MOANMORE LOWER GREEN ENERGY LIMITED

MOANMORE LOWER WIND FARM

COUNTY CLARE

TRAFFIC AND TRANSPORT ASSESSMENT

April 2025

Moanmore Lower Green Energy Limited,
Station Road,
Adare,
Co. Limerick

Jennings O'Donovan & Partners Limited,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
email: info@jodireland.com

JENNINGS O'DONOVAN & PARTNERS LIMITED
Project, Civil and Structural Consulting Engineers,
FINISKLIN BUSINESS PARK,
SLIGO,
IRELAND.

Telephone (071) 9161416
Fax (071) 9161080

Email info@jodireland.com
Web Site www.jodireland.com

DOCUMENT APPROVAL

PROJECT	Moanmore Lower Wind Farm	
CLIENT / JOB NO	Moanmore Lower Green Energy Limited	6778
DOCUMENT TITLE	Traffic and Transport Assessment (TTA)	

	Prepared by	**Reviewed/Approved by**
Document Final	Name John Doogan	Name David Kiely
Date 8th April 2025	Signature	Signature

6778/703/JD

MOANMORE LOWER WIND FARM

TRAFFIC AND TRANSPORT ASSESSMENT

CONTENTS

1 INTRODUCTION

1.1 Brief

Jennings O'Donovan & Partners Limited has been appointed by Moanmore Lower Green Energy Limited to prepare a Traffic and Transport Assessment ("TTA") for the proposed Moanmore Lower Wind Farm (The Development), Co. Clare. The wind farm Site is located in south-west County Clare, 3km northwest of the town of Kilrush and 6.8km southwest of Cooraclare village. The Development will include the following main components:

- Erection of 3 no. wind turbines with an overall ground to blade tip height of 150m, with a rotor diameter of 136m and a hub height of 82m and a total generating capacity of 15MW,
- Construction of turbine hardstand areas and turbine foundations,
- Construction of new internal site access tracks and upgrade of existing site track, to include all associated site drainage,
- Construction of 1. no new site entrance along the turbine delivery route with access onto the adjoining local road network (L6132),
- Construction of 1 no. temporary construction compound with associated temporary site offices, parking areas and security fencing,
- Development of a site drainage network,
- Construction of 1 no. 38kV electrical substation with all associated electrical plant and equipment, security fencing, lightening protection, security cameras and gates, and all ancillary structures and works,
- 1 no. permanent spoil storage area,
- All wind farm internal cabling connecting the wind turbines to the electrical substation,
- All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 38kV underground cable in permanent cable ducts from the proposed, permanent, on-site substation and to the existing Tullabrack 110kV ESBN Substation,
- 2 no. flood compensation areas,
- Vertical realignment of an existing crest curve on the L6132 local road in order to prevent grounding of abnormal load vehicles during delivery of turbine components,
- Ancillary forestry felling to facilitate construction and operation of the development,
- Construction of a blade transfer area off the L6132,
- Provision of 2 no. biodiversity enhancement areas,
- Upgrade of an existing site entrance onto the adjoining local road network (L2034) including the demolition of an existing wall and removal of hedgerow at the site entrance to facilitate abnormal load vehicles during delivery of turbine components and reconstruction of same wall and replanting of hedgerow,
- Landscaping and all associated ancillary works.

1.2 Statement of Authority

The Traffic and Transport Assessment has been prepared by John Doogan of Jennings O'Donovan & Partners Limited, Finisklin, Sligo. Established in Sligo in 1950, Jennings O'Donovan & Partners Limited is a Clean Tech Company providing consulting engineering services in the areas of road design, renewable energy, civil and structural engineering, water supply, wastewater collection and treatment, environmental resource management and impact assessment and in the area of industrial and commercial development.

1.3 Design References / Standards

The TTA for the proposed Development has been based on the following technical documents:

- Clare County Development Plan 2023 - 2029.
- Transport Infrastructure Ireland publications:
  PE-PDV-02045 Traffic and Transport Assessment Guidelines.
  PE-PAG-02017 Travel Demand Projections.
  PE-PAG-02039, Expansion Factors for Short Period Traffic Counts.
  Spatial Planning and National Roads.
  Design Manual for Roads and Bridges.
  Specification for Road Works.
- Design Manual for Urban Roads and Streets - DMURS
- Junctions 9 Traffic Analysis Software.

1.4 Methodology

The methodology adopted for this Traffic and Transport Assessment involved:
A site visit was undertaken on Thursday 12th January 2023 to record traffic volumes and turning movements of vehicles at the N68/L6132 junction, L6132/R483/L2036 junction and at the L2036/L2034 junction. The traffic counts were carried out between 7.00am and 11.00am in the morning to capture peak traffic flows during the morning period and between 3.30am and 6.00am in the evening to capture peak traffic flows during the evening period.

A traffic analysis was carried out at the N68/L6132 junction, L6132/R483/L2036 junction and at the L2036/L2034 junction using the 2023 Existing traffic flows to determine if capacity problems exist at the junctions in the vicinity of the proposed Development.

Future year traffic assessments were then carried out at the N68/L6132 junction, L6132/R483/L2036 junction and at the L2036/L2034 junction for the following scenarios to determine if capacity problems would arise at the junctions with and without the proposed Development in place.

2025 Projected traffic flows without the proposed Development (Planning Approval)
2035 Projected traffic flows without the proposed Development (Planning Period / Windfarm Construction)
2075 Projected traffic flows without the proposed Development (Operations Period)
2035 Projected traffic flows with the proposed Development (Wind Farm Construction Traffic)
2075 Projected traffic flows with the proposed Development (Wind Farm Decommissioning Traffic)
A traffic assessment was carried out at the L2036/L2034 junction with the proposed Development under construction in 2035 with additional traffic from unrelated planned and consented developments to determine if capacity problems would arise at the junction due to combined traffic volumes in the vicinity of the development.

A traffic assessment was carried out at the L2036/L2034 junction with decommissioning traffic in 2075 with additional traffic from unrelated planned and consented developments to determine if capacity problems would arise at the junction due to combined traffic volumes in the vicinity of the development. Temporary traffic lights will be required for short periods on the L2034 and the N68 for traffic management during the construction of the proposed Development. A traffic analysis has been carried out to assess the impact of the temporary traffic lights on the L2034 and the N68.

A traffic analysis has been carried out to assess the impact of projected traffic flows combined with peak construction traffic on L2034 existing accesses and local road junctions.

1.5 Consultation With Local authority

The design team for the proposed Development consulted Clare County Council Transportation Department in August 2020 to provide details of the proposed Development.

1.6 Site Location, Context and Proposed Development

The proposed Development is located in south-west County Clare 3.5km north-east of the town of Kilrush and 3km southwest of Cooraclare village. The Development will consist of 3 No. 4-5MW wind turbines with an overall ground to blade tip height of 150m. The candidate wind turbine will have a rotor diameter of 136m and a hub height of 82m. Each turbine will be erected on an insitu concrete foundation with steel reinforcement and will have a Turbine Hardstand constructed from granular material, the Turbine Hardstand will be used to store turbine components and to support a crane during the erection of the turbine. Each Turbine Hardstand will be linked to the site entrance on the L2034 by a network of access tracks constructed from granular materials with associated drainage and fencing. The turbines will be linked to the Onsite Substation by electrical cabling laid in buried ducts alongside the site access track. The Onsite Substation will be linked to the national grid via an underground grid connection to the existing Tullabrack 110kV substation. A permanent Met Mast with a height of 82m

for monitoring wind speeds will be constructed within the wind farm site. Surplus material arising from excavations at the wind farm site will be used to landscape site access track and hardstand embankments and to backfill the onsite borrow pit. Any remaining surplus material will be deposited in the permanent spoil storage area. The Location and layout of the wind farm site is shown on **Figure 1**. The location of the wind farm Grid Connection is shown on **Figure 2**.

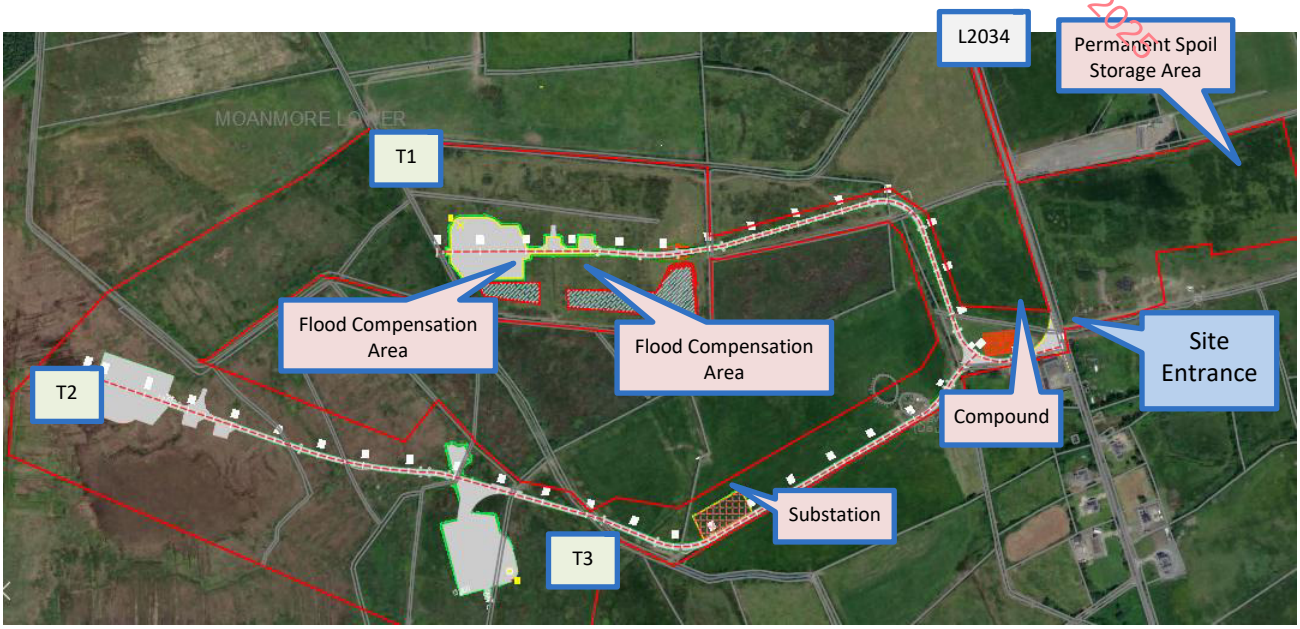


Figure 1: Site Layout

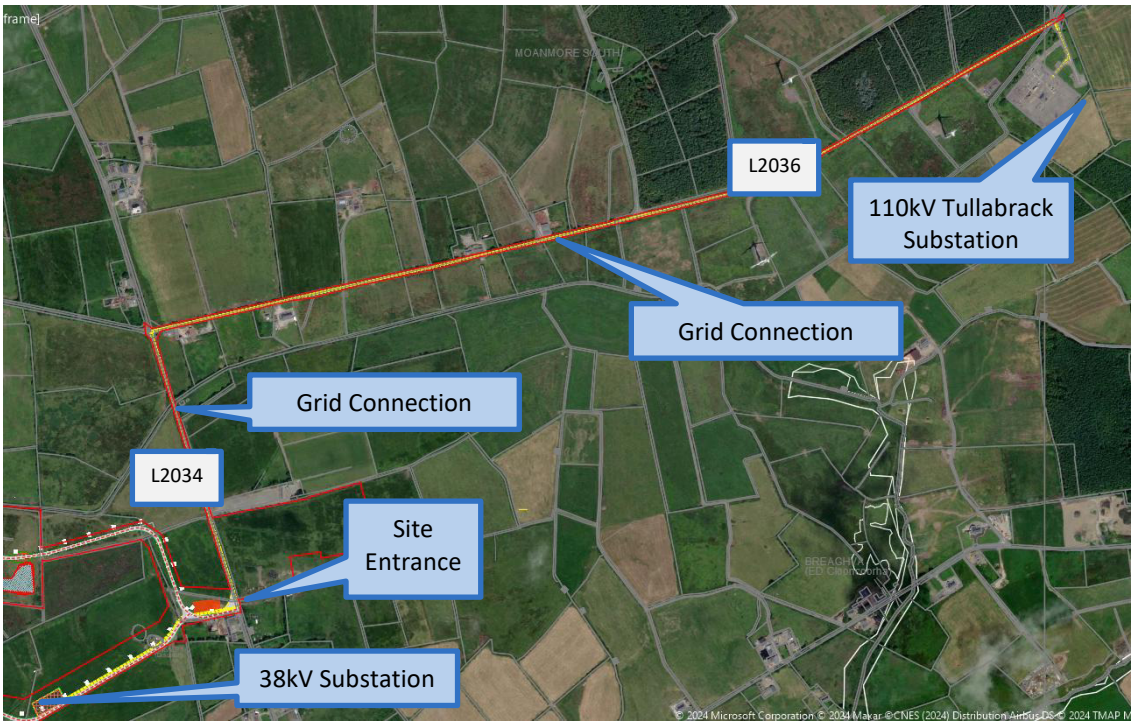


Figure 2: Grid Connection Route

2 EXISTING PUBLIC ROAD NETWORK AND TRAFFIC

2.1 Existing Traffic Volumes

To assess the impact of the proposed Development on the existing road network when the proposed Development is constructed and fully occupied, baseline traffic volumes in the area are required. Jennings O'Donovan carried out classified traffic counts Thursday 12th January 2023 to record traffic volumes and turning movements of vehicles at the N68 / L6132 junction, L6132/R483/L2036 junction and at the L2036/L2034 junction.

