

HoyDorman

McAdam Design

**Lifford Common
Recreational Facility & Spine Road
Traffic Statement**

April 2022

HoyDorman

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1 Introduction

Hoy Dorman have been commissioned by McAdam Design to produce a Traffic Statement (TS) for the proposed relocation of Lifford Celtic Facility to include two sports pitches (one at 7,350sqm one at 2400sqm) with associated floodlighting and car parking.

The proposed Multi-Use Park 10-acre green field site at The Common, Lifford, Co. Donegal in the Stranorlar Municipal.

District includes proposals for the construction of approximately 720m of access road (6.0m wide road (3.0m lanes)) and shared footways/cycleways throughout (3.0m wide) to facilitate access to future developments within adjoining lands.

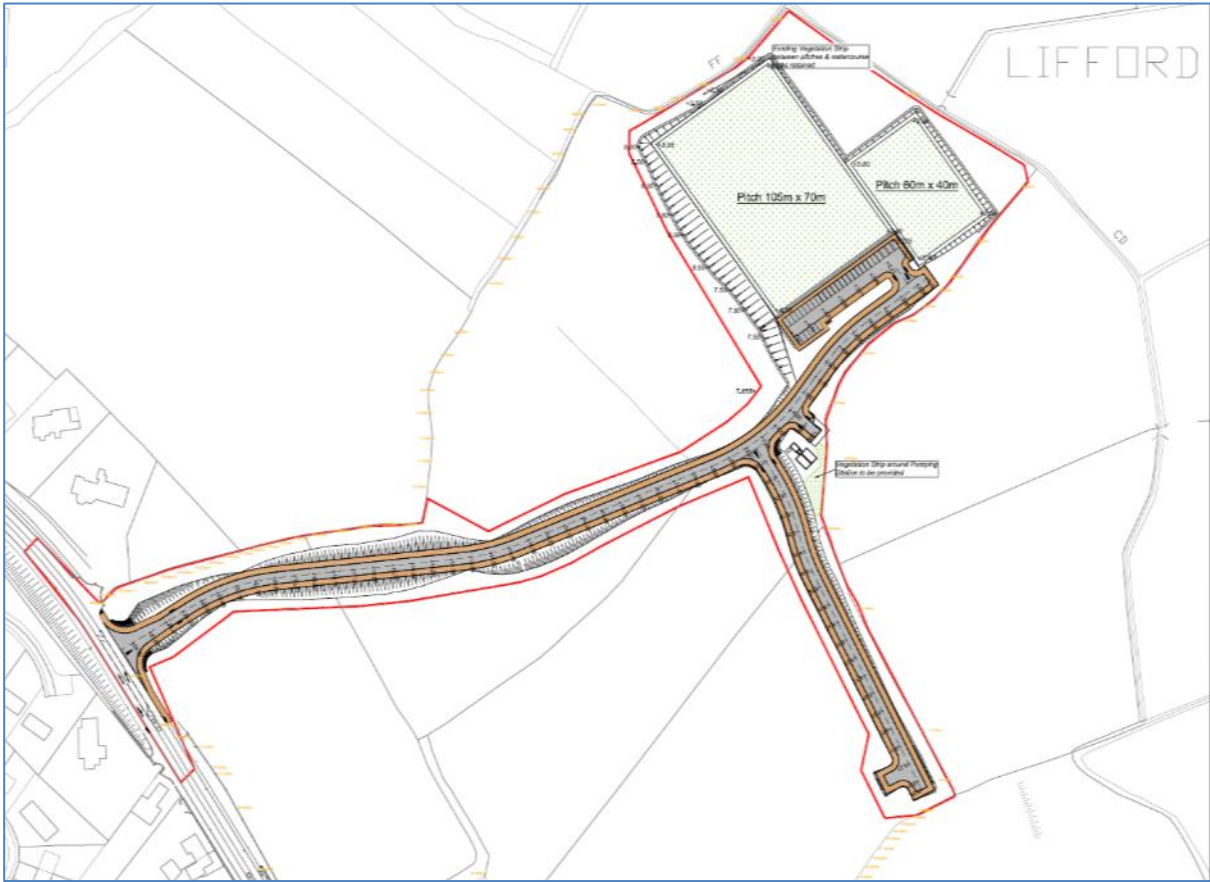
It is proposed that an access will be constructed onto the existing N14 National Primary Road to accommodate the proposed development. The scheme includes a proposed right-hand turn lane (RHTL) which can be accommodated within the existing N14 road widths / existing central hatched area.

The development will further consist of:

- Wastewater pumping station and associated pipe networks to service proposed developments.
- Stormwater drainage facilitating potential future connections.
- Services and utilities to service proposed developments.
- Future linkages that will facilitate access to adjoining lands to enable potential future development proposals and facilitate future road layout proposals that will increase the overall connectivity to the town centre for both pedestrians and road users.

The site is located adjacent to the National Primary Road (N14) and is within the defined settlement framework boundary of Lifford. Lifford is identified as a Layer 2B: Strategic Town due to its special economic function and its proximity to the border with Northern Ireland and the associated cross border context. The wider area is identified as an 'Opportunity Site' as set out in the County Development Plan 2018- 2024 and the proposed site area as identified is contained within this zone. The proposed road network will facilitate the future development of the opportunity site, an indicative layout of the opportunity site is contained within the proposed Masterplan, which accompanies this planning application.

Figure 1: Site Location / Red Line Planning Boundary



2 Policy Context

The following policies and guidance will be consulted during the writing of the TIA

- Traffic and Transport Assessment Guidelines, National Roads Authority, May 2014;
- Design Manual for Urban Roads and Streets (DMURS), Department of Transport, Tourism and Sport (DTTAS), March 2013;
- Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Environmental Protection Agency (EPA), August 2017;
- Pedestrian Crossing Specification and Guidance, NRA, April 2011;
- DN-GEO-03060: Geometric Design of Junctions, Transport Infrastructure Ireland (TII), June 2017;
- DN-GEO-03031: Rural Road Link Design, TII, June 2017.
- Donegal County Development Plan

Predicted traffic generation figures for the construction and operational phases of the proposed development are based on information provided by Lifford Celtic Facility.

3 Existing Conditions / Receiving Environment

Methodology

To inform the TS various site visits to Lifford were conducted alongside desktop studies and consulting historical data. Due to the proximity of the site to the ROI / NI border the relevant jurisdictions will be consulted regarding traffic generation and any potential impacts and mitigation throughout the planning process should it be required.

Lifford is a town in Donegal which according to the 2016 Republic of Ireland Census has a population on circa 1,626 people. There are excellent footway links from the residential areas to the various town amenities, these footway links benefit from both street lighting and dropped kerbs with tactile paving.

Existing Facility

The current facilities for Lifford Celtic Football are accessed via Station Road which is a narrow lane with no white lining, no passing bays and no street lighting which leads to a small carpark.

Traffic Surveys

Traffic surveys were undertaken on the 28/09/2022 on the N14 / St Judes Court location approximately 200m from the proposed access indicating 'arm references'. Figures below taken from Trafflcnz software.

Figure 1: Traffic Survey Location



Figure 2: Traffic Profile Throughout the Day

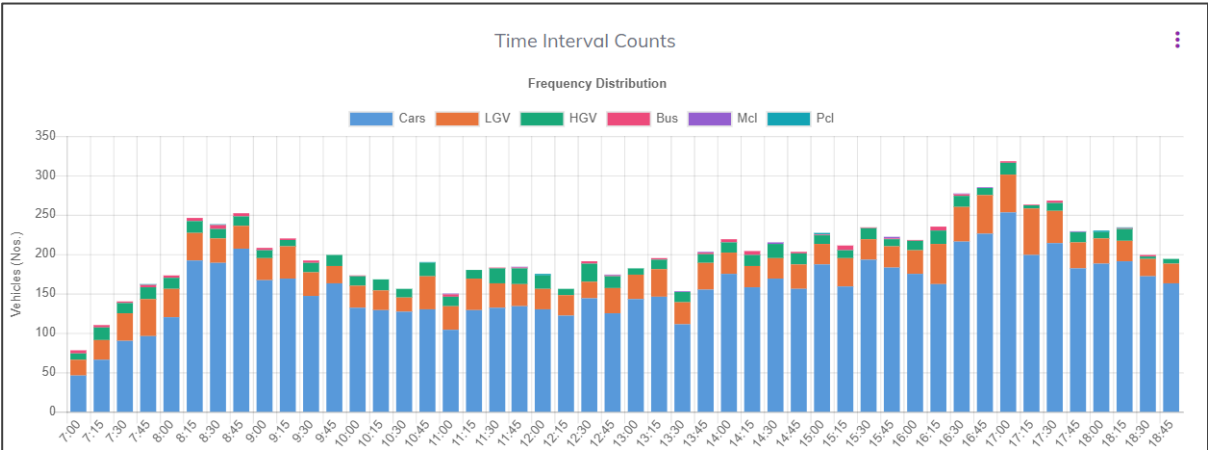
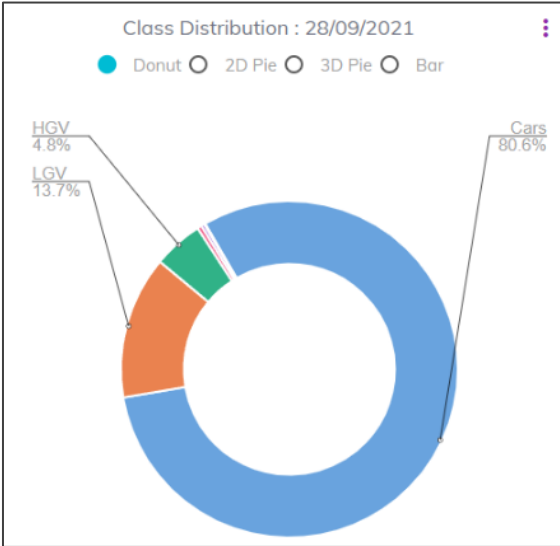


Figure 3: AM & PM Peak Hour Traffic

	AM – 0800 - 0900			PM – 1700 - 1800		
	A (N14)	B (St Judes Ct)	C(N14)	A (N14)	B (St Judes Ct)	C(N14)
A (N14)	0	12	366	0	30	522
B (St Judes Ct)	26	0	5	21	0	5
C(N14)	498	2	0	492	8	0

Figure 4: Class Distribution



Speed Survey

The posted speed limit at this section of the N14 is 60km/hr. A traffic survey was carried out and as part of that survey follow on speed surveys were undertaken. The 85th percentile speed in the northbound carriageway was 54km/hr and the 85th percentile speed in the southbound carriageway was 51km/hr.

Description of Junctions within the Area of Influence

The N14 Letterkenny Road is a National Primary Road. At the proposed site entrance location, the N14 is single carriageway in both directions with white lining along its entirety with a speed limit of 60kph.

There are wide well-maintained footways on both sides of the carriageway which benefit from dropped kerbs and tactile paving.

Figure 5: N14 Letterkenny Road Proposed Site Entrance (to the right just at grey car)



Committed Development

There was no significant committed development within the area of the proposed development.

