C		ONE HOUR	✓	769	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	54	389	1
	B	81	0	107	0
	C	723	44	0	2
	D	7	2	6	0

Proportions

	To				
	A	B	C	D	
From	A	0.00	0.12	0.88	0.00
	B	0.43	0.00	0.57	0.00
	C	0.94	0.06	0.00	0.00
	D	0.47	0.13	0.40	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	1	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.000	1.013	1.000
	B	1.000	1.000	1.000	1.000
	C	1.004	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	334	334
	B	142	142
	C	579	579
	D	11	11
17:00-17:15	A	399	399
	B	169	169
	C	691	691
	D	13	13
17:15-17:30	A	489	489
	B	207	207
	C	847	847
	D	17	17
17:30-17:45	A	489	489
	B	207	207
	C	847	847
	D	17	17
17:45-18:00	A	399	399
	B	169	169
	C	691	691
	D	13	13
18:00-18:15	A	334	334
	B	142	142
	C	579	579
	D	11	11

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-CD	0.22	8.83	0.3	A	98	147
B-AD	0.32	19.19	0.5	C	74	111
A-BCD	0.00	8.18	0.0	A	0.92	1
A-B					50	74
A-C					357	535
D-ABC	0.06	13.41	0.1	B	14	21
C-ABD	0.09	7.57	0.1	A	40	61
C-D					2	3
C-A					663	995

Main Results for each time segment

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-CD	81	20	585	0.138	80	0.0	0.2	7.122	A
B-AD	61	15	357	0.171	60	0.0	0.2	12.106	B
A-BCD	0.75	0.19	512	0.001	0.75	0.0	0.0	7.044	A
A-B	41	10			41				
A-C	293	73			293				
D-ABC	11	3	380	0.030	11	0.0	0.0	9.761	A
C-ABD	33	8	563	0.059	33	0.0	0.1	6.792	A
C-D	2	0.38			2				
C-A	544	136			544				

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-CD	96	24	561	0.172	96	0.2	0.2	7.740	A
B-AD	73	18	323	0.225	72	0.2	0.3	14.344	B
A-BCD	0.90	0.22	482	0.002	0.90	0.0	0.0	7.481	A
A-B	49	12			49				
A-C	350	87			350				
D-ABC	13	3	341	0.040	13	0.0	0.0	10.992	B
C-ABD	40	10	546	0.072	39	0.1	0.1	7.102	A
C-D	2	0.45			2				
C-A	650	162			650				

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-CD	118	29	526	0.224	117	0.2	0.3	8.810	A
B-AD	89	22	277	0.322	88	0.3	0.5	19.047	C
A-BCD	1	0.28	441	0.003	1	0.0	0.0	8.182	A
A-B	59	15			59				
A-C	428	107			428				
D-ABC	17	4	285	0.058	16	0.0	0.1	13.396	B
C-ABD	48	12	524	0.092	48	0.1	0.1	7.567	A
C-D	2	0.55			2				
C-A	796	199			796				

17:30 - 17:45

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-CD	118	29	525	0.224	118	0.3	0.3	8.832	A
B-AD	89	22	277	0.322	89	0.5	0.5	19.187	C
A-BCD	1	0.28	441	0.003	1	0.0	0.0	8.183	A
A-B	59	15			59				
A-C	428	107			428				
D-ABC	17	4	285	0.058	17	0.1	0.1	13.411	B
C-ABD	48	12	524	0.092	48	0.1	0.1	7.570	A
C-D	2	0.55			2				
C-A	796	199			796				

17:45 - 18:00

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-CD	96	24	560	0.172	97	0.3	0.2	7.765	A
B-AD	73	18	323	0.225	74	0.5	0.3	14.464	B
A-BCD	0.90	0.22	482	0.002	0.90	0.0	0.0	7.485	A
A-B	49	12			49				
A-C	350	87			350				
D-ABC	13	3	341	0.040	14	0.1	0.0	11.006	B
C-ABD	40	10	546	0.072	40	0.1	0.1	7.107	A
C-D	2	0.45			2				
C-A	650	162			650				

18:00 - 18:15

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-CD	81	20	584	0.138	81	0.2	0.2	7.154	A
B-AD	61	15	357	0.171	61	0.3	0.2	12.207	B
A-BCD	0.75	0.19	512	0.001	0.75	0.0	0.0	7.048	A
A-B	41	10			41				
A-C	293	73			293				
D-ABC	11	3	380	0.030	11	0.0	0.0	9.776	A
C-ABD	33	8	563	0.059	33	0.1	0.1	6.799	A
C-D	2	0.38			2				
C-A	544	136			544				

2022, Peak - Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		3.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	Stream B-AD

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	452	100.000
B		ONE HOUR	✓	222	100.000
C		ONE HOUR	✓	722	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	168	284	0	
	B	110	0	112	0	
	C	588	134	0	0	
	D	0	0	0	0	

Proportions

		To				
		A	B	C	D	
From	A	0.00	0.37	0.63	0.00	
	B	0.50	0.00	0.50	0.00	
	C	0.81	0.19	0.00	0.00	
	D	0.25	0.25	0.25	0.25	

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

		To				
		A	B	C	D	
From	A	1.000	1.000	1.000	1.000	
	B	1.000	1.000	1.000	1.000	
	C	1.002	1.000	1.000	1.000	
	D	1.000	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
10:45-11:00	A	340	340
	B	167	167
	C	544	544
	D	0	0
11:00-11:15	A	406	406
	B	200	200
	C	649	649
	D	0	0
11:15-11:30	A	498	498
	B	244	244
	C	795	795
	D	0	0
11:30-11:45	A	498	498
	B	244	244
	C	795	795
	D	0	0
11:45-12:00	A	406	406
	B	200	200
	C	649	649
	D	0	0
12:00-12:15	A	340	340
	B	167	167
	C	544	544
	D	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-CD	0.23	8.94	0.3	A	103	154
B-AD	0.43	22.04	0.7	C	101	151
A-BCD	0.00	0.00	0.0	A	0	0
A-B					154	231
A-C					261	391
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.28	9.56	0.4	A	123	185
C-D					0	0
C-A					539	809

Main Results for each time segment

10:45 - 11:00

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-CD	84	21	587	0.144	84	0.0	0.2	7.138	A
B-AD	83	21	362	0.229	82	0.0	0.3	12.784	B
A-BCD	0	0	1027	0.000	0	0.0	0.0	0.000	A
A-B	126	32			126				
A-C	214	53			214				
D-ABC	0	0	363	0.000	0	0.0	0.0	0.000	A
C-ABD	101	25	562	0.180	100	0.0	0.2	7.787	A
C-D	0	0			0				
C-A	443	111			443				

11:00 - 11:15

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-CD	101	25	563	0.179	100	0.2	0.2	7.781	A
B-AD	99	25	329	0.300	98	0.3	0.4	15.550	C
A-BCD	0	0	968	0.000	0	0.0	0.0	0.000	A
A-B	151	38			151				
A-C	255	64			255				
D-ABC	0	0	328	0.000	0	0.0	0.0	0.000	A
C-ABD	121	30	546	0.221	120	0.2	0.3	8.462	A
C-D	0	0			0				
C-A	528	132			528				

11:15 - 11:30

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-CD	123	31	526	0.234	123	0.2	0.3	8.915	A
B-AD	121	30	284	0.426	120	0.4	0.7	21.735	C
A-BCD	0	0	886	0.000	0	0.0	0.0	0.000	A
A-B	185	46			185				
A-C	313	78			313				
D-ABC	0	0	278	0.000	0	0.0	0.0	0.000	A
C-ABD	148	37	525	0.283	148	0.3	0.4	9.539	A
C-D	0	0			0				
C-A	646	162			646				

11:30 - 11:45

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-CD	123	31	526	0.235	123	0.3	0.3	8.943	A
B-AD	121	30	284	0.426	121	0.7	0.7	22.044	C
A-BCD	0	0	886	0.000	0	0.0	0.0	0.000	A
A-B	185	46			185				
A-C	313	78			313				
D-ABC	0	0	278	0.000	0	0.0	0.0	0.000	A
C-ABD	148	37	525	0.283	148	0.4	0.4	9.560	A
C-D	0	0			0				
C-A	646	162			646				

11:45 - 12:00

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-CD	101	25	562	0.179	101	0.3	0.2	7.814	A
B-AD	99	25	329	0.300	100	0.7	0.4	15.792	C
A-BCD	0	0	967	0.000	0	0.0	0.0	0.000	A
A-B	151	38			151				
A-C	255	64			255				
D-ABC	0	0	328	0.000	0	0.0	0.0	0.000	A
C-ABD	121	30	546	0.221	121	0.4	0.3	8.490	A
C-D	0	0			0				
C-A	528	132			528				

12:00 - 12:15

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-CD	84	21	587	0.144	85	0.2	0.2	7.172	A
B-AD	83	21	362	0.229	83	0.4	0.3	12.957	B
A-BCD	0	0	1026	0.000	0	0.0	0.0	0.000	A
A-B	126	32			126				
A-C	214	53			214				
D-ABC	0	0	363	0.000	0	0.0	0.0	0.000	A
C-ABD	101	25	562	0.180	101	0.3	0.2	7.825	A
C-D	0	0			0				
C-A	443	111			443				

2025, AM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		1.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025	AM - Weekday	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	724	100.000
B		ONE HOUR	✓	72	100.000
C		ONE HOUR	✓	637	100.000
D		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	190	531	3
	B	36	0	35	1
	C	539	90	0	8
	D	2	4	2	0

Proportions

	To				
	A	B	C	D	
From	A	0.00	0.26	0.73	0.00
	B	0.50	0.00	0.49	0.01
	C	0.85	0.14	0.00	0.01
	D	0.25	0.50	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	1	2	0
	B	0	0	3	0
	C	4	0	0	0
	D	0	0	0	0

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.010	1.020	1.000
	B	1.000	1.000	1.030	1.000
	C	1.040	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	545	545
	B	54	54
	C	480	480
	D	6	6
08:00-08:15	A	651	651
	B	65	65
	C	573	573
	D	7	7
08:15-08:30	A	797	797
	B	79	79
	C	701	701
	D	9	9
08:30-08:45	A	797	797
	B	79	79
	C	701	701
	D	9	9
08:45-09:00	A	651	651
	B	65	65
	C	573	573
	D	7	7
09:00-09:15	A	545	545
	B	54	54
	C	480	480
	D	6	6

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-CD	0.08	8.34	0.1	A	33	49
B-AD	0.17	18.17	0.2	C	33	50
A-BCD	0.01	7.67	0.0	A	3	4
A-B					174	262
A-C					487	731
D-ABC	0.03	13.86	0.0	B	7	11
C-ABD	0.22	10.34	0.3	B	83	124
C-D					7	11
C-A					494	742

Main Results for each time segment

07:45 - 08:00

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-CD	27	7	554	0.048	27	0.0	0.1	7.031	A
B-AD	27	7	331	0.083	27	0.0	0.1	11.850	B
A-BCD	2	0.56	534	0.004	2	0.0	0.0	6.775	A
A-B	143	36			143				
A-C	400	100			400				
D-ABC	6	2	357	0.017	6	0.0	0.0	10.242	B
C-ABD	68	17	510	0.133	67	0.0	0.2	8.124	A
C-D	6	2			6				
C-A	406	101			406				

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-CD	32	8	525	0.061	32	0.1	0.1	7.513	A
B-AD	33	8	292	0.112	33	0.1	0.1	13.886	B
A-BCD	3	0.67	508	0.005	3	0.0	0.0	7.125	A
A-B	171	43			171				
A-C	477	119			477				
D-ABC	7	2	321	0.022	7	0.0	0.0	11.485	B
C-ABD	81	20	483	0.167	81	0.2	0.2	8.938	A
C-D	7	2			7				
C-A	485	121			485				

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-CD	39	10	484	0.081	39	0.1	0.1	8.329	A
B-AD	40	10	238	0.168	40	0.1	0.2	18.110	C
A-BCD	3	0.83	473	0.007	3	0.0	0.0	7.668	A
A-B	209	52			209				
A-C	585	146			585				
D-ABC	9	2	269	0.033	9	0.0	0.0	13.849	B
C-ABD	99	25	447	0.222	99	0.2	0.3	10.322	B
C-D	9	2			9				
C-A	593	148			593				

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-CD	39	10	484	0.081	39	0.1	0.1	8.335	A
B-AD	40	10	238	0.168	40	0.2	0.2	18.174	C
A-BCD	3	0.83	473	0.007	3	0.0	0.0	7.670	A
A-B	209	52			209				
A-C	585	146			585				
D-ABC	9	2	269	0.033	9	0.0	0.0	13.857	B
C-ABD	99	25	447	0.222	99	0.3	0.3	10.340	B
C-D	9	2			9				
C-A	593	148			593				

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-CD	32	8	525	0.061	32	0.1	0.1	7.519	A
B-AD	33	8	292	0.112	33	0.2	0.1	13.944	B
A-BCD	3	0.67	508	0.005	3	0.0	0.0	7.128	A
A-B	171	43			171				
A-C	477	119			477				
D-ABC	7	2	320	0.022	7	0.0	0.0	11.496	B
C-ABD	81	20	483	0.167	81	0.3	0.2	8.959	A
C-D	7	2			7				
C-A	485	121			485				

09:00 - 09:15

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-CD	27	7	553	0.048	27	0.1	0.1	7.040	A
B-AD	27	7	330	0.083	28	0.1	0.1	11.901	B
A-BCD	2	0.56	533	0.004	2	0.0	0.0	6.782	A
A-B	143	36			143				
A-C	400	100			400				
D-ABC	6	2	357	0.017	6	0.0	0.0	10.251	B
C-ABD	68	17	510	0.133	68	0.2	0.2	8.153	A
C-D	6	2			6				
C-A	406	101			406				

2025, PM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		2.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	22	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025	PM - Weekday	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	454	100.000
B		ONE HOUR	✓	193	100.000
C		ONE HOUR	✓	787	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	55	398	1	
	B	83	0	110	0	
	C	740	45	0	2	
	D	7	2	6	0	

Proportions

		To				
		A	B	C	D	
From	A	0.00	0.12	0.88	0.00	
	B	0.43	0.00	0.57	0.00	
	C	0.94	0.06	0.00	0.00	
	D	0.47	0.13	0.40	0.00	

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	0	1	0	
	B	0	0	0	0	
	C	0	0	0	0	
	D	0	0	0	0	

Average PCU Per Veh

		To				
		A	B	C	D	
From	A	1.000	1.000	1.010	1.000	
	B	1.000	1.000	1.000	1.000	
	C	1.000	1.000	1.000	1.000	
	D	1.000	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	342	342
	B	145	145
	C	592	592
	D	11	11
17:00-17:15	A	408	408
	B	174	174
	C	707	707
	D	13	13
17:15-17:30	A	500	500
	B	212	212
	C	867	867
	D	17	17
17:30-17:45	A	500	500
	B	212	212
	C	867	867
	D	17	17
17:45-18:00	A	408	408
	B	174	174
	C	707	707
	D	13	13
18:00-18:15	A	342	342
	B	145	145
	C	592	592
	D	11	11

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-CD	0.23	9.01	0.3	A	101	151
B-AD	0.34	20.04	0.5	C	76	114
A-BCD	0.00	8.28	0.0	A	0.92	1
A-B					50	76
A-C					365	548
D-ABC	0.06	13.79	0.1	B	14	21
C-ABD	0.10	7.63	0.1	A	41	62
C-D					2	3
C-A					679	1019

Main Results for each time segment

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-CD	83	21	582	0.142	82	0.0	0.2	7.193	A
B-AD	62	16	353	0.177	62	0.0	0.2	12.328	B
A-BCD	0.75	0.19	508	0.001	0.75	0.0	0.0	7.093	A
A-B	41	10			41				
A-C	300	75			300				
D-ABC	11	3	375	0.030	11	0.0	0.0	9.886	A
C-ABD	34	8	561	0.060	34	0.0	0.1	6.826	A
C-D	2	0.38			2				
C-A	557	139			557				

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-CD	99	25	557	0.177	99	0.2	0.2	7.845	A
B-AD	75	19	318	0.234	74	0.2	0.3	14.722	B
A-BCD	0.90	0.22	478	0.002	0.90	0.0	0.0	7.548	A
A-B	49	12			49				
A-C	358	89			358				
D-ABC	13	3	335	0.040	13	0.0	0.0	11.188	B
C-ABD	40	10	544	0.074	40	0.1	0.1	7.146	A
C-D	2	0.45			2				
C-A	665	166			665				

