CONSULTING ENGINEERS

Ardshanavooly, Killarney, Co. Kerry

Proposed Residential Development, Ardshanavooly, Killarney, Co. Kerry

Traffic and Transportation Assessment

December 2025

MHL & Associates Ltd.
Consulting Engineers




Document Control Sheet

Client	Wrightwood Development Ltd
Project Title	Proposed Development at Ardshanavooly, Co. Kerry
Project Location	Ardshanavooly, Killarney, Co. Kerry
Document Title	Traffic and Transportation Assessment
Document No.	MHL_24078TT-Ardshan Killarney-TTA DOC 03
Job No.	24078TT

Rev	Status	Author	Reviewed By	Approved By	Date
	Internal Draft	C. O'Connor		-	05/03/2025
R01	Client Draft	C. O'Connor	J Daly	-	08/09/2025
R02	S247 Issue	C. O'Connor	J Daly	-	23/09/2025
R03	LRD Issue	J Daly	J Daly	-	17/12/2025

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1 NON TECHNICAL SUMMARY

M.H.L. & Associates Ltd. Consulting Engineers has been engaged by Wearefoundation to prepare a Traffic and Transportation Assessment (TTA) in support of an Large Scale Residential Development (LRD) by Wrightwood Development for development at a 2.23 hectare site at lands at Ardshanavooly, Killarney, Co. Kerry.

The proposed development comprises of:

1. Construction of a 124 no. dwellings in a mix of duplex, maisonette and apartment typologies comprising 16 no. 1 bed apartments, 6 no. 2 bed apartments, 16 no. 1 bed duplex apartments, 16 no. 2 bed duplex maisonettes, 33 no. 2 bed duplex apartments, 33 no. 3 bed maisonettes and 4 no. 3 bed terrace houses, all in building heights ranging from 2 to 4 storeys.

2. A total of 143 no. surface car parking spaces, including 4 no. car-share parking spaces, 6 no. visitor spaces, and 5 no. assigned Part M/accessible spaces.

3. Bicycle parking comprising of 272 no spaces in total, comprising 118 no. spaces within the private open space of ground floor residential units and 102 no. spaces within secure sheltered structures and designated secure bicycle parking areas, and 52 no. short stay/visitor spaces.

4. 3,636 sq.m of public open space, including arrival pocket park, central pocket park and amenity landscape areas (including 117 sq.m of play), grass lawns, kickabout areas, picnic areas and seating areas;

5. 1,050 sq.m of communal external open space, including seating areas, nature trails, and amenity grass lawns.

6. Additional environmental open space of 1,790 sq.m, including landscape buffers, protection and enhancement of existing hedgerows and trees.

7. A new vehicular, pedestrian and cyclist access from the existing estate road adjoining the site to the south.

8. Infrastructure works to serve the proposed development to include the internal road and footpath network, ESB cabinets/substations/switchrooms, site and external building lighting, site drainage works, hard and soft landscaping, boundary treatments, communal bin stores, and all ancillary site services and development works above and below ground.

This report has been prepared in accordance with the TII's 2014 publication "Traffic and Transport Assessment Guidelines" and the "Guidelines for Traffic Impact Assessments" as published by the Institution of Highways & Transportation U.K. in 1994.

The Opening year is the year of expected completion for the development and is taken to be 2026. In accordance with the TII's "Traffic and Transport Assessment Guidelines", a traffic analysis is required to be undertaken for the **Opening Year (2026), Opening Year +5 (2033)** and fifteen years from this date i.e., the **Opening Year+15 (2043)**.

This TTA assessment focused on the following traffic junctions:

- **Junction 1:** The Park Road / Friary downs priority junction

As part of this assessment, 12-hour traffic flows were recorded by third party traffic counters Irish Traffic Surveys Ltd. for Park Road / Friary Downs junction, with these traffic counts recorded in September 2024. These counts been factored up to the modelling year scenarios 2024 through to 2043 with TII expansion factors.

The overall impact of the development on the adjoining local road is to increase traffic flows entering/existing the development of 1131 no. trips in the morning peak and by 1212 no. trips in the evening peak in the Opening Year 2026, assuming all traffic generated by the development is new to the network. Junction 1 reaches a maximum RFC of 41% in the 2043 AM with development scenario and reaches a maximum of 24% in the 2043 PM with development scenario. The development is modelled to increase traffic %RFC for all junctions by a maximum of 10% for both morning and evening peaks from the Opening Year of the development.

All analysed junctions operate well within capacity for all design scenarios. Additionally, these junctions show no more than a 10% increase in RFC between the "with development" and "without development" scenarios. The proposed development does not cause a significant negative impact on the analysed junctions and surrounding area.

This report set out these findings in more detail overleaf.

2 EXISTING SITE

The site is to be situated along Park Road, far north of the junction with Friary Downs, in Killarney, Co. Kerry. The development is to be accessed via a priority junction located within the 60kph speed control of Killarney Town. The site is approximately less than 1km east of Killarney Town with the location shown below in Figure 2.1 below.

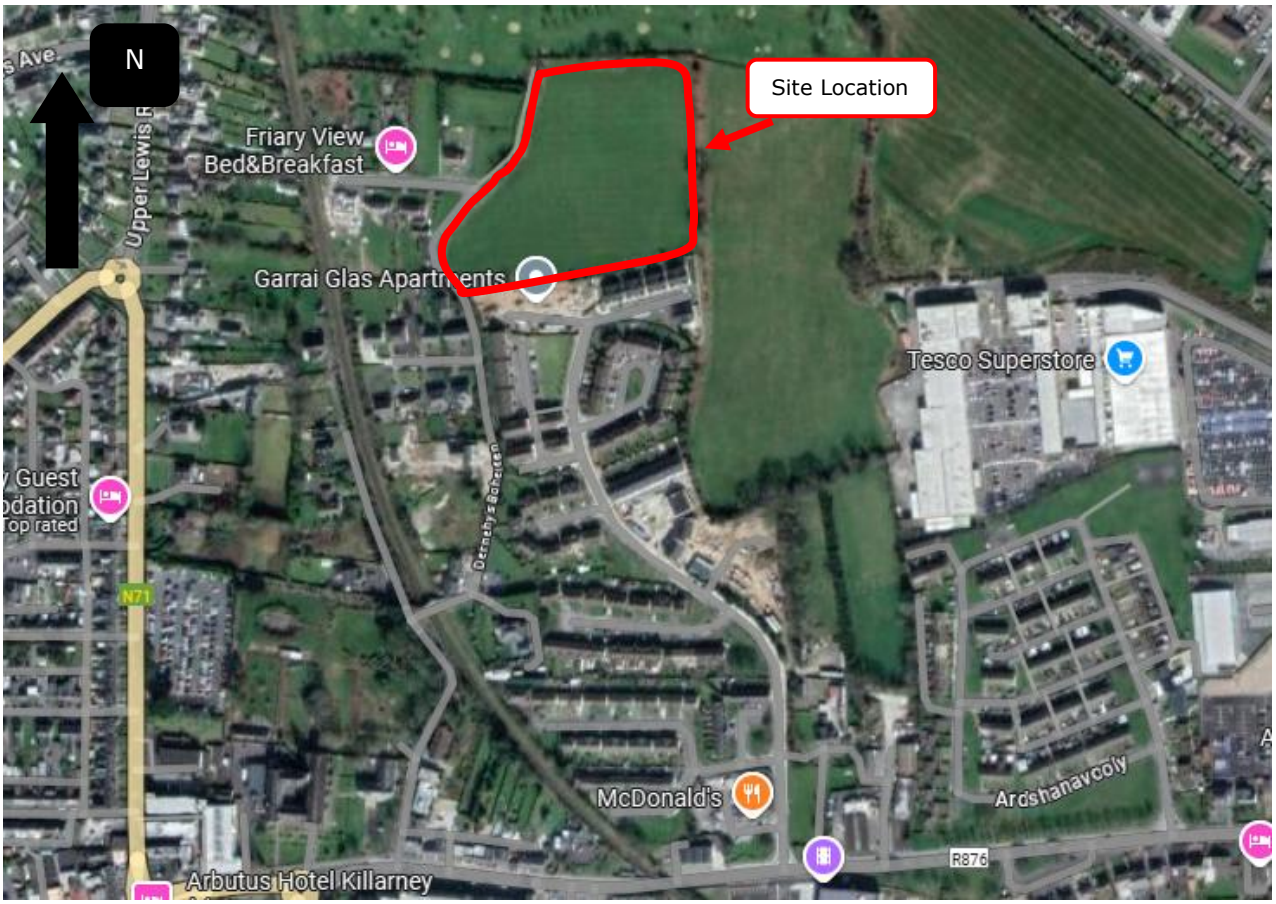

Figure 2.1: Site Location (Credit: Google)

3 PROPOSED DEVELOPMENT

The proposed development comprises of:

Construction of a 124 no. dwellings in a mix of duplex, maisonette and apartment typologies comprising 16 no. 1 bed apartments, 6 no. 2 bed apartments, 16 no. 1 bed duplex apartments, 16 no. 2 bed duplex maisonettes, 33 no. 2 bed duplex apartments, 33 no. 3 bed maisonettes and 4 no. 3 bed terrace houses, all in building heights ranging from 2 to 4 storeys.

A total of 143 no. surface car parking spaces, including 4 no. car-share parking spaces, 6 no. visitor spaces, and 5 no. assigned Part M/accessible spaces.

Bicycle parking comprising of 272 no spaces in total, comprising 118 no. spaces within the private open space of ground floor residential units and 102 no. spaces within secure sheltered structures and designated secure bicycle parking areas, and 52 no. short stay/visitor spaces.

A new vehicular, pedestrian and cyclist access from the existing estate road adjoining the site to the south.

The site layout plan and schedule can be seen below in Figure 3.2 & Figure 3.3

Figure 3.1 Development Site (Credit: Google)

Figure 3.2 Site Layout Map (Credit: R. Graham O'Sullivan Architect)

RESIDENTIAL UNIT MIX				
DUPLEXES				
Two Bedroom Apartment	33	No.	2	Bed
Three Bedroom Maisonette	33	No.	3	Bed
DUPLEXES				
One Bedroom Apartment	16	No.	1	Bed
Two Bedroom Maisonette	16	No.	2	Bed
TOWNHOUSES				
Three Bedroom	4	No.	3	Bed
APARTMENTS				
One Bedroom	16	No.	1	Bed
Two Bedroom	6	No.	2	Bed
TOTAL	124			

Figure 3.3: Proposed Development Schedule (Credit: R. Graham O'Sullivan Architect)

4 TRAFFIC

4.1 Traffic Generation -TRICs

Trip generation from the proposed units was garnered via the TRICS database. MHL are a licence holder for the TRICS database and employ it for traffic studies. TRICS is a well-established UK and Irish national database which holds in excess of 2,100 site locations and 7,000 survey counts with over 98 separate land use sub-categories. MHL & Associates Ltd. are one of over 300 worldwide licensed TRICS member organisations. The TRICS program was utilised for the land-use sub-category associated with the development proposal. The "Guidelines for Traffic and Transportation Assessments" state that for residential units, the busiest hours are between 08:15-09:15 and 17:00-18:00. The proposed development Trip Rates per unit are shown below.

The full TRICS output, is included in Appendix of this report and outlines the likely trip rates for a development of this size. A synopsis of the peak hour trip generation rates and figures for the overall development is displayed in Figure below.

2028					
Full Proposed Development		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Development Trip Generation - based on TRICs database					
124	*Peak Trics Trip Rates Per Unit*	*0.149*	*0.370*	*0.316*	*0.168*
	Peak Trips No. Units	*18*	*46*	*39*	*21*
	SUBTOTAL	*64*		*49*	

Figure 4.1 Peak Hour Tric's Traffic Generation for the Proposed Development

As part of the traffic survey's undertaken, the existing trip rates were recorded exiting and entering the near by Arlington Heights Estate. These figures were used to generate a new trip rate for the proposed development. A synopsis of the peak hour trip generation rates and figures for the overall development is displayed in Figure below

2028					
Full Proposed Development		AM PEAK		PM PEAK	
		Arrivals	Departures	Arrivals	Departures
New Residential Development Trip Generation - based on based on Neighbouring Estate					
124	*Peak Trics Trip Rates Per Unit*	*0.250*	*0.525*	*0.325*	*0.325*
	Peak Trips No. Units	*31*	*65*	*40*	*40*
	SUBTOTAL	*96*		*81*	

Figure 4.2 Peak Hour Traffic Generation for the Proposed Development based on Neighbouring Development

The counted figure was higher then that calculated by Trics and were used for this assessment. This conservative approach provides a very robust basis for the traffic assessment and modelling that following.

4.2 Site Traffic Counts

Traffic counts conducted on Wednesday 18/09/2024 by Irish Traffic Surveys Ltd. were utilised to establish the actual AM & PM Peak traffic hours for the local road network for the purposes of this assessment. These existing junction traffic counts were growth factored as described in Chapter 5. Based on the traffic counts and considering the recommendation of the Guidelines for Traffic and Transportation Assessments, the peak hours considered in this TTA are reflective of the demand case for the site.