The morning peak hour traffic period on the public road network in the vicinity of the proposed Development are obtained from the traffic counts. The Traffic counts shows that peak traffic occurs between 8.00am and 9.00am in the morning and between 5.00pm and 6.00pm in the afternoon. The peak hour period shown in **Table 1** is used to carry out capacity analysis for the development.

AM Peak Hour	8.00 – 9.00
PM Peak Hour	17.00 – 18.00

Table 1: Peak Hour Traffic Period

2.2 Access to the Proposed Development

The location of the site entrance to the proposed Development is shown on **Figure 1.** The site entrance will be constructed on the L2034 local road. The site entrance will consist of a simple T-Junction with priority for L2034 traffic. The junction will be constructed to accommodate HGV vehicles with an extended overrun area to accommodate the swept path and wheel loading from abnormal load vehicles delivering turbine components during the turbine erection phase of the project. During the construction of the wind farm infrastructure such as access tracks and hardstands, the overrun area at the junctions for abnormal load vehicles will not be in use and access to the overrun areas will be restricted using temporary traffic barriers. The temporary traffic barriers will be used to channelise traffic at the junctions and to prevent parking in the vicinity of the L2034. The overrun area at the junction will be reinstated following the delivery of turbine components. The site entrance junction will have a dwell area with a gradient of -2.5% at its intersection with the L2034 with drainage falling towards the wind farm site and away from the L2034 carriageway. The site entrance junction will be gated and fenced with stock proof fencing during the construction period, the access gates will be set back 20m from the L2034 carriageway edge to accommodate HGV vehicles entering the wind farm site and to eliminate the possibility of vehicles blocking the L2034. Wheel cleaning facilities will be provided at site access junctions to prevent the spread of mud and debris onto the L2034 carriageway. The Layout of the site entrance is shown on **Figure 3**. Visibility at the junction will be in accordance with Clare County

Council Development Plan, Table A1.6.2 and will have visibility splays of 160m measured from a 2.4m setback.

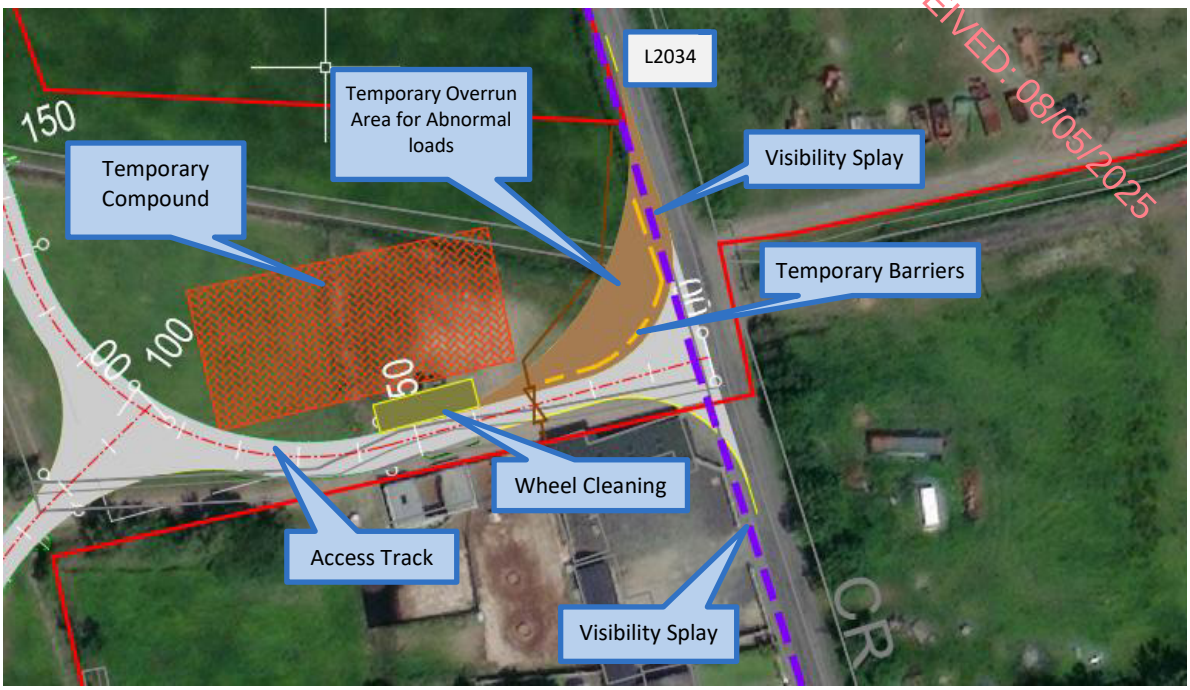


Figure 3: L2034 Site Entrance

2.3 Existing Roads in the Vicinity of the Site

The location of the Site entrance to the proposed Development is shown on **Figure 1**. The site entrance is located on the L2034 local road (Reference Plate 1). The L2036 is a 5.0m wide single carriageway with grass verges. The L2034 runs between the N67 in Kilrush and the L2030 junction to the north of the proposed development. The L2034 local road and has an 80km/h speed limit classification. The L2034 is in good condition and will be the primary access road to the site during the construction, operation and decommissioning of the proposed Development. Existing traffic volumes on the L2034 were obtained from the classified traffic counts carried out by JOD on Wednesday 12th January 2023 at the L2034 / L2036 junction. Using the methodology from TII publication PE-PAG-02039 to calculate annual average daily traffic (AADT) from short period traffic counts, the resulting AADT on the L2034 is calculated from the recorded traffic counts as follows. The L2036 local road has an AADT of 811 vehicles at its junction with the L2036 which equates to a two-way traffic flow of approximately 90 vehicles during peak hour traffic periods with less than 1% HGV traffic.

Plate 1 – L2034 Local Road

The existing N68 national secondary road (Reference Plate 2) is typically a 6.0m wide two lane single carriageway road in the vicinity of the Site. The road is delineated with road markings and signposted with regulatory and directional signs. Existing traffic volumes on the N68 were obtained from the classified traffic counts carried out by JOD on Wednesday 12th January 2023 at the N68 / L6132 junction. Using the methodology from TII publication PE-PAG-02039 to calculate annual average daily traffic (AADT) from short period traffic counts, the resulting AADT on the N68 is calculated from the recorded traffic counts as follows. The N68 local road has an AADT of 2,870 vehicles at its junction with the L6132 which equates to a two-way traffic flow of approximately 300 vehicles during peak hour traffic periods with 5% HGV traffic.

Plate 2 – N68 National Road

The existing N67 national secondary road (Reference Plate 3) is typically a 6.0m wide two lane single carriageway road in the vicinity of the Site. The road is delineated with road markings and signposted with regulatory and directional signs.

Plate 3 – N67 National Road

The existing L6132 (Reference Plate 4) is a 2.8m / 3.0m wide two lane local road with regulatory signs and roadmarkings at junctions. The L6132 will be used during delivery of turbine components. Existing traffic volumes on the L6132 were obtained from the classified traffic counts carried out by JOD on Wednesday 12th January 2023 at the N68 / L6132 junction. Using the methodology from TII publication PE-PAG-02039 to calculate annual average daily traffic (AADT) from short period traffic counts, the resulting AADT on the L6132 is calculated from the recorded traffic counts as follows. The L6132 local road has an AADT of 170 vehicles at its junction with the N68 which equates to a two-way traffic flow of approximately 20 vehicles during peak hour traffic periods with less than 1% HGV traffic.

Plate 4 – L6132 Local Road

The existing L2036 (Reference Plate 5) is a 2.8m / 3.0m wide two lane local road with regulatory signs and roadmarkings at junctions. The L2036 will be used during delivery of turbine components and during grid connection works. Existing traffic volumes on the L6036 were obtained from the classified traffic counts carried out by JOD on Wednesday 12th January 2023 at the L6036 / L6034 junction. Using the methodology from TII publication PE-PAG-02039 to calculate annual average daily traffic (AADT) from short period traffic counts, the resulting AADT on the L2036 is calculated from the recorded traffic counts as follows. The L2036 local road has an AADT of 432 vehicles at its junction with the L6034 which equates to a two-way traffic flow of approximately 30 vehicles during peak hour traffic periods with less than 1% HGV traffic.

Plate 5 – L2036 Local Road

2.4 Existing Junctions in the Vicinity of the Site

The existing junction between the N67 and the L2034 (Reference plate 6) is a ghost island T-junction with priority for N67 traffic. The junction is located in a 60km/h speed limit zone. The junction is a stop-controlled junction with regulatory road markings and signage. The junction is lit by public lighting. Observations during the traffic counts show that there are no capacity problems at the junction under current traffic conditions.

Plate 6 – N67 / L2034 Junction

The existing junction between the N68 and the L6132 (Reference plate 7) is a staggered crossroads junction with priority for N68 traffic. The junction is located in a 80km/h speed limit zone. The junction is a stop-controlled junction with regulatory road markings and signage. The junction is not lit by public lighting. Observations during the traffic counts and traffic analysis carried out at the junction using the recorded traffic volumes show that there are no capacity problems at the junction under current traffic conditions. The junction is currently operating at free flow conditions with a level of service = A. The results of the analysis are included in **Section 4.**

Plate 7 – N68 / L6132 Junction

The existing junction between the R483 / L2036 / L6132 at Tullabrack Cross (Reference plate 8) is crossroads junction with priority for R483 traffic. The junction is located in a 80km/h speed limit zone. The junction is a stop-controlled junction with regulatory road markings and signage. The junction is not lit by public lighting. Observations during the traffic counts and traffic analysis carried out at the junction using the recorded traffic volumes show that there are no capacity problems at the junction under current traffic conditions. The junction is currently operating at free flow conditions with a level of service = A. The results of the analysis are included in **Section 4**.

Plate 8 – R483 / L6132 Tullabrack Cross Junction

The existing junction between the L2034 and the L2036 (Reference plate 9) is crossroads junction with priority for L2034 traffic. The junction is located in a 80km/h speed limit zone. The junction is a stop-controlled junction with regulatory road markings and signage. The junction is not lit by public lighting. Observations during the traffic counts and traffic analysis carried out at the junction using the recorded traffic volumes show that there are no capacity problems at the junction under current traffic conditions. The junction is currently operating at free flow conditions with a level of service = A. The results of the analysis are included in **Section 4.**

Plate 9 – L2034 / L2036 Junction

2.5 Accident Data

Mapped statistics for accident data in the area were not available from the RSA website in October 2024.

2.6 Parking Facilities

Parking facilities are provided within the Development Site.