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-CD	121	30	521	0.232	121	0.2	0.3	8.987	A
B-AD	91	23	271	0.337	91	0.3	0.5	19.872	C
A-BCD	1	0.28	436	0.003	1	0.0	0.0	8.281	A
A-B	61	15			61				
A-C	438	110			438				
D-ABC	17	4	278	0.059	16	0.0	0.1	13.778	B
C-ABD	50	12	521	0.095	49	0.1	0.1	7.629	A
C-D	2	0.55			2				
C-A	815	204			815				

17:30 - 17:45

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-CD	121	30	521	0.233	121	0.3	0.3	9.011	A
B-AD	91	23	271	0.337	91	0.5	0.5	20.038	C
A-BCD	1	0.28	436	0.003	1	0.0	0.0	8.281	A
A-B	61	15			61				
A-C	438	110			438				
D-ABC	17	4	277	0.060	17	0.1	0.1	13.794	B
C-ABD	50	12	521	0.095	50	0.1	0.1	7.632	A
C-D	2	0.55			2				
C-A	815	204			815				

17:45 - 18:00

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-CD	99	25	557	0.178	99	0.3	0.2	7.874	A
B-AD	75	19	318	0.234	75	0.5	0.3	14.864	B
A-BCD	0.90	0.22	478	0.002	0.90	0.0	0.0	7.552	A
A-B	49	12			49				
A-C	358	89			358				
D-ABC	13	3	335	0.040	14	0.1	0.0	11.206	B
C-ABD	40	10	544	0.074	41	0.1	0.1	7.152	A
C-D	2	0.45			2				
C-A	665	166			665				

18:00 - 18:15

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-CD	83	21	581	0.142	83	0.2	0.2	7.227	A
B-AD	62	16	353	0.177	63	0.3	0.2	12.440	B
A-BCD	0.75	0.19	508	0.001	0.75	0.0	0.0	7.095	A
A-B	41	10			41				
A-C	300	75			300				
D-ABC	11	3	375	0.030	11	0.0	0.0	9.904	A
C-ABD	34	8	561	0.060	34	0.1	0.1	6.836	A
C-D	2	0.38			2				
C-A	557	139			557				

2025, Peak - Saturday

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	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		3.51	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025	Peak - Saturday	ONE HOUR	10:45	12:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	463	100.000
B		ONE HOUR	✓	228	100.000
C		ONE HOUR	✓	740	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	172	291	0
	B	113	0	115	0
	C	603	137	0	0
	D	0	0	0	0

Proportions

	To				
	A	B	C	D	
From	A	0.00	0.37	0.63	0.00
	B	0.50	0.00	0.50	0.00
	C	0.81	0.19	0.00	0.00
	D	0.25	0.25	0.25	0.25

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
10:45-11:00	A	349	349
	B	172	172
	C	557	557
	D	0	0
11:00-11:15	A	416	416
	B	205	205
	C	665	665
	D	0	0
11:15-11:30	A	510	510
	B	251	251
	C	815	815
	D	0	0
11:30-11:45	A	510	510
	B	251	251
	C	815	815
	D	0	0
11:45-12:00	A	416	416
	B	205	205
	C	665	665
	D	0	0
12:00-12:15	A	349	349
	B	172	172
	C	557	557
	D	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-CD	0.24	9.14	0.3	A	106	158
B-AD	0.45	23.37	0.8	C	104	156
A-BCD	0.00	0.00	0.0	A	0	0
A-B					158	237
A-C					267	401
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.29	9.71	0.4	A	126	189
C-D					0	0
C-A					553	829

Main Results for each time segment

10:45 - 11:00

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-CD	87	22	584	0.148	86	0.0	0.2	7.211	A
B-AD	85	21	358	0.238	84	0.0	0.3	13.074	B
A-BCD	0	0	1019	0.000	0	0.0	0.0	0.000	A
A-B	129	32			129				
A-C	219	55			219				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-ABD	103	26	559	0.184	102	0.0	0.2	7.860	A
C-D	0	0			0				
C-A	454	113			454				

11:00 - 11:15

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-CD	103	26	559	0.185	103	0.2	0.2	7.893	A
B-AD	102	25	324	0.313	101	0.3	0.4	16.068	C
A-BCD	0	0	959	0.000	0	0.0	0.0	0.000	A
A-B	155	39			155				
A-C	262	65			262				
D-ABC	0	0	322	0.000	0	0.0	0.0	0.000	A
C-ABD	123	31	543	0.227	123	0.2	0.3	8.564	A
C-D	0	0			0				
C-A	542	135			542				

11:15 - 11:30

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-CD	127	32	521	0.243	126	0.2	0.3	9.110	A
B-AD	124	31	278	0.447	123	0.4	0.8	22.985	C
A-BCD	0	0	875	0.000	0	0.0	0.0	0.000	A
A-B	189	47			189				
A-C	320	80			320				
D-ABC	0	0	271	0.000	0	0.0	0.0	0.000	A
C-ABD	152	38	522	0.291	151	0.3	0.4	9.692	A
C-D	0	0			0				
C-A	663	166			663				

11:30 - 11:45

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-CD	127	32	520	0.243	127	0.3	0.3	9.143	A
B-AD	124	31	278	0.447	124	0.8	0.8	23.372	C
A-BCD	0	0	875	0.000	0	0.0	0.0	0.000	A
A-B	189	47			189				
A-C	320	80			320				
D-ABC	0	0	271	0.000	0	0.0	0.0	0.000	A
C-ABD	152	38	522	0.291	152	0.4	0.4	9.715	A
C-D	0	0			0				
C-A	663	166			663				

11:45 - 12:00

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-CD	103	26	558	0.185	104	0.3	0.2	7.929	A
B-AD	102	25	324	0.313	103	0.8	0.5	16.359	C
A-BCD	0	0	958	0.000	0	0.0	0.0	0.000	A
A-B	155	39			155				
A-C	262	65			262				
D-ABC	0	0	322	0.000	0	0.0	0.0	0.000	A
C-ABD	123	31	543	0.227	124	0.4	0.3	8.594	A
C-D	0	0			0				
C-A	542	135			542				

12:00 - 12:15

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-CD	87	22	583	0.148	87	0.2	0.2	7.250	A
B-AD	85	21	358	0.238	86	0.5	0.3	13.266	B
A-BCD	0	0	1018	0.000	0	0.0	0.0	0.000	A
A-B	129	32			129				
A-C	219	55			219				
D-ABC	0	0	358	0.000	0	0.0	0.0	0.000	A
C-ABD	103	26	559	0.184	103	0.3	0.2	7.899	A
C-D	0	0			0				
C-A	454	113			454				

2033, AM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		1.50	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	22	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033	AM - Weekday	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	767	100.000
B		ONE HOUR	✓	76	100.000
C		ONE HOUR	✓	677	100.000
D		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	201	563	3
	B	38	0	37	1
	C	572	96	0	9
	D	2	4	2	0

Proportions

	To				
	A	B	C	D	
From	A	0.00	0.26	0.73	0.00
	B	0.50	0.00	0.49	0.01
	C	0.84	0.14	0.00	0.01
	D	0.25	0.50	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	1	2	0
	B	0	0	3	0
	C	4	0	0	0
	D	0	0	0	0

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.010	1.020	1.000
	B	1.000	1.000	1.030	1.000
	C	1.040	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	577	577
	B	57	57
	C	510	510
	D	6	6
08:00-08:15	A	690	690
	B	68	68
	C	609	609
	D	7	7
08:15-08:30	A	844	844
	B	84	84
	C	745	745
	D	9	9
08:30-08:45	A	844	844
	B	84	84
	C	745	745
	D	9	9
08:45-09:00	A	690	690
	B	68	68
	C	609	609
	D	7	7
09:00-09:15	A	577	577
	B	57	57
	C	510	510
	D	6	6

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-CD	0.09	8.65	0.1	A	34	52
B-AD	0.19	20.20	0.2	C	35	53
A-BCD	0.01	7.87	0.0	A	3	4
A-B					184	277
A-C					517	775
D-ABC	0.04	14.87	0.0	B	7	11
C-ABD	0.24	10.91	0.3	B	88	132
C-D					8	12
C-A					525	787

Main Results for each time segment

07:45 - 08:00

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-CD	28	7	545	0.052	28	0.0	0.1	7.160	A
B-AD	29	7	319	0.091	29	0.0	0.1	12.400	B
A-BCD	2	0.56	525	0.004	2	0.0	0.0	6.882	A
A-B	151	38			151				
A-C	424	106			424				
D-ABC	6	2	346	0.017	6	0.0	0.0	10.583	B
C-ABD	72	18	502	0.144	72	0.0	0.2	8.359	A
C-D	7	2			7				
C-A	431	108			431				

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-CD	34	8	515	0.066	34	0.1	0.1	7.701	A
B-AD	35	9	277	0.125	34	0.1	0.1	14.807	B
A-BCD	3	0.67	498	0.005	3	0.0	0.0	7.267	A
A-B	181	45			181				
A-C	506	127			506				
D-ABC	7	2	307	0.023	7	0.0	0.0	12.020	B
C-ABD	86	22	474	0.182	86	0.2	0.2	9.282	A
C-D	8	2			8				
C-A	514	129			514				

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-CD	41	10	470	0.088	41	0.1	0.1	8.637	A
B-AD	42	11	221	0.192	42	0.1	0.2	20.101	C
A-BCD	3	0.83	461	0.007	3	0.0	0.0	7.872	A
A-B	221	55			221				
A-C	620	155			620				
D-ABC	9	2	251	0.035	9	0.0	0.0	14.853	B
C-ABD	106	27	436	0.243	106	0.2	0.3	10.880	B
C-D	10	2			10				
C-A	629	157			629				

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-CD	41	10	470	0.088	41	0.1	0.1	8.646	A
B-AD	42	11	220	0.192	42	0.2	0.2	20.197	C
A-BCD	3	0.83	460	0.007	3	0.0	0.0	7.874	A
A-B	221	55			221				
A-C	620	155			620				
D-ABC	9	2	251	0.035	9	0.0	0.0	14.868	B
C-ABD	106	27	436	0.243	106	0.3	0.3	10.905	B
C-D	10	2			10				
C-A	629	157			629				

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-CD	34	8	515	0.066	34	0.1	0.1	7.712	A
B-AD	35	9	277	0.125	35	0.2	0.1	14.888	B
A-BCD	3	0.67	498	0.005	3	0.0	0.0	7.270	A
A-B	181	45			181				
A-C	506	127			506				
D-ABC	7	2	306	0.023	7	0.0	0.0	12.031	B
C-ABD	86	22	474	0.182	87	0.3	0.2	9.311	A
C-D	8	2			8				
C-A	514	129			514				

09:00 - 09:15

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-CD	28	7	545	0.052	28	0.1	0.1	7.171	A
B-AD	29	7	318	0.091	29	0.1	0.1	12.463	B
A-BCD	2	0.56	525	0.004	2	0.0	0.0	6.889	A
A-B	151	38			151				
A-C	424	106			424				
D-ABC	6	2	346	0.017	6	0.0	0.0	10.597	B
C-ABD	72	18	502	0.144	73	0.2	0.2	8.394	A
C-D	7	2			7				
C-A	431	108			431				

2033, PM - Weekday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		2.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033	PM - Weekday	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	482	100.000
B		ONE HOUR	✓	204	100.000
C		ONE HOUR	✓	834	100.000
D		ONE HOUR	✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	59	422	1	
	B	88	0	116	0	
	C	784	48	0	2	
	D	8	2	7	0	

Proportions

		To				
		A	B	C	D	
From	A	0.00	0.12	0.88	0.00	
	B	0.43	0.00	0.57	0.00	
	C	0.94	0.06	0.00	0.00	
	D	0.47	0.12	0.41	0.00	

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	0	1	0	
	B	0	0	0	0	
	C	0	0	0	0	
	D	0	0	0	0	

Average PCU Per Veh

		To				
		A	B	C	D	
From	A	1.000	1.000	1.010	1.000	
	B	1.000	1.000	1.000	1.000	
	C	1.000	1.000	1.000	1.000	
	D	1.000	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	363	363
	B	154	154
	C	628	628
	D	13	13
17:00-17:15	A	433	433
	B	183	183
	C	750	750
	D	15	15
17:15-17:30	A	531	531
	B	225	225
	C	918	918
	D	19	19
17:30-17:45	A	531	531
	B	225	225
	C	918	918
	D	19	19
17:45-18:00	A	433	433
	B	183	183
	C	750	750
	D	15	15
18:00-18:15	A	363	363
	B	154	154
	C	628	628
	D	13	13

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-CD	0.25	9.48	0.3	A	106	160
B-AD	0.38	22.74	0.6	C	81	121
A-BCD	0.00	8.55	0.0	A	0.92	1
A-B					54	81
A-C					387	581
D-ABC	0.07	15.05	0.1	C	16	23
C-ABD	0.10	7.82	0.1	A	44	66
C-D					2	3
C-A					719	1079

Main Results for each time segment

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-CD	87	22	575	0.152	87	0.0	0.2	7.367	A
B-AD	66	17	342	0.194	65	0.0	0.2	12.969	B
A-BCD	0.75	0.19	499	0.002	0.75	0.0	0.0	7.226	A
A-B	44	11			44				
A-C	318	79			318				
D-ABC	13	3	363	0.035	13	0.0	0.0	10.259	B
C-ABD	36	9	555	0.065	36	0.0	0.1	6.925	A
C-D	2	0.38			2				
C-A	590	148			590				

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-CD	104	26	548	0.190	104	0.2	0.2	8.107	A
B-AD	79	20	305	0.259	79	0.2	0.3	15.843	C
A-BCD	0.90	0.22	467	0.002	0.90	0.0	0.0	7.730	A
A-B	53	13			53				
A-C	379	95			379				
D-ABC	15	4	320	0.048	15	0.0	0.0	11.796	B
C-ABD	43	11	538	0.080	43	0.1	0.1	7.276	A
C-D	2	0.45			2				
C-A	705	176			705				

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-CD	128	32	508	0.251	127	0.2	0.3	9.448	A
B-AD	97	24	255	0.380	96	0.3	0.6	22.326	C
A-BCD	1	0.28	422	0.003	1	0.0	0.0	8.550	A
A-B	65	16			65				
A-C	465	116			465				
D-ABC	19	5	258	0.073	19	0.0	0.1	15.022	C
C-ABD	53	13	513	0.103	53	0.1	0.1	7.812	A
C-D	2	0.55			2				
C-A	863	216			863				

17:30 - 17:45

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-CD	128	32	507	0.252	128	0.3	0.3	9.480	A
B-AD	97	24	255	0.380	97	0.6	0.6	22.738	C
A-BCD	1	0.28	422	0.003	1	0.0	0.0	8.551	A
A-B	65	16			65				
A-C	465	116			465				
D-ABC	19	5	258	0.073	19	0.1	0.1	15.046	C
C-ABD	53	13	513	0.103	53	0.1	0.1	7.815	A
C-D	2	0.55			2				
C-A	863	216			863				

17:45 - 18:00

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-CD	104	26	547	0.191	105	0.3	0.2	8.143	A
B-AD	79	20	305	0.259	80	0.6	0.4	16.048	C
A-BCD	0.90	0.22	467	0.002	0.90	0.0	0.0	7.731	A
A-B	53	13			53				
A-C	379	95			379				
D-ABC	15	4	320	0.048	15	0.1	0.1	11.819	B
C-ABD	43	11	538	0.080	43	0.1	0.1	7.282	A
C-D	2	0.45			2				
C-A	705	176			705				

18:00 - 18:15

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-CD	87	22	574	0.152	88	0.2	0.2	7.407	A
B-AD	66	17	342	0.194	67	0.4	0.2	13.106	B
A-BCD	0.75	0.19	499	0.002	0.75	0.0	0.0	7.228	A
A-B	44	11			44				
A-C	318	79			318				
D-ABC	13	3	363	0.035	13	0.1	0.0	10.282	B
C-ABD	36	9	555	0.065	36	0.1	0.1	6.935	A
C-D	2	0.38			2				
C-A	590	148			590				

2033, Peak - Saturday

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	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		3.93	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033	Peak - Saturday	ONE HOUR	10:45	12:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	492	100.000
B		ONE HOUR	✓	242	100.000
C		ONE HOUR	✓	786	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	183	309	0
	B	120	0	122	0
	C	640	146	0	0
	D	0	0	0	0