4.3 Modal Choice

In predicting the level of traffic that will be generated by the proposed development, the means of transport (modal choice) and quantity of traffic generated (trip attraction) must be considered. It is assumed that there will be a combination of cars, public transport and active travel, due to the nature of the development. The analysis assumes the cars will dominate the developments traffic movements. Further public transport improvements would encourage a greater modal shift in the future towards sustainable travel modes for those travelling to work or live at the facility, as encouraged by local and National Transport Authority Policy. This would reduce the modelled impact of this development on the surrounding road network.

4.4 Existing Situation

Traffic counts taken at each of the assessed junctions were used as the basis of the modelling, producing morning and evening O/D Matrices. The traffic flows through the junctions were assessed as shown in the following figures.

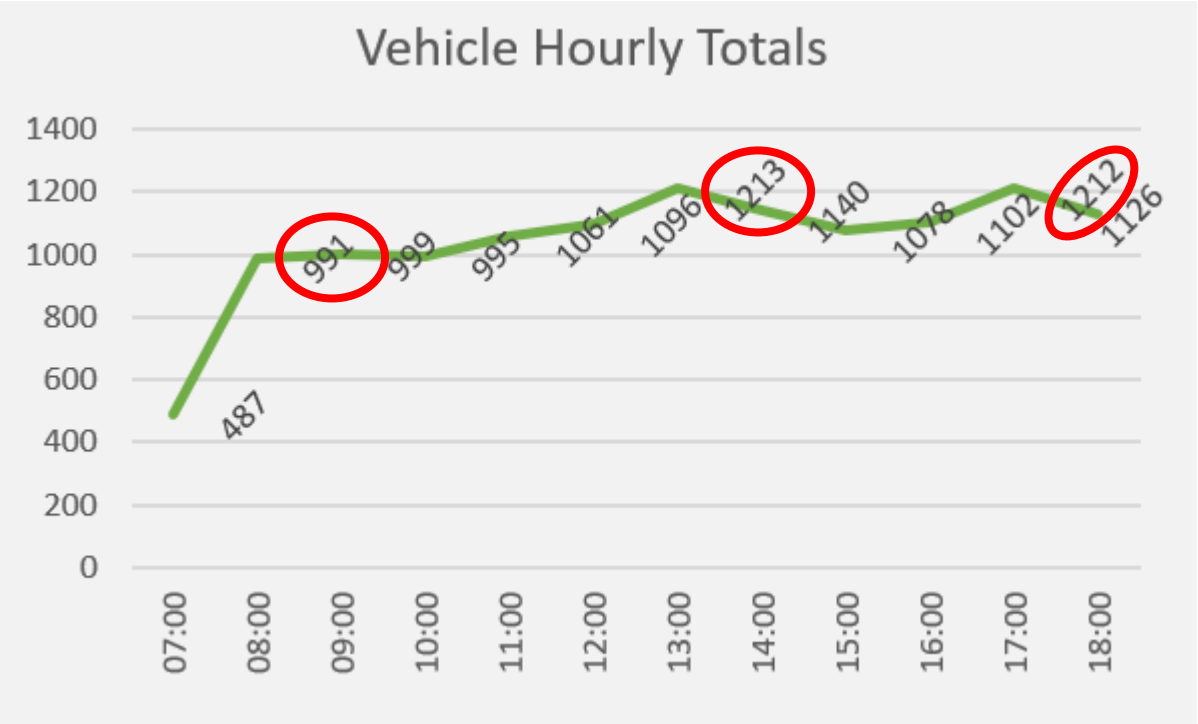

Figure 4.3 Network Traffic Profile for AM & 2x PM Peak Flows

4.5 Trip Distribution

The current traffic distribution pattern was used to determine directional split to and from the proposed development. This peak hour directional split pattern is assumed to remain constant with the passage of time. The "Guidelines for Traffic and Transportation

Assessments" state that for a residential development, the busiest hours are between 08:00-09:00 in the mornings and from 17:00 to 18:00 in the evenings.
Having reviewed the existing measured traffic flows at both existing junctions, it was determined that the most heavily trafficked peak hours were 08:15-09:15 and 17:00-18:00 for the working week.

4.6 Traffic Volumes

Traffic counts taken at the assessed junction was used as the basis of the modelling, producing morning and evening O/D Matrices. The traffic flows through Junction 1 as recorded in the traffic counts are shown in the following figures.

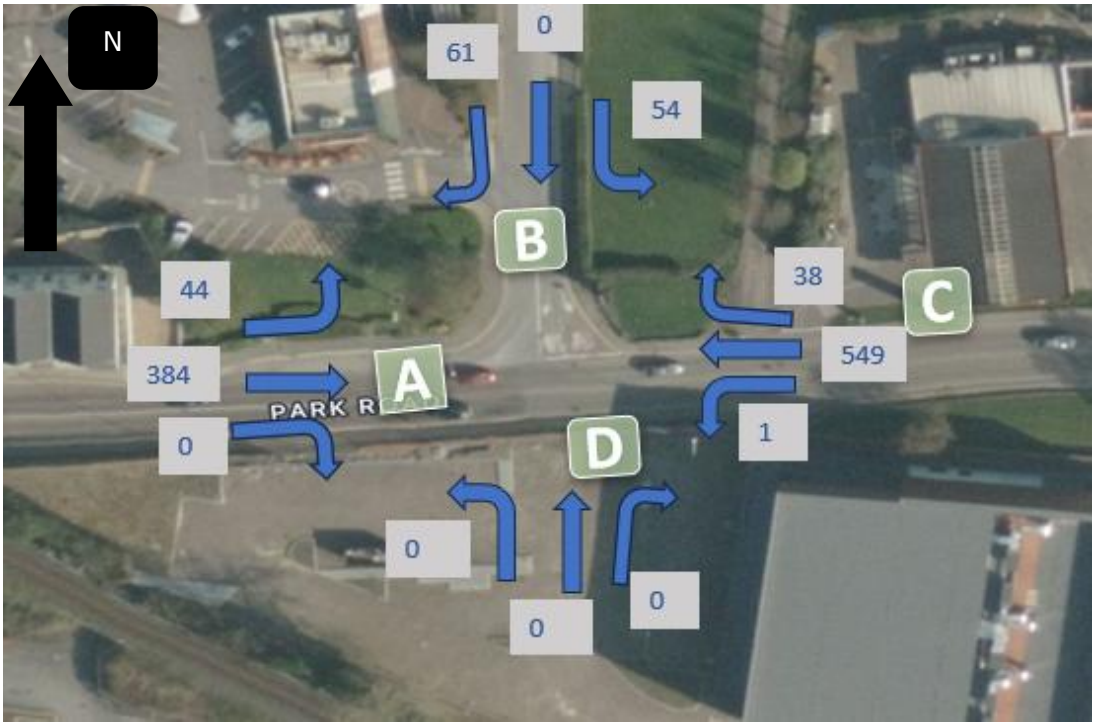

Figure 4.4 AM Turning Counts for Junction 1

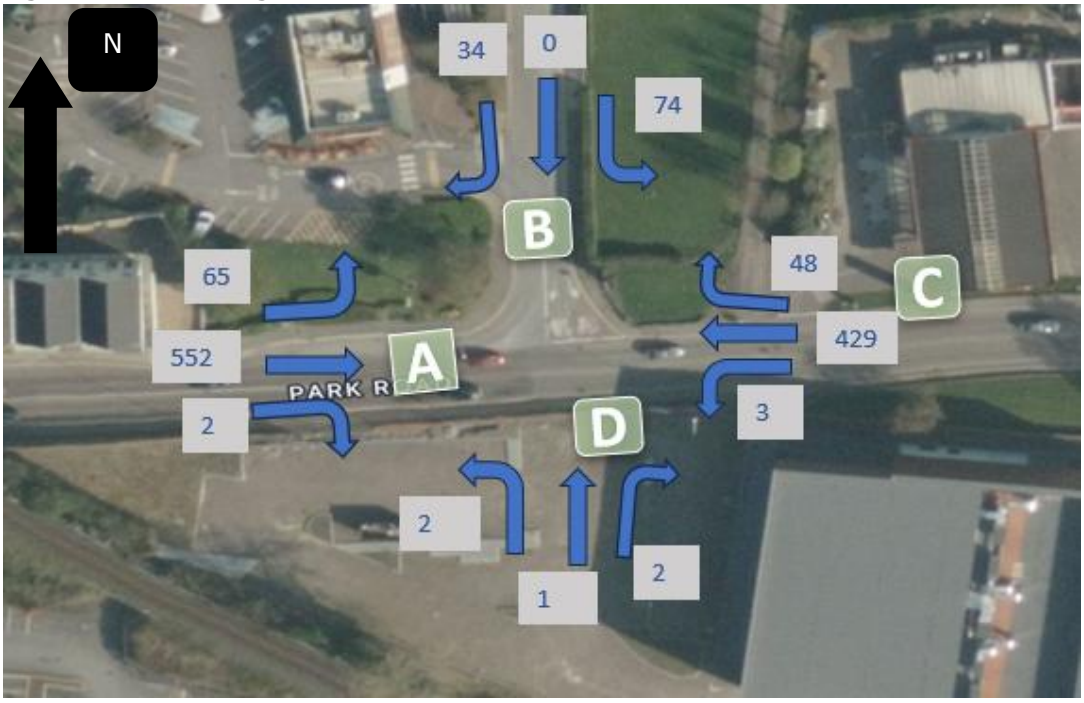

Figure 4.5 PM Turning Counts for Junction 1

5 TRAFFIC ASSESSMENT

The base year is taken as 2024 the year the traffic counts were undertaken. It is anticipated that the first year of operation, subject to a positive outcome from the planning process would be 2026. In accordance with the Guidelines for Traffic and Transportation Assessments as published by the TII, a traffic analysis is required to be undertaken for the Opening Year, Opening Year plus five years and Opening Year plus fifteen years.

The TII publication "Project Appraisal Guidelines for National Routes Unit 5.3 – Travel Demand Projections" was used to calculate growth factors for the road network traffic. Table 5.1 below shows the calculated growth factors:

			Cars/LGV	HGV	Combined
Count %			96%	4%	**100%**
2024	**to**	**2028**	1.029	1.065	**1.030**
2024	**to**	**2033**	1.094	1.222	**1.099**
2024	**to**	**2043**	1.147	1.392	**1.156**

TII Project Appraisal Guidelines for National Roads Unit 5.3
Travel Demand Projections (PE-PAG-0217-02)

Figure 5.1 Future Projected Growth Rates

The client has proposed to build the scheme in 4 phases but for the purposes of this report, we have modelled the worst-case scenario, namely the whole scheme was built in one phase.

The effects of traffic growth on the existing network plus the additional traffic generated by the proposed development, have been compiled to build junction diagrams of the priority junctions.

6 TRAFFIC MODELLING

6.1 Junctions 10 Analysis

The purpose of this Traffic and Transport Assessment is to determine if the capacity of the existing road network is sufficient to cater for the traffic generated by the proposed development.

In order to assess the capacity of the proposed development and the adjoining network, traffic models for the priority junctions were produced using the PICADY traffic modelling software.

The output movements from the models are based on the assigned junction arms. The arms are designated A to D for the Development Junction.

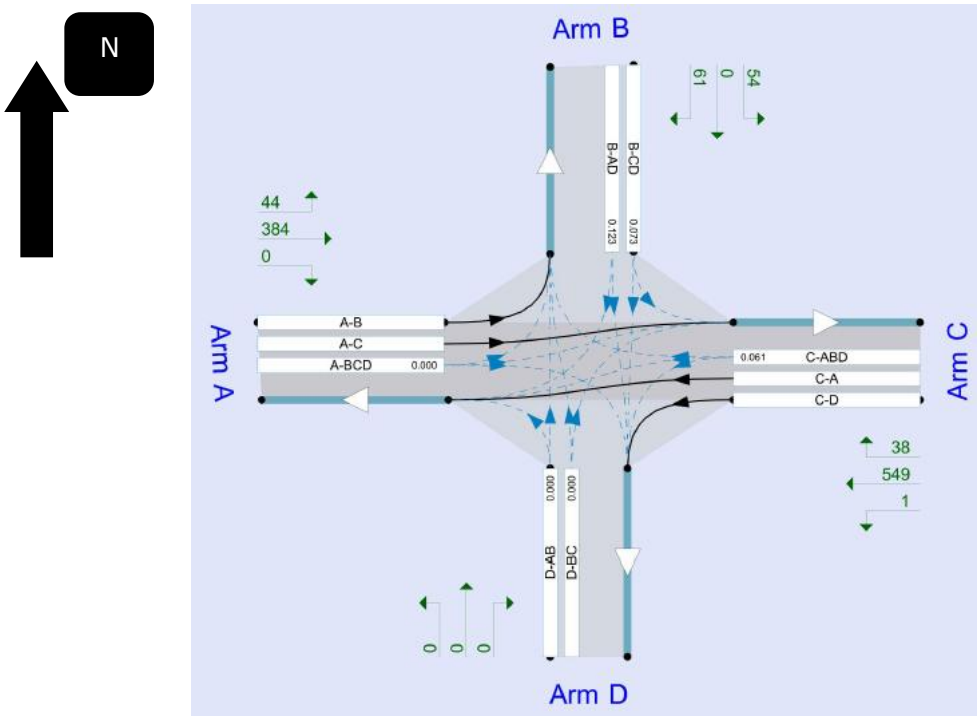

Figure 6.1: Junction 1 - Development Junction
(Arm A –Park Road (W), Arm B – Friary Downs (N), Arm C –Park Road (E), Arm D – Omniplex Cinema Killarney (S)

The output result sheets from the traffic modelling software consist of tables of demand flow, capacities, queues, and delays for each 15-minute time segment of the peak hour analysis.