3 TRAFFIC GENERATION AND TRIP DISTRIBUTION

3.1 Trip Generation associated with the Development

During the construction of the wind farm, the maximum daily traffic generated by the development will occur during concrete pours for turbine foundations. The concrete pours will occur on three separate days during the 10 month construction period. During the concrete pours the wind farm development will generate 159 HGV trips and 40 LGV trips on the public road network. When concrete pours are not taking place on site, the development will generate a maximum of 78 HGV trips and 30 LGV trips on a daily basis. The traffic profile for the development during turbine foundation concrete pours is shown in **Table 2.** Full details of the traffic generated by the proposed Development is included in the project Traffic Management Plan (TMP).

Time	Arrivals		Departures	
	HGV	LGV	HGV	LGV
06.00 – 07.00		20		
07.00 – 08.00	18	15	18	
08.00 – 09.00	14	5	14	2
09.00 – 10.00	14		14	
10.00 – 11.00	14		14	
11.00 – 12.00	17		17	

Time	Arrivals		Departures	
	HGV	LGV	HGV	LGV
12.00 – 13.00	14		14	
13.00 – 14.00	14	5	14	5
14.00 – 15.00	17		17	
15.00 – 16.00	14		14	
16.00 – 17.00	10		10	
17.00 – 18.00	8	2	8	5
18.00 – 19.00	5		5	15
19.00 – 20.00				20

Table 2: Development Traffic Profile

3.2 Traffic Distribution

For the purpose of analysis all traffic generated by the wind farm development will arrive and depart at the site entrances on the L2034 from the L2034 / L2036 junction.

3.3 Future Traffic Growth on the Public Road Network

Traffic Infrastructure Ireland (TII) forecasts for future traffic growth on the public road network are published in PE-PAG-02017 “Travel Demand Projections”. The growth factors are applied to the 2023 baseline traffic flows to approximate the traffic flows on the public road network in the future when the development is granted planning in 2025, 10 year planning grant and construction in 2035 and a 40 year operational period and decommissioning in 2075. The growth factors for the relevant assessment years using the central-growth scenario for County Clare are shown in **Table 3**.

Year	LGV Growth Factor	HGV Growth Factor
2023	1.00	1.00
2025	1.03	1.08
2035	1.13	1.47
2075	1.28	3.14

Table 3: Traffic Growth Factors for Public Roads

4 TRAFFIC ANALYSIS

4.1 Traffic Analysis at the N68 / L6132 Junction

A traffic analysis has been carried out to determine if the N68 / L6132 junction will operate within capacity for the following senarios;

- 2023 Baseline traffic counts
- 2025 Projected traffic flows without the proposed Development (Planning Approval)
- 2035 Projected traffic flows without the proposed Development (Planning Period)
- 2075 Projected traffic flows without the proposed Development (Operations Period)
- 2035 Projected traffic flows with the proposed Development (Wind Farm Construction Traffic)
- 2075 Projected traffic flows with the proposed Development (Wind Farm Decommissioning Traffic)

The results of the analysis show that the N68 / L6132 junction will not exceed the 0.85 ratio of flow to capacity (RFC) and will continue to operate with reserve capacity beyond 2075. The ratio of flow to capacity (RFC) is calculated from Junctions 9 PICADY software. An RFC value of 1.0 indicates that the junction is operating at full capacity with a value of 0.85 considered to be the maximum RFC value after which the junction will begin to experience some capacity issues. The results of the analysis are summarised in **Figure 4**.

	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
2023 Existing Traffic - N68 / L6132 / L6162 Junction																		
Stream B-ACD	D1	0.0	0.5	7.07	0.03	A	0.36	A	688 % [Stream B-ACD]	D2	0.0	0.5	7.02	0.01	A	0.39	A	604 % [Stream B-ACD]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.5	5.29	0.02	A			
2025 Forecast Traffic Flows (Grant of Planning - No Development)																		
Stream B-ACD	D3	0.0	0.5	7.90	0.03	A	0.41	A	647 % [Stream B-ACD]	D4	0.0	0.6	8.94	0.02	A	0.46	A	529 % [Stream B-ACD]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.5	5.28	0.02	A			
2035 Forecast Traffic Flows (Planning Period - No Development)																		
Stream B-ACD	D5	0.0	0.5	7.90	0.04	A	0.49	A	556 % [Stream B-ACD]	D6	0.0	0.6	8.74	0.02	A	0.50	A	465 % [Stream B-ACD]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.5	5.25	0.03	A			
2075 Forecast Traffic Flows (Operational Lifespan - No Development)																		
Stream B-ACD	D7	0.1	0.5	8.04	0.09	A	0.79	A	370 % [Stream B-ACD]	D8	0.1	0.5	8.50	0.05	A	0.41	A	373 % [Stream B-ACD]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
2035 Forecast Traffic Flows + Development Construction Traffic (With Development)																		
Stream B-ACD	D9	0.1	0.7	12.11	0.09	B	1.55	A	301 % [Stream B-ACD]	**D10**	**0.1**	**0.7**	**11.60**	**0.06**	**B**	**1.05**	**A**	**320 % [Stream B-ACD]**
Stream A-BCD		0.0	~1	0.00	0.00	A					**0.0**	**~1**	**0.00**	**0.00**	**A**			
Stream D-ABC		0.0	~1	0.00	0.00	A					**0.0**	**~1**	**0.00**	**0.00**	**A**			
Stream C-ABD		0.0	0.5	5.79	0.02	A					**0.1**	**0.5**	**5.30**	**0.04**	**A**			
2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)																		
Stream B-ACD	D11	0.2	0.6	10.99	0.13	B	1.64	A	232 % [Stream B-ACD]	D12	0.1	0.6	9.92	0.09	A	0.99	A	244 % [Stream B-ACD]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	0.5	5.83	0.02	A					0.1	0.5	5.36	0.05	A			

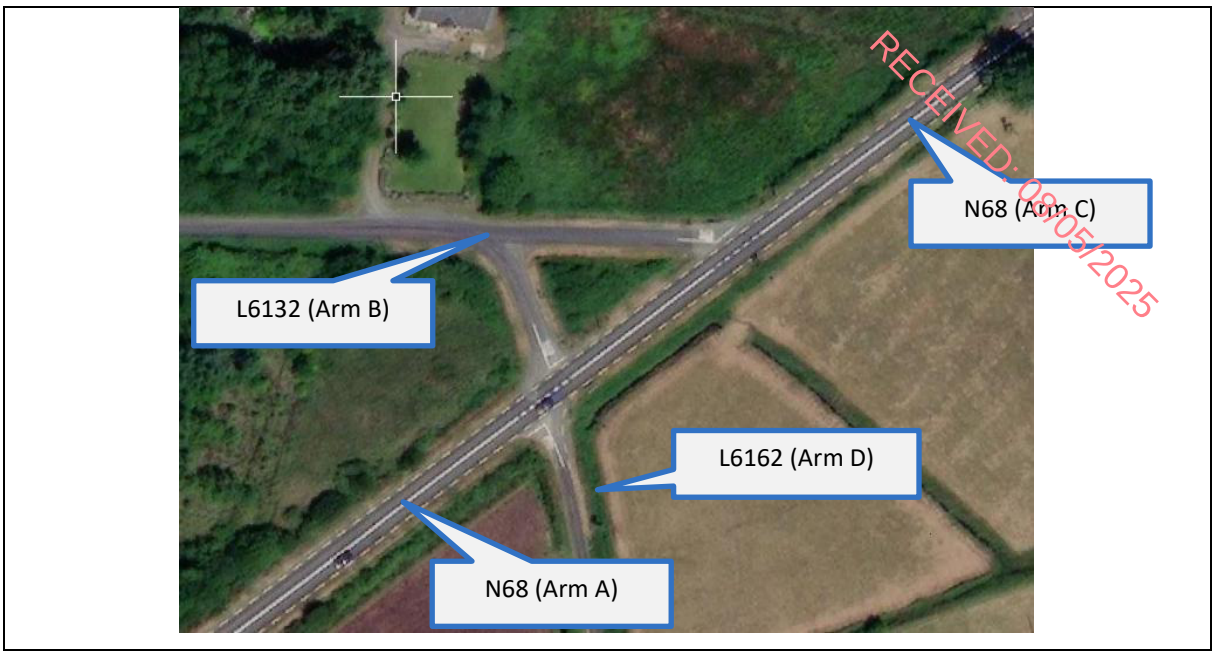


Figure 4: Traffic Analysis Summary for the N68 / L6132 / L6162 Junction

4.2 Traffic Analysis at the L6132 / R483 / L2036 Junction

A traffic analysis of the junction has been carried out to determine if the junction will operate within capacity for the following senarios;

- 2023 Baseline traffic counts
- 2025 Projected traffic flows without the proposed Development (Planning Approval)
- 2035 Projected traffic flows without the proposed Development (Planning Period)
- 2075 Projected traffic flows without the proposed Development (Operations Period)
- 2035 Projected traffic flows with the proposed Development (Wind Farm Construction Traffic)
- 2075 Projected traffic flows with the proposed Development (Wind Farm Decommissioning Traffic)

The results of the analysis show that the L6132 / R483 / L2036 junction will not exceed the 0.85 ratio of flow to capacity (RFC) and will continue to operate with reserve capacity beyond 2075. The ratio of flow to capacity (RFC) is calculated from Junctions 9 PICADY software. An RFC value of 1.0 indicates that the junction is operating at full capacity with a value of 0.85 considered to be the maximum RFC value after which the junction will begin to experience some capacity issues. The results of the analysis are summarised in **Figure 5**.

	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
	2023 Existing Traffic - R483 / L6132 / L2036 Tullabrack Cross																	
Stream B-ACD	D1	0.0	0.6	10.72	0.02	B	1.23	A	784 % [Stream B-ACD]	D2	0.0	0.6	8.53	0.02	A	1.55	A	538 % [Stream D-ABC]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.7	11.05	0.02	B					0.1	0.6	10.28	0.05	B			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.6	6.53	0.01	A			
	2025 Forecast Traffic Flows (Grant of Planning - No Development)																	
Stream B-ACD	D3	0.0	0.6	10.68	0.03	B	1.26	A	749 % [Stream B-ACD]	D4	0.0	0.6	8.55	0.02	A	1.61	A	509 % [Stream D-ABC]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.7	11.08	0.02	B					0.1	0.6	10.35	0.05	B			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.6	6.52	0.01	A			
	2035 Forecast Traffic Flows (Planning Period - No Development)																	
Stream B-ACD	D5	0.0	0.6	10.55	0.03	B	1.38	A	627 % [Stream B-ACD]	D6	0.0	0.6	8.36	0.03	A	1.82	A	413 % [Stream D-ABC]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.6	10.73	0.03	B					0.1	0.6	10.37	0.07	B			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.6	6.68	0.01	A			
	2075 Forecast Traffic Flows (Operational Lifespan - No Development)																	
Stream B-ACD	D7	0.1	0.5	10.49	0.07	B	1.88	A	391 % [Stream B-ACD]	D8	0.1	0.5	8.22	0.06	A	1.97	A	303 % [Stream D-ABC]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.6	10.39	0.05	B					0.1	0.5	10.30	0.09	B			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
	2035 Forecast Traffic Flows + Development Construction Traffic (With Development)																	
Stream B-ACD	D9	0.2	0.8	14.78	0.09	B	4.41	A	313 % [Stream B-ACD]	D10	0.1	0.7	11.69	0.06	B	3.34	A	282 % [Stream D-ABC]
Stream A-BCD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.8	14.99	0.08	B					0.2	0.6	12.67	0.11	B			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	0.6	6.67	0.01	A			
	2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)																	
Stream B-ACD	**D11**	**0.2**	**0.7**	**14.30**	**0.13**	**B**	**4.23**	**A**	**225 % [Stream B-ACD]**	D12	0.1	0.6	10.59	0.09	B	3.90	A	170 % [Stream D-ABC]
Stream A-BCD		**0.0**	**~1**	**0.00**	**0.00**	**A**					0.0	~1	0.00	0.00	A			
Stream D-ABC		**0.2**	**0.7**	**14.03**	**0.10**	**B**					0.3	1.3	12.91	0.18	B			
Stream C-ABD		**0.0**	**~1**	**0.00**	**0.00**	**A**					0.0	0.6	7.14	0.01	A			

Figure 5: Traffic Analysis Summary for the R483 / L6132 / L2036 Junction

4.3 Traffic Analysis at the L2034 / L2036 Junction

A traffic analysis of the junction has been carried out to determine if the junction will operate within capacity for the following scenarios;

- 2023 Baseline traffic counts

- 2025 Projected traffic flows without the proposed Development (Planning Approval)
- 2035 Projected traffic flows without the proposed Development (Planning Period)
- 2075 Projected traffic flows without the proposed Development (Operations Period)
- 2035 Projected traffic flows with the proposed Development (Wind Farm Construction Traffic)
- 2075 Projected traffic flows with the proposed Development (Wind Farm Decommissioning Traffic)

The results of the analysis show that the L2034 / L2036 junction will not exceed the 0.85 ratio of flow to capacity (RFC) and will continue to operate with reserve capacity beyond 2075. The ratio of flow to capacity (RFC) is calculated from Junctions 9 PICADY software. An RFC value of 1.0 indicates that the junction is operating at full capacity with a value of 0.85 considered to be the maximum RFC value after which the junction will begin to experience some capacity issues. The results of the analysis are summarised in **Figure 6**.