4 Proposed Scheme

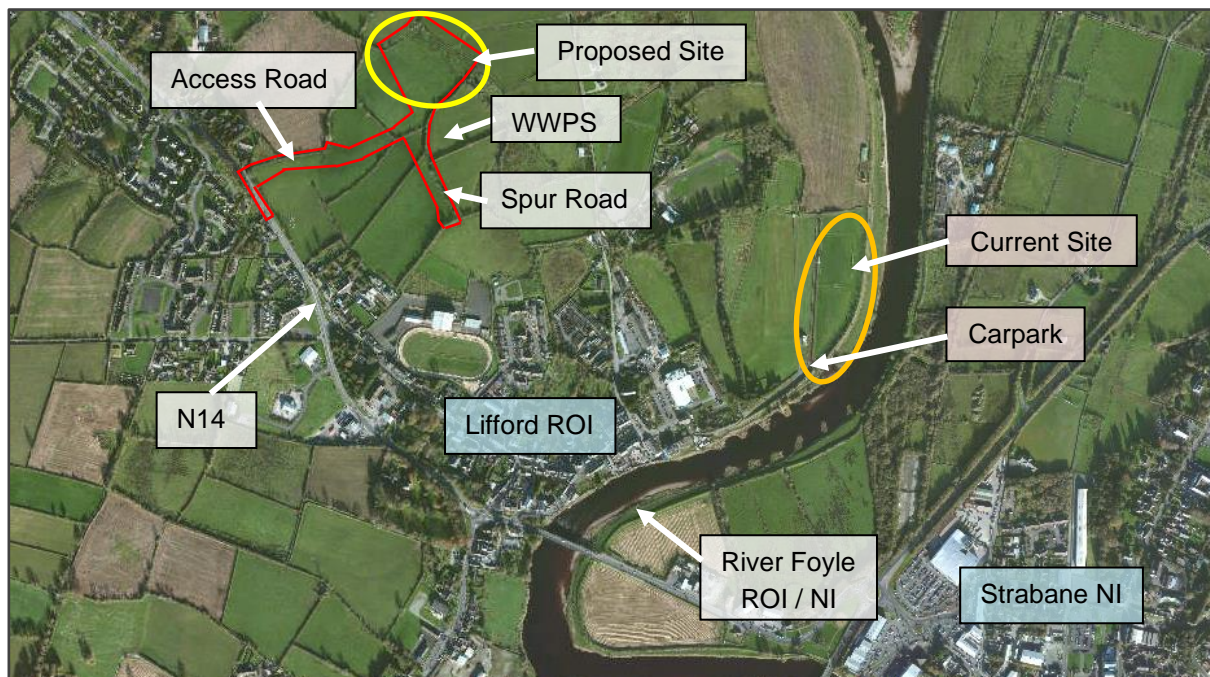
It is proposed to move Lifford Celtic Facility recreational pitches approximately 1km to the northwest of its current location, please refer to Figure 6. There are two pitches proposed; one at 7350sqm; one at 2400sqm with associated floodlighting and car parking. The proposal includes the construction of approximately 600m of access road (6.0m wide road (3.0m lanes)) and shared footways/cycleways throughout (3.0m wide) to facilitate access to future developments within adjoining lands

It is proposed that an access will be constructed onto the existing N14 National Primary Road to accommodate the proposed development. The scheme includes a proposed right-hand turn lane (RHTL) which can be accommodated within the existing N14 road widths / existing central hatched area. The right turning lane is illustrated in Figure 7.

The wider development will further consist of:

- Wastewater pumping station and associated pipe networks to service proposed developments.
- Stormwater drainage facilitating potential future connections.
- Services and utilities to service proposed developments.
- Future linkages that will facilitate access to adjoining lands to enable potential future development proposals and facilitate future road layout proposals that will increase the overall connectivity to the town centre for both pedestrians and road users.

Figure 6: Location of Current and Proposed Lifford Celtic Pitches



5 Trip Generation / Distribution

Methodology

The recreational pitches are being relocated approximately 1km northwest of its current location. As the traffic associated with the pitches is already existing on the local and wider road network these trips can be classed as diverted rather than new. The Lifford Celtic Facility through Donegal County Council have provided Hoy Dorman with an average number of vehicles that attend.

Vehicles

During weekdays on average 20veh arrive at 17:30, these vehicles stay and then leave the grounds at 19:00. A further 20veh arrive at 19:00 stay and then leave the grounds at 20:30 resulting in an AADT of 80veh.

During the weekend on average 30veh arrive at 14:00, stay and depart the grounds at 16:30 resulting in an AADT of 60 vehicles.

Table 1: Vehicle Trips Associated with Lifford Celtic Facility

	Arriving	Departing	Arriving	Departing	Arriving	Departing	AADT
Time	14:00	16:30	17:30	19:00	19:00	20:30	
Tuesday			20	20	20	20	80
Wednesday			20	20	20	20	80
Thursday			20	20	20	20	80
Saturday	30	30					60
Sunday	30	30					60

TRICS

There was minimal comparable data on the TRICS database therefore in line with best practice the information from Lifford Celtic Facility, as provided in the table above, has been used to inform the junction assessment.

Assignment to the Road Network

As demonstrated in Table 1 the majority of the trips occur outside of the peak hour. Those arriving at 17:30 within the peak hour are minimal (20veh) and are already existing on the local and wider road network therefore are classed as diverted rather than new. As there are no vehicles that arrive or depart in the AM peak hour only the PM peak has been assessed.

Distribution

It has been assumed that 25% of the vehicles are coming from the hinterlands north of the proposed site and 75% are coming from Lifford south of the proposed site.

6 Junction Operational Assessments

Methodology

The maximum number of vehicles entering the proposed development in the PM peak was 20veh (one way within the peak PM hour). This is significantly below the 10% threshold which would require further assessment.

However, the junction has been modelled with the 20veh entering and leaving in all directions therefore ensuring a sensitivity based robust assessment of development traffic on the N14 surrounding road network. The traffic surveys were undertaken during COVID lockdown which are expected to be low compared to pre-COVID. However, if applying additional traffic on the N14 i.e. pre COVID the percentage impact of the proposed development will reduce hence reinforcing the fact no need for modelling.

Junctions 10 software was used to model the respective junction's performance and informed this study of existing and proposed residual capacity remaining.

Flow Diagram Summary of Results & Impact Thresholds

Flow Diagrams have not been completed as the modelling is provided for information only as the percentage impact falls well below the 10% threshold. However, the baseline traffic, growth factors, development flows and future assessment years have been included in the modelling and modelling data contained in Appendix A.

Assessment Years

The TS will consider the operation of each junction with the base traffic conditions factored +5, + 15 year assessment periods.

- 2021 – Survey traffic year
- 2023 – Estimated Opening Year Baseline Traffic
- 2028 – Design Year (+5 years from estimated opening year)
- 2038 – Design years (+15 years from estimated opening year)

The proposed opening year for the development is anticipated to be 2023. In line with TII Guidelines design years of 2028 and 2038 have been used in this assessment to represent a 5-year and 15-year design horizon for studying any identified impacts of the development on the existing surrounding roads network.

Traffic Growth Rates

The derived traffic growth used for the TS will be factored to the design years of 2028 and 2038, using the TII central growth rates.

- Survey Traffic year 2021 + 2years to opening year 2023 factor of 1.0222 which equates to a factor of 102%.
- Survey Traffic Assessment year + 5years - 2023 to 2028 (seven years from 2021 to 2028) TII factor of 1.0777 which equates to a factor of 106%
- Assessment year + 15years - 2023 to 2038 TII factor of 1.1311 which equates to a factor of 1.1089 this is rounded up on the flow diagrams and shown as 113.0%

Assessment Time Period

The peak hour of 08:00 – 09:00 and 17:00 – 18:00 has been used in the assessments of the junctions as this represents the busiest time periods of existing traffic and the most onerous in regard to the traffic modelling.

Table 2: Proposed scheme junction with the N14

		AM							PM								
Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00)																	
Stream B-AC	D1	0.0	~1	0.00	0.00	A	0.00	A	900 %								
Stream C-B		0.0	~1	0.00	0.00	A											
Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00)																	
Stream B-AC									D2	0.0	~1	0.00	0.00	A	0.00	A	900 %
Stream C-B										0.0	~1	0.00	0.00	A			
Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023																	
Stream B-AC	D3	0.0	~1	0.00	0.00	A	0.00	A	900 %								
Stream C-B		0.0	~1	0.00	0.00	A											
Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023																	
Stream B-AC									D4	0.0	~1	0.00	0.00	A	0.00	A	900 %
Stream C-B										0.0	~1	0.00	0.00	A			
Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023)																	
Stream B-AC	D5	0.1	0.5	6.42	0.07	A	4.37	A	900 %								
Stream C-B		0.0	0.5	4.63	0.03	A											
Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023)																	
Stream B-AC									D6	0.1	0.5	6.42	0.07	A	4.37	A	900 %
Stream C-B										0.0	0.5	4.63	0.03	A			
Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023)																	
Stream B-AC	D7	0.1	0.5	9.06	0.10	A	0.50	A	125 %								
Stream C-B		0.0	0.5	5.72	0.03	A			[Stream B-AC]								
Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023)																	
Stream B-AC									D8	0.1	0.5	9.45	0.10	A	0.44	A	106 %
Stream C-B										0.0	0.5	5.71	0.03	A			[Stream B-AC]
Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028)																	
Stream B-AC	D9	0.1	0.5	9.37	0.10	A	0.48	A	112 %								
Stream C-B		0.0	0.5	5.83	0.03	A			[Stream B-AC]								
Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028)																	
Stream B-AC									D10	0.1	0.5	9.83	0.11	A	0.43	A	93 %
Stream C-B										0.0	0.5	5.81	0.03	A			[Stream B-AC]
Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038)																	
Stream B-AC	D11	0.1	0.5	9.59	0.11	A	0.47	A	104 %								
Stream C-B		0.0	0.5	5.91	0.03	A			[Stream B-AC]								
Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028)																	
Stream B-AC									D12	0.1	0.5	10.11	0.11	B	0.42	A	86 %
Stream C-B										0.0	0.5	5.89	0.03	A			[Stream B-AC]

This junction has significant residual capacity for current and future operating levels of traffic.

Sensitivity Testing

Sensitivity testing of traffic modelling was accounted for by the following

- Within the traffic modelling all 20veh have been modelled approaching and leaving from all directions.
- No reduction was made in relation to the existing or pass by trips in association to vehicles travelling to the current site of Lifford Celtic pitches.

7 Construction Phase Assessment

Methodology

The section considers the potential impacts during construction phase of the project. Construction programme is considered and will be influenced by the final detailed design. The key elements of the proposed development, transport routes, construction compounds are considered. Potential Impacts During the Construction Phase are highlighted, estimates of temporary construction HGV traffic are provided together with mitigation measures and construction phase conclusion.

Works Staging

The staging of the construction works will be subject to a detailed programme by the successful contractor in advance of commencement of works. It will be cognisant of a list of timeline constraints included in the Contract Documents.

Construction Programming

The aim is to have the entire project completed within 6months. This timescale has been used to assess the worst-case scenario in terms of the potential for traffic impacts. The construction timeline is dependent on the approach taken by the contractor, risk assessments and detailed design.

Several constraints have been identified which will impact upon the programme. These include:

- Minimising disruption to traffic on the N14 at all times
- Minimise disruption and nuisance to local businesses, traders and those living in residential properties close to any works area who could be adversely affected during the construction phase
- Ensuring all construction mitigation measures as identified
- Phasing and timing of any works be in line with guidance
- Archaeological assessment if deemed required
- Encountering areas with invasive species (Himalayan Balsam). Refer to invasive species management plan
- Health and Safety – as in any works project Health and Safety will be specifically addressed.