Proportions

	To				
	A	B	C	D	
From	A	0.00	0.37	0.63	0.00
	B	0.50	0.00	0.50	0.00
	C	0.81	0.19	0.00	0.00
	D	0.25	0.25	0.25	0.25

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
10:45-11:00	A	370	370
	B	182	182
	C	592	592
	D	0	0
11:00-11:15	A	442	442
	B	218	218
	C	707	707
	D	0	0
11:15-11:30	A	542	542
	B	266	266
	C	865	865
	D	0	0
11:30-11:45	A	542	542
	B	266	266
	C	865	865
	D	0	0
11:45-12:00	A	442	442
	B	218	218
	C	707	707
	D	0	0
12:00-12:15	A	370	370
	B	182	182
	C	592	592
	D	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-CD	0.27	9.69	0.4	A	112	168
B-AD	0.50	27.54	1.0	D	110	165
A-BCD	0.00	0.00	0.0	A	0	0
A-B					168	252
A-C					284	425
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.31	10.18	0.5	B	135	202
C-D					0	0
C-A					587	880

Main Results for each time segment

10:45 - 11:00

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-CD	92	23	577	0.159	91	0.0	0.2	7.404	A
B-AD	90	23	347	0.260	89	0.0	0.3	13.863	B
A-BCD	0	0	1000	0.000	0	0.0	0.0	0.000	A
A-B	138	34			138				
A-C	233	58			233				
D-ABC	0	0	347	0.000	0	0.0	0.0	0.000	A
C-ABD	110	28	554	0.199	109	0.0	0.2	8.069	A
C-D	0	0			0				
C-A	482	120			482				

11:00 - 11:15

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-CD	110	27	549	0.200	109	0.2	0.2	8.186	A
B-AD	108	27	312	0.346	107	0.3	0.5	17.550	C
A-BCD	0	0	935	0.000	0	0.0	0.0	0.000	A
A-B	165	41			165				
A-C	278	69			278				
D-ABC	0	0	308	0.000	0	0.0	0.0	0.000	A
C-ABD	132	33	537	0.245	131	0.2	0.3	8.863	A
C-D	0	0			0				
C-A	575	144			575				

11:15 - 11:30

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-CD	134	34	507	0.265	134	0.2	0.4	9.641	A
B-AD	132	33	263	0.503	130	0.5	1.0	26.855	D
A-BCD	0	0	847	0.000	0	0.0	0.0	0.000	A
A-B	201	50			201				
A-C	340	85			340				
D-ABC	0	0	254	0.000	0	0.0	0.0	0.000	A
C-ABD	162	41	516	0.315	162	0.3	0.5	10.146	B
C-D	0	0			0				
C-A	703	176			703				

11:30 - 11:45

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-CD	134	34	506	0.266	134	0.4	0.4	9.691	A
B-AD	132	33	262	0.503	132	1.0	1.0	27.541	D
A-BCD	0	0	847	0.000	0	0.0	0.0	0.000	A
A-B	201	50			201				
A-C	340	85			340				
D-ABC	0	0	253	0.000	0	0.0	0.0	0.000	A
C-ABD	162	41	516	0.315	162	0.5	0.5	10.175	B
C-D	0	0			0				
C-A	703	176			703				

11:45 - 12:00

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-CD	110	27	548	0.200	110	0.4	0.3	8.235	A
B-AD	108	27	311	0.347	110	1.0	0.5	18.000	C
A-BCD	0	0	935	0.000	0	0.0	0.0	0.000	A
A-B	165	41			165				
A-C	278	69			278				
D-ABC	0	0	308	0.000	0	0.0	0.0	0.000	A
C-ABD	132	33	537	0.245	132	0.5	0.3	8.899	A
C-D	0	0			0				
C-A	575	144			575				

12:00 - 12:15

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-CD	92	23	576	0.160	92	0.3	0.2	7.451	A
B-AD	90	23	347	0.260	91	0.5	0.4	14.118	B
A-BCD	0	0	999	0.000	0	0.0	0.0	0.000	A
A-B	138	34			138				
A-C	233	58			233				
D-ABC	0	0	347	0.000	0	0.0	0.0	0.000	A
C-ABD	110	28	554	0.199	110	0.3	0.3	8.116	A
C-D	0	0			0				
C-A	482	120			482				

2025, AM - Weekday - With Development

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		1.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2025	AM - Weekday - With Development	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	728	100.000
B		ONE HOUR	✓	98	100.000
C		ONE HOUR	✓	642	100.000
D		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	194	531	3
	B	54	0	43	1
	C	539	95	0	8
	D	2	4	2	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.27	0.73	0.00
	B	0.55	0.00	0.44	0.01
	C	0.84	0.15	0.00	0.01
	D	0.25	0.50	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	1	2	0
	B	0	0	3	0
	C	4	0	0	0
	D	0	0	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.010	1.020	1.000
	B	1.000	1.000	1.030	1.000
	C	1.040	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	548	548
	B	74	74
	C	483	483
	D	6	6
08:00-08:15	A	654	654
	B	88	88
	C	577	577
	D	7	7
08:15-08:30	A	802	802
	B	108	108
	C	707	707
	D	9	9
08:30-08:45	A	802	802
	B	108	108
	C	707	707
	D	9	9
08:45-09:00	A	654	654
	B	88	88
	C	577	577
	D	7	7
09:00-09:15	A	548	548
	B	74	74
	C	483	483
	D	6	6

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-CD	0.10	8.72	0.1	A	40	60
B-AD	0.25	20.45	0.3	C	50	75
A-BCD	0.01	7.70	0.0	A	3	4
A-B					178	267
A-C					487	731
D-ABC	0.03	14.03	0.0	B	7	11
C-ABD	0.23	10.53	0.3	B	87	131
C-D					7	11
C-A					494	742

Main Results for each time segment

07:45 - 08:00

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-CD	33	8	548	0.060	33	0.0	0.1	7.183	A
B-AD	41	10	329	0.125	40	0.0	0.1	12.453	B
A-BCD	2	0.56	532	0.004	2	0.0	0.0	6.793	A
A-B	146	37			146				
A-C	400	100			400				
D-ABC	6	2	355	0.017	6	0.0	0.0	10.301	B
C-ABD	72	18	509	0.141	71	0.0	0.2	8.206	A
C-D	6	2			6				
C-A	406	101			406				

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-CD	39	10	518	0.076	39	0.1	0.1	7.739	A
B-AD	49	12	290	0.169	49	0.1	0.2	14.914	B
A-BCD	3	0.67	506	0.005	3	0.0	0.0	7.148	A
A-B	174	44			174				
A-C	477	119			477				
D-ABC	7	2	318	0.023	7	0.0	0.0	11.576	B
C-ABD	85	21	483	0.177	85	0.2	0.2	9.056	A
C-D	7	2			7				
C-A	484	121			484				

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-CD	48	12	473	0.101	48	0.1	0.1	8.706	A
B-AD	60	15	236	0.254	59	0.2	0.3	20.325	C
A-BCD	3	0.83	471	0.007	3	0.0	0.0	7.703	A
A-B	214	53			214				
A-C	585	146			585				
D-ABC	9	2	266	0.033	9	0.0	0.0	14.018	B
C-ABD	105	26	447	0.235	105	0.2	0.3	10.513	B
C-D	9	2			9				
C-A	593	148			593				

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-CD	48	12	473	0.102	48	0.1	0.1	8.718	A
B-AD	60	15	236	0.254	60	0.3	0.3	20.454	C
A-BCD	3	0.83	470	0.007	3	0.0	0.0	7.705	A
A-B	214	53			214				
A-C	585	146			585				
D-ABC	9	2	265	0.033	9	0.0	0.0	14.027	B
C-ABD	105	26	447	0.235	105	0.3	0.3	10.534	B
C-D	9	2			9				
C-A	593	148			593				

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-CD	39	10	518	0.076	39	0.1	0.1	7.751	A
B-AD	49	12	290	0.169	49	0.3	0.2	15.023	C
A-BCD	3	0.67	506	0.005	3	0.0	0.0	7.154	A
A-B	174	44			174				
A-C	477	119			477				
D-ABC	7	2	318	0.023	7	0.0	0.0	11.586	B
C-ABD	85	21	483	0.177	86	0.3	0.2	9.082	A
C-D	7	2			7				
C-A	484	121			484				

09:00 - 09:15

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-CD	33	8	548	0.060	33	0.1	0.1	7.199	A
B-AD	41	10	329	0.125	41	0.2	0.1	12.536	B
A-BCD	2	0.56	532	0.004	2	0.0	0.0	6.797	A
A-B	146	37			146				
A-C	400	100			400				
D-ABC	6	2	355	0.017	6	0.0	0.0	10.311	B
C-ABD	72	18	509	0.141	72	0.2	0.2	8.238	A
C-D	6	2			6				
C-A	406	101			406				

2025, PM - Weekday - With Development

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		2.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2025	PM - Weekday - With Development	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	467	100.000
B		ONE HOUR	✓	209	100.000
C		ONE HOUR	✓	800	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	68	398	1	
	B	94	0	115	0	
	C	740	58	0	2	
	D	7	2	6	0	

Proportions

		To				
		A	B	C	D	
From	A	0.00	0.15	0.85	0.00	
	B	0.45	0.00	0.55	0.00	
	C	0.93	0.07	0.00	0.00	
	D	0.47	0.13	0.40	0.00	

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A	B	C	D	
From	A	0	0	1	0	
	B	0	0	0	0	
	C	0	0	0	0	
	D	0	0	0	0	

Average PCU Per Veh

		To				
		A	B	C	D	
From	A	1.000	1.000	1.010	1.000	
	B	1.000	1.000	1.000	1.000	
	C	1.000	1.000	1.000	1.000	
	D	1.000	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	352	352
	B	157	157
	C	602	602
	D	11	11
17:00-17:15	A	420	420
	B	188	188
	C	719	719
	D	13	13
17:15-17:30	A	514	514
	B	230	230
	C	881	881
	D	17	17
17:30-17:45	A	514	514
	B	230	230
	C	881	881
	D	17	17
17:45-18:00	A	420	420
	B	188	188
	C	719	719
	D	13	13
18:00-18:15	A	352	352
	B	157	157
	C	602	602
	D	11	11

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-CD	0.25	9.36	0.3	A	106	158
B-AD	0.39	22.33	0.6	C	86	129
A-BCD	0.00	8.38	0.0	A	0.92	1
A-B					62	94
A-C					365	548
D-ABC	0.06	14.11	0.1	B	14	21
C-ABD	0.12	7.93	0.1	A	53	80
C-D					2	3
C-A					679	1019

Main Results for each time segment

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-CD	87	22	577	0.150	86	0.0	0.2	7.318	A
B-AD	71	18	348	0.203	70	0.0	0.3	12.868	B
A-BCD	0.75	0.19	505	0.001	0.75	0.0	0.0	7.144	A
A-B	51	13			51				
A-C	300	75			300				
D-ABC	11	3	372	0.030	11	0.0	0.0	9.977	A
C-ABD	44	11	558	0.078	43	0.0	0.1	6.986	A
C-D	2	0.38			2				
C-A	557	139			557				

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-CD	103	26	551	0.188	103	0.2	0.2	8.036	A
B-AD	85	21	313	0.270	84	0.3	0.4	15.680	C
A-BCD	0.90	0.22	473	0.002	0.90	0.0	0.0	7.617	A
A-B	61	15			61				
A-C	358	89			358				
D-ABC	13	3	331	0.041	13	0.0	0.0	11.338	B
C-ABD	52	13	541	0.096	52	0.1	0.1	7.360	A
C-D	2	0.45			2				
C-A	665	166			665				

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-CD	127	32	512	0.247	126	0.2	0.3	9.327	A
B-AD	103	26	265	0.391	102	0.4	0.6	22.064	C
A-BCD	1	0.28	430	0.003	1	0.0	0.0	8.383	A
A-B	75	19			75				
A-C	438	110			438				
D-ABC	17	4	272	0.061	16	0.0	0.1	14.088	B
C-ABD	64	16	518	0.123	64	0.1	0.1	7.928	A
C-D	2	0.55			2				
C-A	815	204			815				

17:30 - 17:45

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-CD	127	32	511	0.248	127	0.3	0.3	9.359	A
B-AD	103	26	265	0.391	103	0.6	0.6	22.333	C
A-BCD	1	0.28	430	0.003	1	0.0	0.0	8.384	A
A-B	75	19			75				
A-C	438	110			438				
D-ABC	17	4	272	0.061	17	0.1	0.1	14.107	B
C-ABD	64	16	518	0.123	64	0.1	0.1	7.933	A
C-D	2	0.55			2				
C-A	815	204			815				

17:45 - 18:00

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-CD	103	26	550	0.188	104	0.3	0.2	8.072	A
B-AD	85	21	313	0.270	86	0.6	0.4	15.887	C
A-BCD	0.90	0.22	473	0.002	0.90	0.0	0.0	7.621	A
A-B	61	15			61				
A-C	358	89			358				
D-ABC	13	3	331	0.041	14	0.1	0.0	11.358	B
C-ABD	52	13	541	0.096	52	0.1	0.1	7.366	A
C-D	2	0.45			2				
C-A	665	166			665				

18:00 - 18:15

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-CD	87	22	576	0.150	87	0.2	0.2	7.358	A
B-AD	71	18	348	0.203	71	0.4	0.3	13.019	B
A-BCD	0.75	0.19	504	0.001	0.75	0.0	0.0	7.146	A
A-B	51	13			51				
A-C	300	75			300				
D-ABC	11	3	372	0.030	11	0.0	0.0	9.996	A
C-ABD	44	11	558	0.078	44	0.1	0.1	6.996	A
C-D	2	0.38			2				
C-A	557	139			557				

2025, Peak - Saturday - With Development

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	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		4.27	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2025	Peak - Saturday - With Development	ONE HOUR	10:45	12:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	475	100.000
B		ONE HOUR	✓	253	100.000
C		ONE HOUR	✓	752	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	184	291	0	
	B	130	0	123	0	
	C	603	149	0	0	
	D	0	0	0	0	

Proportions

		To				
		A	B	C	D	
From	A	0.00	0.39	0.61	0.00	
	B	0.51	0.00	0.49	0.00	
	C	0.80	0.20	0.00	0.00	
	D	0.25	0.25	0.25	0.25	

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
10:45-11:00	A	358	358
	B	190	190
	C	566	566
	D	0	0
11:00-11:15	A	427	427
	B	227	227
	C	676	676
	D	0	0
11:15-11:30	A	523	523
	B	279	279
	C	828	828
	D	0	0
11:30-11:45	A	523	523
	B	279	279
	C	828	828
	D	0	0
11:45-12:00	A	427	427
	B	227	227
	C	676	676
	D	0	0
12:00-12:15	A	358	358
	B	190	190
	C	566	566
	D	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-CD	0.27	9.69	0.4	A	113	169
B-AD	0.53	27.78	1.1	D	119	179
A-BCD	0.00	0.00	0.0	A	0	0
A-B					169	253
A-C					267	401
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.32	10.14	0.5	B	137	206
C-D					0	0
C-A					553	829

Main Results for each time segment

10:45 - 11:00

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-CD	93	23	577	0.160	92	0.0	0.2	7.404	A
B-AD	98	24	354	0.276	96	0.0	0.4	13.898	B
A-BCD	0	0	1013	0.000	0	0.0	0.0	0.000	A
A-B	139	35			139				
A-C	219	55			219				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	112	28	557	0.201	111	0.0	0.2	8.052	A
C-D	0	0			0				
C-A	454	113			454				

11:00 - 11:15

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-CD	111	28	550	0.201	110	0.2	0.2	8.186	A
B-AD	117	29	320	0.366	116	0.4	0.6	17.623	C
A-BCD	0	0	951	0.000	0	0.0	0.0	0.000	A
A-B	165	41			165				
A-C	262	65			262				
D-ABC	0	0	318	0.000	0	0.0	0.0	0.000	A
C-ABD	134	34	541	0.248	134	0.2	0.3	8.839	A
C-D	0	0			0				
C-A	542	135			542				

11:15 - 11:30

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-CD	135	34	508	0.267	135	0.2	0.4	9.638	A
B-AD	143	36	272	0.525	141	0.6	1.0	27.030	D
A-BCD	0	0	865	0.000	0	0.0	0.0	0.000	A
A-B	203	51			203				
A-C	320	80			320				
D-ABC	0	0	265	0.000	0	0.0	0.0	0.000	A
C-ABD	166	41	521	0.318	165	0.3	0.5	10.108	B
C-D	0	0			0				
C-A	662	166			662				