	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
2023 Existing Traffic - L2034 / L2036 Junction																		
Stream B-ACD	D1	0.0	0.5	8.49	0.03	A	2.30	A	900 % []	D2	0.0	0.5	7.17	0.03	A	1.37	A	900 % []
Stream A-BCD		0.0	0.5	5.46	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.6	9.38	0.01	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	0.5	5.66	0.01	A					0.0	0.5	5.49	0.00	A			
2025 Forecast Traffic Flows (Grant of Planning - No Development)																		
Stream B-ACD	D3	0.0	0.5	8.52	0.03	A	2.37	A	900 % []	D4	0.0	0.5	7.20	0.04	A	1.43	A	900 % []
Stream A-BCD		0.0	0.5	5.46	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.6	9.38	0.01	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.0	0.5	5.49	0.00	A			
2035 Forecast Traffic Flows (Planning Period - No Development)																		
Stream B-ACD	D5	0.0	0.5	8.57	0.04	A	2.65	A	884 % [Stream B-ACD]	D6	0.1	0.5	7.31	0.05	A	2.10	A	900 % []
Stream A-BCD		0.0	0.5	5.45	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.5	9.20	0.02	A					0.0	0.6	10.15	0.01	B			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.0	0.5	5.47	0.00	A			
2075 Forecast Traffic Flows (Operational Lifespan - No Development)																		
Stream B-ACD	**D7**	**0.1**	**0.5**	**8.92**	**0.09**	**A**	**3.56**	**A**	**511 % [Stream B-ACD]**	D8	0.1	0.5	7.81	0.11	A	3.10	A	517 % [Stream B-ACD]
Stream A-BCD		**0.0**	**0.5**	**5.41**	**0.00**	**A**					0.0	~1	0.00	0.00	A			
Stream D-ABC		**0.0**	**0.5**	**8.87**	**0.03**	**A**					0.0	0.5	9.73	0.03	A			
Stream C-ABD		**0.0**	**~1**	**0.00**	**0.00**	**A**					0.0	~1	0.00	0.00	A			
2035 Forecast Traffic Flows + Development Construction Traffic (With Development)																		
Stream B-ACD	D9	0.2	0.7	12.72	0.10	B	6.66	A	401 % [Stream B-ACD]	D10	0.1	0.6	9.11	0.08	A	3.87	A	668 % [Stream B-ACD]
Stream A-BCD		0.0	0.5	5.45	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.8	14.51	0.07	B					0.0	0.6	10.26	0.01	B			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.1	0.7	8.44	0.03	A			
2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)																		

Stream B-ACD	D11	0.2	0.6	12.16	0.15	B	6.80	A	275 % [Stream B-ACD]	D12	0.2	0.6	9.11	0.13	A	4.42	A	396 % [Stream B-ACD]
Stream A-BCD		0.0	0.5	5.42	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.7	13.41	0.08	B					0.0	0.5	9.86	0.03	A			
Stream C-ABD		0.0	0.5	5.69	0.01	A					0.1	0.7	8.24	0.03	A			

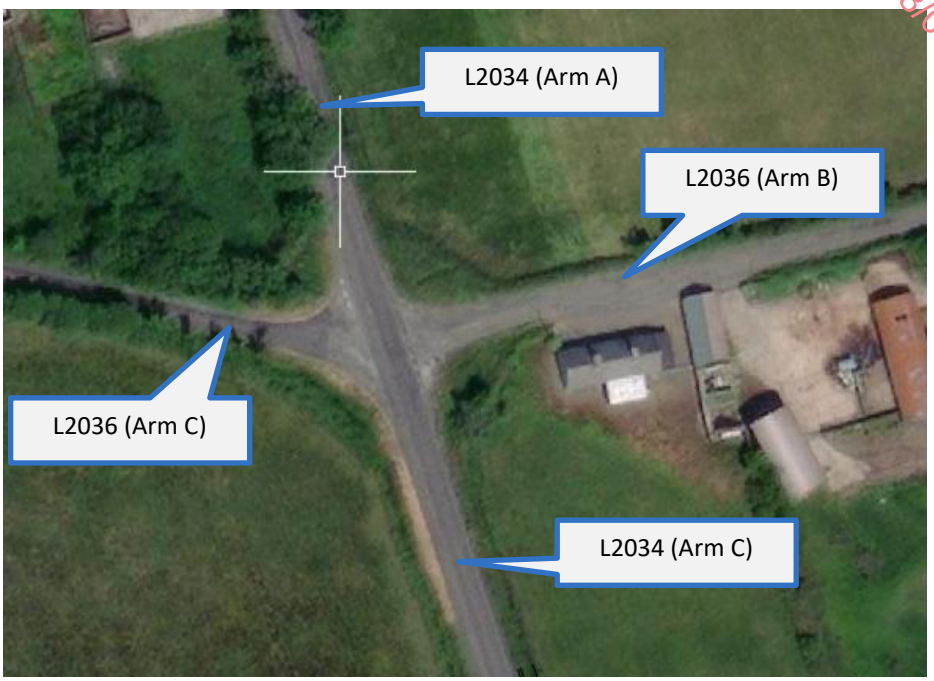


Figure 6: Traffic Analysis Summary for the L2034 / L2036 Junction

4.4 Traffic Analysis with Unrelated Consented and Proposed Developments

A traffic assessment was carried out during the construction (2035) and decommissioning (2070) of the proposed Development with additional traffic from unrelated planned and consented developments to determine if capacity problems would arise on the road network due to combined traffic volumes in the vicinity of the development. There are currently no major developments planned or consented in the vicinity of the proposed Development which would generate significant volumes of new trips on the public road network. In order to test the ability of the road network to cater for additional developments which may coincide with wind farm construction and decommissioning traffic, an analysis has been carried out with a 10% increase in public road traffic in addition to forecast traffic growth (TII) plus construction / decommissioning traffic to test the capacity of the public road network. The results of the analysis show that the L3034 / L2036 junction will not exceed the 0.85 ratio of flow to capacity (RFC) in 2035 or 2075 when wind farm construction / decommissioning traffic is combined with forecast traffic and traffic from future developments. The ratio of flow to capacity (RFC) is calculated from Junctions 9 PICADY software. An RFC value of 1.0 indicates that the junction is operating at full capacity with a value of 0.85 considered to be the maximum RFC value after which the junction will begin to experience some capacity issues. The results of the analysis are included in **Appendix A**.

4.5 Traffic Analysis for Temporary Traffic Lights

Temporary traffic lights will be required on the N68 and the L3034 to carry out works on the public road network during the construction of the proposed Development. The traffic analysis shows that motorists will experience delays of approximately 75 seconds when the temporary traffic lights are installed on the road network. The location and duration of traffic management using temporary traffic lights is detailed in the Traffic Management Plan.

5 SUMMARY

This TMP has been undertaken to outline the management of traffic movements during the construction, operation and decommissioning phases of the Moanmore Lower Wind Farm.

Increased volumes of traffic will be generated by the proposed Development during the construction and decommissioning periods. Traffic analysis carried out in the Traffic and Transport Assessment (TTA) report for the project shows that traffic generated by the proposed Development during the construction, operation and decommissioning phases of the Moanmore Lower Wind Farm can be accommodated on the existing public road network.

APPENDIX A

TRAFFIC ANALYSIS – L2034 / L2036 Junction

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: I2034 I2036 Junction - 2023 Existing Traffic.j9
Path: P:\Jod-jobs\6778 Moanmore WF\500 Environmental\503 EIA\16. Traffic and Transport\Final Appendices\Appendix 16.1 Traffic and Transport Assessment\Traffic analysis
Report generation date: 25/04/2025 09:32:37

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	Net Resi Cap
2023 Existing Traffic - L2034 / L2036 Junction																		
Stream B-ACD	D1	0.0	0.5	8.49	0.03	A	2.30	A	900 % []	D2	0.0	0.5	7.17	0.03	A	1.37	A	90 [
Stream A-BCD		0.0	0.5	5.46	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.6	9.38	0.01	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	0.5	5.66	0.01	A					0.0	0.5	5.49	0.00	A			
2025 Forecast Traffic Flows (Grant of Planning - No Development)																		
Stream B-ACD	D3	0.0	0.5	8.52	0.03	A	2.37	A	900 % []	D4	0.0	0.5	7.20	0.04	A	1.43	A	90 [
Stream A-BCD		0.0	0.5	5.46	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.6	9.38	0.01	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.0	0.5	5.49	0.00	A			
2035 Forecast Traffic Flows (Planning Period - No Development)																		
Stream B-ACD	D5	0.0	0.5	8.57	0.04	A	2.65	A	884 % [Stream B-ACD]	D6	0.1	0.5	7.31	0.05	A	2.10	A	90 [
Stream A-BCD		0.0	0.5	5.45	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.5	9.20	0.02	A					0.0	0.6	10.15	0.01	B			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.0	0.5	5.47	0.00	A			
2075 Forecast Traffic Flows (Operational Lifespan - No Development)																		
Stream B-ACD	D7	0.1	0.5	8.92	0.09	A	3.56	A	511 % [Stream B-ACD]	D8	0.1	0.5	7.81	0.11	A	3.10	A	51 [Str B-A
Stream A-BCD		0.0	0.5	5.41	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.0	0.5	8.87	0.03	A					0.0	0.5	9.73	0.03	A			
Stream C-ABD		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
2035 Forecast Traffic Flows + Development Construction Traffic (With Development)																		
Stream B-ACD	D9	0.2	0.7	12.72	0.10	B	6.66	A	401 % [Stream B-ACD]	D10	0.1	0.6	9.11	0.08	A	3.87	A	66 [Str B-A
Stream A-BCD		0.0	0.5	5.45	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.8	14.51	0.07	B					0.0	0.6	10.26	0.01	B			
Stream C-ABD		0.0	0.5	5.67	0.01	A					0.1	0.7	8.44	0.03	A			
2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)																		
Stream B-ACD	D11	0.2	0.6	12.16	0.15	B	6.80	A	275 % [Stream B-ACD]	D12	0.2	0.6	9.11	0.13	A	4.42	A	39 [Str B-A
Stream A-BCD		0.0	0.5	5.42	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.7	13.41	0.08	B					0.0	0.5	9.86	0.03	A			
Stream C-ABD		0.0	0.5	5.69	0.01	A					0.1	0.7	8.24	0.03	A			
2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic																		
Stream B-ACD	D13	0.2	0.7	12.98	0.12	B	6.78	A	339 % [Stream B-ACD]	D14	0.1	0.6	9.24	0.09	A	3.94	A	57 [Str B-A
Stream A-BCD		0.0	0.5	5.43	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.1	0.8	14.50	0.08	B					0.0	0.6	10.31	0.02	B			
Stream C-ABD		0.0	0.5	5.70	0.01	A					0.1	0.7	8.41	0.04	A			
2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic																		
Stream B-ACD	D15	0.3	1.3	12.50	0.17	B	6.97	A	235 % [Stream B-ACD]	D16	0.2	0.6	9.26	0.15	A	5.70	A	35 [Str B-A
Stream A-BCD		0.0	0.5	5.40	0.00	A					0.0	~1	0.00	0.00	A			
Stream D-ABC		0.2	0.7	13.43	0.10	B					0.0	0.5	9.72	0.03	A			
Stream C-ABD		0.0	0.5	5.70	0.02	A					0.1	0.7	8.74	0.04	A			