The relevant constraints will be referenced in the Contract Documents and will form part of the procurement process.

The sequence of Works will broadly be as follows:

- Establish Compounds and environmental measures
- Cut back scrub and brush
- Construct temporary fencing
- Undertake excavation and drainage works
- Construct the pitches, spine roads and WWPS
- Bring pavement to formation and form verges
- Pavement construction
- Construct permanent fencing, remove temporary fencing, and install signage/fixtures

Working hours shall be 07:00 to 19:00 Monday to Friday and 08:00 to 14.00 on Saturday.

Construction Compound

A single construction compound will be established. The purpose of the compound is to provide adequate storage space and welfare facilities to allow the construction of project in an efficient and safe manner. The compound will have safe access to the public road network. The approach to the compound junction will be adequately signed indicating construction traffic.

Potential Impacts During the Construction Phase

The proposed construction works will lead to temporary additional construction related traffic on the existing public road network over the duration of the construction works. These impacts will be associated with:

- HGV's transporting materials to and from the site compound, including materials for the construction of drainage infrastructure, pavement construction, temporary hard standings, particular pavement construction elements relating to the pitch and carpark construction.
- HGV's transporting conventional earthworks machinery such as excavators, dumper trucks, rollers etc.
- Fuel trucks transporting fuel (for plant) to the site compound during the works
- Light goods vehicles (LGVs) such as cars, 4x4s and vans used by the workers and supervisory staff involved in the construction works
- Cranes for lifting structure components

Without appropriate mitigation measures, the proposed works have the potential to lead to a negative impact on the road network including:

- Delay and disruption to road users
- Road safety issues should the works not be carried out in line with good traffic management practices
- Inappropriate parking of construction related vehicles along the route of the works
- Soiling of the public road leading to a general lack of cleanliness and poor skid resistance on roads

It is considered the construction of the works is normal construction activity, there are no special aspects of the construction that warrant further assessment.

Additional Temporary Construction Traffic

The volume of additional traffic will vary over the 6months period in accordance with the construction programme. The main elements of construction are the spins roads, playing pitches & carpark, WWPS and the right turning lane. These elements of construction are not large in terms of physical buildings or heavy civil engineering and will not require a large number of operatives during construction.

Furthermore, there it is not expected to be significant import or export of fill material and other construction material.

During the peak of construction, it is anticipated some 15HGV movements / day (one way). There will be the usual mix of vehicles associated with a construction site i.e., fuel trucks, light goods vehicles (LGVs) such as cars, 4x4s and vans used by the workers and supervisory staff involved in the construction works. These vehicle numbers are expected to be low as the number of operatives required will be relatively low during the normal operation of the construction phase.

Construction Phase Mitigation

Dust and Dirt

During the construction phase the increase in dust and dirt will be minimised by effective site management. The construction routes will be discussed and agreed with respective roads departments and disruption will be mitigated, however as the project is next to the N14 construction routes are expected to be very good in both directions. The construction routes and the phasing of the scheme will be agreed with respective roads departments.

Wheel washing facilities will be provided for all construction vehicles and construction areas will be fenced-off. It should be noted that a OCEMP has been undertaken and has been included as part of the planning submission.

Any impact will be ameliorated using best practice including damping down excavated material and haul roads when the roads are dry and covering loads of surplus material leaving and entering the site. Wheel washing will be provided on site.

Construction Days & Hours

Working hours shall be 07:00 to 19:00 Monday to Friday and 08:00 to 14.00 on Saturday.

Operatives Travel Behaviour

The Contractor will be required to develop a Construction Travel Plan to ensure operatives vehicles use are kept to a minimum with the use of mini-buses and shared vehicle trips where appropriate.

Construction Phase Conclusion

On the basis of this assessment, it is expected that the impact this activity will have on the surrounding road network will be 'temporary' / 'short-term' in duration, and 'slight' in significance.

8 Quality Audit (Including Non-Motorised Users)

Introduction

Given the relatively small scale of the proposed development a summary Quality Audit has been undertaken to demonstrate that appropriate consideration has been given to all of the relevant aspects of the design. The key benefits of a Quality Audit are:

- A transparent process that demonstrates that the needs of all user groups and the design objectives.
- Enables the projects objectives to be delivered by putting in place a check procedure.
- Contributes to cost efficiency in design and implementation.
- Encourages engagement with stakeholders.

Quality Audits generally consist of a number of individual and overlapping audits that may include:

- an audit of visual quality;
- a review of how the street is/may be used by the community;
- a road safety audit, including a risk assessment;
- an access audit;
- a walking audit;
- a cycle audit;
- a non-motorised user audit;
- a community street audit (in existing streets); and
- a place check audit.

The extent to which these processes are undertaken will vary according to the scale and scope of any given project. The intention of a Quality Audit is not to 'pass' or 'fail' a design. Rather it is intended as an assessment tool that highlights the strengths and weaknesses of a design and a documented process of how decisions were made. Non-motorised users will be assessed by looking at pedestrian desire lines, bus timetables and cycle routes.

Visual Quality

As this application is for two sports pitches and an access road visual quality has not been considered.

Community Use

Lifford Celtic will benefit from the proposed pitches; the pitches are being displaced by the proposed Riverine Development. Therefore, there will be a community use aspect to the proposed development.

Road Safety Audit

A Stage 1 Road Safety Audit (RSA) will be undertaken as part of the planning submission. A stage 1 Road Safety Audit was deemed appropriate as the level of detail provided at this stage and it is not

anticipated that the tender drawings will include additional design elements other than those that may arise from the Statutory Processes. If those changes are substantial, then a revised audit will be undertaken.

Access Audit

Proposals for the construction of approximately 600m of access road (6.0m wide road (3.0m lanes)) and shared footways/cycleways throughout (3.0m wide) to facilitate access to future developments within adjoining lands. The geometric details of the access are provided in the planning package.

The recreational facility will benefit from improved access and facilities to what they currently have at their grounds on Station Road which is a narrow lane with no white lining, no passing bays and no street lighting and a small carpark.

Recommendations:

It is proposed that an access will be constructed onto the existing N14 National Primary Road to accommodate the proposed development. The scheme includes a proposed RHTL which can be accommodated within the existing N14 road widths / existing central hatched area. The provision RHTL will futureproof the site based on what can be provided at this location. Any potential future sites will be assessed and submit their own planning applications and considered on their own merit.

Non-Motorised User Audit

The following walking and cycling audits overlap and form the non-motorised user audit. Recommendations for each of the NMU modes can be found below.

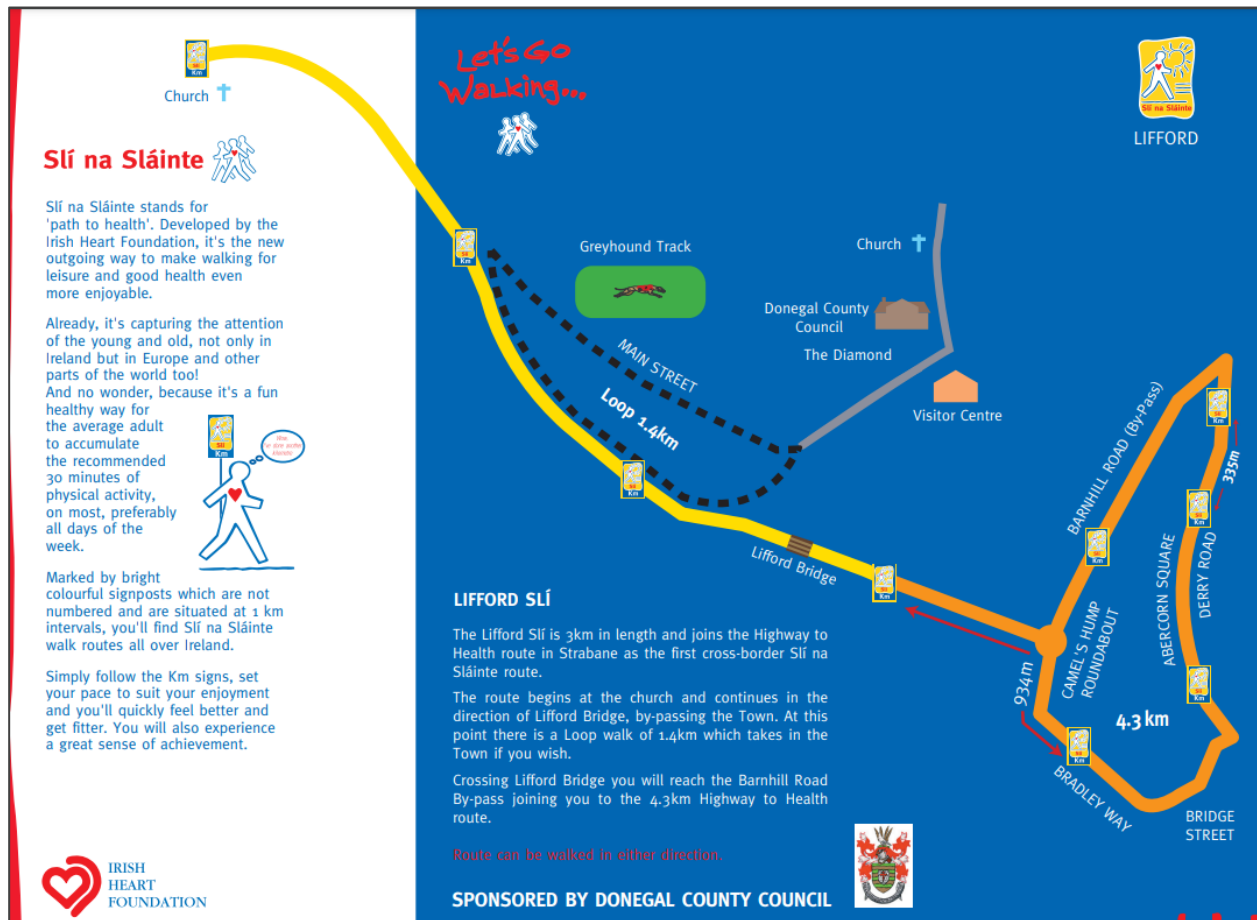
Walking Audit

The proposed site can be described as easily accessible on foot, all footways within the area are well maintained and benefit from dropped kerbs, tactile paving and street lighting on the N14 within the vicinity of the proposed entrance.

There is a dedicated pedestrian greenway - The Lifford Slí which is 3km in length. This joins the Highway to Health route in Strabane as the first cross-border Slí na Sláinte route.

The route begins at the church and continues in the direction of Lifford Bridge, by-passing the Town. At this point there is a Loop walk of 1.4km which takes in the Town if you wish. Crossing Lifford Bridge you will reach the Barnhill Road By-pass joining you to the 4.3km Highway to Health route.

Figure 8: Strabane to Lifford Greenway / Slí na Sláinte route



Recommendations

The crossing point on the N14 is existing as a ghost pedestrian island, which is lit. As this application is for the pitches there are no plans to upgrade this crossing. Any future developments on the site will be subject to their own Traffic Assessments and audits.