11:30 - 11:45

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-CD	135	34	507	0.267	135	0.4	0.4	9.689	A
B-AD	143	36	272	0.526	143	1.0	1.1	27.779	D
A-BCD	0	0	865	0.000	0	0.0	0.0	0.000	A
A-B	203	51			203				
A-C	320	80			320				
D-ABC	0	0	265	0.000	0	0.0	0.0	0.000	A
C-ABD	166	41	521	0.318	166	0.5	0.5	10.138	B
C-D	0	0			0				
C-A	662	166			662				

11:45 - 12:00

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-CD	111	28	549	0.202	111	0.4	0.3	8.237	A
B-AD	117	29	319	0.366	119	1.1	0.6	18.117	C
A-BCD	0	0	950	0.000	0	0.0	0.0	0.000	A
A-B	165	41			165				
A-C	262	65			262				
D-ABC	0	0	317	0.000	0	0.0	0.0	0.000	A
C-ABD	134	34	541	0.248	135	0.5	0.3	8.874	A
C-D	0	0			0				
C-A	542	135			542				

12:00 - 12:15

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-CD	93	23	576	0.161	93	0.3	0.2	7.448	A
B-AD	98	24	354	0.277	99	0.6	0.4	14.171	B
A-BCD	0	0	1012	0.000	0	0.0	0.0	0.000	A
A-B	139	35			139				
A-C	219	55			219				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	112	28	557	0.201	113	0.3	0.3	8.100	A
C-D	0	0			0				
C-A	454	113			454				

2033, AM - Weekday - With Development

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		1.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2033	AM - Weekday - With Development	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	772	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	681	100.000
D		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	206	563	3
	B	56	0	45	1
	C	572	100	0	9
	D	2	4	2	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.27	0.73	0.00
	B	0.55	0.00	0.44	0.01
	C	0.84	0.15	0.00	0.01
	D	0.25	0.50	0.25	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	1	2	0
	B	0	0	3	0
	C	4	0	0	0
	D	0	0	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.010	1.020	1.000
	B	1.000	1.000	1.030	1.000
	C	1.040	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	581	581
	B	77	77
	C	513	513
	D	6	6
08:00-08:15	A	694	694
	B	92	92
	C	612	612
	D	7	7
08:15-08:30	A	850	850
	B	112	112
	C	750	750
	D	9	9
08:30-08:45	A	850	850
	B	112	112
	C	750	750
	D	9	9
08:45-09:00	A	694	694
	B	92	92
	C	612	612
	D	7	7
09:00-09:15	A	581	581
	B	77	77
	C	513	513
	D	6	6

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-CD	0.11	9.08	0.1	A	42	63
B-AD	0.28	23.01	0.4	C	52	78
A-BCD	0.01	7.90	0.0	A	3	4
A-B					189	284
A-C					517	775
D-ABC	0.04	15.06	0.0	C	7	11
C-ABD	0.25	11.09	0.3	B	92	138
C-D					8	12
C-A					525	787

Main Results for each time segment

07:45 - 08:00

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-CD	34	9	540	0.064	34	0.0	0.1	7.326	A
B-AD	42	11	317	0.134	42	0.0	0.2	13.052	B
A-BCD	2	0.56	524	0.004	2	0.0	0.0	6.896	A
A-B	155	39			155				
A-C	424	106			424				
D-ABC	6	2	344	0.018	6	0.0	0.0	10.643	B
C-ABD	75	19	501	0.150	75	0.0	0.2	8.434	A
C-D	7	2			7				
C-A	431	108			431				

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-CD	41	10	507	0.081	41	0.1	0.1	7.947	A
B-AD	51	13	276	0.184	50	0.2	0.2	15.966	C
A-BCD	3	0.67	497	0.005	3	0.0	0.0	7.286	A
A-B	185	46			185				
A-C	506	127			506				
D-ABC	7	2	304	0.024	7	0.0	0.0	12.116	B
C-ABD	90	22	473	0.190	90	0.2	0.2	9.393	A
C-D	8	2			8				
C-A	514	129			514				

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-CD	50	13	459	0.109	50	0.1	0.1	9.062	A
B-AD	62	16	219	0.284	61	0.2	0.4	22.812	C
A-BCD	3	0.83	459	0.007	3	0.0	0.0	7.900	A
A-B	227	57			227				
A-C	620	155			620				
D-ABC	9	2	248	0.036	9	0.0	0.0	15.041	C
C-ABD	111	28	435	0.254	110	0.2	0.3	11.064	B
C-D	10	2			10				
C-A	629	157			629				

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-CD	50	13	459	0.110	50	0.1	0.1	9.076	A
B-AD	62	16	218	0.284	62	0.4	0.4	23.012	C
A-BCD	3	0.83	459	0.007	3	0.0	0.0	7.903	A
A-B	227	57			227				
A-C	620	155			620				
D-ABC	9	2	248	0.036	9	0.0	0.0	15.056	C
C-ABD	111	28	435	0.254	111	0.3	0.3	11.092	B
C-D	10	2			10				
C-A	629	157			629				

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-CD	41	10	507	0.081	41	0.1	0.1	7.962	A
B-AD	51	13	275	0.184	51	0.4	0.2	16.113	C
A-BCD	3	0.67	496	0.005	3	0.0	0.0	7.290	A
A-B	185	46			185				
A-C	506	127			506				
D-ABC	7	2	304	0.024	7	0.0	0.0	12.128	B
C-ABD	90	22	473	0.190	90	0.3	0.2	9.424	A
C-D	8	2			8				
C-A	514	129			514				

09:00 - 09:15

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-CD	34	9	539	0.064	34	0.1	0.1	7.343	A
B-AD	42	11	317	0.134	43	0.2	0.2	13.156	B
A-BCD	2	0.56	524	0.004	2	0.0	0.0	6.901	A
A-B	155	39			155				
A-C	424	106			424				
D-ABC	6	2	344	0.018	6	0.0	0.0	10.661	B
C-ABD	75	19	501	0.150	76	0.2	0.2	8.471	A
C-D	7	2			7				
C-A	431	108			431				

2033, PM - Weekday - With Development

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		2.86	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2033	PM - Weekday - With Development	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	495	100.000
B		ONE HOUR	✓	220	100.000
C		ONE HOUR	✓	847	100.000
D		ONE HOUR	✓	17	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	72	422	1
	B	99	0	121	0
	C	784	61	0	2
	D	8	2	7	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.15	0.85	0.00
	B	0.45	0.00	0.55	0.00
	C	0.93	0.07	0.00	0.00
	D	0.47	0.12	0.41	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Average PCU Per Veh

		To			
		A	B	C	D
From	A	1.000	1.000	1.010	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	373	373
	B	166	166
	C	638	638
	D	13	13
17:00-17:15	A	445	445
	B	198	198
	C	761	761
	D	15	15
17:15-17:30	A	545	545
	B	242	242
	C	933	933
	D	19	19
17:30-17:45	A	545	545
	B	242	242
	C	933	933
	D	19	19
17:45-18:00	A	445	445
	B	198	198
	C	761	761
	D	15	15
18:00-18:15	A	373	373
	B	166	166
	C	638	638
	D	13	13

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-CD	0.27	9.88	0.4	A	111	167
B-AD	0.44	25.73	0.8	D	91	136
A-BCD	0.00	8.66	0.0	A	0.92	1
A-B					66	99
A-C					387	581
D-ABC	0.07	15.44	0.1	C	16	23
C-ABD	0.13	8.13	0.2	A	56	84
C-D					2	3
C-A					719	1079

Main Results for each time segment

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-CD	91	23	569	0.160	90	0.0	0.2	7.513	A
B-AD	75	19	338	0.221	73	0.0	0.3	13.570	B
A-BCD	0.75	0.19	495	0.002	0.75	0.0	0.0	7.279	A
A-B	54	14			54				
A-C	318	79			318				
D-ABC	13	3	360	0.036	13	0.0	0.0	10.359	B
C-ABD	46	11	553	0.083	46	0.0	0.1	7.090	A
C-D	2	0.38			2				
C-A	590	148			590				

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-CD	109	27	541	0.201	109	0.2	0.2	8.317	A
B-AD	89	22	300	0.296	88	0.3	0.4	16.955	C
A-BCD	0.90	0.22	462	0.002	0.90	0.0	0.0	7.802	A
A-B	65	16			65				
A-C	379	95			379				
D-ABC	15	4	316	0.048	15	0.0	0.1	11.967	B
C-ABD	55	14	535	0.103	55	0.1	0.1	7.494	A
C-D	2	0.45			2				
C-A	705	176			705				

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-CD	133	33	498	0.267	133	0.2	0.4	9.839	A
B-AD	109	27	249	0.438	108	0.4	0.7	25.280	D
A-BCD	1	0.28	417	0.003	1	0.0	0.0	8.659	A
A-B	79	20			79				
A-C	465	116			465				
D-ABC	19	5	252	0.074	19	0.1	0.1	15.405	C
C-ABD	67	17	510	0.132	67	0.1	0.2	8.125	A
C-D	2	0.55			2				
C-A	863	216			863				

17:30 - 17:45

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-CD	133	33	497	0.268	133	0.4	0.4	9.883	A
B-AD	109	27	249	0.438	109	0.7	0.8	25.732	D
A-BCD	1	0.28	417	0.003	1	0.0	0.0	8.660	A
A-B	79	20			79				
A-C	465	116			465				
D-ABC	19	5	252	0.074	19	0.1	0.1	15.437	C
C-ABD	67	17	510	0.132	67	0.2	0.2	8.130	A
C-D	2	0.55			2				
C-A	863	216			863				

17:45 - 18:00

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-CD	109	27	540	0.201	109	0.4	0.3	8.362	A
B-AD	89	22	300	0.297	90	0.8	0.4	17.262	C
A-BCD	0.90	0.22	462	0.002	0.90	0.0	0.0	7.806	A
A-B	65	16			65				
A-C	379	95			379				
D-ABC	15	4	316	0.048	15	0.1	0.1	11.993	B
C-ABD	55	14	535	0.103	55	0.2	0.1	7.505	A
C-D	2	0.45			2				
C-A	705	176			705				

18:00 - 18:15

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-CD	91	23	569	0.160	91	0.3	0.2	7.547	A
B-AD	75	19	337	0.221	75	0.4	0.3	13.753	B
A-BCD	0.75	0.19	495	0.002	0.75	0.0	0.0	7.282	A
A-B	54	14			54				
A-C	318	79			318				
D-ABC	13	3	360	0.036	13	0.1	0.0	10.384	B
C-ABD	46	11	553	0.083	46	0.1	0.1	7.101	A
C-D	2	0.38			2				
C-A	590	148			590				

2033, Peak - Saturday - With Development

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	A635 Old Mill Lane/County Way/Access Road	Crossroads	Two-way		4.89	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	Stream B-AD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2033	Peak - Saturday - With Development	ONE HOUR	10:45	12:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	504	100.000
B		ONE HOUR	✓	267	100.000
C		ONE HOUR	✓	798	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	195	309	0
	B	137	0	130	0
	C	640	158	0	0
	D	0	0	0	0

Proportions

		To			
		A	B	C	D
From	A	0.00	0.39	0.61	0.00
	B	0.51	0.00	0.49	0.00
	C	0.80	0.20	0.00	0.00
	D	0.25	0.25	0.25	0.25

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	A	B	C	D	
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
10:45-11:00	A	379	379
	B	201	201
	C	601	601
	D	0	0
11:00-11:15	A	453	453
	B	240	240
	C	717	717
	D	0	0
11:15-11:30	A	555	555
	B	294	294
	C	879	879
	D	0	0
11:30-11:45	A	555	555
	B	294	294
	C	879	879
	D	0	0
11:45-12:00	A	453	453
	B	240	240
	C	717	717
	D	0	0
12:00-12:15	A	379	379
	B	201	201
	C	601	601
	D	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-CD	0.29	10.33	0.4	B	119	179
B-AD	0.59	33.84	1.4	D	126	189
A-BCD	0.00	0.00	0.0	A	0	0
A-B					179	268
A-C					284	425
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.34	10.63	0.5	B	146	219
C-D					0	0
C-A					586	879

Main Results for each time segment

10:45 - 11:00

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-CD	98	24	570	0.172	97	0.0	0.2	7.607	A
B-AD	103	26	343	0.300	101	0.0	0.4	14.787	B
A-BCD	0	0	993	0.000	0	0.0	0.0	0.000	A
A-B	147	37			147				
A-C	233	58			233				
D-ABC	0	0	344	0.000	0	0.0	0.0	0.000	A
C-ABD	119	30	552	0.216	118	0.0	0.3	8.272	A
C-D	0	0			0				
C-A	482	120			482				

11:00 - 11:15

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-CD	117	29	540	0.217	117	0.2	0.3	8.507	A
B-AD	123	31	307	0.401	122	0.4	0.6	19.408	C
A-BCD	0	0	927	0.000	0	0.0	0.0	0.000	A
A-B	175	44			175				
A-C	278	69			278				
D-ABC	0	0	304	0.000	0	0.0	0.0	0.000	A
C-ABD	143	36	535	0.267	142	0.3	0.4	9.154	A
C-D	0	0			0				
C-A	575	144			575				

11:15 - 11:30

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-CD	143	36	493	0.290	143	0.3	0.4	10.258	B
B-AD	151	38	257	0.588	148	0.6	1.3	32.391	D
A-BCD	0	0	837	0.000	0	0.0	0.0	0.000	A
A-B	215	54			215				
A-C	340	85			340				
D-ABC	0	0	248	0.000	0	0.0	0.0	0.000	A
C-ABD	177	44	515	0.343	176	0.4	0.5	10.592	B
C-D	0	0			0				
C-A	702	175			702				

11:30 - 11:45

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-CD	143	36	491	0.291	143	0.4	0.4	10.335	B
B-AD	151	38	256	0.588	151	1.3	1.4	33.836	D
A-BCD	0	0	837	0.000	0	0.0	0.0	0.000	A
A-B	215	54			215				
A-C	340	85			340				
D-ABC	0	0	247	0.000	0	0.0	0.0	0.000	A
C-ABD	177	44	515	0.343	177	0.5	0.5	10.630	B
C-D	0	0			0				
C-A	702	175			702				

11:45 - 12:00

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-CD	117	29	538	0.217	117	0.4	0.3	8.577	A
B-AD	123	31	306	0.402	126	1.4	0.7	20.215	C
A-BCD	0	0	927	0.000	0	0.0	0.0	0.000	A
A-B	175	44			175				
A-C	278	69			278				
D-ABC	0	0	303	0.000	0	0.0	0.0	0.000	A
C-ABD	143	36	535	0.267	143	0.5	0.4	9.200	A
C-D	0	0			0				
C-A	575	144			575				

12:00 - 12:15

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-CD	98	24	568	0.172	98	0.3	0.2	7.662	A
B-AD	103	26	343	0.301	104	0.7	0.4	15.152	C
A-BCD	0	0	992	0.000	0	0.0	0.0	0.000	A
A-B	147	37			147				
A-C	233	58			233				
D-ABC	0	0	343	0.000	0	0.0	0.0	0.000	A
C-ABD	119	30	552	0.216	119	0.4	0.3	8.328	A
C-D	0	0			0				
C-A	482	120			482				