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

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

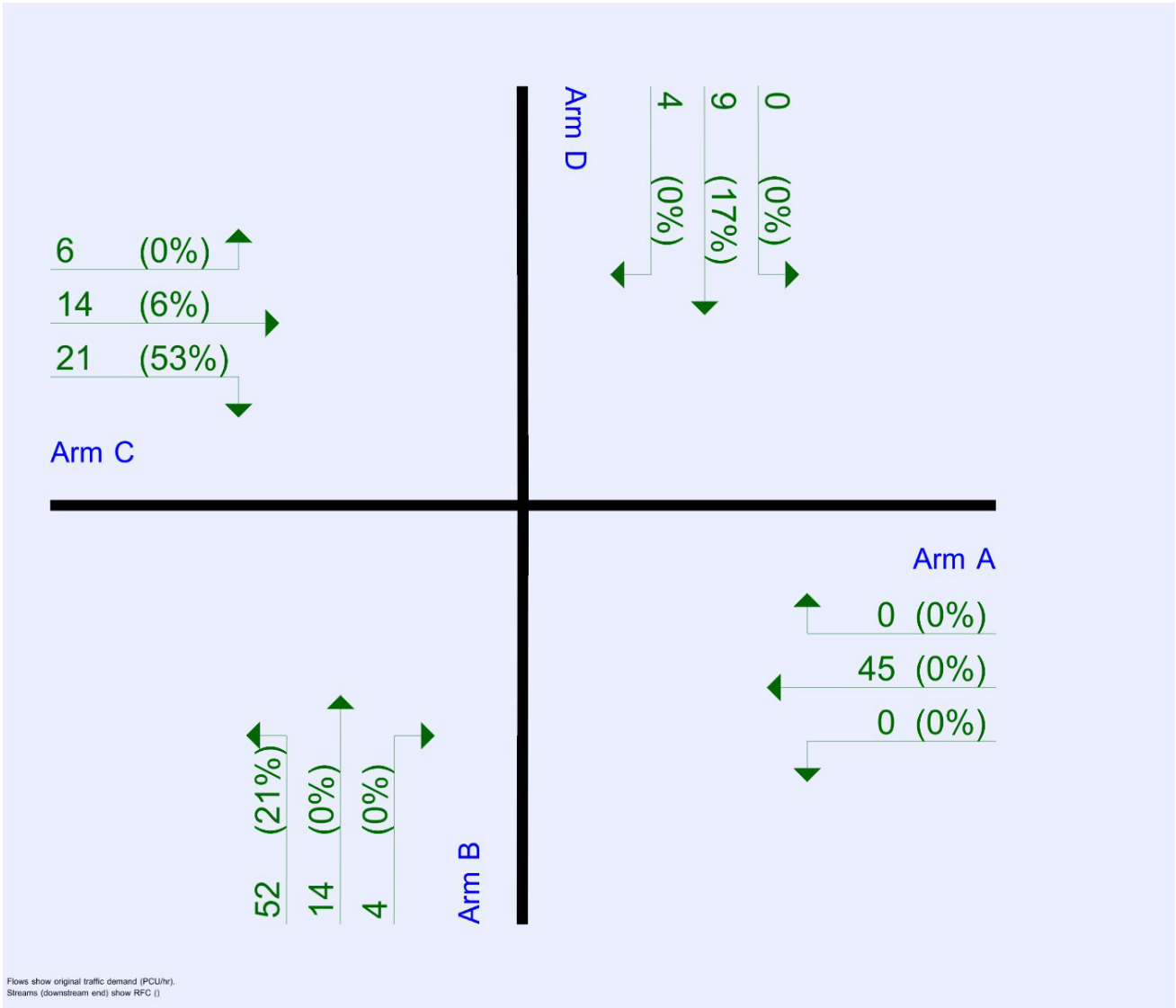
File summary

File Description

Title	N68 / L6132
Location	County Clare
Site number	
Date	25/01/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JODIRELAND\jdoogan
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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Existing Traffic - L2034 / L2036 Junction	AM	ONE HOUR	08:00	09:30	15
D2	2023 Existing Traffic - L2034 / L2036 Junction	PM	ONE HOUR	17:00	18:30	15
D3	2025 Forecast Traffic Flows (Grant of Planning - No Development)	AM	ONE HOUR	08:00	09:30	15
D4	2025 Forecast Traffic Flows (Grant of Planning - No Development)	PM	ONE HOUR	17:00	18:30	15
D5	2035 Forecast Traffic Flows (Planning Period - No Development)	AM	ONE HOUR	08:00	09:30	15
D6	2035 Forecast Traffic Flows (Planning Period - No Development)	PM	ONE HOUR	17:00	18:30	15
D7	2075 Forecast Traffic Flows (Operational Lifespan - No Development)	AM	ONE HOUR	08:00	09:30	15
D8	2075 Forecast Traffic Flows (Operational Lifespan - No Development)	PM	ONE HOUR	17:00	18:30	15
D9	2035 Forecast Traffic Flows + Development Construction Traffic (With Development)	AM	ONE HOUR	08:00	09:30	15
D10	2035 Forecast Traffic Flows + Development Construction Traffic (With Development)	PM	ONE HOUR	17:00	18:30	15
D11	2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)	AM	ONE HOUR	08:00	09:30	15
D12	2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)	PM	ONE HOUR	17:00	18:30	15
D13	2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic	AM	ONE HOUR	08:00	09:30	15
D14	2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic	PM	ONE HOUR	17:00	18:30	15
D15	2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic	AM	ONE HOUR	08:00	09:30	15
D16	2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Existing Traffic - L2034 / L2036 Junction, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Arms

Arms

Arm	Name	Description	Arm type
A	l2034 North		Major
B	L2036 east		Minor
C	L2034 south		Major
D	l2036 west		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	5.00			120.0	✓	0.00
C	5.00			120.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	10	10
D	One lane	2.20	10	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	643	-	-	-	-	-	-	0.260	0.372	0.260	-	-	-
B-A	447	0.085	0.215	0.215	-	-	-	0.135	0.307	-	0.215	0.215	0.107
B-C	580	0.093	0.234	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	447	0.085	0.215	0.215	-	-	-	0.135	0.307	0.135	-	-	-
B-D, offside lane	447	0.085	0.215	0.215	-	-	-	0.135	0.307	0.135	-	-	-
C-B	643	0.260	0.260	0.372	-	-	-	-	-	-	-	-	-
D-A	580	-	-	-	-	-	-	0.234	-	0.093	-	-	-
D-B, nearside lane	447	0.135	0.135	0.307	-	-	-	0.215	0.215	0.085	-	-	-
D-B, offside lane	447	0.135	0.135	0.307	-	-	-	0.215	0.215	0.085	-	-	-
D-C	447	-	0.135	0.307	0.107	0.215	0.215	0.215	0.215	0.085	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Existing Traffic - L2034 / L2036 Junction	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	45	100.000
B		✓	13	100.000
C		✓	23	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	43	1
	B	5	0	4	4
	C	17	6	0	0
	D	1	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	25	0
	C	0	0	0	0
	D	0	33	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.03	8.49	0.0	0.5	A
A-BCD	0.00	5.46	0.0	0.5	A
A-B					
A-C					
D-ABC	0.01	9.38	0.0	0.6	A
C-ABD	0.01	5.66	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	471	0.021	10	0.0	8.322	A
A-BCD	0.79	660	0.001	0.79	0.0	5.461	A
A-B	0.75			0.75			
A-C	32			32			
D-ABC	4	460	0.008	4	0.0	9.265	A
C-ABD	5	643	0.007	5	0.0	5.639	A
C-D	0			0			
C-A	13			13			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	469	0.025	12	0.0	8.394	A
A-BCD	0.96	663	0.001	0.96	0.0	5.437	A
A-B	0.90			0.90			
A-C	39			39			
D-ABC	4	459	0.010	4	0.0	9.312	A
C-ABD	6	643	0.009	6	0.0	5.648	A
C-D	0			0			
C-A	15			15			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	466	0.031	14	0.0	8.494	A
A-BCD	1	667	0.002	1	0.0	5.402	A
A-B	1			1			
A-C	47			47			
D-ABC	6	456	0.012	5	0.0	9.379	A
C-ABD	7	643	0.011	7	0.0	5.661	A
C-D	0			0			
C-A	19			19			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	466	0.031	14	0.0	8.494	A
A-BCD	1	667	0.002	1	0.0	5.402	A
A-B	1			1			
A-C	47			47			
D-ABC	6	456	0.012	6	0.0	9.379	A
C-ABD	7	643	0.011	7	0.0	5.663	A
C-D	0			0			
C-A	19			19			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	469	0.025	12	0.0	8.397	A
A-BCD	0.96	663	0.001	0.96	0.0	5.439	A
A-B	0.90			0.90			
A-C	39			39			
D-ABC	4	459	0.010	5	0.0	9.315	A
C-ABD	6	643	0.009	6	0.0	5.649	A
C-D	0			0			
C-A	15			15			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	471	0.021	10	0.0	8.326	A
A-BCD	0.79	660	0.001	0.79	0.0	5.464	A
A-B	0.75			0.75			
A-C	32			32			
D-ABC	4	460	0.008	4	0.0	9.267	A
C-ABD	5	643	0.007	5	0.0	5.642	A
C-D	0			0			
C-A	13			13			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.03	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.01	0.01	0.29	0.53	0.56			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.03	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Existing Traffic - L2034 / L2036 Junction, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		1.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

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)
D2	2023 Existing Traffic - L2034 / L2036 Junction	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	31	100.000
B		✓	16	100.000
C		✓	45	100.000
D		✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	31	0
	B	1	0	11	4
	C	39	2	0	4
	D	0	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	3	0	0	0
	D	0	33	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.03	7.17	0.0	0.5	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.00	0.00	0.0	~1	A
C-ABD	0.00	5.49	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	523	0.023	12	0.0	7.044	A
A-BCD	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	23			23			
D-ABC	0	464	0.000	0	0.0	0.000	A
C-ABD	2	658	0.002	2	0.0	5.488	A
C-D	3			3			
C-A	29			29			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	522	0.028	14	0.0	7.097	A
A-BCD	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	28			28			
D-ABC	0	462	0.000	0	0.0	0.000	A
C-ABD	2	661	0.003	2	0.0	5.467	A
C-D	4			4			
C-A	35			35			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	18	520	0.034	18	0.0	7.171	A
A-BCD	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	34			34			
D-ABC	0	459	0.000	0	0.0	0.000	A
C-ABD	2	665	0.004	2	0.0	5.439	A
C-D	4			4			
C-A	43			43			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	18	520	0.034	18	0.0	7.171	A
A-BCD	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	34			34			
D-ABC	0	459	0.000	0	0.0	0.000	A
C-ABD	2	665	0.004	2	0.0	5.440	A
C-D	4			4			
C-A	43			43			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	522	0.028	14	0.0	7.100	A
A-BCD	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	28			28			
D-ABC	0	462	0.000	0	0.0	0.000	A
C-ABD	2	661	0.003	2	0.0	5.469	A
C-D	4			4			
C-A	35			35			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	523	0.023	12	0.0	7.044	A
A-BCD	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	23			23			
D-ABC	0	464	0.000	0	0.0	0.000	A
C-ABD	2	658	0.002	2	0.0	5.489	A
C-D	3			3			
C-A	29			29			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

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-ACD	0.03	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	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-ACD	0.03	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:15 - 18:30

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2025 Forecast Traffic Flows (Grant of Planning - No Development), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

