

Proposed Large-scale Residential Development, Lisdaran, Cavan, Co. Cavan

Traffic and Transport Assessment

28th October 2025

Prepared for

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Non-technical summary

- TTRSA has been commissioned by Lisdaran Developments Ltd. to prepare a Traffic and Transport Assessment (TTA) for a Proposed Large-scale Residential Development (LRD) at Lisdaran, Cavan, Co. Cavan, as part of a planning application.
- The proposed development consists of the provision of 109 residential units and a crèche. 65 of the residential units are to be detached/terraced dwellings, and 44 of the residential units are to be duplex apartments. The development also includes: on-street and off-street (in-curtilage) surface car parking; electric vehicle charging points; bicycle parking; an upgraded access point from Loreto Road including the provision of a right-turn lane; internal access roads; footpaths including connection to the Cavan Urban Greenway; and, other associated works including surface water drainage and landscaping.
- The proposed development is to be accessed from the L1513 Loreto Road, approximately 350m to the north-east of its junction with Golf Links Road. Lisdaran Developments Ltd. have informed TTRSA that the junction permitted under Cavan County Council planning reference 21/601, including a right-turn lane facility on the Loreto Road, will be constructed following commencement of the proposed development.
- The site layout of the proposed development, upon which the analysis contained within this TTA is based, has been prepared by Michael Fitzpatrick Architects Ltd. entitled '*Site Plan*' drawing reference 24174- RCL-MFA-00- 00- DR- A-518 Rev P03, dated 23/10/2025.
- The scope of this TTA was discussed with Cavan County Council as part of the LRD process, with the requested scope being set out within Cavan County Council's LRD Opinion. The content of this TTA is consistent with the requested scope.
- To assist in the preparation of this TTA, Cavan County Council have provided traffic data collected at: the L1532/L1513 Loreto Cross junction at Drumgola; the L1514/L1513 Drumelis mini-roundabout junction; and, the R198/L1514 Rock Cross junction, on Thursday 30th March 2023. Data for the local peak traffic hours across these junctions, an AM peak hour of 08:00-08:59 and a PM peak hour of 15:45-16:44, has been processed by TTRSA for analysis within this TTA.
- Subject to planning being granted, TTRSA have been informed by the Lisdaran Developments Ltd. that the proposed development will be opened in phases with the final phase been completed in summer 2029. Local traffic has been growthed to this 'opening' year and future assessment years of 2034 and 2044 (five and 15 years after opening) using composite TII link based central growth factors for County Cavan.
- Trip generation for the proposed development has been predicted based on trip generation traffic counts undertaken previously undertaken by TTRSA at the Drumgola Woods and Rocklands housing estates, both located within Cavan town.
- The traffic impact of the proposed development on the following junctions has been assessed using TII recognised industry standard traffic modelling software packages: the amended site access junction onto Loreto Road; the existing L1532/L1513 Loreto Cross junction at Drumgola; the existing L1514/L1513 Drumelis mini-roundabout junction; and, the R198/L1514 Rock Cross junction. In summary, the traffic modelling output shows that with the exception of the L1532/L1513 Loreto Cross junction at Drumgola, which will be operating over capacity in the 2034 AM peak in the baseline scenario, the existing junctions have spare capacity in the baseline and with development scenarios. The traffic modelling also shows that the L1532/L1513 Loreto Cross junction at Drumgola would operate with significant levels of spare capacity if traffic signal control was introduced to allow vehicles to exit from the L1513 Loreto Road.
- Collision data is not currently publicly available due to ongoing issues in relation to GDPR and associated data-sharing agreements between An Garda Síochána and the Road Safety Authority. A Stage 1 Road Safety Audit of the proposed development has been prepared under separate cover.
- A Quality Audit has been prepared under separate cover, the preparation of which, reviewed the roads with the proposed development against the geometric standards contained within DMURS.

- The proposed development includes: one car parking space per duplex unit and two car parking spaces per dwelling, 206 car parking spaces overall, of which 22 are visitor car parking spaces for the duplex units and ten car parking spaces are located at the crèche. Proposed bicycle parking comprises: 160 bicycle parking spaces including 98 bicycle parking spaces for the duplex apartments, 52 bicycle parking spaces for visitors, and 10 bicycle parking spaces located at the crèche.
- The proposed development has been designed to accommodate access and deliveries by service vehicles. Swept-path analysis for refuse vehicle access have been prepared by Alan Traynor Consulting Engineers.

1 Introduction

1.1 Traffic Transport and Road Safety Associates

Traffic Transport and Road Safety Associates Ltd. (TTRSA) is a specialist Traffic Engineering and Transport Planning practice, based in Ireland. The senior managers within TTRSA have extensive experience of developing traffic management schemes, assessing the transport related impacts of development and improving road safety both nationally and internationally.

TTRSA has been commissioned by Lisdaran Developments Ltd. to prepare a Traffic and Transport Assessment for a Proposed Large-scale Residential Development (LRD) at Lisdaran, Cavan, Co. Cavan, as part of a planning application.