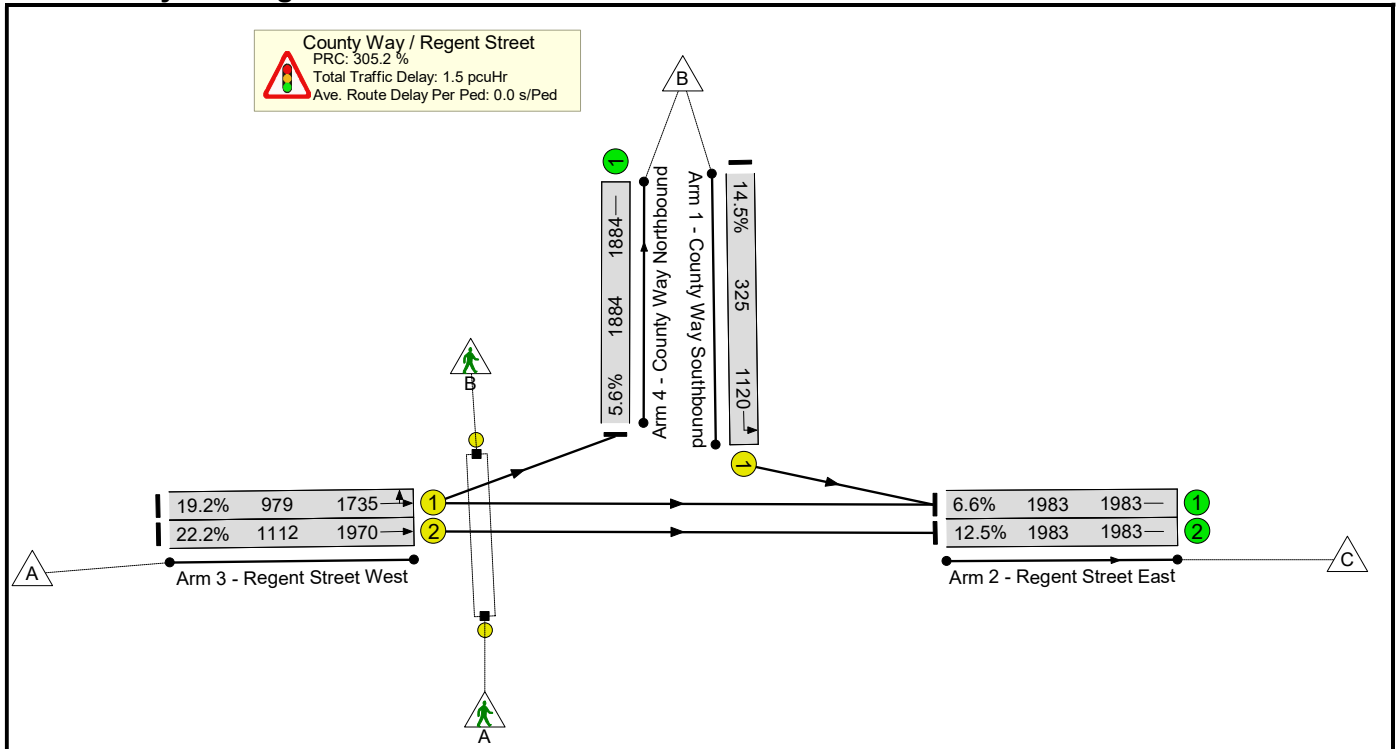
Results Summary

User and Project Details

Project:	Seams – Barnsley
Title:	Regent St / County Way
Location:	Barnsley, England
File name:	County Way - Regent St Junction.lsg3x
Company:	Arcadis Consulting (UK) Ltd

Scenario 1: 'AM Peak Base 2022' (FG1: 'AM Peak Base 2022', Plan 1: 'Network Control Plan 1')

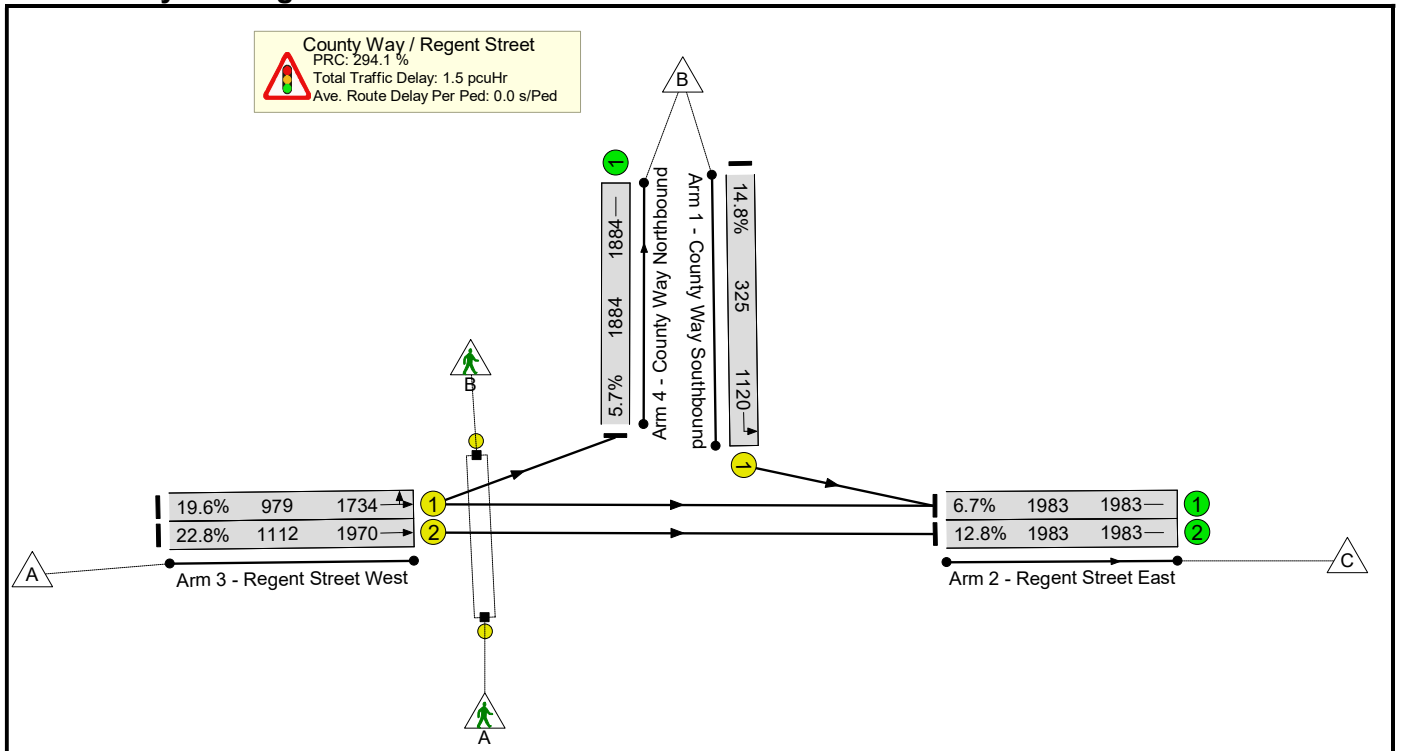
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	22.2%	0	0	0	1.5	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	22.2%	0	0	0	1.5	-	-
1/1	County Way Southbound Left	U	B		1	17	-	47	1120	325	14.5%	-	-	-	0.3	22.8	0.7
2/1	Regent Street East	U	-		-	-	-	130	1983	1983	6.6%	-	-	-	0.0	1.0	0.0
2/2	Regent Street East	U	-		-	-	-	247	1983	1983	12.5%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	188	1735	979	19.2%	-	-	-	0.5	8.9	1.7
3/2	Regent Street West Ahead	U	A		1	34	-	247	1970	1112	22.2%	-	-	-	0.6	8.8	2.2
4/1	County Way Northbound	U	-		-	-	-	105	1884	1884	5.6%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	14	-	0	-	16258	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		305.2		Total Delay for Signalled Lanes (pcuHr):				1.37		Cycle Time (s): 62			
				PRC Over All Lanes (%):		305.2		Total Delay Over All Lanes(pcuHr):				1.50					

Scenario 2: 'AM Peak Phase 1 2025' (FG4: 'AM Peak Phase 1 2025', Plan 1: 'Network Control Plan 1')
Network Layout Diagram

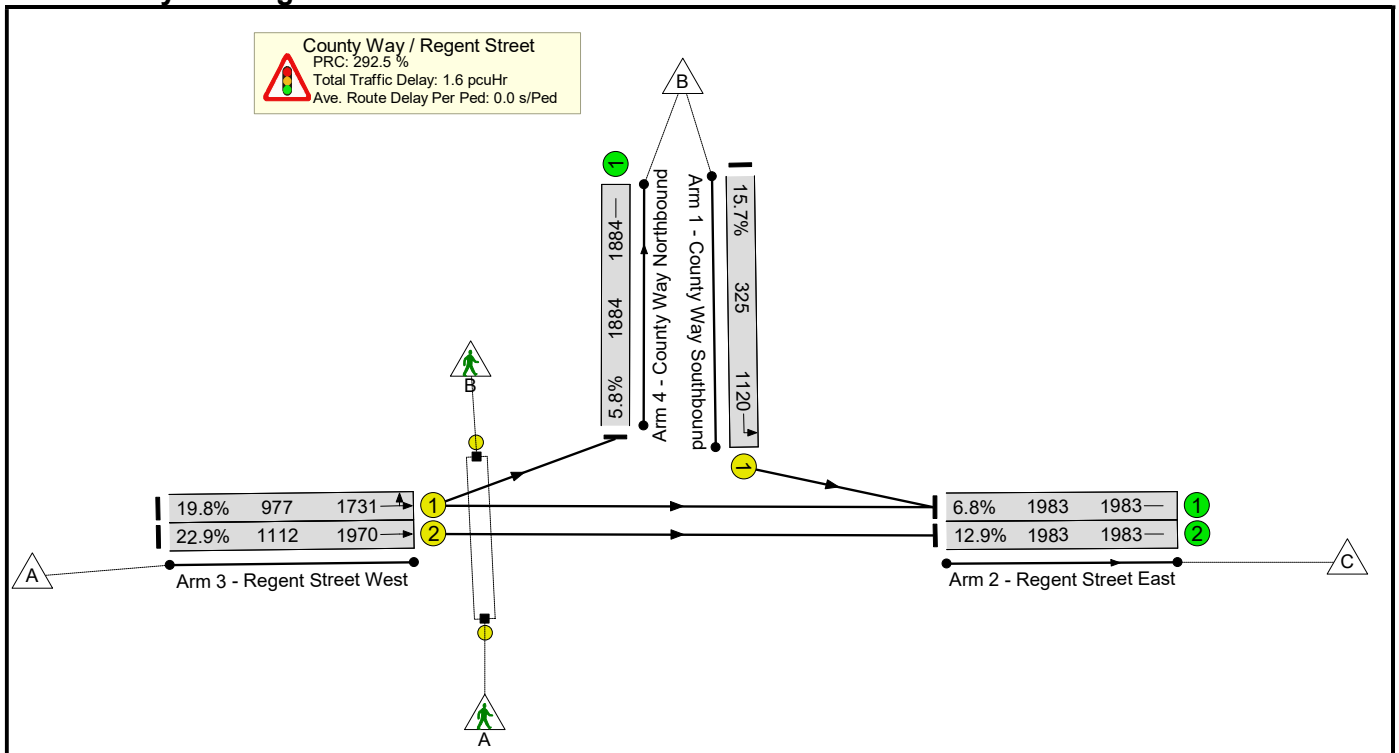


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	22.8%	0	0	0	1.5	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	22.8%	0	0	0	1.5	-	-
1/1	County Way Southbound Left	U	B		1	17	-	48	1120	325	14.8%	-	-	-	0.3	22.8	0.7
2/1	Regent Street East	U	-		-	-	-	132	1983	1983	6.7%	-	-	-	0.0	1.0	0.0
2/2	Regent Street East	U	-		-	-	-	254	1983	1983	12.8%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	192	1734	979	19.6%	-	-	-	0.5	8.9	1.7
3/2	Regent Street West Ahead	U	A		1	34	-	254	1970	1112	22.8%	-	-	-	0.6	8.8	2.3
4/1	County Way Northbound	U	-		-	-	-	108	1884	1884	5.7%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	14	-	0	-	16258	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		294.1		Total Delay for Signalled Lanes (pcuHr):				1.40		Cycle Time (s): 62			
				PRC Over All Lanes (%):		294.1		Total Delay Over All Lanes(pcuHr):				1.54					

Scenario 3: 'AM Peak Phase 1 2025 + Development' (FG5: 'AM Peak Phase 1 2025 + Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

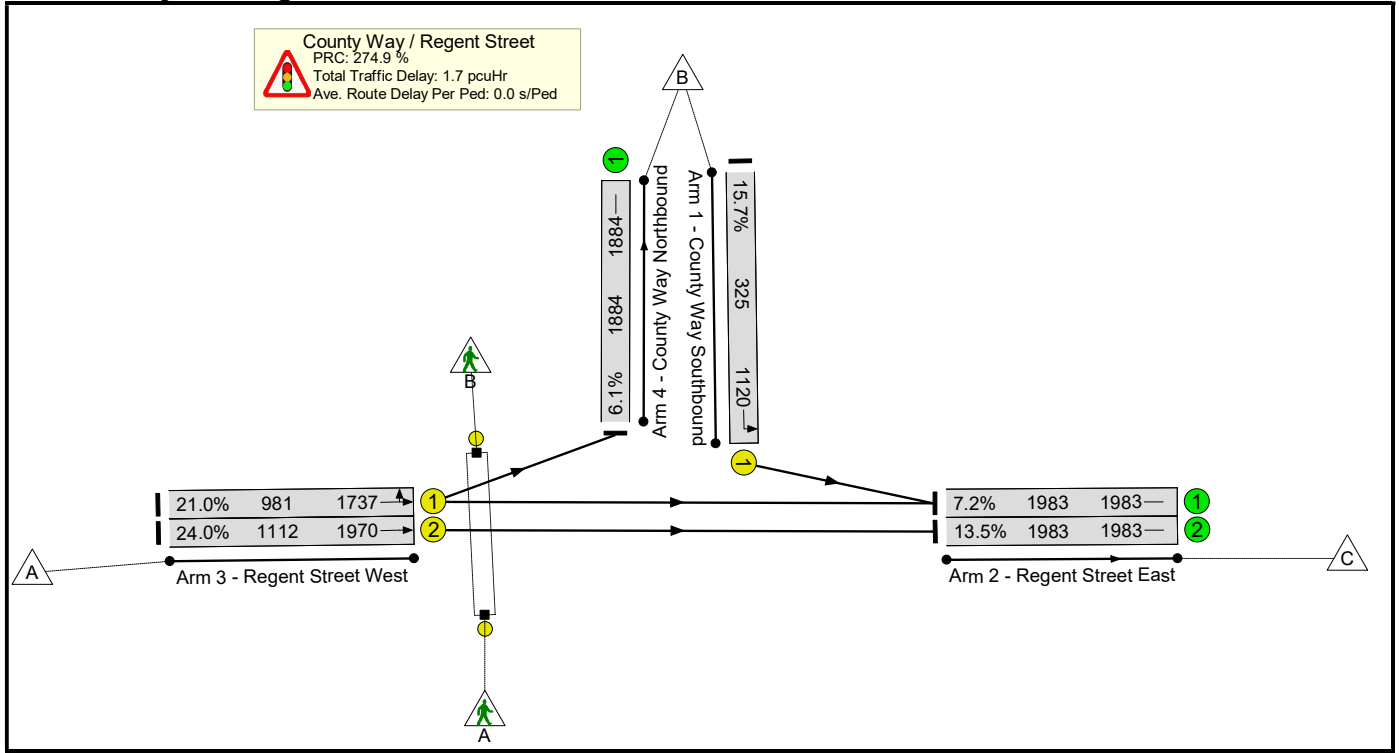


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	22.9%	0	0	0	1.6	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	22.9%	0	0	0	1.6	-	-
1/1	County Way Southbound Left	U	B		1	17	-	51	1120	325	15.7%	-	-	-	0.3	22.9	0.7
2/1	Regent Street East	U	-		-	-	-	134	1983	1983	6.8%	-	-	-	0.0	1.0	0.0
2/2	Regent Street East	U	-		-	-	-	255	1983	1983	12.9%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	193	1731	977	19.8%	-	-	-	0.5	8.9	1.7
3/2	Regent Street West Ahead	U	A		1	34	-	255	1970	1112	22.9%	-	-	-	0.6	8.9	2.3
4/1	County Way Northbound	U	-		-	-	-	110	1884	1884	5.8%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	14	-	0	-	16258	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		292.5		Total Delay for Signalled Lanes (pcuHr):				1.43		Cycle Time (s): 62			
				PRC Over All Lanes (%):		292.5		Total Delay Over All Lanes(pcuHr):				1.57					

Scenario 4: 'AM Peak 2033' (FG6: 'AM Peak 2033', Plan 1: 'Network Control Plan 1')