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)
D3	2025 Forecast Traffic Flows (Grant of Planning - No Development)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	46	100.000
B		✓	14	100.000
C		✓	24	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	44	1
	B	5	0	4	4
	C	18	6	0	0
	D	1	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	25	0
	C	0	0	0	0
	D	0	33	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.03	8.52	0.0	0.5	A
A-BCD	0.00	5.46	0.0	0.5	A
A-B					
A-C					
D-ABC	0.01	9.38	0.0	0.6	A
C-ABD	0.01	5.67	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	470	0.022	10	0.0	8.340	A
A-BCD	0.82	660	0.001	0.81	0.0	5.458	A
A-B	0.77			0.77			
A-C	33			33			
D-ABC	4	460	0.009	4	0.0	9.261	A
C-ABD	5	643	0.007	5	0.0	5.641	A
C-D	0			0			
C-A	13			13			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	468	0.027	13	0.0	8.419	A
A-BCD	0.99	664	0.001	0.99	0.0	5.432	A
A-B	0.92			0.92			
A-C	40			40			
D-ABC	5	459	0.010	5	0.0	9.311	A
C-ABD	6	643	0.009	6	0.0	5.650	A
C-D	0			0			
C-A	16			16			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	465	0.033	15	0.0	8.525	A
A-BCD	1	668	0.002	1	0.0	5.397	A
A-B	1			1			
A-C	49			49			
D-ABC	6	456	0.013	6	0.0	9.380	A
C-ABD	7	643	0.011	7	0.0	5.663	A
C-D	0			0			
C-A	19			19			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	465	0.033	15	0.0	8.525	A
A-BCD	1	668	0.002	1	0.0	5.399	A
A-B	1			1			
A-C	49			49			
D-ABC	6	456	0.013	6	0.0	9.380	A
C-ABD	7	643	0.011	7	0.0	5.665	A
C-D	0			0			
C-A	19			19			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	468	0.027	13	0.0	8.420	A
A-BCD	0.99	664	0.001	0.99	0.0	5.432	A
A-B	0.92			0.92			
A-C	40			40			
D-ABC	5	459	0.010	5	0.0	9.311	A
C-ABD	6	643	0.009	6	0.0	5.650	A
C-D	0			0			
C-A	16			16			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	470	0.022	11	0.0	8.346	A
A-BCD	0.82	660	0.001	0.82	0.0	5.460	A
A-B	0.77			0.77			
A-C	33			33			
D-ABC	4	460	0.009	4	0.0	9.262	A
C-ABD	5	643	0.007	5	0.0	5.641	A
C-D	0			0			
C-A	13			13			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.03	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.01	0.01	0.29	0.53	0.56			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.04	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2025 Forecast Traffic Flows (Grant of Planning - No Development), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		1.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

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)
D4	2025 Forecast Traffic Flows (Grant of Planning - No Development)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	32	100.000
B		✓	17	100.000
C		✓	46	100.000
D		✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	32	0
	B	1	0	12	4
	C	40	2	0	4
	D	0	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	3	0	0	0
	D	0	33	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.04	7.20	0.0	0.5	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.00	0.00	0.0	~1	A
C-ABD	0.00	5.49	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	523	0.025	13	0.0	7.058	A
A-BCD	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	24			24			
D-ABC	0	463	0.000	0	0.0	0.000	A
C-ABD	2	659	0.002	2	0.0	5.485	A
C-D	3			3			
C-A	30			30			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	521	0.030	16	0.0	7.117	A
A-BCD	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	29			29			
D-ABC	0	461	0.000	0	0.0	0.000	A
C-ABD	2	662	0.003	2	0.0	5.463	A
C-D	4			4			
C-A	36			36			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	519	0.037	19	0.0	7.196	A
A-BCD	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	35			35			
D-ABC	0	458	0.000	0	0.0	0.000	A
C-ABD	2	666	0.004	2	0.0	5.435	A
C-D	5			5			
C-A	44			44			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	519	0.037	19	0.0	7.196	A
A-BCD	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	35			35			
D-ABC	0	458	0.000	0	0.0	0.000	A
C-ABD	2	666	0.004	2	0.0	5.438	A
C-D	5			5			
C-A	44			44			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	521	0.030	16	0.0	7.117	A
A-BCD	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	29			29			
D-ABC	0	461	0.000	0	0.0	0.000	A
C-ABD	2	662	0.003	2	0.0	5.465	A
C-D	4			4			
C-A	36			36			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	523	0.025	13	0.0	7.064	A
A-BCD	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	24			24			
D-ABC	0	463	0.000	0	0.0	0.000	A
C-ABD	2	659	0.002	2	0.0	5.485	A
C-D	3			3			
C-A	30			30			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

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-ACD	0.03	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	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-ACD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	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-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:15 - 18:30

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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2035 Forecast Traffic Flows (Planning Period - No Development) , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.65	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	884	Stream B-ACD

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)
D5	2035 Forecast Traffic Flows (Planning Period - No Development)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	51	100.000
B		✓	19	100.000
C		✓	26	100.000
D		✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	49	1
	B	7	0	6	6
	C	19	7	0	0
	D	1	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	20	0
	C	0	0	0	0
	D	0	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.04	8.57	0.0	0.5	A
A-BCD	0.00	5.45	0.0	0.5	A
A-B					
A-C					
D-ABC	0.02	9.20	0.0	0.5	A
C-ABD	0.01	5.67	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	468	0.030	14	0.0	8.343	A
A-BCD	0.90	662	0.001	0.90	0.0	5.445	A
A-B	0.85			0.85			
A-C	37			37			
D-ABC	5	460	0.011	5	0.0	9.063	A
C-ABD	5	643	0.008	5	0.0	5.645	A
C-D	0			0			
C-A	14			14			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	465	0.036	17	0.0	8.440	A
A-BCD	1	666	0.002	1	0.0	5.417	A
A-B	1			1			
A-C	44			44			
D-ABC	6	458	0.014	6	0.0	9.122	A
C-ABD	6	643	0.010	6	0.0	5.656	A
C-D	0			0			
C-A	17			17			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	462	0.045	21	0.0	8.573	A
A-BCD	1	671	0.002	1	0.0	5.378	A
A-B	1			1			
A-C	53			53			
D-ABC	8	456	0.017	8	0.0	9.202	A
C-ABD	8	643	0.012	8	0.0	5.670	A
C-D	0			0			
C-A	21			21			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	462	0.045	21	0.0	8.573	A
A-BCD	1	671	0.002	1	0.0	5.378	A
A-B	1			1			
A-C	53			53			
D-ABC	8	456	0.017	8	0.0	9.202	A
C-ABD	8	643	0.012	8	0.0	5.672	A
C-D	0			0			
C-A	21			21			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	465	0.036	17	0.0	8.442	A
A-BCD	1	666	0.002	1	0.0	5.417	A
A-B	1			1			
A-C	44			44			
D-ABC	6	458	0.014	6	0.0	9.124	A
C-ABD	6	643	0.010	6	0.0	5.656	A
C-D	0			0			
C-A	17			17			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	468	0.030	14	0.0	8.350	A
A-BCD	0.90	662	0.001	0.90	0.0	5.447	A
A-B	0.85			0.85			
A-C	37			37			
D-ABC	5	460	0.011	5	0.0	9.067	A
C-ABD	5	643	0.008	5	0.0	5.646	A
C-D	0			0			
C-A	14			14			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.04	0.03	0.26	0.48	0.50			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.02	0.02	0.29	0.52	0.55			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.05	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2035 Forecast Traffic Flows (Planning Period - No Development) , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

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)
D6	2035 Forecast Traffic Flows (Planning Period - No Development)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	35	100.000
B		✓	24	100.000
C		✓	51	100.000
D		✓	6	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	35	0
	B	1	0	16	6
	C	44	2	0	5
	D	0	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	3	0	0	0
	D	0	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.05	7.31	0.1	0.5	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.01	10.15	0.0	0.6	B
C-ABD	0.00	5.47	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	18	522	0.034	18	0.0	7.135	A
A-BCD	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	26			26			
D-ABC	4	435	0.010	4	0.0	9.963	A
C-ABD	2	660	0.003	2	0.0	5.473	A
C-D	3			3			
C-A	33			33			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	520	0.041	21	0.0	7.211	A
A-BCD	0	631	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	5	432	0.012	5	0.0	10.040	B
C-ABD	2	664	0.003	2	0.0	5.450	A
C-D	4			4			
C-A	40			40			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	26	518	0.050	26	0.1	7.314	A
A-BCD	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	39			39			
D-ABC	6	429	0.014	6	0.0	10.146	B
C-ABD	3	668	0.004	3	0.0	5.418	A
C-D	5			5			
C-A	49			49			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	26	518	0.050	26	0.1	7.314	A
A-BCD	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	39			39			
D-ABC	6	429	0.014	6	0.0	10.146	B
C-ABD	3	668	0.004	3	0.0	5.419	A
C-D	5			5			
C-A	49			49			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	520	0.041	21	0.0	7.212	A
A-BCD	0	631	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	5	432	0.012	5	0.0	10.043	B
C-ABD	2	664	0.003	2	0.0	5.452	A
C-D	4			4			
C-A	40			40			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	18	522	0.034	18	0.0	7.139	A
A-BCD	0	633	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	26			26			
D-ABC	4	435	0.010	4	0.0	9.966	A
C-ABD	2	660	0.003	2	0.0	5.474	A
C-D	3			3			
C-A	33			33			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

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-ACD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.01	0.30	0.54	0.57			N/A	N/A
C-ABD	0.00	0.00	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-ACD	0.05	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	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-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	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-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:15 - 18:30

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-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2075 Forecast Traffic Flows (Operational Lifespan - No Development), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.56	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	511	Stream B-ACD

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)
D7	2075 Forecast Traffic Flows (Operational Lifespan - No Development)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	59	100.000
B		✓	39	100.000
C		✓	22	100.000
D		✓	14	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	57	1
	B	16	0	11	13
	C	22	0	0	0
	D	3	8	3	0

Vehicle Mix

Heavy Vehicle Percentages

From \ To	A	B	C	D
A	0	0	0	0
B	0	0	12	0
C	0	0	0	0
D	0	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.09	8.92	0.1	0.5	A
A-BCD	0.00	5.41	0.0	0.5	A
A-B					
A-C					
D-ABC	0.03	8.87	0.0	0.5	A
C-ABD	0.00	0.00	0.0	~1	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	465	0.063	29	0.1	8.513	A
A-BCD	1	667	0.002	1	0.0	5.403	A
A-B	0.99			0.99			
A-C	43			43			
D-ABC	10	461	0.023	10	0.0	8.676	A
C-ABD	0	632	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	17			17			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	35	462	0.076	35	0.1	8.684	A
A-BCD	1	672	0.002	1	0.0	5.367	A
A-B	1			1			
A-C	51			51			
D-ABC	12	459	0.027	12	0.0	8.758	A
C-ABD	0	629	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	20			20			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	459	0.094	43	0.1	8.917	A
A-BCD	2	678	0.002	2	0.0	5.319	A
A-B	1			1			
A-C	62			62			
D-ABC	15	456	0.034	15	0.0	8.869	A
C-ABD	0	626	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	25			25			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	459	0.094	43	0.1	8.921	A
A-BCD	2	678	0.002	2	0.0	5.319	A
A-B	1			1			
A-C	62			62			
D-ABC	15	456	0.034	15	0.0	8.869	A
C-ABD	0	626	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	25			25			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	35	462	0.076	35	0.1	8.691	A
A-BCD	1	672	0.002	1	0.0	5.370	A
A-B	1			1			
A-C	51			51			
D-ABC	12	459	0.027	13	0.0	8.761	A
C-ABD	0	629	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	20			20			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	465	0.063	29	0.1	8.526	A
A-BCD	1	667	0.002	1	0.0	5.405	A
A-B	0.99			0.99			
A-C	43			43			
D-ABC	10	461	0.023	10	0.0	8.682	A
C-ABD	0	632	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	17			17			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

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-ACD	0.08	0.03	0.26	0.48	0.50			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.03	0.03	0.27	0.49	0.52			N/A	N/A
C-ABD	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-ACD	0.11	0.03	0.27	0.48	0.51			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.04	0.03	0.27	0.49	0.52			N/A	N/A
C-ABD	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-ACD	0.11	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	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-ACD	0.09	0.00	0.00	0.09	0.09			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

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-ACD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2075 Forecast Traffic Flows (Operational Lifespan - No Development), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	517	Stream B-ACD