The Arcady output table contains information on maximum queue length, delay, and Ratio of Flow to Capacity (RFC). The RFC provides the basis for judging the acceptability of junction design and the capacity of existing junctions. Generally, an RFC of 0.85 or less is considered acceptable during the peak period. An RFC of this value indicates that at peak times the junction is at 85% of its operational capacity and therefore has a practical reserve capacity at a junction required to cater for periods of unusually high traffic flow, such as bank holiday weekends, etc. The degree of saturation of a junction is a measure of the capacity of the junction. A junction with an RFC of 0.85 would be considered to be operating at a degree of saturation of 100%.

The following summary junction performance tables for describes each of the junctions RFC's, Delay and Queue values for both morning and evening peaks for all design scenarios as well as the Level of Service for the junction.

Junction 1 - Proposed Development Junction

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024									
Stream B-CD	D1	0.1	7.89	0.12	A	D2	0.2	8.94	0.17	A
Stream B-AD		0.3	14.57	0.21	B		0.1	14.42	0.13	B
Stream A-BCD		0	0	0	A		0	4.06	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.2	4.34	0.11	A		0.3	4.9	0.14	A
	2028 without Dev									
Stream B-CD	D3	0.1	8.01	0.12	A	D4	0.2	9.11	0.17	A
Stream B-AD		0.3	15.05	0.22	C		0.2	14.86	0.14	B
Stream A-BCD		0	0	0	A		0	4.03	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.3	4.31	0.12	A		0.4	4.89	0.14	A
	2028 with Dev									
Stream B-CD	D5	0.3	9.2	0.21	A	D6	0.3	10.22	0.25	B
Stream B-AD		0.5	18.24	0.35	C		0.2	16.5	0.2	C
Stream A-BCD		0	0	0	A		0	3.99	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.4	4.45	0.16	A		0.5	5.24	0.2	A
	2033 without Dev									
Stream B-CD	D7	0.1	8.25	0.13	A	D8	0.2	9.52	0.19	A
Stream B-AD		0.3	16.22	0.25	C		0.2	15.99	0.15	C
Stream A-BCD		0	0	0	A		0	3.95	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.3	4.28	0.13	A		0.4	4.88	0.16	A
	2033 with Dev									
Stream B-CD	D9	0.3	9.58	0.22	A	D10	0.4	10.76	0.27	B
Stream B-AD		0.6	20.11	0.38	C		0.3	17.88	0.22	C
Stream A-BCD		0	0	0	A		0	3.91	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.5	4.41	0.18	A		0.6	5.28	0.22	A
	2043 without Dev									
Stream B-CD	D11	0.2	8.49	0.14	A	D12	0.3	9.92	0.21	A
Stream B-AD		0.4	17.39	0.27	C		0.2	17.07	0.17	C
Stream A-BCD		0	0	0	A		0	3.89	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.4	4.25	0.14	A		0.5	4.91	0.18	A
	2043 with Dev									
Stream B-CD	D13	0.3	9.9	0.23	A	D14	0.4	11.25	0.28	B
Stream B-AD		0.7	21.79	0.41	C		0.3	19.24	0.24	C
Stream A-BCD		0	0	0	A		0	3.85	0.01	A
Stream D-AB		0	0	0	A		0	0	0	A
Stream D-BC		0	0	0	A		0	0	0	A
Stream C-ABD		0.6	4.38	0.19	A		0.7	5.34	0.24	A

Figure 6.2: Development Junction Summary Table

A maximum RFC of 41% occurs in the AM peak for the 2043 With Development scenario. This occurs on Arm B – Development Access Road. A delay of approximately 17 seconds will be experienced along the minor arm of the junction, while a 5 second delay will be experienced for vehicles turning from Upper Park Road onto the development access road. The analysis shows that the junction is operating well below capacity for all scenarios up to and including the 2043 with development scenarios and any delays are minimal.

While the model does not show any vehicles queuing at this junction, AM peak queuing has been observed on site. This AM que (6/7 cars) is generated as a result of vehicles queuing from the Roundabout at Fair Hill. It is expected that this development will increase the que along Arm B by an additional 50% (3 or 4 Cars). But the future Signalisation of this junction as proposed by Kerry County Council will improve both the existing and expected vehicles queuing lengths, a yellow Box junction should be installed at this junction on Park Road. This will facilitate vehicles exiting right from Friary Downs onto R876 (Park Road) towards the City Centre.

6.2 Cumulative Impact

The cumulative impact of the scheme on the surrounding roads network for future years is determined by modelling future scenarios on future projected traffic data and expected development traffic.

The overall impact of the development on the adjoining town network of assessed junctions is to increase RFC by a maximum of 10% for both morning and evening peaks from the Opening Year of the development, assuming all traffic generated by the development is new to the network. The traffic volumes at junction 2 increase by 15% for the AM peak hour and 12% in the PM peak. All junctions are operating within capacity for all scenarios and the impact of the development is not significant in nature.

7 ROAD SAFETY

Please refer to the Stage 1 Road Safety Report (RSA) submitted as part of this planning submission.

8 INTERNAL LAYOUT & PARKING PROVISION

The site is to have a hard tarmac or concrete surface with adequate foundation to withstand the wheel loads involved. The overall drainage of the site should be adequate to cope with storm water. The whole site is to be well lit to ensure the safe execution of manoeuvres, the safety of passengers and the security of vehicles and their contents. The lighting should be from a high level to prevent glare during manoeuvres and reduce the potential for vandalism. The layout of the site is to be designed to reduce the need for reversing manoeuvres. Where these are unavoidable, there should be an adequate area to safely execute the reversing or turning manoeuvres necessary. All parking spaces provided are required to be a minimum 2.4m x 4.9m in size.

It is proposed to provide a total of 143 no. surface car parking spaces, including 4 no. car-share parking spaces, 7 no. visitor spaces, and 5 no. assigned Part M/accessible spaces for the residential development. It is also proposed to provide 272 no spaces in total, comprising 118 no. spaces within the private open space of ground floor residential units and 154 no. spaces within secure sheltered structures and designated secure bicycle parking areas.

Figure 8.1 Site layout showing parking proposals (Credit: R. Graham O'Sullivan Architect)

9 PEDESTRIAN / CYCLIST / DISABILITY

All internal footpaths should be dished at all entrances and crossings with tapered/dropped kerbs and tactile paving used on approaches in accordance with the design guidelines for use with tactile paving. This is to accommodate wheelchair access and guide the visually impaired users safely through the development. Adequate bicycle parking provision is proposed as per development schedules presented.