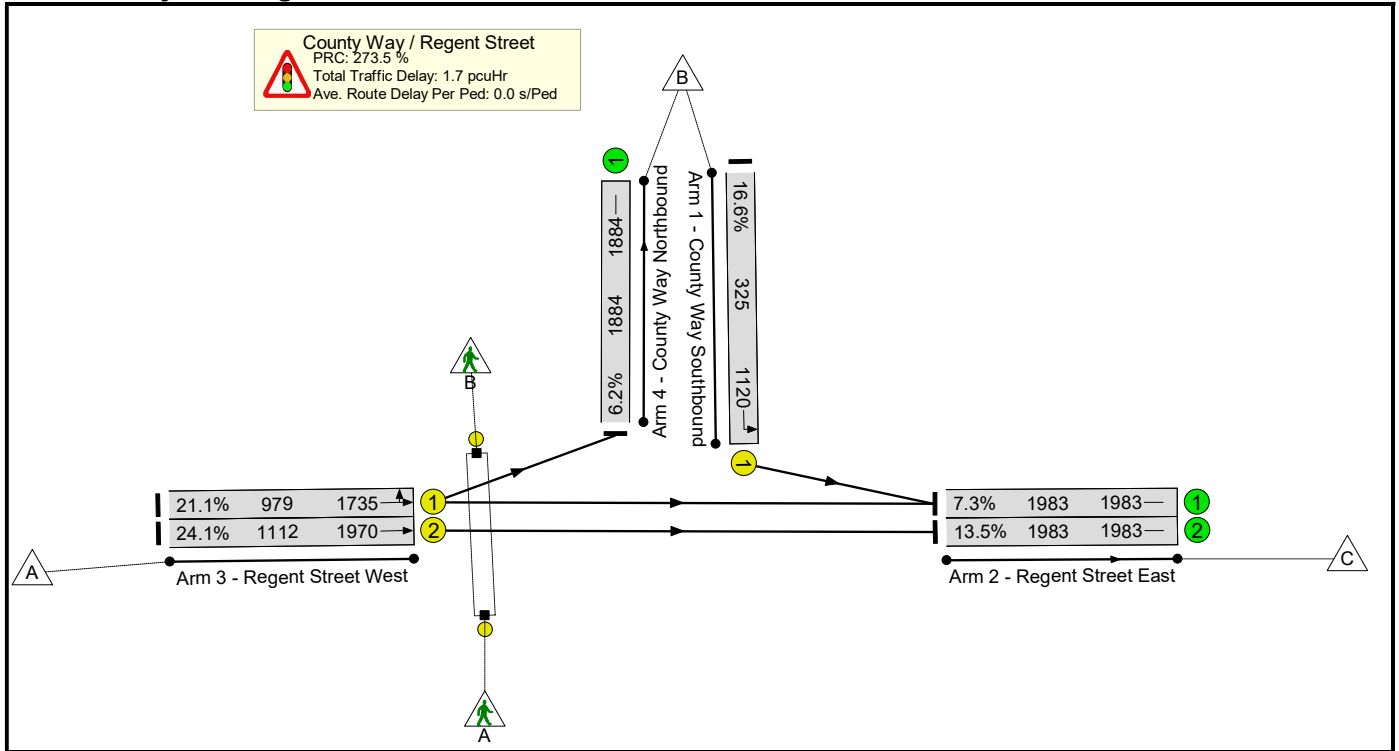
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	24.0%	0	0	0	1.7	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	24.0%	0	0	0	1.7	-	-
1/1	County Way Southbound Left	U	B		1	17	-	51	1120	325	15.7%	-	-	-	0.3	22.9	0.7
2/1	Regent Street East	U	-		-	-	-	143	1983	1983	7.2%	-	-	-	0.0	1.0	0.0
2/2	Regent Street East	U	-		-	-	-	267	1983	1983	13.5%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	206	1737	981	21.0%	-	-	-	0.5	9.0	1.8
3/2	Regent Street West Ahead	U	A		1	34	-	267	1970	1112	24.0%	-	-	-	0.7	8.9	2.5
4/1	County Way Northbound	U	-		-	-	-	114	1884	1884	6.1%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	14	-	0	-	16258	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		274.9		Total Delay for Signalled Lanes (pcuHr):				1.50		Cycle Time (s): 62			
				PRC Over All Lanes (%):		274.9		Total Delay Over All Lanes(pcuHr):				1.65					

Scenario 5: 'AM Peak 2033 + Development' (FG7: 'AM Peak 2033 + Development', Plan 1: 'Network Control Plan 1')
Network Layout Diagram

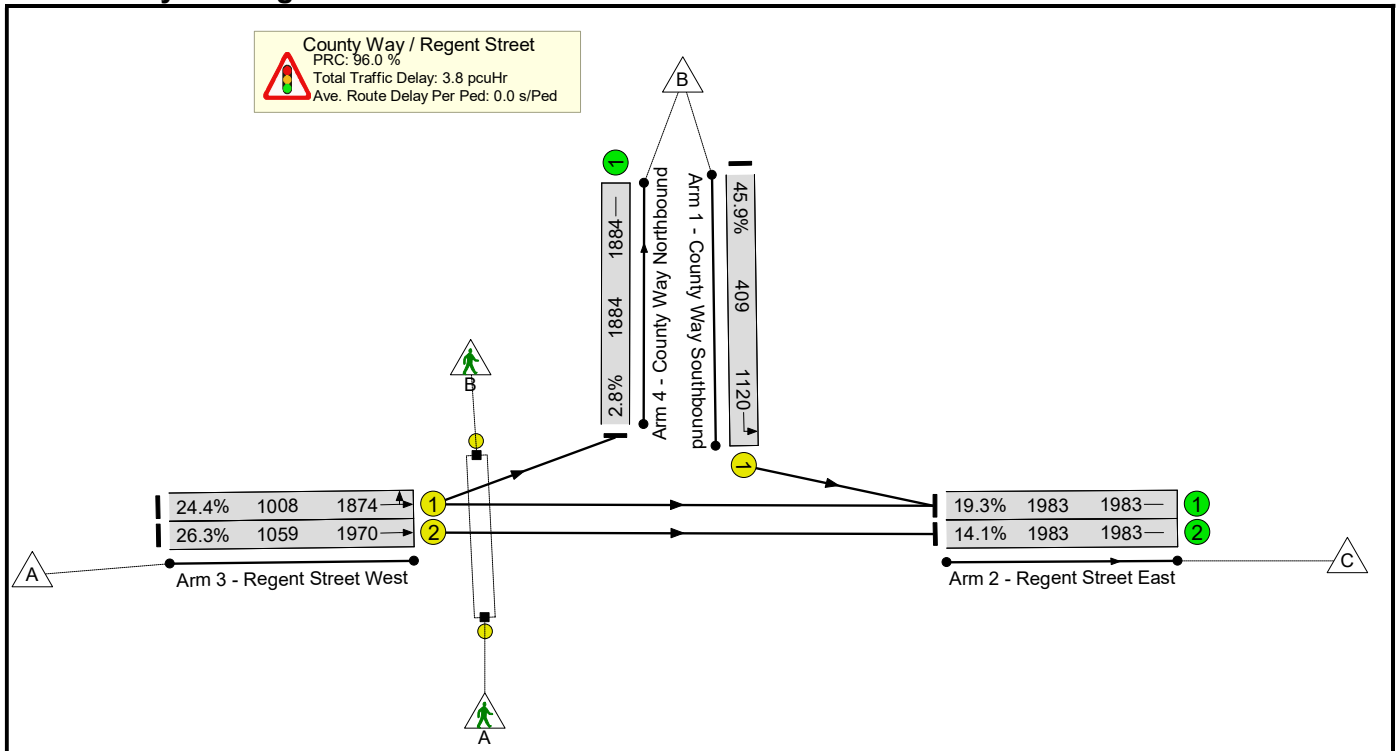


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	24.1%	0	0	0	1.7	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	24.1%	0	0	0	1.7	-	-
1/1	County Way Southbound Left	U	B		1	17	-	54	1120	325	16.6%	-	-	-	0.3	23.1	0.8
2/1	Regent Street East	U	-		-	-	-	145	1983	1983	7.3%	-	-	-	0.0	1.0	0.0
2/2	Regent Street East	U	-		-	-	-	268	1983	1983	13.5%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	207	1735	979	21.1%	-	-	-	0.5	9.0	1.9
3/2	Regent Street West Ahead	U	A		1	34	-	268	1970	1112	24.1%	-	-	-	0.7	8.9	2.5
4/1	County Way Northbound	U	-		-	-	-	116	1884	1884	6.2%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	14	-	0	-	16258	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		273.5		Total Delay for Signalled Lanes (pcuHr):				1.53		Cycle Time (s): 62			
				PRC Over All Lanes (%):		273.5		Total Delay Over All Lanes(pcuHr):				1.68					

Scenario 6: 'PM Peak Base 2022' (FG2: 'PM Peak Base 2022', Plan 1: 'Network Control Plan 1')

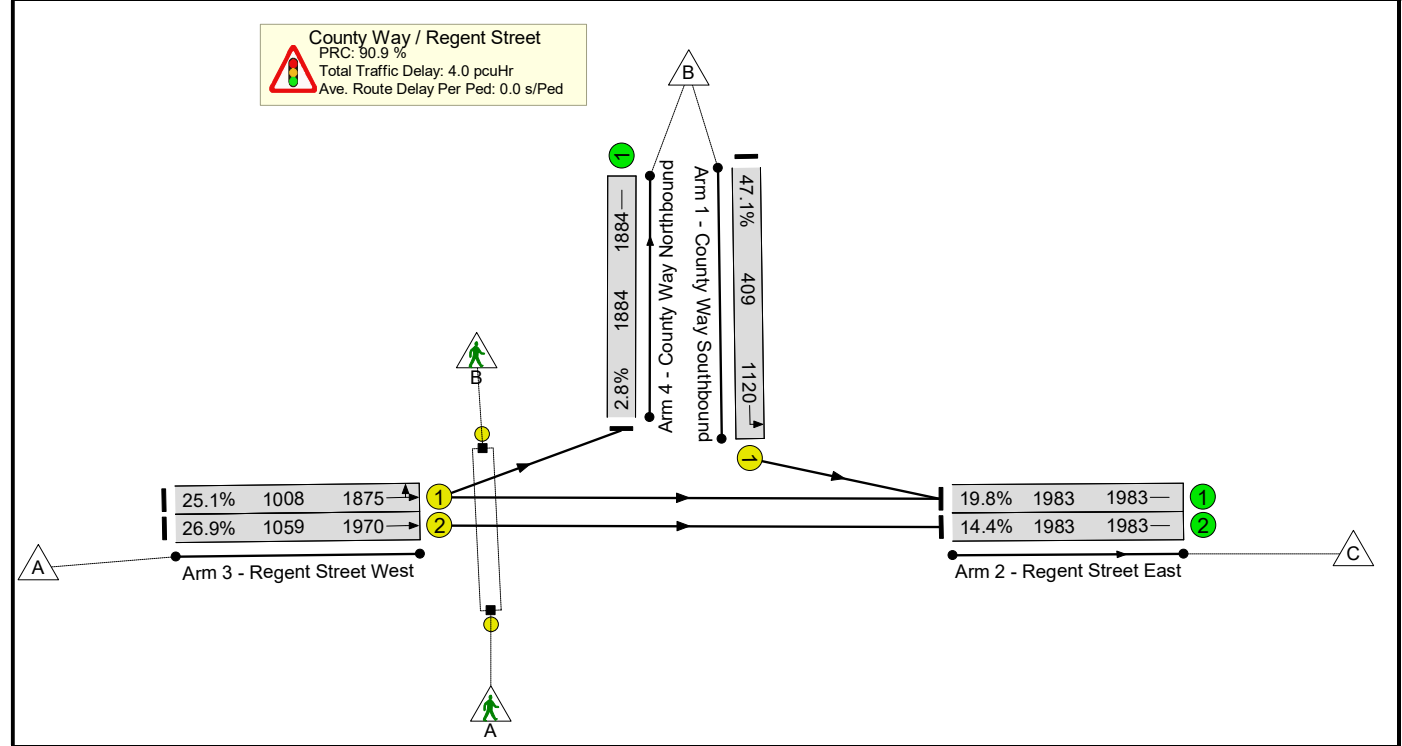
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	45.9%	0	0	0	3.8	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	45.9%	0	0	0	3.8	-	-
1/1	County Way Southbound Left	U	B		1	33	-	188	1120	409	45.9%	-	-	-	1.6	30.6	4.1
2/1	Regent Street East	U	-		-	-	-	382	1983	1983	19.3%	-	-	-	0.1	1.1	0.1
2/2	Regent Street East	U	-		-	-	-	279	1983	1983	14.1%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	49	-	246	1874	1008	24.4%	-	-	-	0.9	13.8	3.5
3/2	Regent Street West Ahead	U	A		1	49	-	279	1970	1059	26.3%	-	-	-	1.1	13.9	4.1
4/1	County Way Northbound	U	-		-	-	-	52	1884	1884	2.8%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	23226	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		96.0		Total Delay for Signalled Lanes (pcuHr):				3.62		Cycle Time (s): 93			
				PRC Over All Lanes (%):		96.0		Total Delay Over All Lanes(pcuHr):				3.83					

Scenario 7: 'PM Peak Phase 1 2025' (FG8: 'PM Peak Phase 1 2025', Plan 1: 'Network Control Plan 1')

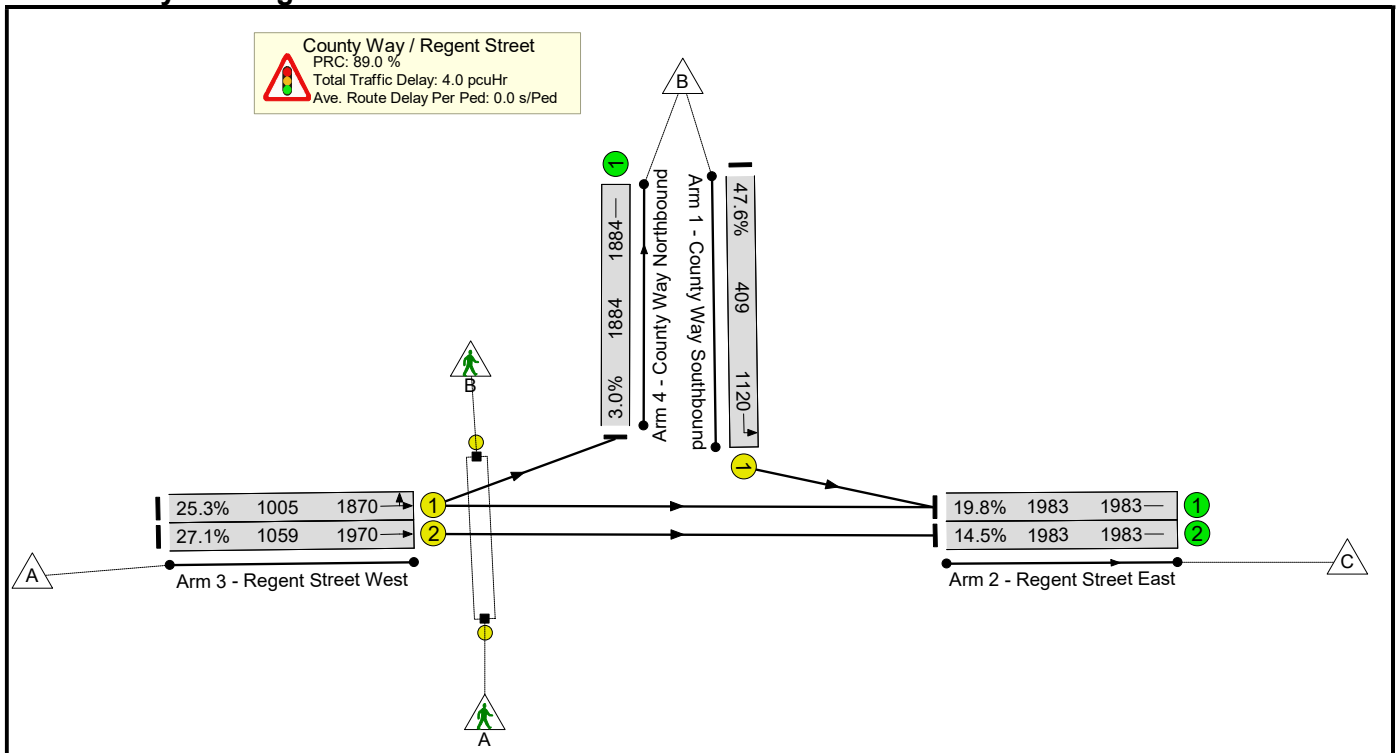


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	47.1%	0	0	0	4.0	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	47.1%	0	0	0	4.0	-	-
1/1	County Way Southbound Left	U	B		1	33	-	193	1120	409	47.1%	-	-	-	1.7	30.9	4.3
2/1	Regent Street East	U	-		-	-	-	393	1983	1983	19.8%	-	-	-	0.1	1.1	0.1
2/2	Regent Street East	U	-		-	-	-	285	1983	1983	14.4%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	49	-	253	1875	1008	25.1%	-	-	-	1.0	13.9	3.6
3/2	Regent Street West Ahead	U	A		1	49	-	285	1970	1059	26.9%	-	-	-	1.1	14.0	4.1
4/1	County Way Northbound	U	-		-	-	-	53	1884	1884	2.8%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	23226	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		90.9		Total Delay for Signalled Lanes (pcuHr):				3.74		Cycle Time (s):		93	
				PRC Over All Lanes (%):		90.9		Total Delay Over All Lanes(pcuHr):				3.96					