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)
D8	2075 Forecast Traffic Flows (Operational Lifespan - No Development)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	41	100.000
B		✓	50	100.000
C		✓	59	100.000
D		✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	41	0
	B	3	0	35	13
	C	53	0	0	5
	D	0	8	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.11	7.81	0.1	0.5	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.03	9.73	0.0	0.5	A
C-ABD	0.00	0.00	0.0	~1	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	521	0.073	38	0.1	7.445	A
A-BCD	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	8	432	0.019	8	0.0	9.471	A
C-ABD	0	635	0.000	0	0.0	0.000	A
C-D	4			4			
C-A	40			40			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	45	519	0.087	45	0.1	7.600	A
A-BCD	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	37			37			
D-ABC	10	428	0.023	10	0.0	9.579	A
C-ABD	0	634	0.000	0	0.0	0.000	A
C-D	5			5			
C-A	48			48			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	55	516	0.107	55	0.1	7.808	A
A-B-C-D	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	45			45			
D-ABC	12	424	0.028	12	0.0	9.726	A
C-A-B-D	0	632	0.000	0	0.0	0.000	A
C-D	6			6			
C-A	59			59			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	55	516	0.107	55	0.1	7.811	A
A-B-C-D	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	45			45			
D-ABC	12	424	0.028	12	0.0	9.726	A
C-A-B-D	0	632	0.000	0	0.0	0.000	A
C-D	6			6			
C-A	59			59			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	45	519	0.087	45	0.1	7.606	A
A-B-C-D	0	630	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	37			37			
D-ABC	10	428	0.023	10	0.0	9.581	A
C-A-B-D	0	634	0.000	0	0.0	0.000	A
C-D	5			5			
C-A	48			48			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	521	0.073	38	0.1	7.459	A
A-B-C-D	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	8	431	0.019	8	0.0	9.477	A
C-A-B-D	0	635	0.000	0	0.0	0.000	A
C-D	4			4			
C-A	40			40			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-B-C-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-A-B-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A

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-ACD	0.09	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.03	0.28	0.50	0.53			N/A	N/A
C-ABD	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-ACD	0.12	0.03	0.26	0.47	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	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-ACD	0.12	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	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-ACD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:15 - 18:30

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-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2035 Forecast Traffic Flows + Development Construction Traffic (With Development), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	401	Stream B-ACD

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)
D9	2035 Forecast Traffic Flows + Development Construction Traffic (With Development)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	51	100.000
B		✓	42	100.000
C		✓	26	100.000
D		✓	27	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	49	1
	B	7	0	6	29
	C	19	7	0	0
	D	1	24	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	20	62
	C	0	0	0	0
	D	0	79	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.10	12.72	0.2	0.7	B
A-BCD	0.00	5.45	0.0	0.5	A
A-B					
A-C					
D-ABC	0.07	14.51	0.1	0.8	B
C-ABD	0.01	5.67	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	449	0.070	31	0.1	12.079	B
A-BCD	0.90	662	0.001	0.90	0.0	5.445	A
A-B	0.85			0.85			
A-C	37			37			
D-ABC	20	443	0.046	20	0.1	14.017	B
C-ABD	5	643	0.008	5	0.0	5.645	A
C-D	0			0			
C-A	14			14			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	446	0.084	38	0.1	12.351	B
A-BCD	1	666	0.002	1	0.0	5.417	A
A-B	1			1			
A-C	44			44			
D-ABC	24	441	0.055	24	0.1	14.230	B
C-ABD	6	643	0.010	6	0.0	5.656	A
C-D	0			0			
C-A	17			17			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	46	443	0.104	46	0.2	12.715	B
A-BCD	1	671	0.002	1	0.0	5.378	A
A-B	1			1			
A-C	53			53			
D-ABC	30	438	0.068	30	0.1	14.507	B
C-ABD	8	643	0.012	8	0.0	5.670	A
C-D	0			0			
C-A	21			21			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	46	443	0.104	46	0.2	12.723	B
A-BCD	1	671	0.002	1	0.0	5.378	A
A-B	1			1			
A-C	53			53			
D-ABC	30	438	0.068	30	0.1	14.513	B
C-ABD	8	643	0.012	8	0.0	5.672	A
C-D	0			0			
C-A	21			21			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	446	0.084	38	0.1	12.364	B
A-BCD	1	666	0.002	1	0.0	5.417	A
A-B	1			1			
A-C	44			44			
D-ABC	24	441	0.055	24	0.1	14.239	B
C-ABD	6	643	0.010	6	0.0	5.656	A
C-D	0			0			
C-A	17			17			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	449	0.070	32	0.1	12.112	B
A-BCD	0.90	662	0.001	0.90	0.0	5.447	A
A-B	0.85			0.85			
A-C	37			37			
D-ABC	20	443	0.046	20	0.1	14.044	B
C-ABD	5	643	0.008	5	0.0	5.646	A
C-D	0			0			
C-A	14			14			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.13	0.04	0.35	0.63	0.67			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.09	0.04	0.42	0.75	0.79			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.16	0.04	0.36	0.66	0.69			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.12	0.04	0.43	0.77	0.81			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.16	0.04	0.35	0.63	0.67			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.12	0.04	0.41	0.74	0.78			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			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-ACD	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2035 Forecast Traffic Flows + Development Construction Traffic (With Development) PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.87	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	668	Stream B-ACD

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)
D10	2035 Forecast Traffic Flows + Development Construction Traffic (With Development)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	35	100.000
B		✓	37	100.000
C		✓	67	100.000
D		✓	6	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	35	0
	B	1	0	30	6
	C	44	18	0	5
	D	0	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	33	0
	C	3	56	0	0
	D	0	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.08	9.11	0.1	0.6	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.01	10.26	0.0	0.6	B
C-ABD	0.03	8.44	0.1	0.7	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	28	539	0.052	28	0.1	8.794	A
A-BCD	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	26			26			
D-ABC	4	431	0.010	4	0.0	10.037	B
C-ABD	14	660	0.022	14	0.0	8.443	A
C-D	3			3			
C-A	33			33			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	34	537	0.063	34	0.1	8.927	A
A-BCD	0	626	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	5	428	0.012	5	0.0	10.130	B
C-ABD	17	664	0.026	17	0.0	8.418	A
C-D	4			4			
C-A	39			39			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	41	535	0.077	41	0.1	9.107	A
A-B-C-D	0	622	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	39			39			
D-ABC	6	424	0.014	6	0.0	10.259	B
C-ABD	22	668	0.032	22	0.1	8.359	A
C-D	5			5			
C-A	47			47			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	41	535	0.077	41	0.1	9.108	A
A-B-C-D	0	622	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	39			39			
D-ABC	6	424	0.014	6	0.0	10.259	B
C-ABD	22	668	0.032	22	0.1	8.332	A
C-D	5			5			
C-A	47			47			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	34	537	0.063	34	0.1	8.933	A
A-B-C-D	0	626	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	5	428	0.012	5	0.0	10.132	B
C-ABD	17	664	0.026	17	0.0	8.364	A
C-D	4			4			
C-A	39			39			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	28	539	0.052	28	0.1	8.806	A
A-B-C-D	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	26			26			
D-ABC	4	431	0.010	4	0.0	10.040	B
C-ABD	14	660	0.022	14	0.0	8.421	A
C-D	3			3			
C-A	33			33			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-B-C-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

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-ACD	0.08	0.03	0.31	0.57	0.60			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.01	0.30	0.54	0.57			N/A	N/A
C-ABD	0.05	0.04	0.38	0.68	0.72			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-ACD	0.10	0.03	0.32	0.58	0.62			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.06	0.04	0.37	0.67	0.71			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-ACD	0.10	0.03	0.31	0.56	0.59			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			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-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:15 - 18:30

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-ACD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.80	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	275	Stream B-ACD

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)
D11	2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	59	100.000
B		✓	62	100.000
C		✓	30	100.000
D		✓	33	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	57	1
	B	16	0	11	36
	C	22	8	0	0
	D	3	27	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	12	50
	C	0	0	0	0
	D	0	70	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.15	12.16	0.2	0.6	B
A-BCD	0.00	5.42	0.0	0.5	A
A-B					
A-C					
D-ABC	0.08	13.41	0.1	0.7	B
C-ABD	0.01	5.69	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	47	451	0.104	46	0.1	11.269	B
A-BCD	1	665	0.002	1	0.0	5.421	A
A-B	0.99			0.99			
A-C	43			43			
D-ABC	25	445	0.056	25	0.1	12.846	B
C-ABD	6	643	0.010	6	0.0	5.654	A
C-D	0			0			
C-A	17			17			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	56	448	0.125	56	0.2	11.640	B
A-BCD	1	669	0.002	1	0.0	5.388	A
A-B	1			1			
A-C	51			51			
D-ABC	30	443	0.068	30	0.1	13.087	B
C-ABD	7	643	0.011	7	0.0	5.666	A
C-D	0			0			
C-A	20			20			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	69	444	0.155	69	0.2	12.150	B
A-BCD	2	675	0.002	2	0.0	5.344	A
A-B	1			1			
A-C	62			62			
D-ABC	37	440	0.083	37	0.1	13.403	B
C-ABD	9	642	0.014	9	0.0	5.683	A
C-D	0			0			
C-A	24			24			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	69	444	0.155	69	0.2	12.162	B
A-BCD	2	675	0.002	2	0.0	5.346	A
A-B	1			1			
A-C	62			62			
D-ABC	37	440	0.083	37	0.1	13.409	B
C-ABD	9	642	0.014	9	0.0	5.685	A
C-D	0			0			
C-A	24			24			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	56	448	0.125	56	0.2	11.661	B
A-BCD	1	669	0.002	1	0.0	5.390	A
A-B	1			1			
A-C	51			51			
D-ABC	30	443	0.068	30	0.1	13.095	B
C-ABD	7	643	0.011	7	0.0	5.667	A
C-D	0			0			
C-A	20			20			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	47	451	0.104	47	0.1	11.309	B
A-BCD	1	665	0.002	1	0.0	5.423	A
A-B	0.99			0.99			
A-C	43			43			
D-ABC	25	445	0.056	25	0.1	12.874	B
C-ABD	6	643	0.010	6	0.0	5.657	A
C-D	0			0			
C-A	17			17			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.18	0.00	0.00	0.18	0.18			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.11	0.04	0.38	0.68	0.72			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.23	0.03	0.33	0.59	0.62			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.13	0.04	0.39	0.70	0.74			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.23	0.03	0.33	0.60	0.63			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.14	0.04	0.38	0.68	0.71			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.18	0.00	0.00	0.18	0.18			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.42	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	396	Stream B-ACD

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)
D12	2075 Forecast Traffic Flows + Development Decommissioning Traffic (With Development)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	41	100.000
B		✓	63	100.000
C		✓	78	100.000
D		✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	41	0
	B	3	0	47	13
	C	53	19	0	5
	D	0	8	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	21	0
	C	6	53	0	0
	D	0	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.13	9.11	0.2	0.6	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.03	9.86	0.0	0.5	A
C-ABD	0.03	8.24	0.1	0.7	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	47	529	0.089	47	0.1	8.581	A
A-BCD	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	8	428	0.019	8	0.0	9.554	A
C-ABD	15	664	0.023	15	0.0	8.241	A
C-D	4			4			
C-A	39			39			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	56	526	0.107	56	0.1	8.800	A
A-BCD	0	623	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	37			37			
D-ABC	10	424	0.023	10	0.0	9.682	A
C-ABD	19	668	0.028	19	0.0	8.209	A
C-D	5			5			
C-A	47			47			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	69	523	0.132	69	0.2	9.102	A
A-BCD	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	45			45			
D-ABC	12	419	0.028	12	0.0	9.856	A
C-ABD	23	674	0.034	23	0.1	8.142	A
C-D	6			6			
C-A	57			57			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	69	523	0.132	69	0.2	9.107	A
A-BCD	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	45			45			
D-ABC	12	419	0.028	12	0.0	9.857	A
C-ABD	23	674	0.034	23	0.1	8.115	A
C-D	6			6			
C-A	57			57			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	56	526	0.107	57	0.1	8.809	A
A-BCD	0	623	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	37			37			
D-ABC	10	424	0.023	10	0.0	9.684	A
C-ABD	19	668	0.028	19	0.0	8.155	A
C-D	5			5			
C-A	47			47			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	47	529	0.089	47	0.1	8.600	A
A-BCD	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	31			31			
D-ABC	8	428	0.019	8	0.0	9.563	A
C-ABD	15	664	0.023	15	0.0	8.217	A
C-D	4			4			
C-A	39			39			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