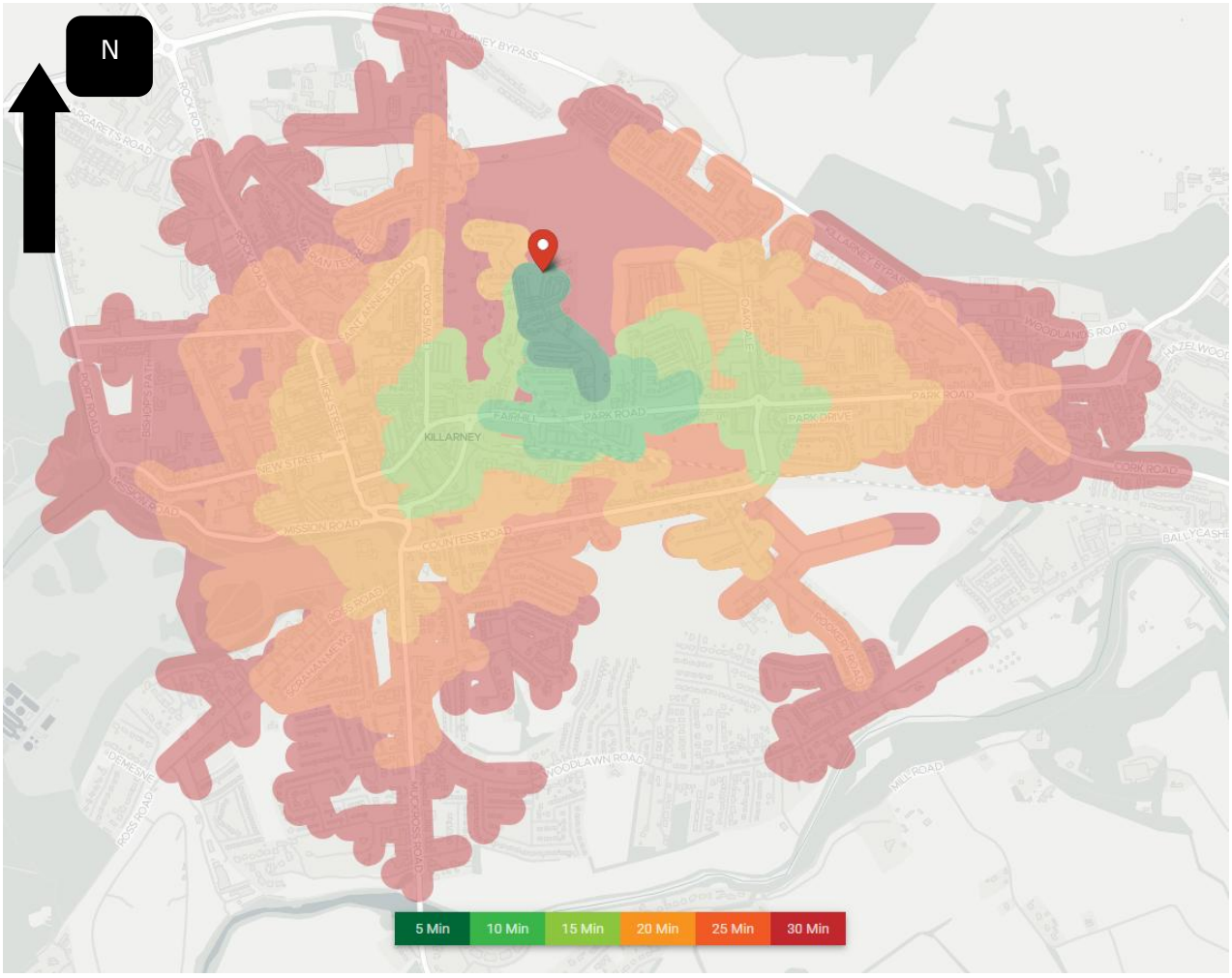

Figure 9.1: 30min Walking Distance from Site

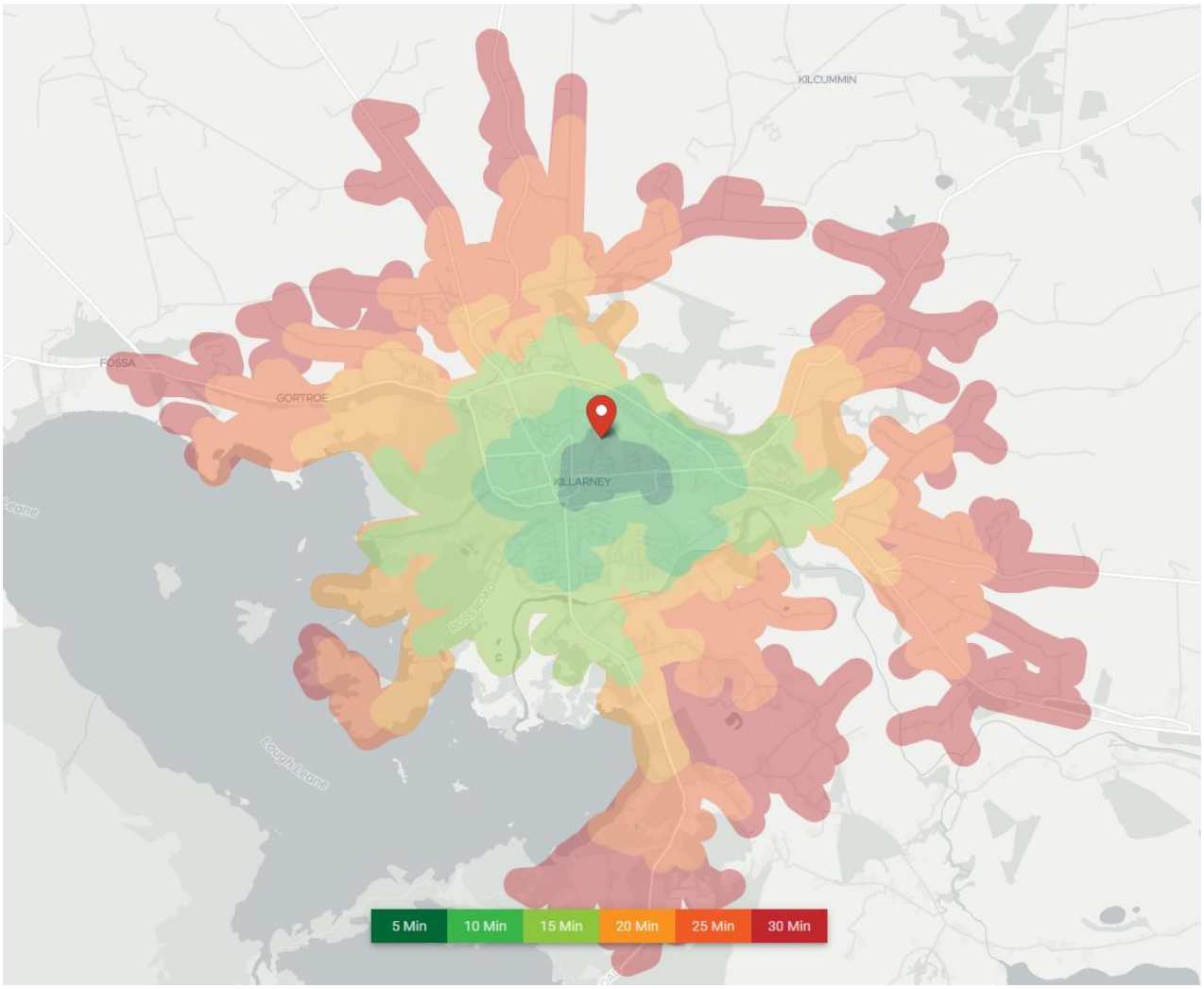

Figure 9.2: 30min Cycle Distance from Site

10 SUMMARY CONCLUSION

In accordance with the TII's "Traffic and Transport Assessment Guidelines", the traffic analysis was undertaken for the **Opening Year (2026), Opening Year +5 (2033)** and fifteen years from this date i.e., the **Opening Year+15 (2043)**.

In summary, the TTA assessment focused on the 1no. nearby traffic junction and the proposed development junction for this application. The priority junction of Upper Park Road and Woodlands Road was assessed as well as the development access junction.

The traffic modelling analysis carried out for these design year scenarios shows that:

- The assessed junctions are operating below capacity for all design years up to 2043 for both morning and evening peaks respectively. But based on the observation of vehicles queuing on site, consideration should be given to installing a Yellow Box Junction at this location to facilitate vehicles exiting from Friary Downs.

- The development access junction reaches a maximum RFC of 41% in the 2043 AM with development scenario.

- The % increase in RFC between "without development" and "with development" scenarios are at a maximum of 10% at the Park Road / Friary Downs Junction

Comparing the analysis of the traffic models, the development will not have a significant negative impact on the operation of these junctions from a capacity point-of-view.

11 REFERENCES

- TII. Traffic and Transport Assessment Guidelines, PE-PDV-02045
- National Roads Authority (2014) Traffic and Transport Assessment Guidelines
- Institution of Highways & Transportation (1994) Guidelines for Traffic Impact Assessment IHT, London
- National Roads Authority (2000) Road Geometry Handbook NRA, Dublin
- National Roads Authority Design Manual for Roads and Bridges NRA, Dublin
- Design Manual for Urban Roads and Streets
- Transport for Ireland (Oct 2016) Project Appraisal Guidelines for National Roads Unit 16.1 – Expansion Factors for Short Period Traffic Counts
- Transport for Ireland 2017. Geometric Design of Junctions, DN-GEO-03060
- Transport for Ireland 2017. Rural Road Link Design, DN-GEO-03031
- National Disability Authority (NDA) guidelines – Towards Best Practice in Provision of Transport Services
- TII approved junction simulation modelling program, Junctions 9
- Trip Rate Information Computer System (TRICS)
- Traffic Surveys: Irish Traffic Surveys Ltd.
- PCU (passenger carrying units) factors, Transport in The Urban Environment, The Institution of highways and Transportation.
- Google Maps
- Openstreetmaps

12 APPENDIX

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13 TRAFFIC COUNT DATA

(Traffic Count Data Available Upon Request)

14 PICADY MODELLING RESULTS

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Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.1.1905

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

Filename: Junction 1J10
Path: N:\TIA\24078TTArdshan LRD Killarney\TTA\Traffic Modelling
Report generation date: 18/02/2025 09:54:25

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024									
Stream B-CD	D1	0.1	7.89	0.12	A	D2	0.2	8.94	0.17	A
Stream B-AD		0.3	14.57	0.21	B		0.1	14.42	0.13	B
Stream A-BCD		0.0	0.00	0.00	A		0.0	4.06	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	4.34	0.11	A		0.3	4.90	0.14	A
	2028 without Dev									
Stream B-CD	D3	0.1	8.01	0.12	A	D4	0.2	9.11	0.17	A
Stream B-AD		0.3	15.05	0.22	C		0.2	14.86	0.14	B
Stream A-BCD		0.0	0.00	0.00	A		0.0	4.03	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.3	4.31	0.12	A		0.4	4.89	0.14	A
	2028 with Dev									
Stream B-CD	D5	0.3	9.20	0.21	A	D6	0.3	10.22	0.25	B
Stream B-AD		0.5	18.24	0.35	C		0.2	16.50	0.20	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	3.99	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.4	4.45	0.16	A		0.5	5.24	0.20	A
	2033 without Dev									
Stream B-CD	D7	0.1	8.25	0.13	A	D8	0.2	9.52	0.19	A
Stream B-AD		0.3	16.22	0.25	C		0.2	15.99	0.15	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	3.95	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.3	4.28	0.13	A		0.4	4.88	0.16	A
	2033 with Dev									
Stream B-CD	D9	0.3	9.58	0.22	A	D10	0.4	10.76	0.27	B
Stream B-AD		0.6	20.11	0.38	C		0.3	17.88	0.22	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	3.91	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.5	4.41	0.18	A		0.6	5.28	0.22	A
	2043 without Dev									
Stream B-CD	D11	0.2	8.49	0.14	A	D12	0.3	9.92	0.21	A
Stream B-AD		0.4	17.39	0.27	C		0.2	17.07	0.17	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	3.89	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.4	4.25	0.14	A		0.5	4.91	0.18	A
	2043 with Dev									
Stream B-CD	D13	0.3	9.90	0.23	A	D14	0.4	11.25	0.28	B
Stream B-AD		0.7	21.79	0.41	C		0.3	19.24	0.24	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	3.85	0.01	A
Stream D-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-BC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.6	4.38	0.19	A		0.7	5.34	0.24	A

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

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

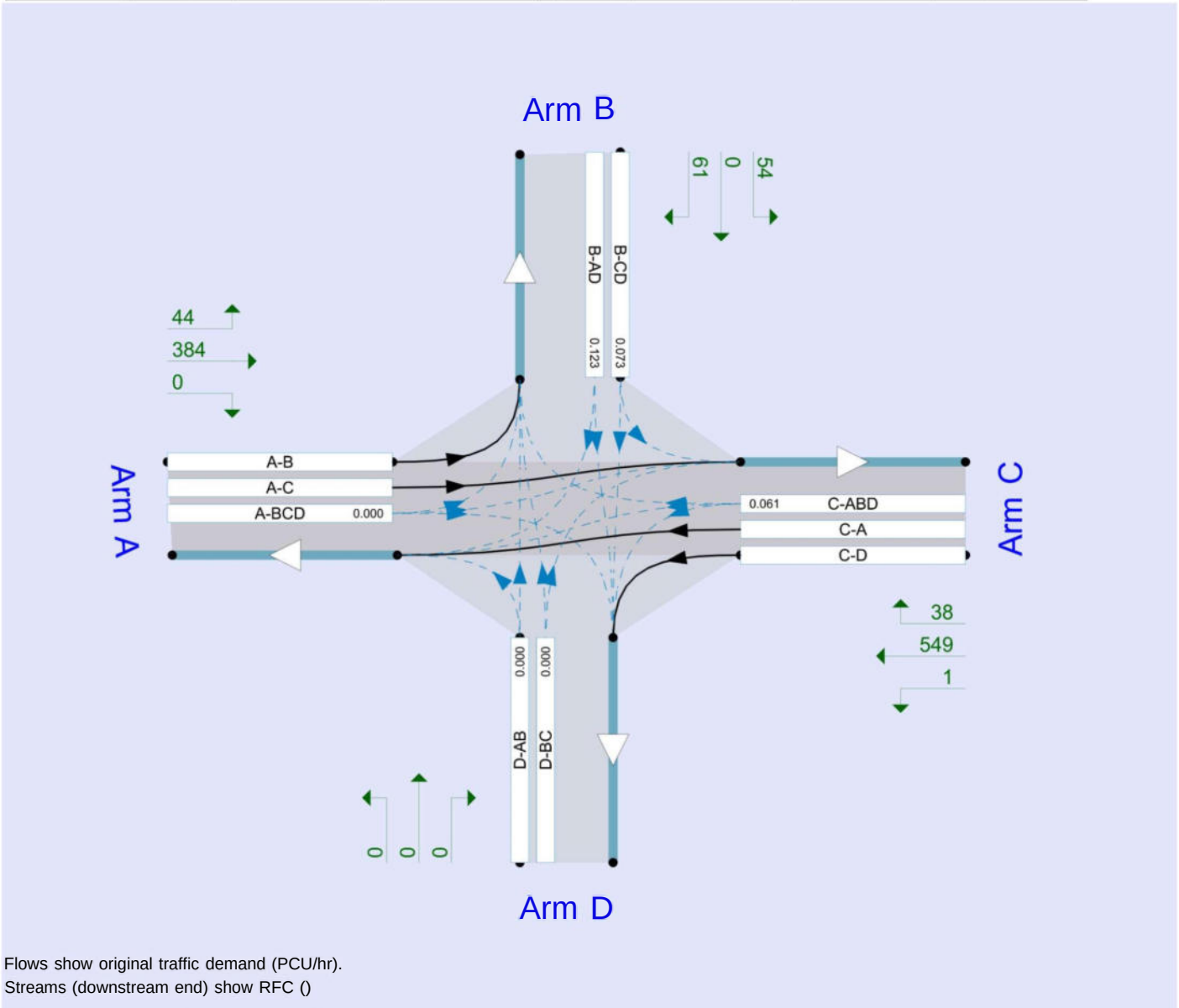
File summary

File Description

Title	
Location	
Site number	
Date	12/02/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MHL\cobrien
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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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	2024	AM	ONE HOUR	08:15	09:45	15
D2	2024	PM	ONE HOUR	17:00	18:30	15
D3	2028 without Dev	AM	ONE HOUR	08:15	09:45	15
D4	2028 without Dev	PM	ONE HOUR	17:00	18:30	15
D5	2028 with Dev	AM	ONE HOUR	08:15	09:45	15
D6	2028 with Dev	PM	ONE HOUR	17:00	18:30	15
D7	2033 without Dev	AM	ONE HOUR	08:15	09:45	15
D8	2033 without Dev	PM	ONE HOUR	17:00	18:30	15
D9	2033 with Dev	AM	ONE HOUR	08:15	09:45	15
D10	2033 with Dev	PM	ONE HOUR	17:00	18:30	15
D11	2043 without Dev	AM	ONE HOUR	08:15	09:45	15
D12	2043 without Dev	PM	ONE HOUR	17:00	18:30	15
D13	2043 with Dev	AM	ONE HOUR	08:15	09:45	15
D14	2043 with Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.49	A

Arms

Arms

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

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	8.00			150.0	Z	0.00
C	8.00			200.0	Z	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	3.20	3.20	15	15
D	Two lanes	3.20	3.20	18	18