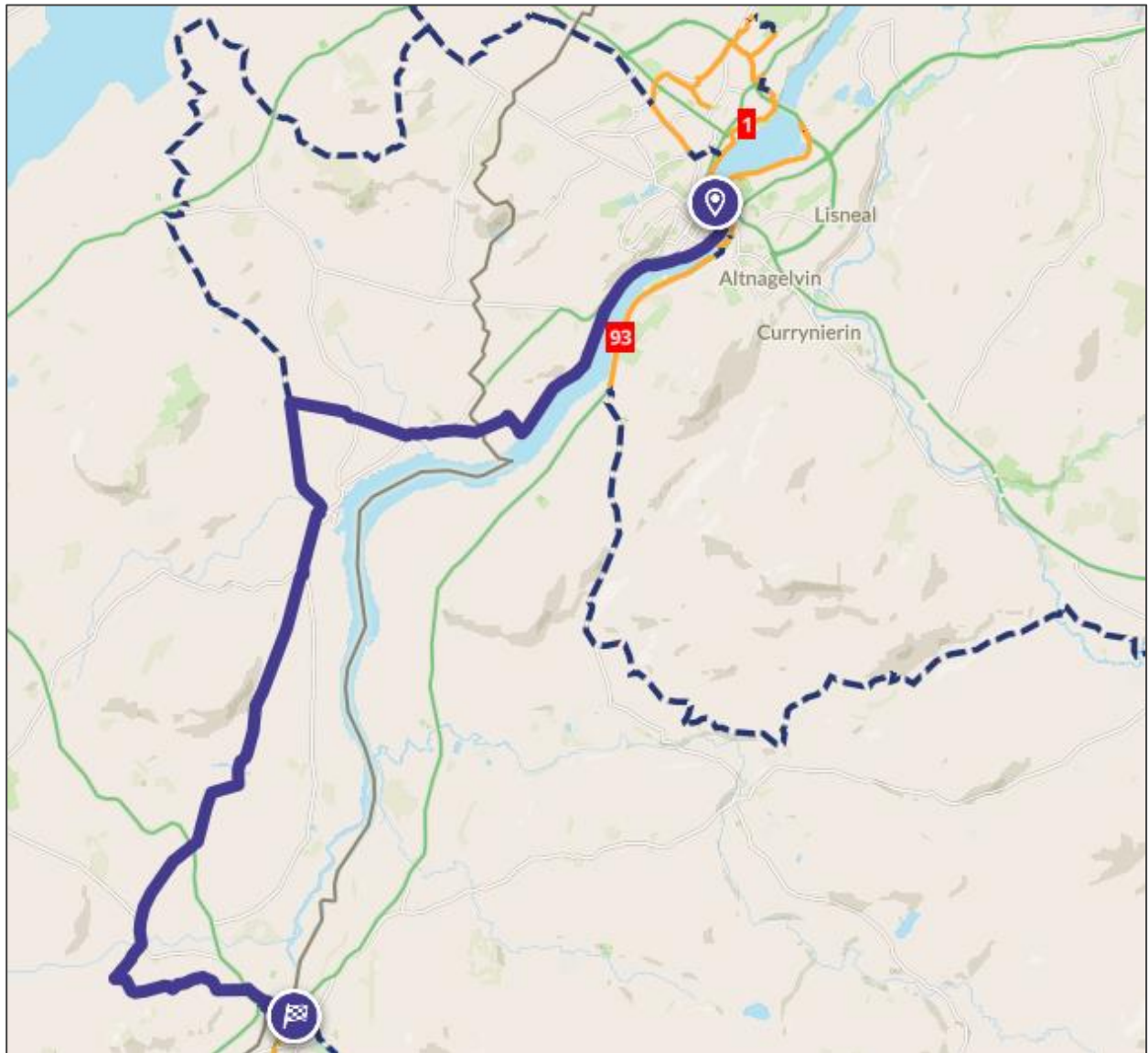
The proposed link roads include 3.0m wide shared footways/cycleways to facilitate access to future developments on adjoining lands, thus non-motorised modes of transport have been accommodated for.

Cycle Audit

The proposed site can be described as easily accessible by cyclists. The N14 from Lifford to the proposed site benefits from street lighting with single carriageway in each direction with white hatching along the central reservation which would allow for safe overtaking of cyclists along large sections of its length.

There is a dedicated cycleway the Foyle Valley Cycle Route which connects Derry City to the border towns of Lifford and Strabane. This cycle route is a mixture of traffic-free paths and quiet country roads and lanes which crosses between Northern Ireland and the Republic of Ireland. The route is 33.9 kilometres and 26.5% Traffic-free.

Figure 9: Foyle Valley Cycle Route



Recommendations

As the proposed site is already well served by cycleways and next to a greenway there is no plan to upgrade these externally to the red line boundary, with the acceptance of the existing pedestrian crossing.

Internally the proposals include 3.0m wide shared footways/cycleways to facilitate access to future developments on adjoining lands.

Bus

Lifford can be classed as well served by public transport with regular links from Strabane, Letterkenny, Derry and Donegal as well as further afield.

Figure 10: Lifford Bus Routes



Recommendations

There are no plans to increase bus services to the proposed site as this application is for two pitches, any potential future developments will be required to re look at this as part of their application.

Community Streets Audit

This is not applicable as part of this application

Place Check Audit

This has not been assessed within this document however, this was assessed during the site selection process.

9 Conclusions

Existing Road Network

The existing road network can easily accommodate the proposed development in terms of traffic capacity at opening year 2023 and future assessment years.

Future Capacity

There is significant future vehicular traffic capacity at the proposed junction with the N14 for future development in relation to the wider opportunity site lands.

Future Applications

The wider lands will be subject to their own planning assessment and application including traffic / access.

Existing Greenway Adjacent

The proposed access is well served for walking, cycling and public transport as it runs parallel to an existing greenway, an appropriate crossing point is proposed to facilitate connectivity from the greenway to the proposed site for non-motorised users.

Construction Phase impact Short Term & Slight

The construction impact of the proposed development is considered 'temporary' / 'short-term' in duration, and 'slight' in significance

Appendix 1: Junction 1 - Modelling

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021
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Filename: 220401_Access_N14_Junction_Pitches.j10

Path: C:\Users\MartinHoy\Hoy & Dorman Ltd\Hoy Dorman - Documents\Civils\2021011_Lifford Mixed_Use_TS\Traffic\Modelling

Report generation date: 03/04/2022 22:00:59

- »Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM
- »Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM
- »Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023, AM
- »Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023, PM
- »Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023), AM
- »Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023), PM
- »Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023), AM
- »Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023), PM
- »Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM
- »Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM
- »Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM
- »Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM

Summary of junction performance

AM										PM								
Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	
Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00)																		
Stream B-AC	D1	0.0	~1	0.00	0.00	A	0.00	A	900 %									
Stream C-B		0.0	~1	0.00	0.00	A		[]										
Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00)																		
Stream B-AC									D2	0.0	~1	0.00	0.00	A	0.00	A	900	
Stream C-B										0.0	~1	0.00	0.00	A			[]	
Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023																		
Stream B-AC	D3	0.0	~1	0.00	0.00	A	0.00	A	900 %									
Stream C-B		0.0	~1	0.00	0.00	A		[]										
Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023																		
Stream B-AC									D4	0.0	~1	0.00	0.00	A	0.00	A	900	
Stream C-B										0.0	~1	0.00	0.00	A			[]	
Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023)																		
Stream B-AC	D5	0.1	0.5	6.42	0.07	A	4.37	A	900 %									
Stream C-B		0.0	0.5	4.63	0.03	A		[]										
Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023)																		
Stream B-AC									D6	0.1	0.5	6.42	0.07	A	4.37	A	900	
Stream C-B										0.0	0.5	4.63	0.03	A			[]	

Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023)														
Stream B-AC	D7	0.1	0.5	9.06	0.10	A	0.50	A	125 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.72	0.03	A								
Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023)														
Stream B-AC	D8	0.1	0.5	9.45	0.10	A	0.44	A	106	[Stream B-AC]				
Stream C-B		0.0	0.5	5.71	0.03	A								
Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028)														
Stream B-AC	D9	0.1	0.5	9.37	0.10	A	0.48	A	112 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.83	0.03	A								
Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028)														
Stream B-AC	D10	0.1	0.5	9.83	0.11	A	0.43	A	93	[Stream B-AC]				
Stream C-B		0.0	0.5	5.81	0.03	A								
Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038)														
Stream B-AC	D11	0.1	0.5	9.59	0.11	A	0.47	A	104 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.91	0.03	A								
Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028)														
Stream B-AC	D12	0.1	0.5	10.11	0.11	B	0.42	A	86	[Stream B-AC]				
Stream C-B		0.0	0.5	5.89	0.03	A								