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-ACD	0.14	0.00	0.00	0.14	0.14			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.03	0.28	0.50	0.53			N/A	N/A
C-ABD	0.05	0.04	0.37	0.67	0.71			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-ACD	0.17	0.03	0.30	0.53	0.56			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.06	0.04	0.37	0.66	0.70			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-ACD	0.17	0.03	0.29	0.52	0.55			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			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-ACD	0.14	0.00	0.00	0.14	0.14			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:15 - 18:30

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-ACD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	339	Stream B-ACD

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)
D13	2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	59	100.000
B		✓	48	100.000
C		✓	29	100.000
D		✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	55	2
	B	8	0	7	33
	C	21	8	0	0
	D	2	27	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	20	62
	C	0	0	0	0
	D	0	79	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.12	12.98	0.2	0.7	B
A-BCD	0.00	5.43	0.0	0.5	A
A-B					
A-C					
D-ABC	0.08	14.50	0.1	0.8	B
C-ABD	0.01	5.70	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	36	448	0.081	36	0.1	12.227	B
A-BCD	2	665	0.002	2	0.0	5.427	A
A-B	2			2			
A-C	41			41			
D-ABC	23	442	0.053	23	0.1	13.929	B
C-ABD	6	642	0.010	6	0.0	5.661	A
C-D	0			0			
C-A	16			16			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	446	0.097	43	0.1	12.545	B
A-BCD	2	669	0.003	2	0.0	5.396	A
A-B	2			2			
A-C	49			49			
D-ABC	28	440	0.063	28	0.1	14.171	B
C-ABD	7	642	0.012	7	0.0	5.674	A
C-D	0			0			
C-A	19			19			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	442	0.120	53	0.2	12.974	B
A-BCD	2	675	0.004	2	0.0	5.353	A
A-B	2			2			
A-C	60			60			
D-ABC	34	437	0.078	34	0.1	14.499	B
C-ABD	9	641	0.014	9	0.0	5.693	A
C-D	0			0			
C-A	23			23			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	442	0.120	53	0.2	12.985	B
A-BCD	2	675	0.004	2	0.0	5.355	A
A-B	2			2			
A-C	60			60			
D-ABC	34	437	0.078	34	0.1	14.504	B
C-ABD	9	641	0.014	9	0.0	5.695	A
C-D	0			0			
C-A	23			23			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	43	446	0.097	43	0.2	12.562	B
A-BCD	2	669	0.003	2	0.0	5.398	A
A-B	2			2			
A-C	49			49			
D-ABC	28	440	0.063	28	0.1	14.185	B
C-ABD	7	642	0.012	7	0.0	5.677	A
C-D	0			0			
C-A	19			19			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	36	448	0.081	36	0.1	12.263	B
A-BCD	2	665	0.002	2	0.0	5.427	A
A-B	2			2			
A-C	41			41			
D-ABC	23	442	0.053	23	0.1	13.957	B
C-ABD	6	642	0.010	6	0.0	5.661	A
C-D	0			0			
C-A	16			16			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.12	0.00	0.00	0.12	0.12			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.11	0.04	0.41	0.74	0.78			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.19	0.04	0.36	0.66	0.69			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.14	0.04	0.42	0.76	0.80			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.19	0.04	0.35	0.63	0.67			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.14	0.04	0.41	0.73	0.77			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.12	0.00	0.00	0.12	0.12			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.94	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	577	Stream B-ACD

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)
D14	2035 Forecast Traffic Flows + Development Construction Traffic + Local Development Traffic	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	39	100.000
B		✓	42	100.000
C		✓	75	100.000
D		✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	39	0
	B	2	0	33	7
	C	49	20	0	6
	D	0	5	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	33	0
	C	3	56	0	0
	D	0	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.09	9.24	0.1	0.6	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.02	10.31	0.0	0.6	B
C-ABD	0.04	8.41	0.1	0.7	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	535	0.059	31	0.1	8.874	A
A-BCD	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	29			29			
D-ABC	5	430	0.012	5	0.0	10.054	B
C-ABD	16	663	0.024	16	0.0	8.409	A
C-D	4			4			
C-A	36			36			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	533	0.071	38	0.1	9.029	A
A-BCD	0	624	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	35			35			
D-ABC	6	426	0.015	6	0.0	10.163	B
C-ABD	19	666	0.029	19	0.1	8.380	A
C-D	5			5			
C-A	43			43			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	46	530	0.087	46	0.1	9.236	A
A-B-C-D	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	43			43			
D-ABC	8	421	0.018	8	0.0	10.313	B
C-ABD	24	672	0.036	24	0.1	8.314	A
C-D	6			6			
C-A	52			52			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	46	530	0.087	46	0.1	9.240	A
A-B-C-D	0	619	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	43			43			
D-ABC	8	421	0.018	8	0.0	10.313	B
C-ABD	24	672	0.036	24	0.1	8.284	A
C-D	6			6			
C-A	52			52			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	38	533	0.071	38	0.1	9.034	A
A-B-C-D	0	624	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	35			35			
D-ABC	6	426	0.015	6	0.0	10.164	B
C-ABD	19	666	0.029	19	0.1	8.318	A
C-D	5			5			
C-A	43			43			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	32	535	0.059	32	0.1	8.889	A
A-B-C-D	0	627	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	29			29			
D-ABC	5	429	0.012	5	0.0	10.058	B
C-ABD	16	663	0.024	16	0.0	8.384	A
C-D	4			4			
C-A	36			36			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-B-C-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

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-ACD	0.09	0.03	0.31	0.56	0.60			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.02	0.30	0.54	0.57			N/A	N/A
C-ABD	0.05	0.04	0.38	0.68	0.72			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-ACD	0.12	0.03	0.32	0.58	0.61			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.06	0.04	0.38	0.68	0.71			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-ACD	0.12	0.03	0.31	0.56	0.59			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			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-ACD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:15 - 18:30

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-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	235	Stream B-ACD

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)
D15	2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	67	100.000
B		✓	70	100.000
C		✓	33	100.000
D		✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	63	2
	B	18	0	12	40
	C	24	9	0	0
	D	4	30	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	12	50
	C	0	0	0	0
	D	0	70	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.17	12.50	0.3	1.3	B
A-BCD	0.00	5.40	0.0	0.5	A
A-B					
A-C					
D-ABC	0.10	13.43	0.2	0.7	B
C-ABD	0.02	5.70	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	449	0.117	52	0.2	11.453	B
A-BCD	2	668	0.002	2	0.0	5.402	A
A-B	2			2			
A-C	47			47			
D-ABC	29	445	0.064	28	0.1	12.788	B
C-ABD	7	642	0.011	7	0.0	5.669	A
C-D	0			0			
C-A	18			18			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	445	0.141	63	0.2	11.885	B
A-BCD	2	673	0.003	2	0.0	5.367	A
A-B	2			2			
A-C	56			56			
D-ABC	34	442	0.077	34	0.1	13.060	B
C-ABD	8	642	0.013	8	0.0	5.684	A
C-D	0			0			
C-A	21			21			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	77	441	0.175	77	0.3	12.487	B
A-BCD	2	679	0.004	2	0.0	5.318	A
A-B	2			2			
A-C	69			69			
D-ABC	42	439	0.095	42	0.2	13.426	B
C-ABD	10	641	0.016	10	0.0	5.705	A
C-D	0			0			
C-A	26			26			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	77	441	0.175	77	0.3	12.502	B
A-BCD	2	679	0.004	2	0.0	5.318	A
A-B	2			2			
A-C	69			69			
D-ABC	42	439	0.095	42	0.2	13.434	B
C-ABD	10	641	0.016	10	0.0	5.705	A
C-D	0			0			
C-A	26			26			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	445	0.141	63	0.2	11.909	B
A-BCD	2	673	0.003	2	0.0	5.367	A
A-B	2			2			
A-C	56			56			
D-ABC	34	442	0.077	34	0.1	13.073	B
C-ABD	8	642	0.013	8	0.0	5.686	A
C-D	0			0			
C-A	21			21			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	449	0.117	53	0.2	11.502	B
A-BCD	2	668	0.002	2	0.0	5.403	A
A-B	2			2			
A-C	47			47			
D-ABC	29	445	0.064	29	0.1	12.820	B
C-ABD	7	642	0.011	7	0.0	5.669	A
C-D	0			0			
C-A	18			18			

Queue Variation Results for each time segment

08:00 - 08:15

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-ACD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

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-ACD	0.20	0.00	0.00	0.20	0.20			N/A	N/A
A-BCD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-ABC	0.12	0.04	0.39	0.70	0.73			N/A	N/A
C-ABD	0.01	0.01	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-ACD	0.26	0.03	0.33	0.59	0.62			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.15	0.04	0.39	0.69	0.73			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.27	0.04	0.35	0.64	1.28			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.15	0.04	0.37	0.67	0.70			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			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-ACD	0.21	0.00	0.00	0.21	0.21			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

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-ACD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		5.70	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	359	Stream B-ACD

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)
D16	2075 Forecast Traffic Flows + Development Decommissioning Traffic + Local Development Traffic	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	45	100.000
B		✓	70	100.000
C		✓	41	100.000
D		✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	45	0
	B	4	0	52	14
	C	14	21	0	6
	D	0	9	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	21	0
	C	6	53	0	0
	D	0	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-ACD	0.15	9.26	0.2	0.6	A
A-BCD	0.00	0.00	0.0	~1	A
A-B					
A-C					
D-ABC	0.03	9.72	0.0	0.5	A
C-ABD	0.04	8.74	0.1	0.7	A
C-D					
C-A					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	528	0.100	52	0.1	8.676	A
A-BCD	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	34			34			
D-ABC	10	433	0.023	10	0.0	9.456	A
C-ABD	16	644	0.025	16	0.0	8.669	A
C-D	4			4			
C-A	10			10			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	526	0.120	63	0.2	8.920	A
A-BCD	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	40			40			
D-ABC	12	430	0.027	12	0.0	9.566	A
C-ABD	19	645	0.030	19	0.0	8.704	A
C-D	5			5			
C-A	12			12			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	77	523	0.147	77	0.2	9.261	A
A-B-C-D	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	50			50			
D-ABC	14	426	0.034	14	0.0	9.716	A
C-ABD	24	645	0.037	24	0.1	8.741	A
C-D	6			6			
C-A	15			15			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	77	523	0.147	77	0.2	9.264	A
A-B-C-D	0	629	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	50			50			
D-ABC	14	426	0.034	14	0.0	9.716	A
C-ABD	24	645	0.037	24	0.1	8.731	A
C-D	6			6			
C-A	15			15			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	63	526	0.120	63	0.2	8.932	A
A-B-C-D	0	632	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	40			40			
D-ABC	12	430	0.027	12	0.0	9.570	A
C-ABD	19	645	0.030	19	0.0	8.682	A
C-D	5			5			
C-A	12			12			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	53	528	0.100	53	0.1	8.698	A
A-B-C-D	0	634	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	34			34			
D-ABC	10	433	0.023	10	0.0	9.464	A
C-ABD	16	644	0.025	16	0.0	8.662	A
C-D	4			4			
C-A	10			10			

Queue Variation Results for each time segment

17:00 - 17:15

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-ACD	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-B-C-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

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-ACD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.03	0.28	0.50	0.53			N/A	N/A
C-ABD	0.05	0.04	0.38	0.68	0.72			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-ACD	0.20	0.03	0.30	0.53	0.56			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.04	0.03	0.28	0.50	0.53			N/A	N/A
C-ABD	0.06	0.04	0.38	0.68	0.72			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-ACD	0.20	0.03	0.29	0.53	0.55			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			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-ACD	0.16	0.00	0.00	0.16	0.16			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:15 - 18:30

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-ACD	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A