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	661	-	-	-	-	-	-	0.234	0.334	0.234	-	-	-
B-A	500	0.083	0.210	0.210	-	-	-	0.132	0.300	-	0.210	0.210	0.105
B-C	646	0.090	0.229	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	500	0.083	0.210	0.210	-	-	-	0.132	0.300	0.132	-	-	-
B-D, offside lane	500	0.083	0.210	0.210	-	-	-	0.132	0.300	0.132	-	-	-
C-B	690	0.244	0.244	0.349	-	-	-	-	-	-	-	-	-
D-A	648	-	-	-	-	-	-	0.229	-	0.091	-	-	-
D-B, nearside lane	502	0.133	0.133	0.302	-	-	-	0.211	0.211	0.084	-	-	-
D-B, offside lane	502	0.133	0.133	0.302	-	-	-	0.211	0.211	0.084	-	-	-
D-C	502	-	0.133	0.302	0.106	0.211	0.211	0.211	0.211	0.084	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		Z	428	100.000
B		Z	115	100.000
C		Z	588	100.000
D		Z	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	44	384	0
	B	61	0	54	0
	C	549	38	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	322	322
	08:30-08:45	385	385
	08:45-09:00	471	471
	09:00-09:15	471	471
	09:15-09:30	385	385
	09:30-09:45	322	322
B	08:15-08:30	87	87
	08:30-08:45	103	103
	08:45-09:00	127	127
	09:00-09:15	127	127
	09:15-09:30	103	103
	09:30-09:45	87	87
C	08:15-08:30	443	443
	08:30-08:45	529	529
	08:45-09:00	647	647
	09:00-09:15	647	647
	09:15-09:30	529	529
	09:30-09:45	443	443
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.12	7.89	0.1	A
B-AD	0.21	14.57	0.3	B
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.11	4.34	0.2	A
C-D				
C-A				

Main Results for each time segment

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-CD	41	559	0.073	40	0.1	6.932	A
B-AD	46	373	0.123	45	0.1	10.968	B
A-BCD	0	554	0.000	0	0.0	0.000	A
A-B	33			33			
A-C	289			289			
D-AB	0	441	0.000	0	0.0	0.000	A
D-BC	0	361	0.000	0	0.0	0.000	A
C-ABD	54	885	0.061	53	0.1	4.330	A
C-D	0.71			0.71			
C-A	388			388			

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-CD	49	541	0.090	48	0.1	7.306	A
B-AD	55	348	0.157	55	0.2	12.250	B
A-BCD	0	534	0.000	0	0.0	0.000	A
A-B	40			40			
A-C	345			345			
D-AB	0	415	0.000	0	0.0	0.000	A
D-BC	0	334	0.000	0	0.0	0.000	A
C-ABD	73	927	0.079	73	0.1	4.220	A
C-D	0.83			0.83			
C-A	454			454			

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-CD	59	516	0.115	59	0.1	7.888	A
B-AD	67	314	0.214	67	0.3	14.528	B
A-BCD	0	505	0.000	0	0.0	0.000	A
A-B	48			48			
A-C	423			423			
D-AB	0	380	0.000	0	0.0	0.000	A
D-BC	0	296	0.000	0	0.0	0.000	A
C-ABD	109	987	0.110	108	0.2	4.100	A
C-D	0.98			0.98			
C-A	538			538			

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-CD	59	515	0.115	59	0.1	7.894	A
B-AD	67	314	0.214	67	0.3	14.568	B
A-BCD	0	505	0.000	0	0.0	0.000	A
A-B	48			48			
A-C	423			423			
D-AB	0	380	0.000	0	0.0	0.000	A
D-BC	0	296	0.000	0	0.0	0.000	A
C-ABD	109	987	0.110	109	0.2	4.103	A
C-D	0.98			0.98			
C-A	538			538			

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-CD	49	541	0.090	49	0.1	7.313	A
B-AD	55	348	0.157	55	0.2	12.295	B
A-BCD	0	534	0.000	0	0.0	0.000	A
A-B	40			40			
A-C	345			345			
D-AB	0	415	0.000	0	0.0	0.000	A
D-BC	0	334	0.000	0	0.0	0.000	A
C-ABD	74	927	0.079	74	0.1	4.224	A
C-D	0.83			0.83			
C-A	454			454			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	41	559	0.073	41	0.1	6.947	A
B-AD	46	373	0.123	46	0.1	11.024	B
A-BCD	0	554	0.000	0	0.0	0.000	A
A-B	33			33			
A-C	289			289			
D-AB	0	440	0.000	0	0.0	0.000	A
D-BC	0	361	0.000	0	0.0	0.000	A
C-ABD	54	885	0.061	54	0.1	4.336	A
C-D	0.71			0.71			
C-A	388			388			

2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.36	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	619	100.000
B		Z	108	100.000
C		Z	480	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	65	552	2
	B	34	0	74	0
	C	429	48	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	466	466
	17:15-17:30	556	556
	17:30-17:45	682	682
	17:45-18:00	682	682
	18:00-18:15	556	556
	18:15-18:30	466	466
B	17:00-17:15	81	81
	17:15-17:30	97	97
	17:30-17:45	119	119
	17:45-18:00	119	119
	18:00-18:15	97	97
	18:15-18:30	81	81
C	17:00-17:15	361	361
	17:15-17:30	432	432
	17:30-17:45	528	528
	17:45-18:00	528	528
	18:00-18:15	432	432
	18:15-18:30	361	361
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.17	8.94	0.2	A
B-AD	0.13	14.42	0.1	B
A-BCD	0.01	4.06	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.14	4.90	0.3	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-CD	56	537	0.104	55	0.1	7.470	A
B-AD	26	355	0.072	25	0.1	10.925	B
A-BCD	3	889	0.004	3	0.0	4.061	A
A-B	49			49			
A-C	414			414			
D-AB	0	445	0.000	0	0.0	0.000	A
D-BC	0	360	0.000	0	0.0	0.000	A
C-ABD	61	797	0.077	60	0.1	4.886	A
C-D	2			2			
C-A	298			298			

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-CD	67	515	0.129	66	0.1	8.024	A
B-AD	31	326	0.094	30	0.1	12.169	B
A-BCD	4	939	0.005	4	0.0	3.851	A
A-B	58			58			
A-C	494			494			
D-AB	0	421	0.000	0	0.0	0.000	A
D-BC	0	332	0.000	0	0.0	0.000	A
C-ABD	82	823	0.100	82	0.2	4.862	A
C-D	2			2			
C-A	347			347			

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-CD	81	484	0.168	81	0.2	8.930	A
B-AD	37	287	0.130	37	0.1	14.393	B
A-BCD	7	1010	0.007	7	0.0	3.585	A
A-B	71			71			
A-C	604			604			
D-AB	0	386	0.000	0	0.0	0.000	A
D-BC	0	294	0.000	0	0.0	0.000	A
C-ABD	119	861	0.138	118	0.3	4.854	A
C-D	3			3			
C-A	407			407			

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-CD	81	484	0.168	81	0.2	8.940	A
B-AD	37	287	0.130	37	0.1	14.418	B
A-BCD	7	1010	0.007	7	0.0	3.589	A
A-B	71			71			
A-C	604			604			
D-AB	0	385	0.000	0	0.0	0.000	A
D-BC	0	294	0.000	0	0.0	0.000	A
C-ABD	119	861	0.138	119	0.3	4.858	A
C-D	3			3			
C-A	407			407			

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-CD	67	515	0.129	67	0.1	8.040	A
B-AD	31	326	0.094	31	0.1	12.197	B
A-BCD	4	939	0.005	4	0.0	3.853	A
A-B	58			58			
A-C	494			494			
D-AB	0	421	0.000	0	0.0	0.000	A
D-BC	0	332	0.000	0	0.0	0.000	A
C-ABD	82	823	0.100	83	0.2	4.871	A
C-D	2			2			
C-A	347			347			

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-CD	56	537	0.104	56	0.1	7.488	A
B-AD	26	354	0.072	26	0.1	10.958	B
A-BCD	3	889	0.004	3	0.0	4.062	A
A-B	49			49			
A-C	414			414			
D-AB	0	445	0.000	0	0.0	0.000	A
D-BC	0	360	0.000	0	0.0	0.000	A
C-ABD	61	797	0.077	62	0.1	4.899	A
C-D	2			2			
C-A	298			298			

2028 without Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.53	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028 without Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	441	100.000
B		Z	119	100.000
C		Z	606	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	45	396	0
	B	63	0	56	0
	C	566	39	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	332	332
	08:30-08:45	396	396
	08:45-09:00	486	486
	09:00-09:15	486	486
	09:15-09:30	396	396
	09:30-09:45	332	332
B	08:15-08:30	90	90
	08:30-08:45	107	107
	08:45-09:00	131	131
	09:00-09:15	131	131
	09:15-09:30	107	107
	09:30-09:45	90	90
C	08:15-08:30	456	456
	08:30-08:45	545	545
	08:45-09:00	667	667
	09:00-09:15	667	667
	09:15-09:30	545	545
	09:30-09:45	456	456
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.12	8.01	0.1	A
B-AD	0.22	15.05	0.3	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.12	4.31	0.3	A
C-D				
C-A				

Main Results for each time segment

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-CD	42	556	0.076	42	0.1	6.991	A
B-AD	47	369	0.128	47	0.1	11.149	B
A-BCD	0	551	0.000	0	0.0	0.000	A
A-B	34			34			
A-C	298			298			
D-AB	0	437	0.000	0	0.0	0.000	A
D-BC	0	357	0.000	0	0.0	0.000	A
C-ABD	56	891	0.063	56	0.1	4.309	A
C-D	0.71			0.71			
C-A	399			399			

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-CD	50	538	0.094	50	0.1	7.385	A
B-AD	57	344	0.165	56	0.2	12.522	B
A-BCD	0	530	0.000	0	0.0	0.000	A
A-B	40			40			
A-C	356			356			
D-AB	0	411	0.000	0	0.0	0.000	A
D-BC	0	329	0.000	0	0.0	0.000	A
C-ABD	77	935	0.083	77	0.2	4.199	A
C-D	0.82			0.82			
C-A	467			467			

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-CD	62	511	0.121	62	0.1	8.004	A
B-AD	69	309	0.225	69	0.3	14.999	B
A-BCD	0	500	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	436			436			
D-AB	0	374	0.000	0	0.0	0.000	A
D-BC	0	290	0.000	0	0.0	0.000	A
C-ABD	115	998	0.116	115	0.3	4.081	A
C-D	0.97			0.97			
C-A	551			551			

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-CD	62	511	0.121	62	0.1	8.011	A
B-AD	69	309	0.225	69	0.3	15.048	C
A-BCD	0	500	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	436			436			
D-AB	0	374	0.000	0	0.0	0.000	A
D-BC	0	290	0.000	0	0.0	0.000	A
C-ABD	115	998	0.116	115	0.3	4.084	A
C-D	0.97			0.97			
C-A	551			551			

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-CD	50	537	0.094	50	0.1	7.393	A
B-AD	57	344	0.165	57	0.2	12.574	B
A-BCD	0	530	0.000	0	0.0	0.000	A
A-B	40			40			
A-C	356			356			
D-AB	0	410	0.000	0	0.0	0.000	A
D-BC	0	329	0.000	0	0.0	0.000	A
C-ABD	78	935	0.083	78	0.2	4.203	A
C-D	0.82			0.82			
C-A	466			466			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	42	556	0.076	42	0.1	7.009	A
B-AD	47	369	0.129	48	0.1	11.208	B
A-BCD	0	551	0.000	0	0.0	0.000	A
A-B	34			34			
A-C	298			298			
D-AB	0	436	0.000	0	0.0	0.000	A
D-BC	0	357	0.000	0	0.0	0.000	A
C-ABD	57	892	0.064	57	0.1	4.315	A
C-D	0.70			0.70			
C-A	399			399			

2028 without Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.38	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028 without Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	638	100.000
B		Z	111	100.000
C		Z	494	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	67	569	2
	B	35	0	76	0
	C	442	49	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	480	480
	17:15-17:30	574	574
	17:30-17:45	702	702
	17:45-18:00	702	702
	18:00-18:15	574	574
	18:15-18:30	480	480
B	17:00-17:15	84	84
	17:15-17:30	100	100
	17:30-17:45	122	122
	17:45-18:00	122	122
	18:00-18:15	100	100
	18:15-18:30	84	84
C	17:00-17:15	372	372
	17:15-17:30	444	444
	17:30-17:45	544	544
	17:45-18:00	544	544
	18:00-18:15	444	444
	18:15-18:30	372	372
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.17	9.11	0.2	A
B-AD	0.14	14.86	0.2	B
A-BCD	0.01	4.03	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.14	4.89	0.4	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-CD	57	533	0.107	57	0.1	7.544	A
B-AD	26	350	0.075	26	0.1	11.093	B
A-BCD	3	897	0.004	3	0.0	4.026	A
A-B	50			50			
A-C	427			427			
D-AB	0	442	0.000	0	0.0	0.000	A
D-BC	0	356	0.000	0	0.0	0.000	A
C-ABD	63	801	0.079	63	0.1	4.877	A
C-D	2			2			
C-A	306			306			

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-CD	68	511	0.134	68	0.2	8.131	A
B-AD	31	321	0.098	31	0.1	12.424	B
A-BCD	5	949	0.005	5	0.0	3.811	A
A-B	60			60			
A-C	509			509			
D-AB	0	416	0.000	0	0.0	0.000	A
D-BC	0	327	0.000	0	0.0	0.000	A
C-ABD	86	828	0.103	85	0.2	4.852	A
C-D	2			2			
C-A	356			356			