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

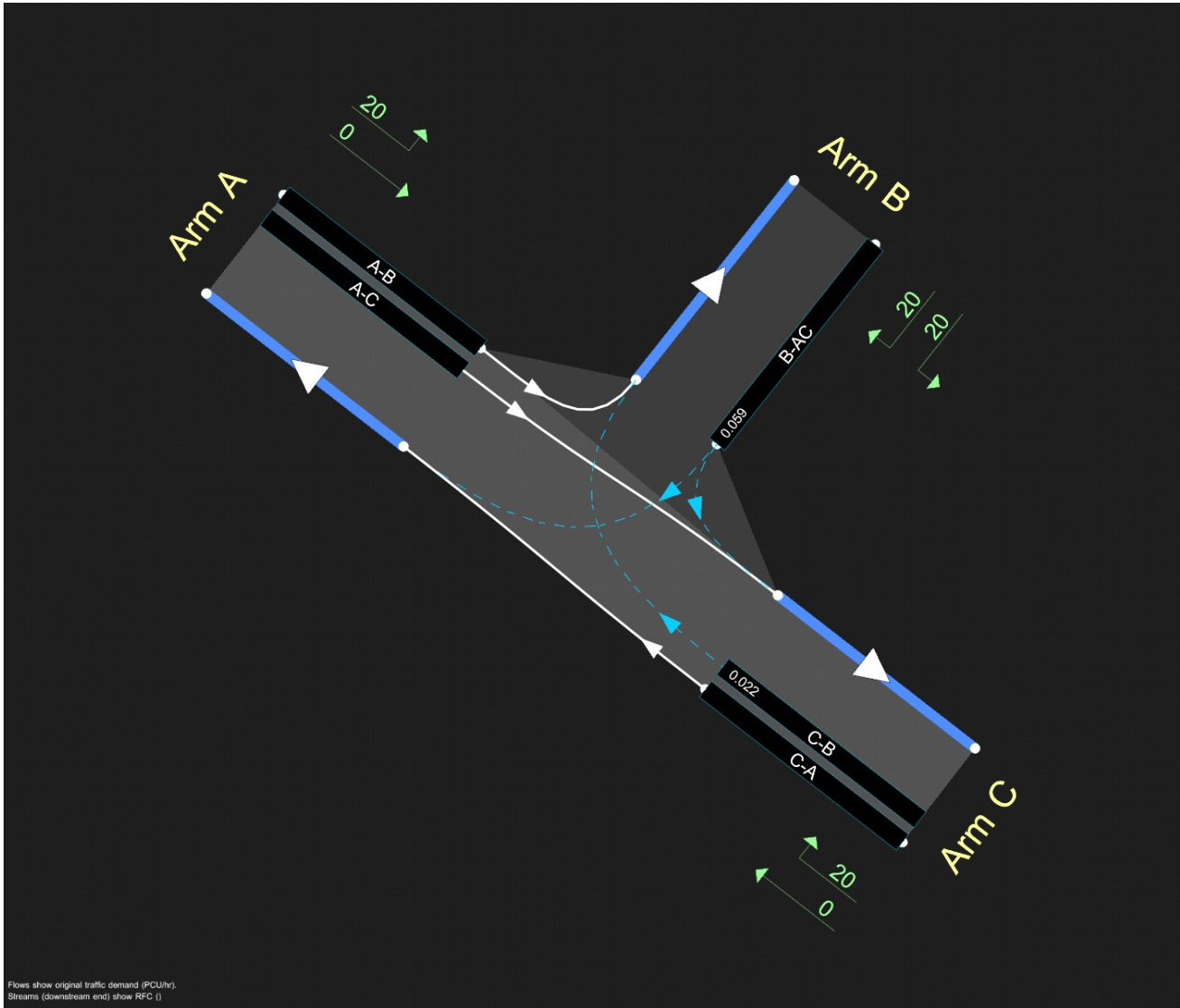
File summary

File Description

Title	
Location	
Site number	
Date	05/05/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\MartinHoy
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓				✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Results for central hour only	Run automatically	Relationship type	Relationship
D1	FD_01 = 2021 Baseline Traffic (08:00-09:00)	AM	ONE HOUR	08:00	09:30	15	✓	✓		
D2	FD_02 = 2021 Baseline Traffic (17:00-18:00)	PM	ONE HOUR	17:00	18:30	15	✓	✓		
D3	FD_03 = Factored Baseline Traffic = 2023	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D1*G1
D4	FD_04 = Factored Baseline Traffic = 2023	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D2*G1
D5	FD_05 = Development Flows (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓		
D6	FD_06 = Development Flows (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓		
D7	FD_07 = Development Flows + Factored Traffic (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D3+D5
D8	FD_08 = Development Flows + Factored Traffic (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D4+D6
D9	FD_09 = Factored Base Traffic + Dev + 5years = (2028)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G2)+D5
D10	FD_10 = Factored Base Traffic + Dev + 5years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G2)+D6
D11	FD_11 = Factored Base Traffic + Dev + 15years = (2038)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G3)+D5
D12	FD_12 = Factored Base Traffic + Dev + 15years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G3)+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	Opening Year 2023		1.0222
G2	Assessment Year + 5 = 2028		1.0777
G3	Assessment Year + 15 = 2038		1.1311

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Lifford Mixed Use, N14 Access	✓	100.000	100.000

Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D1 - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.50		✓	3.30	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	50	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	547	0.084	0.213	0.134	0.305
B-C	691	0.090	0.227	-	-
C-B	805	0.264	0.264	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Results for central hour only	Run automatically
D1	FD_01 = 2021 Baseline Traffic (08:00-09:00)	AM	ONE HOUR	08:00	09:30	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	✓	498	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	498
	B	0	0	0
	C	366	0	0

Proportions

	To			
	A	B	C	
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

	To			
	A	B	C	
From	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	375	375
	08:15-08:30	448	448
	08:30-08:45	548	548
	08:45-09:00	548	548
	09:00-09:15	448	448
	09:15-09:30	375	375
B	08:00-08:15	0	0
	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
C	08:00-08:15	276	276
	08:15-08:30	329	329
	08:30-08:45	403	403
	08:45-09:00	403	403
	09:00-09:15	329	329
	09:15-09:30	276	276

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						366	366
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						498	498

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
C-B	0	0	686	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	448	112			448				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
C-B	0	0	660	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	548	137			548				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
C-B	0	0	660	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	548	137			548				

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-AC	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
C-B	0	0	686	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	448	112			448				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D2 - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically
D2	FD_02 = 2021 Baseline Traffic (17:00-18:00)	PM	ONE HOUR	17:00	18:30	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	✓	0	100.000
C		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	492
	B	0	0	0
	C	522	0	0

Proportions

	To			
	A	B	C	
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	370	370
	17:15-17:30	442	442
	17:30-17:45	542	542
	17:45-18:00	542	542
	18:00-18:15	442	442
	18:15-18:30	370	370
B	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0
C	17:00-17:15	393	393
	17:15-17:30	469	469
	17:30-17:45	575	575
	17:45-18:00	575	575
	18:00-18:15	469	469
	18:15-18:30	393	393

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						522	522
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						492	492

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	469	117			469				
C-B	0	0	688	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	442	111			442				

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-AC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	575	144			575				
C-B	0	0	662	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	542	135			542				

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-AC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	575	144			575				
C-B	0	0	662	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	542	135			542				

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-AC	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	469	117			469				
C-B	0	0	688	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	442	111			442				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - FD_03 = Factored Baseline Traffic = 2023, AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D3	FD_03 = Factored Baseline Traffic = 2023	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D1*G1

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	✓	509	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	509
	B	0	0	0
	C	374	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C		
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To		
From	A	B	C	
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	383	383
	08:15-08:30	458	458
	08:30-08:45	560	560
	08:45-09:00	560	560
	09:00-09:15	458	458
	09:15-09:30	383	383
B	08:00-08:15	0	0
	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
C	08:00-08:15	282	282
	08:15-08:30	336	336
	08:30-08:45	412	412
	08:45-09:00	412	412
	09:00-09:15	336	336
	09:15-09:30	282	282

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						374	374
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						509	509

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
C-B	0	0	684	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	458	114			458				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	412	103			412				
C-B	0	0	657	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	560	140			560				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	412	103			412				
C-B	0	0	657	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	560	140			560				

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-AC	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
C-B	0	0	684	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	458	114			458				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D4 - FD_04 = Factored Baseline Traffic = 2023, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D4	FD_04 = Factored Baseline Traffic = 2023	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D2*G1

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	✓	503	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	503
	B	0	0	0
	C	534	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A	B	C	
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	379	379
	17:15-17:30	452	452
	17:30-17:45	554	554
	17:45-18:00	554	554
	18:00-18:15	452	452
	18:15-18:30	379	379
B	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0
C	17:00-17:15	402	402
	17:15-17:30	480	480
	17:30-17:45	587	587
	17:45-18:00	587	587
	18:00-18:15	480	480
	18:15-18:30	402	402

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						534	534
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						503	503

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	480	120			480				
C-B	0	0	685	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	452	113			452				

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-AC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
C-B	0	0	658	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	554	138			554				

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-AC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
C-B	0	0	658	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	554	138			554				

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-AC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	480	120			480				
C-B	0	0	685	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	452	113			452				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D5 - FD_05 = Development Flows (2023), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		4.37	A

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)	Results for central hour only	Run automatically
D5	FD_05 = Development Flows (2023)	AM	ONE HOUR	08:00	09:30	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	✓	20	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	20	0
	B	20	0	20
	C	0	20	0

Proportions

	To			
	A	B	C	
From	A	0.00	1.00	0.00
	B	0.50	0.00	0.50
	C	0.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	15	15
	08:15-08:30	18	18
	08:30-08:45	22	22
	08:45-09:00	22	22
	09:00-09:15	18	18
	09:15-09:30	15	15
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	15	15
	08:15-08:30	18	18
	08:30-08:45	22	22
	08:45-09:00	22	22
	09:00-09:15	18	18
	09:15-09:30	15	15

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	6.42	0.1	0.5	A	40	40
C-A						0	0
C-B	0.03	4.63	0.0	0.5	A	20	20
A-B						20	20
A-C						0	0

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	606	0.059	36	0.1	0.1	6.317	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.602	A
A-B	18	4			18				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	36	9	606	0.059	36	0.1	0.1	6.319	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.603	A
A-B	18	4			18				
A-C	0	0			0				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D6 - FD_06 = Development Flows (2023), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		4.37	A

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)	Results for central hour only	Run automatically
D6	FD_06 = Development Flows (2023)	PM	ONE HOUR	17:00	18:30	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	✓	20	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	20	0
	B	20	0	20
	C	0	20	0

Proportions

	To			
	A	B	C	
From	A	0.00	1.00	0.00
	B	0.50	0.00	0.50
	C	0.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	15	15
	17:15-17:30	18	18
	17:30-17:45	22	22
	17:45-18:00	22	22
	18:00-18:15	18	18
	18:15-18:30	15	15
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	15	15
	17:15-17:30	18	18
	17:30-17:45	22	22
	17:45-18:00	22	22
	18:00-18:15	18	18
	18:15-18:30	15	15

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	6.42	0.1	0.5	A	40	40
C-A						0	0
C-B	0.03	4.63	0.0	0.5	A	20	20
A-B						20	20
A-C						0	0

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	606	0.059	36	0.1	0.1	6.317	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.602	A
A-B	18	4			18				
A-C	0	0			0				

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-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	36	9	606	0.059	36	0.1	0.1	6.319	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.603	A
A-B	18	4			18				
A-C	0	0			0				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D7 - FD_07 = Development Flows + Factored Traffic (2023), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.50	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	125	Stream B-AC	0.50	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D7	FD_07 = Development Flows + Factored Traffic (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D3+D5

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	✓	529	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	509
B	20	0	20
C	374	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	398	398
	08:15-08:30	476	476
	08:30-08:45	583	583
	08:45-09:00	583	583
	09:00-09:15	476	476
	09:15-09:30	398	398
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	297	297
	08:15-08:30	354	354
	08:30-08:45	434	434
	08:45-09:00	434	434
	09:00-09:15	354	354
	09:15-09:30	297	297

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.06	0.1	0.5	A	40	40
C-A						374	374
C-B	0.03	5.72	0.0	0.5	A	20	20
A-B						20	20
A-C						509	509

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	473	0.076	36	0.1	0.1	8.229	A
C-A	336	84			336				
C-B	18	4	679	0.026	18	0.0	0.0	5.445	A
A-B	18	4			18				
A-C	458	114			458				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	441	0.100	44	0.1	0.1	9.055	A
C-A	412	103			412				
C-B	22	6	651	0.034	22	0.0	0.0	5.724	A
A-B	22	6			22				
A-C	560	140			560				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	441	0.100	44	0.1	0.1	9.059	A
C-A	412	103			412				
C-B	22	6	651	0.034	22	0.0	0.0	5.724	A
A-B	22	6			22				
A-C	560	140			560				

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-AC	36	9	473	0.076	36	0.1	0.1	8.235	A
C-A	336	84			336				
C-B	18	4	679	0.026	18	0.0	0.0	5.445	A
A-B	18	4			18				
A-C	458	114			458				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.44	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	106	Stream B-AC	0.44	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D8	FD_08 = Development Flows + Factored Traffic (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D4+D6

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	✓	523	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	503
B	20	0	20
C	534	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	394	394
	17:15-17:30	470	470
	17:30-17:45	576	576
	17:45-18:00	576	576
	18:00-18:15	470	470
	18:15-18:30	394	394
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	417	417
	17:15-17:30	498	498
	17:30-17:45	610	610
	17:45-18:00	610	610
	18:00-18:15	498	498
	18:15-18:30	417	417

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.45	0.1	0.5	A	40	40
C-A						534	534
C-B	0.03	5.71	0.0	0.5	A	20	20
A-B						20	20
A-C						503	503

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	461	0.078	36	0.1	0.1	8.475	A
C-A	480	120			480				
C-B	18	4	681	0.026	18	0.0	0.0	5.433	A
A-B	18	4			18				
A-C	452	113			452				

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-AC	44	11	425	0.104	44	0.1	0.1	9.441	A
C-A	587	147			587				
C-B	22	6	653	0.034	22	0.0	0.0	5.708	A
A-B	22	6			22				
A-C	554	138			554				