Scenario 8: 'PM Peak Phase 1 2025 + Development' (FG9: 'PM Peak Phase 1 2025 + Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

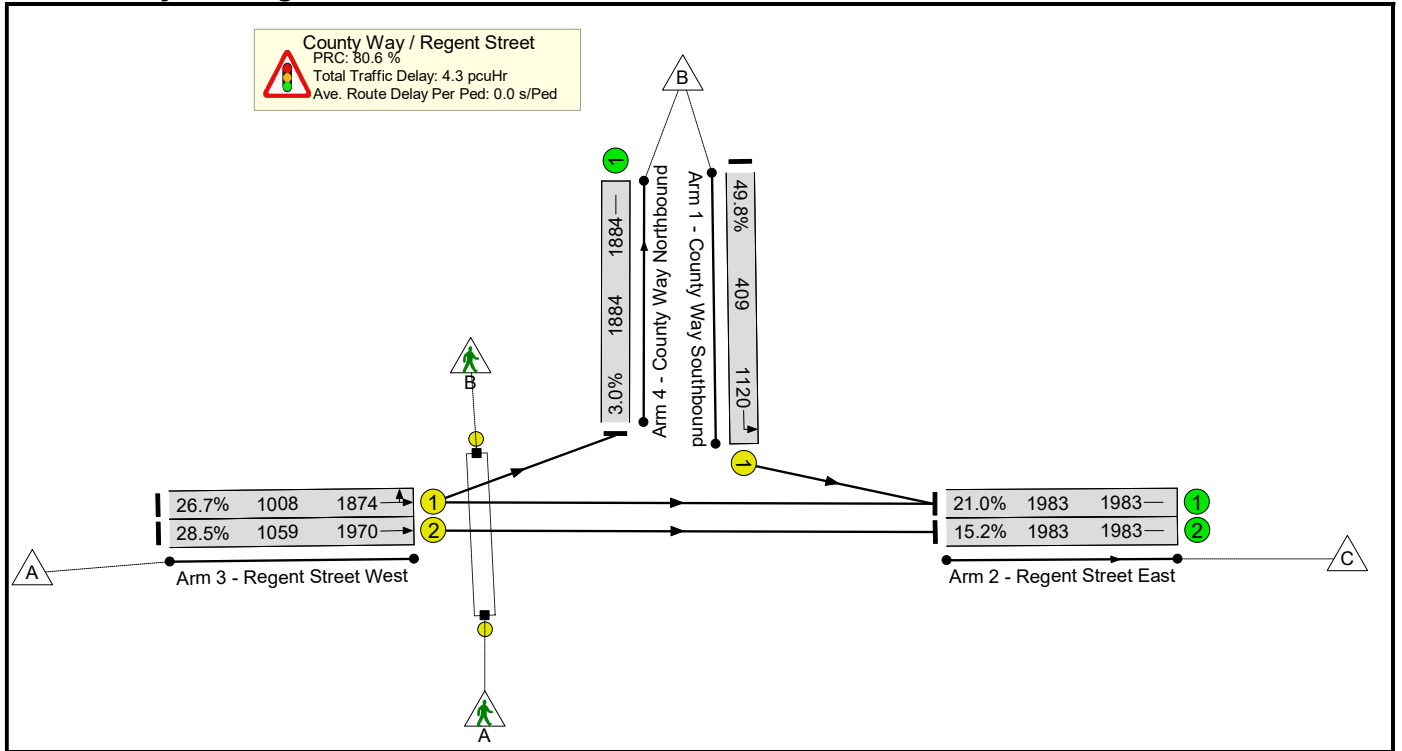


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	47.6%	0	0	0	4.0	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	47.6%	0	0	0	4.0	-	-
1/1	County Way Southbound Left	U	B		1	33	-	195	1120	409	47.6%	-	-	-	1.7	31.0	4.3
2/1	Regent Street East	U	-		-	-	-	393	1983	1983	19.8%	-	-	-	0.1	1.1	0.1
2/2	Regent Street East	U	-		-	-	-	287	1983	1983	14.5%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	49	-	254	1870	1005	25.3%	-	-	-	1.0	13.9	3.6
3/2	Regent Street West Ahead	U	A		1	49	-	287	1970	1059	27.1%	-	-	-	1.1	14.0	4.2
4/1	County Way Northbound	U	-		-	-	-	56	1884	1884	3.0%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	23226	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		89.0		Total Delay for Signalled Lanes (pcuHr):				3.78		Cycle Time (s): 93			
				PRC Over All Lanes (%):		89.0		Total Delay Over All Lanes(pcuHr):				4.00					

Scenario 9: 'PM Peak 2033' (FG10: 'PM Peak 2033', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

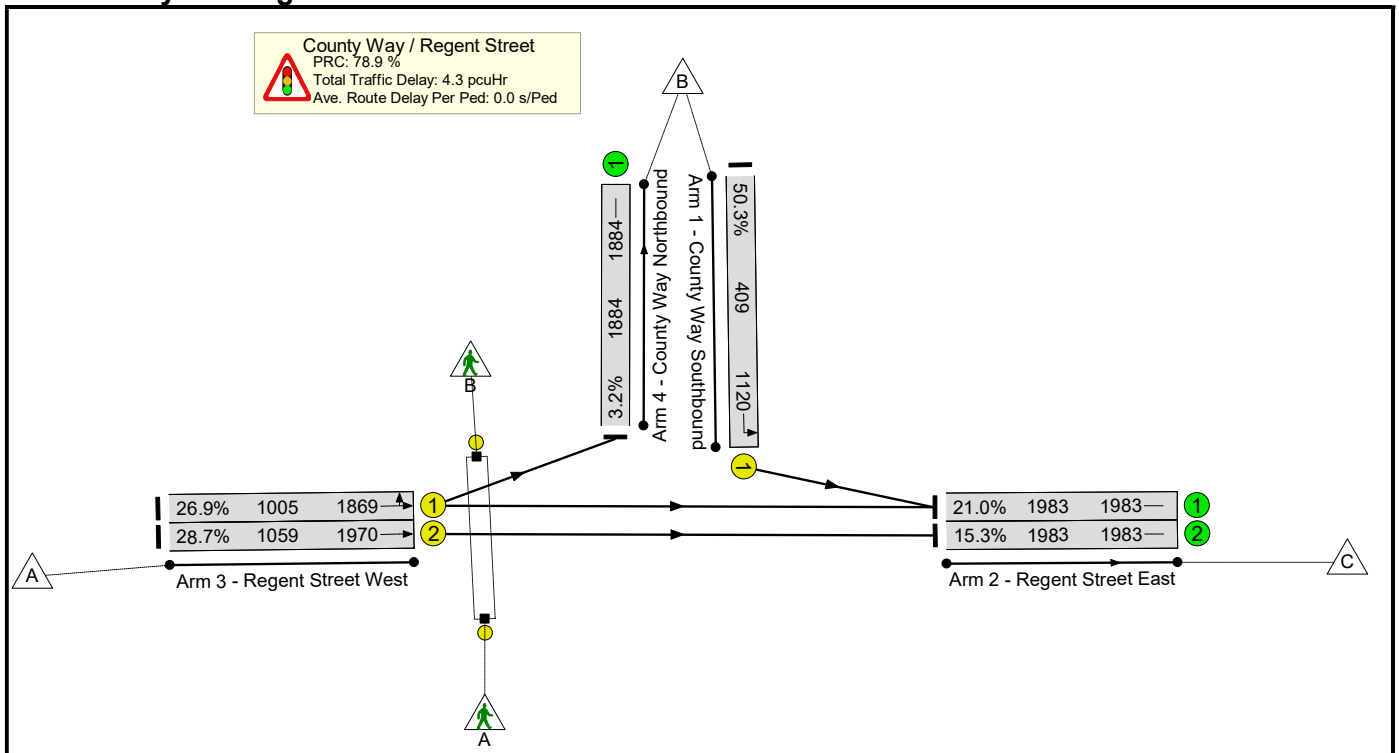


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	49.8%	0	0	0	4.3	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	49.8%	0	0	0	4.3	-	-
1/1	County Way Southbound Left	U	B		1	33	-	204	1120	409	49.8%	-	-	-	1.8	31.6	4.6
2/1	Regent Street East	U	-		-	-	-	416	1983	1983	21.0%	-	-	-	0.1	1.1	0.1
2/2	Regent Street East	U	-		-	-	-	302	1983	1983	15.2%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	49	-	269	1874	1008	26.7%	-	-	-	1.0	14.0	3.9
3/2	Regent Street West Ahead	U	A		1	49	-	302	1970	1059	28.5%	-	-	-	1.2	14.1	4.4
4/1	County Way Northbound	U	-		-	-	-	57	1884	1884	3.0%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	23226	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		80.6		Total Delay for Signalled Lanes (pcuHr):				4.03		Cycle Time (s):		93	
				PRC Over All Lanes (%):		80.6		Total Delay Over All Lanes(pcuHr):				4.26					

Scenario 10: 'PM Peak 2033 + Development' (FG11: 'PM Peak 2033 + Development', Plan 1: 'Network Control Plan 1')

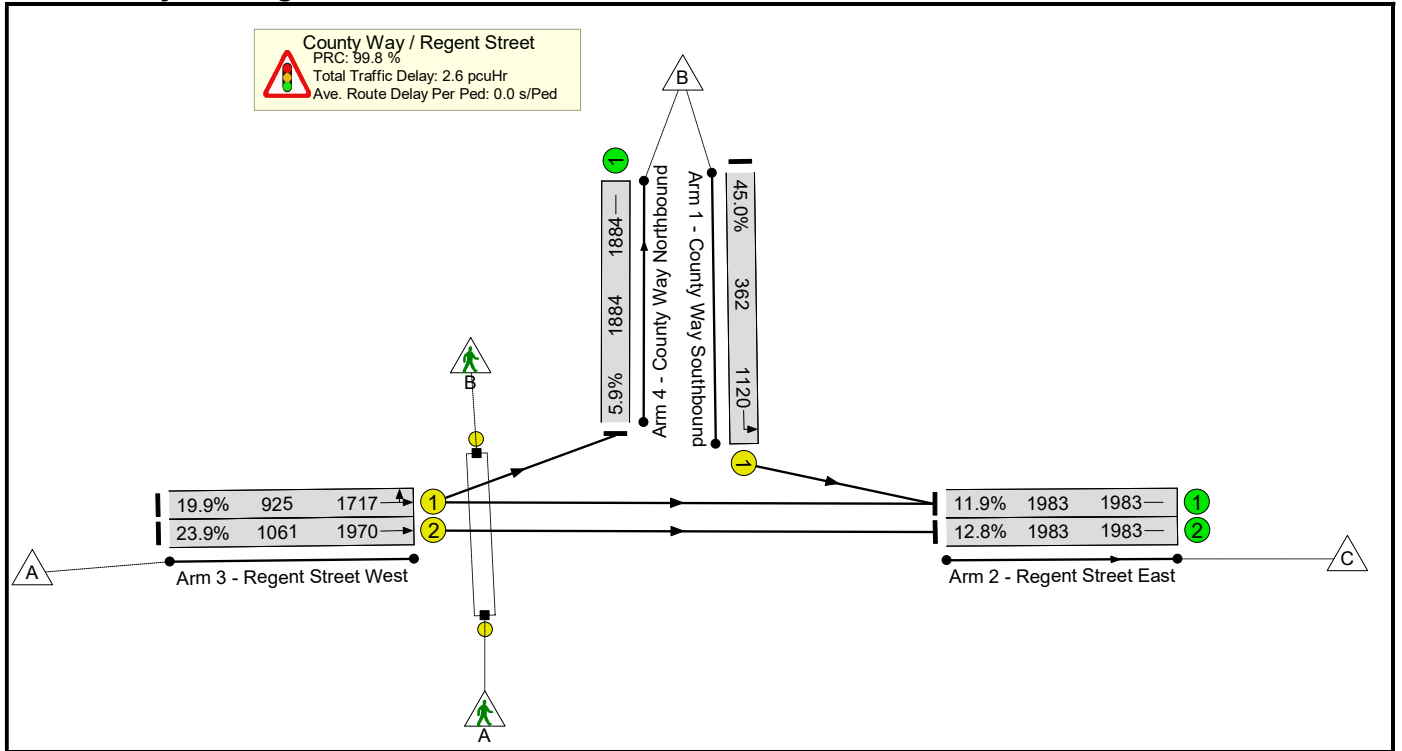
Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	50.3%	0	0	0	4.3	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	50.3%	0	0	0	4.3	-	-
1/1	County Way Southbound Left	U	B		1	33	-	206	1120	409	50.3%	-	-	-	1.8	31.7	4.6
2/1	Regent Street East	U	-		-	-	-	416	1983	1983	21.0%	-	-	-	0.1	1.1	0.1
2/2	Regent Street East	U	-		-	-	-	304	1983	1983	15.3%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	49	-	270	1869	1005	26.9%	-	-	-	1.1	14.1	3.9
3/2	Regent Street West Ahead	U	A		1	49	-	304	1970	1059	28.7%	-	-	-	1.2	14.1	4.4
4/1	County Way Northbound	U	-		-	-	-	60	1884	1884	3.2%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	23226	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		78.9		Total Delay for Signalled Lanes (pcuHr):				4.07		Cycle Time (s):		93	
				PRC Over All Lanes (%):		78.9		Total Delay Over All Lanes(pcuHr):				4.31					

Scenario 11: 'Weekend Peak Base 2022' (FG3: 'Weekend Peak Base 2022', Plan 1: 'Network Control Plan 1')
Network Layout Diagram

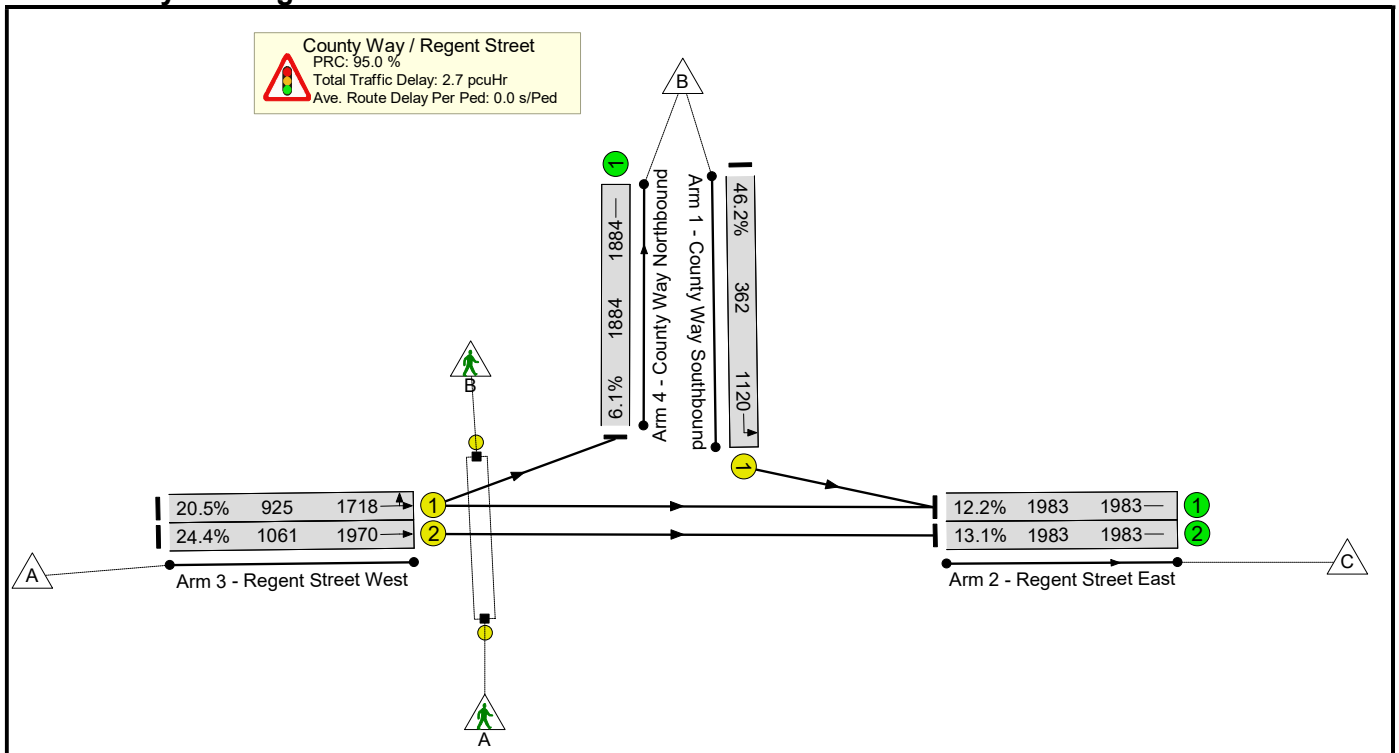


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	45.0%	0	0	0	2.6	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	45.0%	0	0	0	2.6	-	-
1/1	County Way Southbound Left	U	B		1	20	-	163	1120	362	45.0%	-	-	-	1.2	26.5	2.7
2/1	Regent Street East	U	-		-	-	-	235	1983	1983	11.9%	-	-	-	0.1	1.0	0.1
2/2	Regent Street East	U	-		-	-	-	254	1983	1983	12.8%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	184	1717	925	19.9%	-	-	-	0.5	10.2	1.8
3/2	Regent Street West Ahead	U	A		1	34	-	254	1970	1061	23.9%	-	-	-	0.7	10.2	2.6
4/1	County Way Northbound	U	-		-	-	-	112	1884	1884	5.9%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	17	-	0	-	18831	0.0%	-	-	-	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		99.8	Total Delay for Signalled Lanes (pcuHr):				2.44	Cycle Time (s):		65		
					PRC Over All Lanes (%):		99.8	Total Delay Over All Lanes(pcuHr):				2.61					