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-CD	84	479	0.175	83	0.2	9.098	A
B-AD	39	281	0.137	38	0.2	14.833	B
A-BCD	7	1023	0.007	7	0.0	3.542	A
A-B	73			73			
A-C	622			622			
D-AB	0	380	0.000	0	0.0	0.000	A
D-BC	0	288	0.000	0	0.0	0.000	A
C-ABD	125	867	0.144	124	0.3	4.851	A
C-D	3			3			
C-A	416			416			

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-CD	84	479	0.175	84	0.2	9.108	A
B-AD	39	281	0.137	39	0.2	14.862	B
A-BCD	7	1023	0.007	7	0.0	3.545	A
A-B	73			73			
A-C	622			622			
D-AB	0	380	0.000	0	0.0	0.000	A
D-BC	0	288	0.000	0	0.0	0.000	A
C-ABD	125	868	0.144	125	0.4	4.855	A
C-D	3			3			
C-A	416			416			

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-CD	68	511	0.134	69	0.2	8.148	A
B-AD	31	321	0.098	32	0.1	12.457	B
A-BCD	5	949	0.005	5	0.0	3.812	A
A-B	60			60			
A-C	509			509			
D-AB	0	416	0.000	0	0.0	0.000	A
D-BC	0	327	0.000	0	0.0	0.000	A
C-ABD	86	828	0.104	86	0.2	4.863	A
C-D	2			2			
C-A	356			356			

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-CD	57	533	0.107	57	0.1	7.569	A
B-AD	26	350	0.075	26	0.1	11.133	B
A-BCD	3	897	0.004	3	0.0	4.027	A
A-B	50			50			
A-C	427			427			
D-AB	0	442	0.000	0	0.0	0.000	A
D-BC	0	356	0.000	0	0.0	0.000	A
C-ABD	64	801	0.080	64	0.2	4.888	A
C-D	2			2			
C-A	306			306			

2028 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.48	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028 with Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	459	100.000
B		Z	187	100.000
C		Z	621	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	63	396	0
	B	95	0	92	0
	C	566	54	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	346	346
	08:30-08:45	413	413
	08:45-09:00	505	505
	09:00-09:15	505	505
	09:15-09:30	413	413
	09:30-09:45	346	346
B	08:15-08:30	141	141
	08:30-08:45	168	168
	08:45-09:00	206	206
	09:00-09:15	206	206
	09:15-09:30	168	168
	09:30-09:45	141	141
C	08:15-08:30	468	468
	08:30-08:45	558	558
	08:45-09:00	684	684
	09:00-09:15	684	684
	09:15-09:30	558	558
	09:30-09:45	468	468
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.21	9.20	0.3	A
B-AD	0.35	18.24	0.5	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.16	4.45	0.4	A
C-D				
C-A				

Main Results for each time segment

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-CD	69	546	0.127	69	0.1	7.540	A
B-AD	72	365	0.196	71	0.2	12.204	B
A-BCD	0	547	0.000	0	0.0	0.000	A
A-B	47			47			
A-C	298			298			
D-AB	0	434	0.000	0	0.0	0.000	A
D-BC	0	350	0.000	0	0.0	0.000	A
C-ABD	78	889	0.088	78	0.2	4.437	A
C-D	0.69			0.69			
C-A	389			389			

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-CD	83	524	0.158	83	0.2	8.157	A
B-AD	85	338	0.252	85	0.3	14.194	B
A-BCD	0	525	0.000	0	0.0	0.000	A
A-B	57			57			
A-C	356			356			
D-AB	0	407	0.000	0	0.0	0.000	A
D-BC	0	320	0.000	0	0.0	0.000	A
C-ABD	108	932	0.115	107	0.3	4.368	A
C-D	0.79			0.79			
C-A	450			450			

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-CD	101	493	0.206	101	0.3	9.182	A
B-AD	105	302	0.346	104	0.5	18.103	C
A-BCD	0	495	0.000	0	0.0	0.000	A
A-B	69			69			
A-C	436			436			
D-AB	0	369	0.000	0	0.0	0.000	A
D-BC	0	278	0.000	0	0.0	0.000	A
C-ABD	161	995	0.161	160	0.4	4.320	A
C-D	0.92			0.92			
C-A	522			522			

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-CD	101	492	0.206	101	0.3	9.203	A
B-AD	105	302	0.347	105	0.5	18.239	C
A-BCD	0	495	0.000	0	0.0	0.000	A
A-B	69			69			
A-C	436			436			
D-AB	0	369	0.000	0	0.0	0.000	A
D-BC	0	278	0.000	0	0.0	0.000	A
C-ABD	161	995	0.162	161	0.4	4.326	A
C-D	0.92			0.92			
C-A	522			522			

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-CD	83	523	0.158	83	0.2	8.179	A
B-AD	85	338	0.253	86	0.3	14.329	B
A-BCD	0	525	0.000	0	0.0	0.000	A
A-B	57			57			
A-C	356			356			
D-AB	0	407	0.000	0	0.0	0.000	A
D-BC	0	319	0.000	0	0.0	0.000	A
C-ABD	108	933	0.116	109	0.3	4.378	A
C-D	0.79			0.79			
C-A	450			450			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	69	545	0.127	69	0.1	7.572	A
B-AD	72	364	0.196	72	0.2	12.323	B
A-BCD	0	547	0.000	0	0.0	0.000	A
A-B	47			47			
A-C	298			298			
D-AB	0	433	0.000	0	0.0	0.000	A
D-BC	0	349	0.000	0	0.0	0.000	A
C-ABD	79	889	0.089	79	0.2	4.450	A
C-D	0.69			0.69			
C-A	388			388			

2028 with Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028 with Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	662	100.000
B		Z	155	100.000
C		Z	513	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	91	569	2
	B	49	0	106	0
	C	442	68	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	498	498
	17:15-17:30	595	595
	17:30-17:45	729	729
	17:45-18:00	729	729
	18:00-18:15	595	595
	18:15-18:30	498	498
B	17:00-17:15	117	117
	17:15-17:30	139	139
	17:30-17:45	171	171
	17:45-18:00	171	171
	18:00-18:15	139	139
	18:15-18:30	117	117
C	17:00-17:15	386	386
	17:15-17:30	461	461
	17:30-17:45	565	565
	17:45-18:00	565	565
	18:00-18:15	461	461
	18:15-18:30	386	386
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.25	10.22	0.3	B
B-AD	0.20	16.50	0.2	C
A-BCD	0.01	3.99	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.20	5.24	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-CD	80	527	0.151	79	0.2	8.029	A
B-AD	37	344	0.107	36	0.1	11.672	B
A-BCD	3	906	0.004	3	0.0	3.986	A
A-B	68			68			
A-C	427			427			
D-AB	0	438	0.000	0	0.0	0.000	A
D-BC	0	349	0.000	0	0.0	0.000	A
C-ABD	88	797	0.111	87	0.2	5.070	A
C-D	2			2			
C-A	296			296			

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-CD	95	503	0.189	95	0.2	8.815	A
B-AD	44	314	0.140	44	0.2	13.317	B
A-BCD	5	960	0.005	5	0.0	3.768	A
A-B	81			81			
A-C	509			509			
D-AB	0	411	0.000	0	0.0	0.000	A
D-BC	0	318	0.000	0	0.0	0.000	A
C-ABD	119	824	0.145	119	0.3	5.115	A
C-D	2			2			
C-A	339			339			

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-CD	117	469	0.249	116	0.3	10.194	B
B-AD	54	272	0.198	54	0.2	16.439	C
A-BCD	7	1037	0.007	7	0.0	3.494	A
A-B	99			99			
A-C	622			622			
D-AB	0	373	0.000	0	0.0	0.000	A
D-BC	0	277	0.000	0	0.0	0.000	A
C-ABD	174	863	0.202	174	0.5	5.233	A
C-D	3			3			
C-A	388			388			

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-CD	117	469	0.249	117	0.3	10.220	B
B-AD	54	272	0.198	54	0.2	16.497	C
A-BCD	7	1037	0.007	7	0.0	3.494	A
A-B	99			99			
A-C	622			622			
D-AB	0	373	0.000	0	0.0	0.000	A
D-BC	0	***Til***	0.000	0	0.0	0.000	A
C-ABD	175	863	0.202	175	0.5	5.243	A
C-D	3			3			
C-A	388			388			

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-CD	95	503	0.189	96	0.2	8.846	A
B-AD	44	314	0.140	44	0.2	13.374	B
A-BCD	5	960	0.005	5	0.0	3.772	A
A-B	81			81			
A-C	509			509			
D-AB	0	411	0.000	0	0.0	0.000	A
D-BC	0	318	0.000	0	0.0	0.000	A
C-ABD	120	824	0.145	120	0.3	5.128	A
C-D	2			2			
C-A	339			339			

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-CD	80	527	0.151	80	0.2	8.056	A
B-AD	37	344	0.107	37	0.1	11.733	B
A-BCD	3	906	0.004	3	0.0	3.988	A
A-B	68			68			
A-C	427			427			
D-AB	0	437	0.000	0	0.0	0.000	A
D-BC	0	348	0.000	0	0.0	0.000	A
C-ABD	89	798	0.111	89	0.2	5.088	A
C-D	2			2			
C-A	295			295			

2033 without Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.62	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.62	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 without Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	470	100.000
B		Z	126	100.000
C		Z	647	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	48	422	0
	B	67	0	59	0
	C	604	42	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	354	354
	08:30-08:45	423	423
	08:45-09:00	517	517
	09:00-09:15	517	517
	09:15-09:30	423	423
	09:30-09:45	354	354
B	08:15-08:30	95	95
	08:30-08:45	113	113
	08:45-09:00	139	139
	09:00-09:15	139	139
	09:15-09:30	113	113
	09:30-09:45	95	95
C	08:15-08:30	487	487
	08:30-08:45	582	582
	08:45-09:00	712	712
	09:00-09:15	712	712
	09:15-09:30	582	582
	09:30-09:45	487	487
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.13	8.25	0.1	A
B-AD	0.25	16.22	0.3	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.13	4.28	0.3	A
C-D				
C-A				

Main Results for each time segment

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-CD	44	550	0.081	44	0.1	7.107	A
B-AD	50	360	0.140	50	0.2	11.568	B
A-BCD	0	544	0.000	0	0.0	0.000	A
A-B	36			36			
A-C	318			318			
D-AB	0	428	0.000	0	0.0	0.000	A
D-BC	0	347	0.000	0	0.0	0.000	A
C-ABD	64	906	0.070	63	0.1	4.270	A
C-D	0.70			0.70			
C-A	423			423			

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-CD	53	530	0.100	53	0.1	7.542	A
B-AD	60	333	0.181	60	0.2	13.164	B
A-BCD	0	521	0.000	0	0.0	0.000	A
A-B	43			43			
A-C	379			379			
D-AB	0	400	0.000	0	0.0	0.000	A
D-BC	0	317	0.000	0	0.0	0.000	A
C-ABD	88	953	0.093	88	0.2	4.162	A
C-D	0.82			0.82			
C-A	493			493			

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-CD	65	501	0.130	65	0.1	8.244	A
B-AD	74	296	0.249	73	0.3	16.148	C
A-BCD	0	489	0.000	0	0.0	0.000	A
A-B	53			53			
A-C	465			465			
D-AB	0	360	0.000	0	0.0	0.000	A
D-BC	0	276	0.000	0	0.0	0.000	A
C-ABD	134	1021	0.131	133	0.3	4.056	A
C-D	0.96			0.96			
C-A	578			578			

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-CD	65	501	0.130	65	0.1	8.253	A
B-AD	74	296	0.249	74	0.3	16.215	C
A-BCD	0	489	0.000	0	0.0	0.000	A
A-B	53			53			
A-C	465			465			
D-AB	0	360	0.000	0	0.0	0.000	A
D-BC	0	275	0.000	0	0.0	0.000	A
C-ABD	134	1022	0.131	134	0.3	4.062	A
C-D	0.96			0.96			
C-A	577			577			

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-CD	53	530	0.100	53	0.1	7.554	A
B-AD	60	333	0.181	61	0.2	13.235	B
A-BCD	0	521	0.000	0	0.0	0.000	A
A-B	43			43			
A-C	379			379			
D-AB	0	400	0.000	0	0.0	0.000	A
D-BC	0	317	0.000	0	0.0	0.000	A
C-ABD	89	954	0.093	89	0.2	4.168	A
C-D	0.82			0.82			
C-A	492			492			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	44	550	0.081	45	0.1	7.124	A
B-AD	50	360	0.140	51	0.2	11.640	B
A-BCD	0	544	0.000	0	0.0	0.000	A
A-B	36			36			
A-C	318			318			
D-AB	0	428	0.000	0	0.0	0.000	A
D-BC	0	347	0.000	0	0.0	0.000	A
C-ABD	64	907	0.071	64	0.1	4.278	A
C-D	0.70			0.70			
C-A	422			422			