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-AC	44	11	425	0.104	44	0.1	0.1	9.446	A
C-A	587	147			587				
C-B	22	6	653	0.034	22	0.0	0.0	5.708	A
A-B	22	6			22				
A-C	554	138			554				

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-AC	36	9	461	0.078	36	0.1	0.1	8.483	A
C-A	480	120			480				
C-B	18	4	681	0.026	18	0.0	0.0	5.433	A
A-B	18	4			18				
A-C	452	113			452				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.48	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	112	Stream B-AC	0.48	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D9	FD_09 = Factored Base Traffic + Dev + 5years = (2028)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G2)+D5

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	✓	569	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	423	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	549
B	20	0	20
C	403	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C		
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To		
From	A	B	C	
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	428	428
	08:15-08:30	511	511
	08:30-08:45	626	626
	08:45-09:00	626	626
	09:00-09:15	511	511
	09:15-09:30	428	428
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	319	319
	08:15-08:30	380	380
	08:30-08:45	466	466
	08:45-09:00	466	466
	09:00-09:15	380	380
	09:15-09:30	319	319

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.37	0.1	0.5	A	40	40
C-A						403	403
C-B	0.03	5.83	0.0	0.5	A	20	20
A-B						20	20
A-C						549	549

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	463	0.078	36	0.1	0.1	8.432	A
C-A	362	91			362				
C-B	18	4	670	0.027	18	0.0	0.0	5.523	A
A-B	18	4			18				
A-C	493	123			493				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	428	0.103	44	0.1	0.1	9.363	A
C-A	444	111			444				
C-B	22	6	639	0.034	22	0.0	0.0	5.831	A
A-B	22	6			22				
A-C	604	151			604				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	428	0.103	44	0.1	0.1	9.368	A
C-A	444	111			444				
C-B	22	6	639	0.034	22	0.0	0.0	5.831	A
A-B	22	6			22				
A-C	604	151			604				

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-AC	36	9	463	0.078	36	0.1	0.1	8.440	A
C-A	362	91			362				
C-B	18	4	670	0.027	18	0.0	0.0	5.526	A
A-B	18	4			18				
A-C	493	123			493				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D10 - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.43	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	93	Stream B-AC	0.43	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D10	FD_10 = Factored Base Traffic + Dev + 5years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G2)+D6

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	✓	562	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	542
B	20	0	20
C	575	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	423	423
	17:15-17:30	505	505
	17:30-17:45	619	619
	17:45-18:00	619	619
	18:00-18:15	505	505
	18:15-18:30	423	423
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	448	448
	17:15-17:30	535	535
	17:30-17:45	655	655
	17:45-18:00	655	655
	18:00-18:15	535	535
	18:15-18:30	448	448

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.83	0.1	0.5	A	40	40
C-A						575	575
C-B	0.03	5.81	0.0	0.5	A	20	20
A-B						20	20
AC						542	542

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	449	0.080	36	0.1	0.1	8.716	A
C-A	517	129			517				
C-B	18	4	671	0.027	18	0.0	0.0	5.510	A
A-B	18	4			18				
A-C	487	122			487				

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-AC	44	11	410	0.107	44	0.1	0.1	9.820	A
C-A	633	158			633				
C-B	22	6	641	0.034	22	0.0	0.0	5.813	A
A-B	22	6			22				
A-C	597	149			597				

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-AC	44	11	410	0.107	44	0.1	0.1	9.826	A
C-A	633	158			633				
C-B	22	6	641	0.034	22	0.0	0.0	5.813	A
A-B	22	6			22				
A-C	597	149			597				

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-AC	36	9	449	0.080	36	0.1	0.1	8.725	A
C-A	517	129			517				
C-B	18	4	671	0.027	18	0.0	0.0	5.512	A
A-B	18	4			18				
A-C	487	122			487				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	104	Stream B-AC	0.47	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D11	FD_11 = Factored Base Traffic + Dev + 15years = (2038)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G3)+D5

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	✓	596	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	576
B	20	0	20
C	423	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.03	0.97
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	449	449
	08:15-08:30	536	536
	08:30-08:45	656	656
	08:45-09:00	656	656
	09:00-09:15	536	536
	09:15-09:30	449	449
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	334	334
	08:15-08:30	398	398
	08:30-08:45	488	488
	08:45-09:00	488	488
	09:00-09:15	398	398
	09:15-09:30	334	334

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.59	0.1	0.5	A	40	40
C-A						423	423
C-B	0.03	5.91	0.0	0.5	A	20	20
A-B						20	20
A-C						576	576

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	456	0.079	36	0.1	0.1	8.578	A
C-A	380	95			380				
C-B	18	4	663	0.027	18	0.0	0.0	5.578	A
A-B	18	4			18				
A-C	518	129			518				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	419	0.105	44	0.1	0.1	9.589	A
C-A	466	116			466				
C-B	22	6	631	0.035	22	0.0	0.0	5.907	A
A-B	22	6			22				
A-C	634	158			634				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	419	0.105	44	0.1	0.1	9.595	A
C-A	466	116			466				
C-B	22	6	631	0.035	22	0.0	0.0	5.907	A
A-B	22	6			22				
A-C	634	158			634				

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-AC	36	9	455	0.079	36	0.1	0.1	8.587	A
C-A	380	95			380				
C-B	18	4	663	0.027	18	0.0	0.0	5.581	A
A-B	18	4			18				
A-C	518	129			518				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D12 - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.42	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	86	Stream B-AC	0.42	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D12	FD_12 = Factored Base Traffic + Dev + 15years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G3)+D6

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	✓	589	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	624	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	569
B	20	0	20
C	604	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.03	0.97
B	0.50	0.00	0.50
C	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	443	443
	17:15-17:30	529	529
	17:30-17:45	648	648
	17:45-18:00	648	648
	18:00-18:15	529	529
	18:15-18:30	443	443
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	469	469
	17:15-17:30	561	561
	17:30-17:45	687	687
	17:45-18:00	687	687
	18:00-18:15	561	561
	18:15-18:30	469	469

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	10.11	0.1	0.5	B	40	40
C-A						604	604
C-B	0.03	5.89	0.0	0.5	A	20	20
A-B						20	20
A-C						569	569

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	441	0.082	36	0.1	0.1	8.888	A
C-A	543	136			543				
C-B	18	4	665	0.027	18	0.0	0.0	5.564	A
A-B	18	4			18				
A-C	511	128			511				

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-AC	44	11	400	0.110	44	0.1	0.1	10.097	B
C-A	665	166			665				
C-B	22	6	633	0.035	22	0.0	0.0	5.887	A
A-B	22	6			22				
A-C	626	157			626				

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-AC	44	11	400	0.110	44	0.1	0.1	10.109	B
C-A	665	166			665				
C-B	22	6	633	0.035	22	0.0	0.0	5.887	A
A-B	22	6			22				
A-C	626	157			626				

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-AC	36	9	441	0.082	36	0.1	0.1	8.898	A
C-A	543	136			543				
C-B	18	4	665	0.027	18	0.0	0.0	5.565	A
A-B	18	4			18				
A-C	511	128			511				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A



Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021
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Filename: 220401_Access_N14_Junction_Pitches.j10

Path: C:\Users\MartinHoy\Hoy & Dorman Ltd\Hoy Dorman - Documents\Civils\2021011_Lifford Mixed_Use_TS\Traffic\Modelling

Report generation date: 03/04/2022 22:00:59

- »Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM
- »Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM
- »Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023, AM
- »Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023, PM
- »Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023), AM
- »Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023), PM
- »Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023), AM
- »Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023), PM
- »Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM
- »Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM
- »Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM
- »Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM

Summary of junction performance

AM										PM								
Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	
Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00)																		
Stream B-AC	D1	0.0	~1	0.00	0.00	A	0.00	A	900 %									
Stream C-B		0.0	~1	0.00	0.00	A		[]										
Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00)																		
Stream B-AC									D2	0.0	~1	0.00	0.00	A	0.00	A	900	
Stream C-B										0.0	~1	0.00	0.00	A			[]	
Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023																		
Stream B-AC	D3	0.0	~1	0.00	0.00	A	0.00	A	900 %									
Stream C-B		0.0	~1	0.00	0.00	A		[]										
Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023																		
Stream B-AC									D4	0.0	~1	0.00	0.00	A	0.00	A	900	
Stream C-B										0.0	~1	0.00	0.00	A			[]	
Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023)																		
Stream B-AC	D5	0.1	0.5	6.42	0.07	A	4.37	A	900 %									
Stream C-B		0.0	0.5	4.63	0.03	A		[]										
Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023)																		
Stream B-AC									D6	0.1	0.5	6.42	0.07	A	4.37	A	900	
Stream C-B										0.0	0.5	4.63	0.03	A			[]	

Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023)														
Stream B-AC	D7	0.1	0.5	9.06	0.10	A	0.50	A	125 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.72	0.03	A								
Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023)														
Stream B-AC	D8	0.1	0.5	9.45	0.10	A	0.44	A	106	[Stream B-AC]				
Stream C-B		0.0	0.5	5.71	0.03	A								
Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028)														
Stream B-AC	D9	0.1	0.5	9.37	0.10	A	0.48	A	112 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.83	0.03	A								
Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028)														
Stream B-AC	D10	0.1	0.5	9.83	0.11	A	0.43	A	93	[Stream B-AC]				
Stream C-B		0.0	0.5	5.81	0.03	A								
Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038)														
Stream B-AC	D11	0.1	0.5	9.59	0.11	A	0.47	A	104 %	[Stream B-AC]				
Stream C-B		0.0	0.5	5.91	0.03	A								
Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028)														
Stream B-AC	D12	0.1	0.5	10.11	0.11	B	0.42	A	86	[Stream B-AC]				
Stream C-B		0.0	0.5	5.89	0.03	A								