Scenario 12: 'Weekend Peak Phase 1 2025' (FG12: 'Weekend Peak Phase 1 2025', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

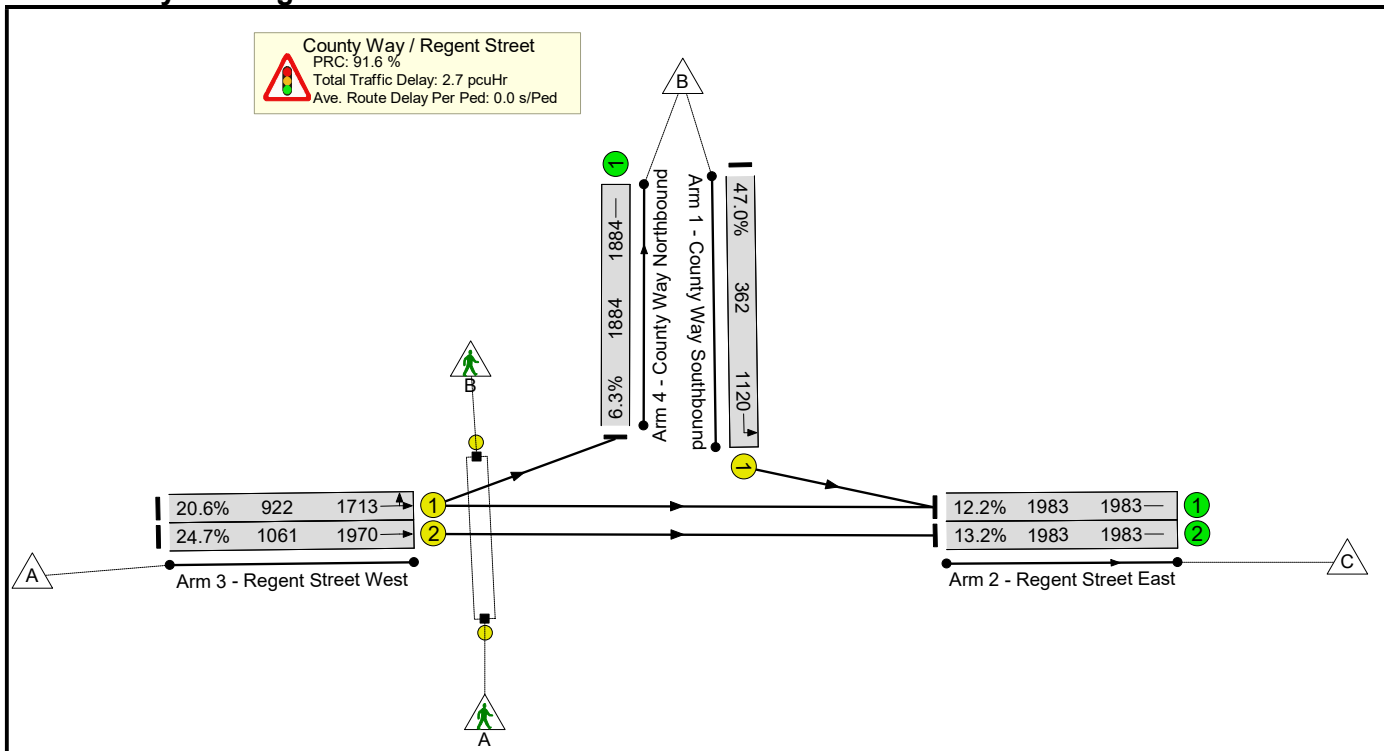


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	46.2%	0	0	0	2.7	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	46.2%	0	0	0	2.7	-	-
1/1	County Way Southbound Left	U	B		1	20	-	167	1120	362	46.2%	-	-	-	1.2	26.7	2.8
2/1	Regent Street East	U	-		-	-	-	242	1983	1983	12.2%	-	-	-	0.1	1.0	0.1
2/2	Regent Street East	U	-		-	-	-	259	1983	1983	13.1%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	190	1718	925	20.5%	-	-	-	0.5	10.2	1.9
3/2	Regent Street West Ahead	U	A		1	34	-	259	1970	1061	24.4%	-	-	-	0.7	10.2	2.6
4/1	County Way Northbound	U	-		-	-	-	115	1884	1884	6.1%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	17	-	0	-	18831	0.0%	-	-	-	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		95.0	Total Delay for Signalled Lanes (pcuHr):				2.52	Cycle Time (s):		65		
					PRC Over All Lanes (%):		95.0	Total Delay Over All Lanes(pcuHr):				2.69					

Scenario 13: 'Weekend Peak Phase 1 2025 + Development' (FG13: 'Weekend Peak Phase 1 2025 + Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

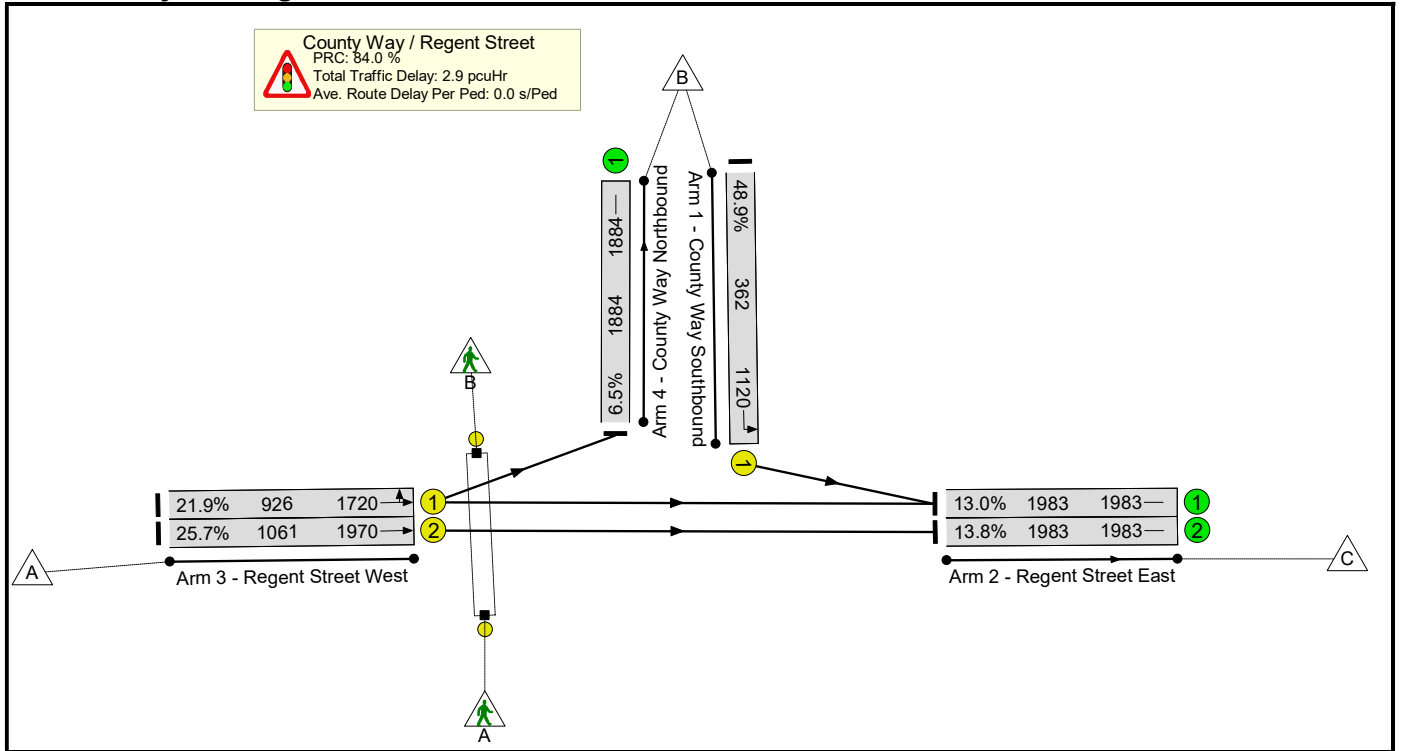


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	47.0%	0	0	0	2.7	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	47.0%	0	0	0	2.7	-	-
1/1	County Way Southbound Left	U	B		1	20	-	170	1120	362	47.0%	-	-	-	1.3	26.9	2.8
2/1	Regent Street East	U	-		-	-	-	242	1983	1983	12.2%	-	-	-	0.1	1.0	0.1
2/2	Regent Street East	U	-		-	-	-	262	1983	1983	13.2%	-	-	-	0.1	1.0	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	190	1713	922	20.6%	-	-	-	0.5	10.3	1.9
3/2	Regent Street West Ahead	U	A		1	34	-	262	1970	1061	24.7%	-	-	-	0.7	10.2	2.6
4/1	County Way Northbound	U	-		-	-	-	118	1884	1884	6.3%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	17	-	0	-	18831	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		91.6		Total Delay for Signalled Lanes (pcuHr):				2.56		Cycle Time (s): 65			
				PRC Over All Lanes (%):		91.6		Total Delay Over All Lanes(pcuHr):				2.74					

Scenario 14: 'Weekend Peak 2033' (FG14: 'Weekend Peak 2033', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

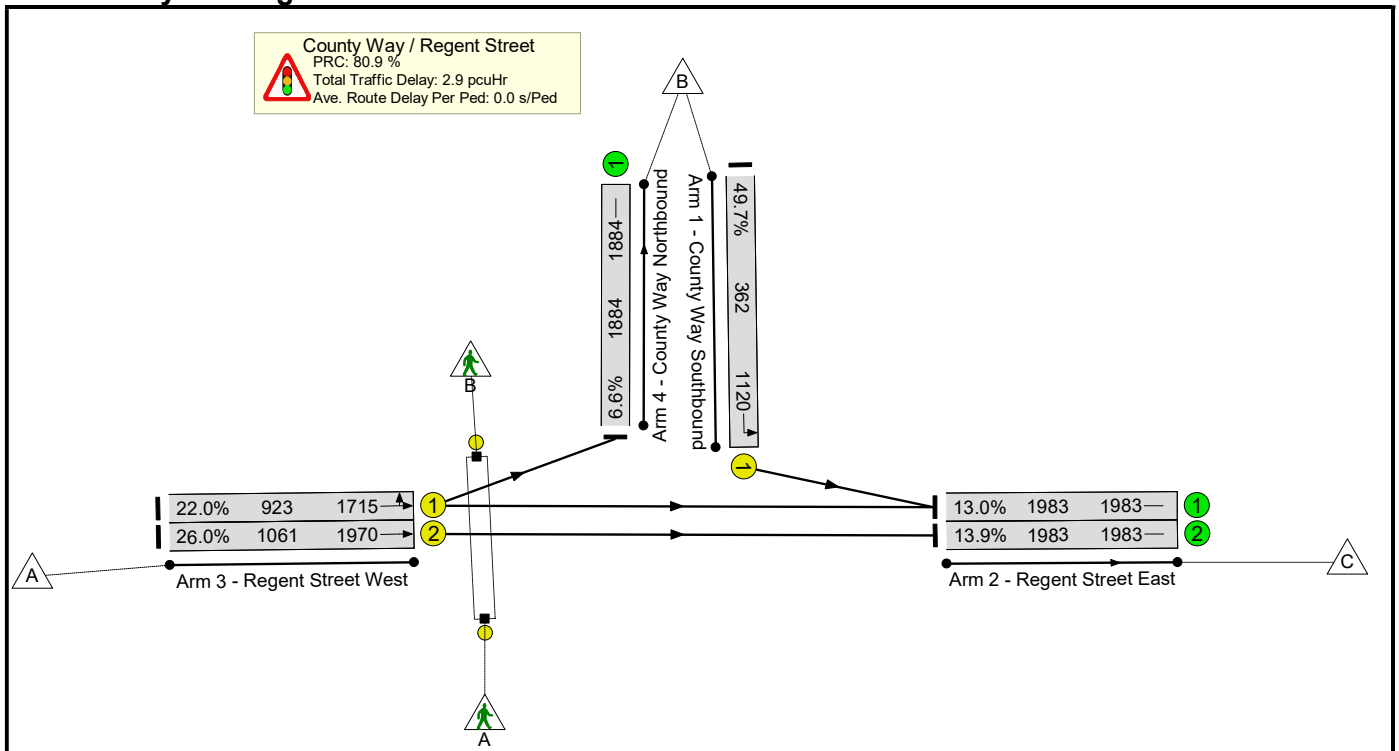


Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	48.9%	0	0	0	2.9	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	48.9%	0	0	0	2.9	-	-
1/1	County Way Southbound Left	U	B		1	20	-	177	1120	362	48.9%	-	-	-	1.3	27.4	3.0
2/1	Regent Street East	U	-		-	-	-	258	1983	1983	13.0%	-	-	-	0.1	1.0	0.1
2/2	Regent Street East	U	-		-	-	-	273	1983	1983	13.8%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	203	1720	926	21.9%	-	-	-	0.6	10.3	2.1
3/2	Regent Street West Ahead	U	A		1	34	-	273	1970	1061	25.7%	-	-	-	0.8	10.3	2.8
4/1	County Way Northbound	U	-		-	-	-	122	1884	1884	6.5%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	17	-	0	-	18831	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		84.0		Total Delay for Signalled Lanes (pcuHr):				2.71		Cycle Time (s): 65			
				PRC Over All Lanes (%):		84.0		Total Delay Over All Lanes(pcuHr):				2.90					

Scenario 15: 'Weekend Peak 2033 + Development' (FG15: 'Weekend Peak 2033 + Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	49.7%	0	0	0	2.9	-	-
County Way / Regent Street	-	-	-		-	-	-	-	-	-	49.7%	0	0	0	2.9	-	-
1/1	County Way Southbound Left	U	B		1	20	-	180	1120	362	49.7%	-	-	-	1.4	27.6	3.1
2/1	Regent Street East	U	-		-	-	-	258	1983	1983	13.0%	-	-	-	0.1	1.0	0.1
2/2	Regent Street East	U	-		-	-	-	276	1983	1983	13.9%	-	-	-	0.1	1.1	0.1
3/1	Regent Street West Ahead Left	U	A		1	34	-	203	1715	923	22.0%	-	-	-	0.6	10.4	2.1
3/2	Regent Street West Ahead	U	A		1	34	-	276	1970	1061	26.0%	-	-	-	0.8	10.3	2.8
4/1	County Way Northbound	U	-		-	-	-	125	1884	1884	6.6%	-	-	-	0.0	1.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C		1	17	-	0	-	18831	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		80.9		Total Delay for Signalled Lanes (pcuHr):				2.76		Cycle Time (s): 65			
				PRC Over All Lanes (%):		80.9		Total Delay Over All Lanes(pcuHr):				2.95					

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