2033 without Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 without Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	680	100.000
B		Z	118	100.000
C		Z	528	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	71	607	2
	B	37	0	81	0
	C	472	53	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	512	512
	17:15-17:30	611	611
	17:30-17:45	749	749
	17:45-18:00	749	749
	18:00-18:15	611	611
	18:15-18:30	512	512
B	17:00-17:15	89	89
	17:15-17:30	106	106
	17:30-17:45	130	130
	17:45-18:00	130	130
	18:00-18:15	106	106
	18:15-18:30	89	89
C	17:00-17:15	398	398
	17:15-17:30	475	475
	17:30-17:45	581	581
	17:45-18:00	581	581
	18:00-18:15	475	475
	18:15-18:30	398	398
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.19	9.52	0.2	A
B-AD	0.15	15.99	0.2	C
A-BCD	0.01	3.95	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.16	4.88	0.4	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-CD	61	526	0.116	60	0.1	7.728	A
B-AD	28	340	0.082	28	0.1	11.506	B
A-BCD	3	914	0.004	3	0.0	3.951	A
A-B	53			53			
A-C	455			455			
D-AB	0	433	0.000	0	0.0	0.000	A
D-BC	0	346	0.000	0	0.0	0.000	A
C-ABD	71	810	0.088	71	0.2	4.869	A
C-D	2			2			
C-A	324			324			

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-CD	73	502	0.145	73	0.2	8.391	A
B-AD	33	309	0.108	33	0.1	13.050	B
A-BCD	5	970	0.005	5	0.0	3.729	A
A-B	64			64			
A-C	543			543			
D-AB	0	405	0.000	0	0.0	0.000	A
D-BC	0	315	0.000	0	0.0	0.000	A
C-ABD	97	839	0.116	97	0.3	4.854	A
C-D	2			2			
C-A	375			375			

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-CD	89	467	0.191	89	0.2	9.504	A
B-AD	41	266	0.153	41	0.2	15.950	C
A-BCD	8	1050	0.007	8	0.0	3.452	A
A-B	78			78			
A-C	663			663			
D-AB	0	366	0.000	0	0.0	0.000	A
D-BC	0	273	0.000	0	0.0	0.000	A
C-ABD	144	883	0.163	143	0.4	4.876	A
C-D	3			3			
C-A	435			435			

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-CD	89	467	0.191	89	0.2	9.520	A
B-AD	41	266	0.153	41	0.2	15.989	C
A-BCD	8	1050	0.007	8	0.0	3.452	A
A-B	78			78			
A-C	663			663			
D-AB	0	366	0.000	0	0.0	0.000	A
D-BC	0	273	0.000	0	0.0	0.000	A
C-ABD	144	883	0.163	144	0.4	4.882	A
C-D	3			3			
C-A	434			434			

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-CD	73	501	0.145	73	0.2	8.411	A
B-AD	33	309	0.108	33	0.1	13.093	B
A-BCD	5	970	0.005	5	0.0	3.733	A
A-B	64			64			
A-C	543			543			
D-AB	0	405	0.000	0	0.0	0.000	A
D-BC	0	315	0.000	0	0.0	0.000	A
C-ABD	98	840	0.116	98	0.3	4.864	A
C-D	2			2			
C-A	375			375			

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-CD	61	526	0.116	61	0.1	7.754	A
B-AD	28	340	0.082	28	0.1	11.551	B
A-BCD	3	914	0.004	3	0.0	3.953	A
A-B	53			53			
A-C	455			455			
D-AB	0	433	0.000	0	0.0	0.000	A
D-BC	0	346	0.000	0	0.0	0.000	A
C-ABD	72	810	0.089	72	0.2	4.882	A
C-D	2			2			
C-A	324			324			

2033 with Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.64	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.64	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2033 with Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	488	100.000
B		Z	196	100.000
C		Z	662	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	66	422	0
	B	100	0	96	0
	C	604	57	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	367	367
	08:30-08:45	439	439
	08:45-09:00	537	537
	09:00-09:15	537	537
	09:15-09:30	439	439
	09:30-09:45	367	367
B	08:15-08:30	148	148
	08:30-08:45	176	176
	08:45-09:00	216	216
	09:00-09:15	216	216
	09:15-09:30	176	176
	09:30-09:45	148	148
C	08:15-08:30	498	498
	08:30-08:45	595	595
	08:45-09:00	729	729
	09:00-09:15	729	729
	09:15-09:30	595	595
	09:30-09:45	498	498
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.22	9.58	0.3	A
B-AD	0.38	20.11	0.6	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.18	4.41	0.5	A
C-D				
C-A				

Main Results for each time segment

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-CD	72	539	0.134	72	0.2	7.695	A
B-AD	75	356	0.212	74	0.3	12.736	B
A-BCD	0	540	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	318			318			
D-AB	0	425	0.000	0	0.0	0.000	A
D-BC	0	340	0.000	0	0.0	0.000	A
C-ABD	87	904	0.096	86	0.2	4.401	A
C-D	0.68			0.68			
C-A	411			411			

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-CD	86	516	0.167	86	0.2	8.379	A
B-AD	90	328	0.274	89	0.4	15.078	C
A-BCD	0	516	0.000	0	0.0	0.000	A
A-B	59			59			
A-C	379			379			
D-AB	0	396	0.000	0	0.0	0.000	A
D-BC	0	308	0.000	0	0.0	0.000	A
C-ABD	120	951	0.127	120	0.3	4.338	A
C-D	0.78			0.78			
C-A	474			474			

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-CD	106	482	0.219	105	0.3	9.555	A
B-AD	110	289	0.381	109	0.6	19.906	C
A-BCD	0	484	0.000	0	0.0	0.000	A
A-B	73			73			
A-C	465			465			
D-AB	0	355	0.000	0	0.0	0.000	A
D-BC	0	264	0.000	0	0.0	0.000	A
C-ABD	183	1019	0.179	182	0.5	4.311	A
C-D	0.90			0.90			
C-A	545			545			

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-CD	106	481	0.220	106	0.3	9.581	A
B-AD	110	289	0.381	110	0.6	20.107	C
A-BCD	0	484	0.000	0	0.0	0.000	A
A-B	73			73			
A-C	465			465			
D-AB	0	355	0.000	0	0.0	0.000	A
D-BC	0	264	0.000	0	0.0	0.000	A
C-ABD	183	1019	0.180	183	0.5	4.318	A
C-D	0.90			0.90			
C-A	545			545			

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-CD	86	515	0.168	87	0.2	8.411	A
B-AD	90	328	0.274	91	0.4	15.255	C
A-BCD	0	516	0.000	0	0.0	0.000	A
A-B	59			59			
A-C	379			379			
D-AB	0	396	0.000	0	0.0	0.000	A
D-BC	0	308	0.000	0	0.0	0.000	A
C-ABD	121	951	0.127	121	0.3	4.349	A
C-D	0.78			0.78			
C-A	474			474			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	72	538	0.134	72	0.2	7.733	A
B-AD	75	356	0.212	76	0.3	12.882	B
A-BCD	0	540	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	318			318			
D-AB	0	424	0.000	0	0.0	0.000	A
D-BC	0	339	0.000	0	0.0	0.000	A
C-ABD	87	904	0.096	88	0.2	4.414	A
C-D	0.68			0.68			
C-A	411			411			

2033 with Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2033 with Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	705	100.000
B		Z	162	100.000
C		Z	546	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	96	607	2
	B	51	0	111	0
	C	472	71	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	531	531
	17:15-17:30	634	634
	17:30-17:45	776	776
	17:45-18:00	776	776
	18:00-18:15	634	634
	18:15-18:30	531	531
B	17:00-17:15	122	122
	17:15-17:30	146	146
	17:30-17:45	178	178
	17:45-18:00	178	178
	18:00-18:15	146	146
	18:15-18:30	122	122
C	17:00-17:15	411	411
	17:15-17:30	491	491
	17:30-17:45	601	601
	17:45-18:00	601	601
	18:00-18:15	491	491
	18:15-18:30	411	411
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.27	10.76	0.4	B
B-AD	0.22	17.88	0.3	C
A-BCD	0.01	3.91	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.22	5.28	0.6	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-CD	84	520	0.161	83	0.2	8.226	A
B-AD	38	334	0.115	38	0.1	12.120	B
A-BCD	4	924	0.004	4	0.0	3.910	A
A-B	72			72			
A-C	455			455			
D-AB	0	429	0.000	0	0.0	0.000	A
D-BC	0	339	0.000	0	0.0	0.000	A
C-ABD	96	806	0.119	95	0.2	5.061	A
C-D	2			2			
C-A	313			313			

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-CD	100	494	0.202	100	0.3	9.124	A
B-AD	46	302	0.152	46	0.2	14.028	B
A-BCD	5	982	0.005	5	0.0	3.683	A
A-B	86			86			
A-C	543			543			
D-AB	0	400	0.000	0	0.0	0.000	A
D-BC	0	307	0.000	0	0.0	0.000	A
C-ABD	131	835	0.157	131	0.3	5.116	A
C-D	2			2			
C-A	357			357			

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-CD	122	457	0.267	122	0.4	10.722	B
B-AD	56	258	0.218	56	0.3	17.796	C
A-BCD	8	1066	0.008	8	0.0	3.402	A
A-B	105			105			
A-C	663			663			
D-AB	0	359	0.000	0	0.0	0.000	A
D-BC	0	263	0.000	0	0.0	0.000	A
C-ABD	194	878	0.221	194	0.6	5.267	A
C-D	3			3			
C-A	404			404			

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-CD	122	457	0.268	122	0.4	10.756	B
B-AD	56	258	0.218	56	0.3	17.875	C
A-BCD	8	1066	0.008	8	0.0	3.405	A
A-B	105			105			
A-C	663			663			
D-AB	0	359	0.000	0	0.0	0.000	A
D-BC	0	262	0.000	0	0.0	0.000	A
C-ABD	195	879	0.222	195	0.6	5.280	A
C-D	3			3			
C-A	404			404			

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-CD	100	494	0.202	100	0.3	9.161	A
B-AD	46	302	0.152	46	0.2	14.102	B
A-BCD	5	982	0.005	5	0.0	3.687	A
A-B	86			86			
A-C	543			543			
D-AB	0	400	0.000	0	0.0	0.000	A
D-BC	0	306	0.000	0	0.0	0.000	A
C-ABD	132	836	0.157	133	0.4	5.132	A
C-D	2			2			
C-A	357			357			

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-CD	84	519	0.161	84	0.2	8.270	A
B-AD	38	334	0.115	39	0.1	12.193	B
A-BCD	4	924	0.004	4	0.0	3.912	A
A-B	72			72			
A-C	455			455			
D-AB	0	428	0.000	0	0.0	0.000	A
D-BC	0	338	0.000	0	0.0	0.000	A
C-ABD	97	807	0.120	97	0.2	5.082	A
C-D	2			2			
C-A	312			312			

2043 without Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2043 without Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	495	100.000
B		Z	133	100.000
C		Z	680	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	51	444	0
	B	71	0	62	0
	C	635	44	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	373	373
	08:30-08:45	445	445
	08:45-09:00	545	545
	09:00-09:15	545	545
	09:15-09:30	445	445
	09:30-09:45	373	373
B	08:15-08:30	100	100
	08:30-08:45	120	120
	08:45-09:00	146	146
	09:00-09:15	146	146
	09:15-09:30	120	120
	09:30-09:45	100	100
C	08:15-08:30	512	512
	08:30-08:45	611	611
	08:45-09:00	749	749
	09:00-09:15	749	749
	09:15-09:30	611	611
	09:30-09:45	512	512
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.14	8.49	0.2	A
B-AD	0.27	17.39	0.4	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.14	4.25	0.4	A
C-D				
C-A				

Main Results for each time segment

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-CD	47	545	0.086	46	0.1	7.218	A
B-AD	53	353	0.151	53	0.2	11.955	B
A-BCD	0	538	0.000	0	0.0	0.000	A
A-B	38			38			
A-C	334			334			
D-AB	0	420	0.000	0	0.0	0.000	A
D-BC	0	339	0.000	0	0.0	0.000	A
C-ABD	69	918	0.075	69	0.1	4.237	A
C-D	0.70			0.70			
C-A	442			442			

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-CD	56	523	0.107	56	0.1	7.695	A
B-AD	64	325	0.197	64	0.2	13.775	B
A-BCD	0	514	0.000	0	0.0	0.000	A
A-B	46			46			
A-C	399			399			
D-AB	0	391	0.000	0	0.0	0.000	A
D-BC	0	308	0.000	0	0.0	0.000	A
C-ABD	97	969	0.100	97	0.2	4.131	A
C-D	0.81			0.81			
C-A	514			514			

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-CD	68	493	0.139	68	0.2	8.475	A
B-AD	78	285	0.274	78	0.4	17.296	C
A-BCD	0	481	0.000	0	0.0	0.000	A
A-B	56			56			
A-C	489			489			
D-AB	0	349	0.000	0	0.0	0.000	A
D-BC	0	264	0.000	0	0.0	0.000	A
C-ABD	149	1041	0.143	148	0.4	4.037	A
C-D	0.94			0.94			
C-A	599			599			