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

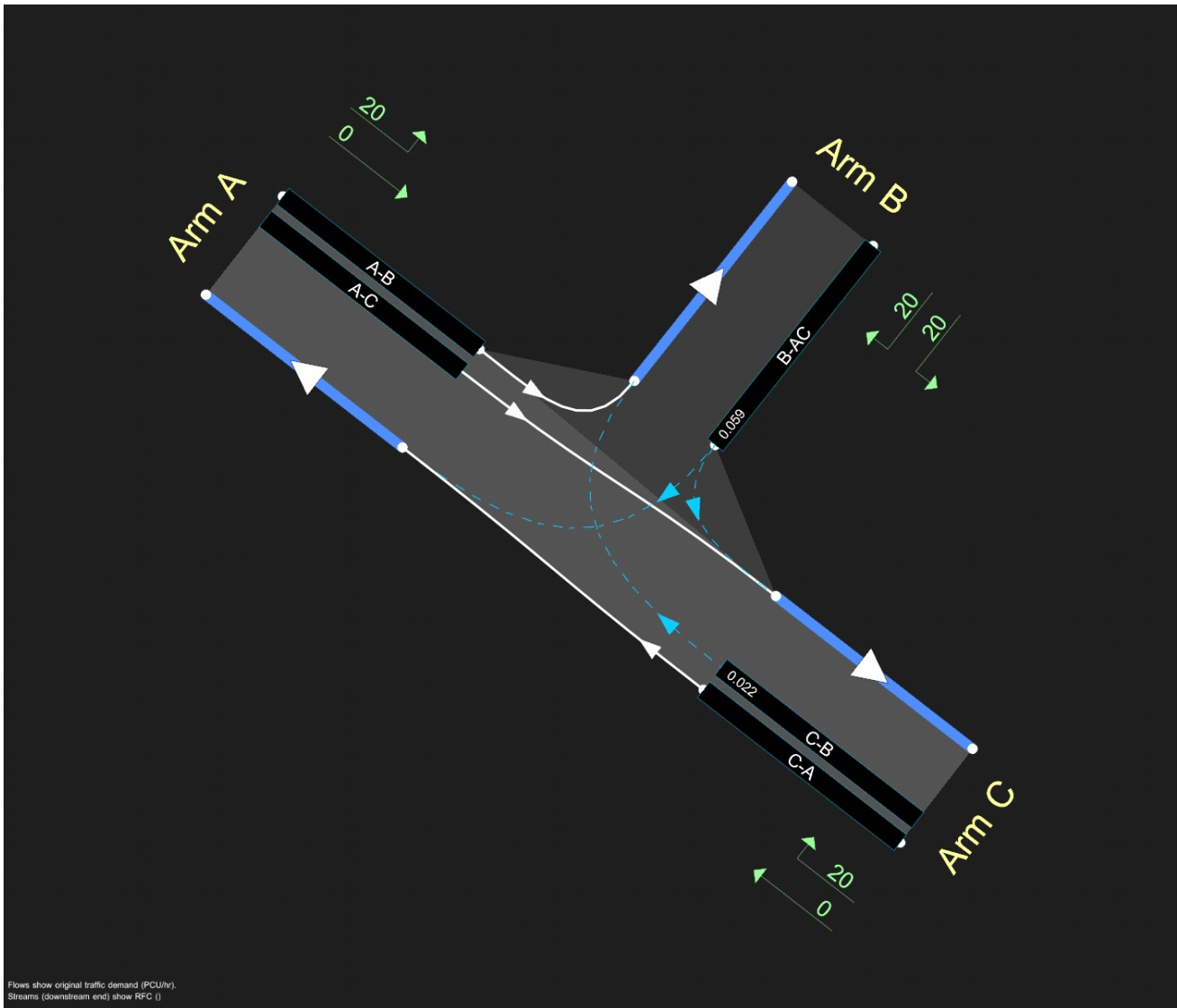
File summary

File Description

Title	
Location	
Site number	
Date	05/05/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\MartinHoy
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓				✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Results for central hour only	Run automatically	Relationship type	Relationship
D1	FD_01 = 2021 Baseline Traffic (08:00-09:00)	AM	ONE HOUR	08:00	09:30	15	✓	✓		
D2	FD_02 = 2021 Baseline Traffic (17:00-18:00)	PM	ONE HOUR	17:00	18:30	15	✓	✓		
D3	FD_03 = Factored Baseline Traffic = 2023	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D1*G1
D4	FD_04 = Factored Baseline Traffic = 2023	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D2*G1
D5	FD_05 = Development Flows (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓		
D6	FD_06 = Development Flows (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓		
D7	FD_07 = Development Flows + Factored Traffic (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D3+D5
D8	FD_08 = Development Flows + Factored Traffic (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D4+D6
D9	FD_09 = Factored Base Traffic + Dev + 5years = (2028)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G2)+D5
D10	FD_10 = Factored Base Traffic + Dev + 5years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G2)+D6
D11	FD_11 = Factored Base Traffic + Dev + 15years = (2038)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G3)+D5
D12	FD_12 = Factored Base Traffic + Dev + 15years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G3)+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	Opening Year 2023		1.0222
G2	Assessment Year + 5 = 2028		1.0777
G3	Assessment Year + 15 = 2038		1.1311

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Lifford Mixed Use, N14 Access	✓	100.000	100.000

Lifford Mixed Use, N14 Access - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D1 - FD_01 = 2021 Baseline Traffic (08:00-09:00), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.50		✓	3.30	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	50	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	547	0.084	0.213	0.134	0.305
B-C	691	0.090	0.227	-	-
C-B	805	0.264	0.264	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Results for central hour only	Run automatically
D1	FD_01 = 2021 Baseline Traffic (08:00-09:00)	AM	ONE HOUR	08:00	09:30	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	✓	498	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	498
	B	0	0	0
	C	366	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	375	375
	08:15-08:30	448	448
	08:30-08:45	548	548
	08:45-09:00	548	548
	09:00-09:15	448	448
	09:15-09:30	375	375
B	08:00-08:15	0	0
	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
C	08:00-08:15	276	276
	08:15-08:30	329	329
	08:30-08:45	403	403
	08:45-09:00	403	403
	09:00-09:15	329	329
	09:15-09:30	276	276

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						366	366
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						498	498

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
C-B	0	0	686	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	448	112			448				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
C-B	0	0	660	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	548	137			548				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	403	101			403				
C-B	0	0	660	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	548	137			548				

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-AC	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
C-B	0	0	686	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	448	112			448				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D2 - FD_02 = 2021 Baseline Traffic (17:00-18:00), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically
D2	FD_02 = 2021 Baseline Traffic (17:00-18:00)	PM	ONE HOUR	17:00	18:30	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	✓	0	100.000
C		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	492
	B	0	0	0
	C	522	0	0

Proportions

	To			
	A	B	C	
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
		A	B	C
From	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	370	370
	17:15-17:30	442	442
	17:30-17:45	542	542
	17:45-18:00	542	542
	18:00-18:15	442	442
	18:15-18:30	370	370
B	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0
C	17:00-17:15	393	393
	17:15-17:30	469	469
	17:30-17:45	575	575
	17:45-18:00	575	575
	18:00-18:15	469	469
	18:15-18:30	393	393

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						522	522
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						492	492

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	469	117			469				
C-B	0	0	688	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	442	111			442				

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-AC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	575	144			575				
C-B	0	0	662	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	542	135			542				

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-AC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-A	575	144			575				
C-B	0	0	662	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	542	135			542				

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-AC	0	0	470	0.000	0	0.0	0.0	0.000	A
C-A	469	117			469				
C-B	0	0	688	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	442	111			442				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_03 = Factored Baseline Traffic = 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - FD_03 = Factored Baseline Traffic = 2023, AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D3	FD_03 = Factored Baseline Traffic = 2023	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D1*G1

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	✓	509	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	509
	B	0	0	0
	C	374	0	0

Proportions

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C		
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To		
From	A	B	C	
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	383	383
	08:15-08:30	458	458
	08:30-08:45	560	560
	08:45-09:00	560	560
	09:00-09:15	458	458
	09:15-09:30	383	383
B	08:00-08:15	0	0
	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
C	08:00-08:15	282	282
	08:15-08:30	336	336
	08:30-08:45	412	412
	08:45-09:00	412	412
	09:00-09:15	336	336
	09:15-09:30	282	282

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						374	374
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						509	509

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
C-B	0	0	684	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	458	114			458				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	412	103			412				
C-B	0	0	657	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	560	140			560				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	412	103			412				
C-B	0	0	657	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	560	140			560				

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-AC	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
C-B	0	0	684	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	458	114			458				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_04 = Factored Baseline Traffic = 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D4 - FD_04 = Factored Baseline Traffic = 2023, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D4	FD_04 = Factored Baseline Traffic = 2023	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D2*G1

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	✓	503	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	
From	A	0	0	503	
	B	0	0	0	
	C	534	0	0	

Proportions

		To			
		A	B	C	
From	A	0.00	0.00	1.00	
	B	0.33	0.33	0.33	
	C	1.00	0.00	0.00	

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C		
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To		
From	A	B	C	
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	379	379
	17:15-17:30	452	452
	17:30-17:45	554	554
	17:45-18:00	554	554
	18:00-18:15	452	452
	18:15-18:30	379	379
B	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0
C	17:00-17:15	402	402
	17:15-17:30	480	480
	17:30-17:45	587	587
	17:45-18:00	587	587
	18:00-18:15	480	480
	18:15-18:30	402	402

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-A						534	534
C-B	0.00	0.00	0.0	~1	A	0	0
A-B						0	0
A-C						503	503

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	480	120			480				
C-B	0	0	685	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	452	113			452				

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-AC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
C-B	0	0	658	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	554	138			554				

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-AC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
C-B	0	0	658	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	554	138			554				

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-AC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	480	120			480				
C-B	0	0	685	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	452	113			452				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-B	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Lifford Mixed Use, N14 Access - FD_05 = Development Flows (2023), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D5 - FD_05 = Development Flows (2023), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		4.37	A

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)	Results for central hour only	Run automatically
D5	FD_05 = Development Flows (2023)	AM	ONE HOUR	08:00	09:30	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	✓	20	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	0
	B	20	0	20
	C	0	20	0

Proportions

		To		
		A	B	C
From	A	0.00	1.00	0.00
	B	0.50	0.00	0.50
	C	0.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	15	15
	08:15-08:30	18	18
	08:30-08:45	22	22
	08:45-09:00	22	22
	09:00-09:15	18	18
	09:15-09:30	15	15
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	15	15
	08:15-08:30	18	18
	08:30-08:45	22	22
	08:45-09:00	22	22
	09:00-09:15	18	18
	09:15-09:30	15	15

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	6.42	0.1	0.5	A	40	40
C-A						0	0
C-B	0.03	4.63	0.0	0.5	A	20	20
A-B						20	20
A-C						0	0

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	606	0.059	36	0.1	0.1	6.317	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.602	A
A-B	18	4			18				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	36	9	606	0.059	36	0.1	0.1	6.319	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.603	A
A-B	18	4			18				
A-C	0	0			0				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Lifford Mixed Use, N14 Access - FD_06 = Development Flows (2023), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D6 - FD_06 = Development Flows (2023), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.37	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		4.37	A

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)	Results for central hour only	Run automatically
D6	FD_06 = Development Flows (2023)	PM	ONE HOUR	17:00	18:30	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	✓	20	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	20	0
	B	20	0	20
	C	0	20	0

Proportions

	To			
	A	B	C	
From	A	0.00	1.00	0.00
	B	0.50	0.00	0.50
	C	0.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	15	15
	17:15-17:30	18	18
	17:30-17:45	22	22
	17:45-18:00	22	22
	18:00-18:15	18	18
	18:15-18:30	15	15
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	15	15
	17:15-17:30	18	18
	17:30-17:45	22	22
	17:45-18:00	22	22
	18:00-18:15	18	18
	18:15-18:30	15	15

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.07	6.42	0.1	0.5	A	40	40
C-A						0	0
C-B	0.03	4.63	0.0	0.5	A	20	20
A-B						20	20
A-C						0	0

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	606	0.059	36	0.1	0.1	6.317	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.602	A
A-B	18	4			18				
A-C	0	0			0				

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-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	44	11	605	0.073	44	0.1	0.1	6.421	A
C-A	0	0			0				
C-B	22	6	799	0.028	22	0.0	0.0	4.633	A
A-B	22	6			22				
A-C	0	0			0				

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-AC	36	9	606	0.059	36	0.1	0.1	6.319	A
C-A	0	0			0				
C-B	18	4	800	0.022	18	0.0	0.0	4.603	A
A-B	18	4			18				
A-C	0	0			0				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Lifford Mixed Use, N14 Access - FD_07 = Development Flows + Factored Traffic (2023), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D7 - FD_07 = Development Flows + Factored Traffic (2023), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.50	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	125	Stream B-AC	0.50	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D7	FD_07 = Development Flows + Factored Traffic (2023)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	D3+D5