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-CD	68	492	0.139	68	0.2	8.489	A
B-AD	78	285	0.274	78	0.4	17.387	C
A-BCD	0	481	0.000	0	0.0	0.000	A
A-B	56			56			
A-C	489			489			
D-AB	0	349	0.000	0	0.0	0.000	A
D-BC	0	264	0.000	0	0.0	0.000	A
C-ABD	149	1041	0.143	149	0.4	4.045	A
C-D	0.94			0.94			
C-A	598			598			

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-CD	56	523	0.107	56	0.1	7.709	A
B-AD	64	324	0.197	64	0.2	13.866	B
A-BCD	0	514	0.000	0	0.0	0.000	A
A-B	46			46			
A-C	399			399			
D-AB	0	391	0.000	0	0.0	0.000	A
D-BC	0	307	0.000	0	0.0	0.000	A
C-ABD	97	969	0.100	98	0.2	4.141	A
C-D	0.81			0.81			
C-A	513			513			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	47	544	0.086	47	0.1	7.235	A
B-AD	53	353	0.151	54	0.2	12.038	B
A-BCD	0	538	0.000	0	0.0	0.000	A
A-B	38			38			
A-C	334			334			
D-AB	0	420	0.000	0	0.0	0.000	A
D-BC	0	339	0.000	0	0.0	0.000	A
C-ABD	70	919	0.076	70	0.1	4.246	A
C-D	0.70			0.70			
C-A	442			442			

2043 without Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.55	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.55	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min
)D12	2043 without Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	715	100.000
B		Z	125	100.000
C		Z	555	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	75	638	2
	B	39	0	86	0
	C	496	56	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	538	538
	17:15-17:30	643	643
	17:30-17:45	787	787
	17:45-18:00	787	787
	18:00-18:15	643	643
	18:15-18:30	538	538
B	17:00-17:15	94	94
	17:15-17:30	112	112
	17:30-17:45	138	138
	17:45-18:00	138	138
	18:00-18:15	112	112
	18:15-18:30	94	94
C	17:00-17:15	418	418
	17:15-17:30	499	499
	17:30-17:45	611	611
	17:45-18:00	611	611
	18:00-18:15	499	499
	18:15-18:30	418	418
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.21	9.92	0.3	A
B-AD	0.17	17.07	0.2	C
A-BCD	0.01	3.89	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.18	4.91	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-CD	65	519	0.125	64	0.1	7.898	A
B-AD	29	332	0.088	29	0.1	11.874	B
A-BCD	4	929	0.004	4	0.0	3.889	A
A-B	56			56			
A-C	478			478			
D-AB	0	426	0.000	0	0.0	0.000	A
D-BC	0	338	0.000	0	0.0	0.000	A
C-ABD	78	817	0.095	77	0.2	4.864	A
C-D	2			2			
C-A	338			338			

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-CD	77	494	0.157	77	0.2	8.636	A
B-AD	35	299	0.117	35	0.1	13.622	B
A-BCD	5	988	0.005	5	0.0	3.661	A
A-B	67			67			
A-C	571			571			
D-AB	0	396	0.000	0	0.0	0.000	A
D-BC	0	306	0.000	0	0.0	0.000	A
C-ABD	107	849	0.126	107	0.3	4.856	A
C-D	2			2			
C-A	389			389			

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-CD	95	458	0.207	94	0.3	9.903	A
B-AD	43	254	0.169	43	0.2	17.018	C
A-BCD	8	1073	0.008	8	0.0	3.378	A
A-B	82			82			
A-C	697			697			
D-AB	0	355	0.000	0	0.0	0.000	A
D-BC	0	261	0.000	0	0.0	0.000	A
C-ABD	161	895	0.179	160	0.5	4.903	A
C-D	3			3			
C-A	448			448			

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-CD	95	457	0.207	95	0.3	9.923	A
B-AD	43	254	0.169	43	0.2	17.070	C
A-BCD	8	1073	0.008	8	0.0	3.381	A
A-B	82			82			
A-C	697			697			
D-AB	0	354	0.000	0	0.0	0.000	A
D-BC	0	261	0.000	0	0.0	0.000	A
C-ABD	161	896	0.180	161	0.5	4.911	A
C-D	3			3			
C-A	447			447			

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-CD	77	494	0.157	78	0.2	8.659	A
B-AD	35	299	0.117	35	0.1	13.673	B
A-BCD	5	988	0.005	5	0.0	3.665	A
A-B	67			67			
A-C	571			571			
D-AB	0	396	0.000	0	0.0	0.000	A
D-BC	0	305	0.000	0	0.0	0.000	A
C-ABD	108	849	0.127	108	0.3	4.872	A
C-D	2			2			
C-A	389			389			

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-CD	65	519	0.125	65	0.1	7.928	A
B-AD	29	332	0.089	30	0.1	11.923	B
A-BCD	4	929	0.004	4	0.0	3.890	A
A-B	56			56			
A-C	478			478			
D-AB	0	425	0.000	0	0.0	0.000	A
D-BC	0	337	0.000	0	0.0	0.000	A
C-ABD	79	818	0.096	79	0.2	4.878	A
C-D	2			2			
C-A	337			337			

2043 with Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2043 with Dev	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	513	100.000
B		Z	202	100.000
C		Z	695	100.000
D		✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	69	444	0
	B	103	0	99	0
	C	635	59	0	1
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	08:15-08:30	386	386
	08:30-08:45	461	461
	08:45-09:00	565	565
	09:00-09:15	565	565
	09:15-09:30	461	461
	09:30-09:45	386	386
B	08:15-08:30	152	152
	08:30-08:45	182	182
	08:45-09:00	222	222
	09:00-09:15	222	222
	09:15-09:30	182	182
	09:30-09:45	152	152
C	08:15-08:30	523	523
	08:30-08:45	625	625
	08:45-09:00	765	765
	09:00-09:15	765	765
	09:15-09:30	625	625
	09:30-09:45	523	523
D	08:15-08:30	0	0
	08:30-08:45	0	0
	08:45-09:00	0	0
	09:00-09:15	0	0
	09:15-09:30	0	0
	09:30-09:45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.23	9.90	0.3	A
B-AD	0.41	21.79	0.7	C
A-BCD	0.00	0.00	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.19	4.38	0.6	A
C-D				
C-A				

Main Results for each time segment

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-CD	75	534	0.140	74	0.2	7.820	A
B-AD	78	349	0.222	76	0.3	13.170	B
A-BCD	0	534	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	334			334			
D-AB	0	417	0.000	0	0.0	0.000	A
D-BC	0	332	0.000	0	0.0	0.000	A
C-ABD	93	916	0.102	92	0.2	4.371	A
C-D	0.68			0.68			
C-A	429			429			

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-CD	89	509	0.175	89	0.2	8.566	A
B-AD	93	319	0.290	92	0.4	15.823	C
A-BCD	0	509	0.000	0	0.0	0.000	A
A-B	62			62			
A-C	399			399			
D-AB	0	387	0.000	0	0.0	0.000	A
D-BC	0	298	0.000	0	0.0	0.000	A
C-ABD	131	966	0.135	130	0.3	4.313	A
C-D	0.78			0.78			
C-A	493			493			

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-CD	109	473	0.230	109	0.3	9.871	A
B-AD	113	279	0.407	112	0.7	21.519	C
A-BCD	0	475	0.000	0	0.0	0.000	A
A-B	76			76			
A-C	489			489			
D-AB	0	344	0.000	0	0.0	0.000	A
D-BC	0	252	0.000	0	0.0	0.000	A
C-ABD	201	1038	0.194	200	0.6	4.306	A
C-D	0.89			0.89			
C-A	563			563			

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-CD	109	473	0.231	109	0.3	9.903	A
B-AD	113	278	0.407	113	0.7	21.794	C
A-BCD	0	475	0.000	0	0.0	0.000	A
A-B	76			76			
A-C	489			489			
D-AB	0	344	0.000	0	0.0	0.000	A
D-BC	0	252	0.000	0	0.0	0.000	A
C-ABD	202	1039	0.194	201	0.6	4.313	A
C-D	0.89			0.89			
C-A	563			563			

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-CD	89	508	0.175	89	0.2	8.602	A
B-AD	93	319	0.290	94	0.4	16.048	C
A-BCD	0	509	0.000	0	0.0	0.000	A
A-B	62			62			
A-C	399			399			
D-AB	0	386	0.000	0	0.0	0.000	A
D-BC	0	298	0.000	0	0.0	0.000	A
C-ABD	131	967	0.136	132	0.3	4.326	A
C-D	0.78			0.78			
C-A	493			493			

09:30 -09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	75	533	0.140	75	0.2	7.861	A
B-AD	78	348	0.223	78	0.3	13.340	B
A-BCD	0	534	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	334			334			
D-AB	0	417	0.000	0	0.0	0.000	A
D-BC	0	331	0.000	0	0.0	0.000	A
C-ABD	94	916	0.102	94	0.2	4.384	A
C-D	0.68			0.68			
C-A	429			429			

2043 with Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	Arm B - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (S)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.18	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.18	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2043 with Dev	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	740	100.000
B		✓	168	100.000
C		✓	573	100.000
D		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	100	638	2
	B	53	0	115	0
	C	496	74	0	3
	D	2	1	2	0

Vehicle Mix

Heavy Vehicle %

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
A	17:00-17:15	557	557
	17:15-17:30	665	665
	17:30-17:45	815	815
	17:45-18:00	815	815
	18:00-18:15	665	665
	18:15-18:30	557	557
B	17:00-17:15	126	126
	17:15-17:30	151	151
	17:30-17:45	185	185
	17:45-18:00	185	185
	18:00-18:15	151	151
	18:15-18:30	126	126
C	17:00-17:15	431	431
	17:15-17:30	515	515
	17:30-17:45	631	631
	17:45-18:00	631	631
	18:00-18:15	515	515
	18:15-18:30	431	431
D	17:00-17:15	0	0
	17:15-17:30	0	0
	17:30-17:45	0	0
	17:45-18:00	0	0
	18:00-18:15	0	0
	18:15-18:30	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.28	11.25	0.4	B
B-AD	0.24	19.24	0.3	C
A-BCD	0.01	3.85	0.0	A
A-B				
A-C				
D-AB	0.00	0.00	0.0	A
D-BC	0.00	0.00	0.0	A
C-ABD	0.24	5.34	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-CD	87	513	0.169	86	0.2	8.406	A
B-AD	40	326	0.122	39	0.1	12.527	B
A-BCD	4	939	0.004	4	0.0	3.849	A
A-B	75			75			
A-C	478			478			
D-AB	0	422	0.000	0	0.0	0.000	A
D-BC	0	331	0.000	0	0.0	0.000	A
C-ABD	103	814	0.127	102	0.3	5.059	A
C-D	2			2			
C-A	326			326			

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-CD	103	486	0.213	103	0.3	9.396	A
B-AD	48	292	0.163	47	0.2	14.689	B
A-BCD	5	1000	0.005	5	0.0	3.617	A
A-B	89			89			
A-C	570			570			
D-AB	0	391	0.000	0	0.0	0.000	A
D-BC	0	297	0.000	0	0.0	0.000	A
C-ABD	143	845	0.169	142	0.4	5.131	A
C-D	2			2			
C-A	370			370			

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-CD	127	447	0.283	126	0.4	11.204	B
B-AD	58	246	0.238	58	0.3	19.132	C
A-BCD	9	1089	0.008	9	0.0	3.330	A
A-B	109			109			
A-C	697			697			
D-AB	0	348	0.000	0	0.0	0.000	A
D-BC	0	251	0.000	0	0.0	0.000	A
C-ABD	214	891	0.240	213	0.6	5.323	A
C-D	3			3			
C-A	414			414			

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-CD	127	447	0.283	127	0.4	11.246	B
B-AD	58	245	0.238	58	0.3	19.237	C
A-BCD	9	1089	0.008	9	0.0	3.333	A
A-B	109			109			
A-C	697			697			
D-AB	0	347	0.000	0	0.0	0.000	A
D-BC	0	251	0.000	0	0.0	0.000	A
C-ABD	215	892	0.241	214	0.7	5.339	A
C-D	3			3			
C-A	414			414			

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-CD	103	486	0.213	104	0.3	9.440	A
B-AD	48	292	0.163	48	0.2	14.787	B
A-BCD	5	1000	0.005	5	0.0	3.618	A
A-B	89			89			
A-C	570			570			
D-AB	0	391	0.000	0	0.0	0.000	A
D-BC	0	297	0.000	0	0.0	0.000	A
C-ABD	143	846	0.169	144	0.4	5.150	A
C-D	2			2			
C-A	370			370			

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-CD	87	513	0.169	87	0.2	8.455	A
B-AD	40	326	0.122	40	0.1	12.611	B
A-BCD	4	939	0.004	4	0.0	3.852	A
A-B	75			75			
A-C	478			478			
D-AB	0	421	0.000	0	0.0	0.000	A
D-BC	0	330	0.000	0	0.0	0.000	A
C-ABD	104	814	0.128	105	0.3	5.084	A
C-D	2			2			
C-A	325			325			

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