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	✓	529	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	509
B	20	0	20
C	374	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	398	398
	08:15-08:30	476	476
	08:30-08:45	583	583
	08:45-09:00	583	583
	09:00-09:15	476	476
	09:15-09:30	398	398
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	297	297
	08:15-08:30	354	354
	08:30-08:45	434	434
	08:45-09:00	434	434
	09:00-09:15	354	354
	09:15-09:30	297	297

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.06	0.1	0.5	A	40	40
C-A						374	374
C-B	0.03	5.72	0.0	0.5	A	20	20
A-B						20	20
A-C						509	509

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	473	0.076	36	0.1	0.1	8.229	A
C-A	336	84			336				
C-B	18	4	679	0.026	18	0.0	0.0	5.445	A
A-B	18	4			18				
A-C	458	114			458				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	441	0.100	44	0.1	0.1	9.055	A
C-A	412	103			412				
C-B	22	6	651	0.034	22	0.0	0.0	5.724	A
A-B	22	6			22				
A-C	560	140			560				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	441	0.100	44	0.1	0.1	9.059	A
C-A	412	103			412				
C-B	22	6	651	0.034	22	0.0	0.0	5.724	A
A-B	22	6			22				
A-C	560	140			560				

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-AC	36	9	473	0.076	36	0.1	0.1	8.235	A
C-A	336	84			336				
C-B	18	4	679	0.026	18	0.0	0.0	5.445	A
A-B	18	4			18				
A-C	458	114			458				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_08 = Development Flows + Factored Traffic (2023), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.44	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	106	Stream B-AC	0.44	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D8	FD_08 = Development Flows + Factored Traffic (2023)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	D4+D6

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	✓	523	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	503
B	20	0	20
C	534	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	394	394
	17:15-17:30	470	470
	17:30-17:45	576	576
	17:45-18:00	576	576
	18:00-18:15	470	470
	18:15-18:30	394	394
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	417	417
	17:15-17:30	498	498
	17:30-17:45	610	610
	17:45-18:00	610	610
	18:00-18:15	498	498
	18:15-18:30	417	417

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.45	0.1	0.5	A	40	40
C-A						534	534
C-B	0.03	5.71	0.0	0.5	A	20	20
A-B						20	20
A-C						503	503

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	461	0.078	36	0.1	0.1	8.475	A
C-A	480	120			480				
C-B	18	4	681	0.026	18	0.0	0.0	5.433	A
A-B	18	4			18				
A-C	452	113			452				

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-AC	44	11	425	0.104	44	0.1	0.1	9.441	A
C-A	587	147			587				
C-B	22	6	653	0.034	22	0.0	0.0	5.708	A
A-B	22	6			22				
A-C	554	138			554				

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-AC	44	11	425	0.104	44	0.1	0.1	9.446	A
C-A	587	147			587				
C-B	22	6	653	0.034	22	0.0	0.0	5.708	A
A-B	22	6			22				
A-C	554	138			554				

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-AC	36	9	461	0.078	36	0.1	0.1	8.483	A
C-A	480	120			480				
C-B	18	4	681	0.026	18	0.0	0.0	5.433	A
A-B	18	4			18				
A-C	452	113			452				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D9 - FD_09 = Factored Base Traffic + Dev + 5years = (2028), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.48	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	112	Stream B-AC	0.48	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D9	FD_09 = Factored Base Traffic + Dev + 5years = (2028)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G2)+D5

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	✓	569	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	423	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	549
B	20	0	20
C	403	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C		
	A	0	0	7	
	B	0	0	0	
	C	7	0	0	

Average PCU Per Veh

		To			
From	A	B	C		
	A	1.000	1.000	1.067	
	B	1.000	1.000	1.000	
	C	1.067	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	428	428
	08:15-08:30	511	511
	08:30-08:45	626	626
	08:45-09:00	626	626
	09:00-09:15	511	511
	09:15-09:30	428	428
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	319	319
	08:15-08:30	380	380
	08:30-08:45	466	466
	08:45-09:00	466	466
	09:00-09:15	380	380
	09:15-09:30	319	319

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.37	0.1	0.5	A	40	40
C-A						403	403
C-B	0.03	5.83	0.0	0.5	A	20	20
A-B						20	20
A-C						549	549

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	463	0.078	36	0.1	0.1	8.432	A
C-A	362	91			362				
C-B	18	4	670	0.027	18	0.0	0.0	5.523	A
A-B	18	4			18				
A-C	493	123			493				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	428	0.103	44	0.1	0.1	9.363	A
C-A	444	111			444				
C-B	22	6	639	0.034	22	0.0	0.0	5.831	A
A-B	22	6			22				
A-C	604	151			604				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	428	0.103	44	0.1	0.1	9.368	A
C-A	444	111			444				
C-B	22	6	639	0.034	22	0.0	0.0	5.831	A
A-B	22	6			22				
A-C	604	151			604				

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-AC	36	9	463	0.078	36	0.1	0.1	8.440	A
C-A	362	91			362				
C-B	18	4	670	0.027	18	0.0	0.0	5.526	A
A-B	18	4			18				
A-C	493	123			493				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D10 - FD_10 = Factored Base Traffic + Dev + 5years = (2028), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.43	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	93	Stream B-AC	0.43	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D10	FD_10 = Factored Base Traffic + Dev + 5years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G2)+D6

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	✓	562	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	542
B	20	0	20
C	575	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.04	0.96
B	0.50	0.00	0.50
C	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	423	423
	17:15-17:30	505	505
	17:30-17:45	619	619
	17:45-18:00	619	619
	18:00-18:15	505	505
	18:15-18:30	423	423
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	448	448
	17:15-17:30	535	535
	17:30-17:45	655	655
	17:45-18:00	655	655
	18:00-18:15	535	535
	18:15-18:30	448	448

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.83	0.1	0.5	A	40	40
C-A						575	575
C-B	0.03	5.81	0.0	0.5	A	20	20
A-B						20	20
A-C						542	542

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	449	0.080	36	0.1	0.1	8.716	A
C-A	517	129			517				
C-B	18	4	671	0.027	18	0.0	0.0	5.510	A
A-B	18	4			18				
A-C	487	122			487				

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-AC	44	11	410	0.107	44	0.1	0.1	9.820	A
C-A	633	158			633				
C-B	22	6	641	0.034	22	0.0	0.0	5.813	A
A-B	22	6			22				
A-C	597	149			597				

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-AC	44	11	410	0.107	44	0.1	0.1	9.826	A
C-A	633	158			633				
C-B	22	6	641	0.034	22	0.0	0.0	5.813	A
A-B	22	6			22				
A-C	597	149			597				

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-AC	36	9	449	0.080	36	0.1	0.1	8.725	A
C-A	517	129			517				
C-B	18	4	671	0.027	18	0.0	0.0	5.512	A
A-B	18	4			18				
A-C	487	122			487				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D11 - FD_11 = Factored Base Traffic + Dev + 15years = (2038), AM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	104	Stream B-AC	0.47	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D11	FD_11 = Factored Base Traffic + Dev + 15years = (2038)	AM	ONE HOUR	08:00	09:30	15	✓	✓	Simple	(D3*G3)+D5

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	✓	596	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	576
B	20	0	20
C	423	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.03	0.97
B	0.50	0.00	0.50
C	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:00-08:15	449	449
	08:15-08:30	536	536
	08:30-08:45	656	656
	08:45-09:00	656	656
	09:00-09:15	536	536
	09:15-09:30	449	449
B	08:00-08:15	30	30
	08:15-08:30	36	36
	08:30-08:45	44	44
	08:45-09:00	44	44
	09:00-09:15	36	36
	09:15-09:30	30	30
C	08:00-08:15	334	334
	08:15-08:30	398	398
	08:30-08:45	488	488
	08:45-09:00	488	488
	09:00-09:15	398	398
	09:15-09:30	334	334

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.59	0.1	0.5	A	40	40
C-A						423	423
C-B	0.03	5.91	0.0	0.5	A	20	20
A-B						20	20
A-C						576	576

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	456	0.079	36	0.1	0.1	8.578	A
C-A	380	95			380				
C-B	18	4	663	0.027	18	0.0	0.0	5.578	A
A-B	18	4			18				
A-C	518	129			518				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	419	0.105	44	0.1	0.1	9.589	A
C-A	466	116			466				
C-B	22	6	631	0.035	22	0.0	0.0	5.907	A
A-B	22	6			22				
A-C	634	158			634				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	419	0.105	44	0.1	0.1	9.595	A
C-A	466	116			466				
C-B	22	6	631	0.035	22	0.0	0.0	5.907	A
A-B	22	6			22				
A-C	634	158			634				

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-AC	36	9	455	0.079	36	0.1	0.1	8.587	A
C-A	380	95			380				
C-B	18	4	663	0.027	18	0.0	0.0	5.581	A
A-B	18	4			18				
A-C	518	129			518				

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Lifford Mixed Use, N14 Access - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D12 - FD_12 = Factored Base Traffic + Dev + 15years = (2028), PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)
Warning	Demand Set Relationship	D8 - FD_08 = Development Flows + Factored Traffic (2023), PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.42	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	86	Stream B-AC	0.42	A

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)	Results for central hour only	Run automatically	Relationship type	Relationship
D12	FD_12 = Factored Base Traffic + Dev + 15years = (2028)	PM	ONE HOUR	17:00	18:30	15	✓	✓	Simple	(D4*G3)+D6

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	✓	589	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	624	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	20	569
B	20	0	20
C	604	20	0

Proportions

From	To		
	A	B	C
A	0.00	0.03	0.97
B	0.50	0.00	0.50
C	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	7
	B	0	0	0
	C	7	0	0

Average PCU Per Veh

		To		
From		A	B	C
	A	1.000	1.000	1.067
	B	1.000	1.000	1.000
	C	1.067	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	443	443
	17:15-17:30	529	529
	17:30-17:45	648	648
	17:45-18:00	648	648
	18:00-18:15	529	529
	18:15-18:30	443	443
B	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	44	44
	17:45-18:00	44	44
	18:00-18:15	36	36
	18:15-18:30	30	30
C	17:00-17:15	469	469
	17:15-17:30	561	561
	17:30-17:45	687	687
	17:45-18:00	687	687
	18:00-18:15	561	561
	18:15-18:30	469	469

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	10.11	0.1	0.5	B	40	40
C-A						604	604
C-B	0.03	5.89	0.0	0.5	A	20	20
A-B						20	20
A-C						569	569

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	441	0.082	36	0.1	0.1	8.888	A
C-A	543	136			543				
C-B	18	4	665	0.027	18	0.0	0.0	5.564	A
A-B	18	4			18				
A-C	511	128			511				

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-AC	44	11	400	0.110	44	0.1	0.1	10.097	B
C-A	665	166			665				
C-B	22	6	633	0.035	22	0.0	0.0	5.887	A
A-B	22	6			22				
A-C	626	157			626				

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-AC	44	11	400	0.110	44	0.1	0.1	10.109	B
C-A	665	166			665				
C-B	22	6	633	0.035	22	0.0	0.0	5.887	A
A-B	22	6			22				
A-C	626	157			626				

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-AC	36	9	441	0.082	36	0.1	0.1	8.898	A
C-A	543	136			543				
C-B	18	4	665	0.027	18	0.0	0.0	5.565	A
A-B	18	4			18				
A-C	511	128			511				

Queue Variation Results for each time segment

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