1.2 Proposed development

The proposed development consists of the provision of 109 residential units and a crèche. 65 of the residential units are to be detached/terraced dwellings, and 44 of the residential units are to be duplex apartments. The development also includes: on-street and off-street (in-curtilage) surface car parking; electric vehicle charging points; bicycle parking; an upgraded access point from Loreto Road including the provision of a right-turn lane; internal access roads; footpaths including connection to the Cavan Urban Greenway; and, other associated works including surface water drainage and landscaping.

The proposed development is to be accessed from the L1513 Loreto Road, approximately 350m to the north-east of its junction with Golf Links Road. The site existing access junction will be amended as part of the proposed development. Lisdaran Developments Ltd. have informed TTRSA that the form of junction permitted under Cavan County Council planning reference 21/601 and An Bord Pleanála (ABP) planning reference 313955, including a right-turn lane facility on the Loreto Road, will be constructed following commencement of the proposed development.

The site layout of the proposed development, upon which the analysis contained within this Traffic and Transport Assessment is based, has been prepared by Michael Fitzpatrick Architects Ltd. entitled 'Site Plan' drawing reference 24174- RCL- MFA-00- 00- DR- A-518 Rev P03, dated 23/10/2025. A scaled copy of this drawing is included for information only within Appendix A.

1.3 Scoping

The scope of this Traffic and Transport Assessment was discussed with Cavan County Council as part of the LRD process, with the requested scope being set out within Cavan County Council's LRD Opinion. The content of this Traffic and Transport Assessment is consistent with the requested scope.

1.4 Format of this Traffic and Transport Assessment

This Traffic and Transport Assessment has been prepared in accordance with the requirements of the guidance set out in the Transport Infrastructure Ireland (TII) document '*Traffic and Transport Assessment Guidelines*' (PE-PDV-02045)¹ published in May 2014. All highway recommendations conform, as appropriate, to: development management standards contained within the '*Cavan County Development Plan 2022-2028*'²; the '*Design Manual for Urban Roads and Streets*'³ (DMURS); and/or, prevailing TII (Publications) guidelines⁴.

1 <https://cdn.tii.ie/publications/PE-PDV-02045-01.pdf>

2 <https://www.cavancoco.ie/file-library/Planning/Development-plans/development-plan-2022-2028/written-statement/cdp-written-statement.pdf>

3 <https://www.roadguidelines.ie/design-manuals-for-urban-roads-and-street/>

4 <https://tiipublications.ie>

- Chapter 2 outlines the existing local conditions into which the proposed development meshes, including the nature of the road network and existing traffic levels;
- Chapter 3 assesses the traffic related impacts of the proposed development, including trip generation, distribution, assignment and junction operation;
- Chapter 4 discusses: external access to the proposed development; alterations to the existing site access; the internal layout of the proposed development including facilities for pedestrians; bicycle and car parking provision; and, servicing access.

2 Existing conditions

2.1 The local highway network

As noted in Section 1.2 of this report, the proposed development is to be accessed, via an amended site access junction, from the L1513 Loreto Road, approximately 350m to the north-east of its junction with Golf Links Road. In the vicinity of the site access junction, Loreto Road is currently formed from a 6.0m wide carriageway demarcated with a solid centreline. The eastern side of Loreto Road is currently bounded by a narrow grass verge, hedge and deep open drain, whilst the western side of Loreto Road is currently bounded by a kerbed footpath and post and rail fence (Plate 2.1). An agricultural/ residential access is located opposite the existing site access, with further residential accesses to the north-east. Public lighting is present, as is formal surface water drainage on the north-western side of Loreto Road. The posted speed limit is 60km/h.

Plate 2.1 – The L1513 Loreto Road looking south-west from the access junction



The access junction leads to a 6.0m wide site access road bounded on its southern side by a 2.0m wide footpath (Plate 2.2).

Plate 2.2 – The existing site access road looking east



2.2 Current traffic levels

To assist in the preparation of this Traffic and Transport Assessment, Cavan County Council have provided traffic data collected at: the L1532/L1513 Loreto Cross junction at Drumgola; the L1514/L1513 Drumelis mini-roundabout junction; and, the R198/L1514 Rock Cross junction, on Thursday 30th March 2023. Data for the local peak traffic hours across these junctions, an AM peak hour of 08:00-08:59 and a PM peak hour of 15:45-16:44, has been processed by TTRSA for analysis within this Traffic and Transport Assessment.

Daily traffic flow recorded by permanent TII traffic counter located on the N3 Cavan Bypass was 8.6% higher than AADT on Thursday 30th March 2023. The data is therefore considered by TTRSA to be robust.

For the purpose of this assessment, the traffic count data has been converted into Passenger Car Units (PCUs), using factors of: 0.2 for pedal cycles; 0.4 for motorcycles; 1.0 for cars and light goods vehicles (LGV) including those towing trailers; and 2.3 for buses (PSV) and all types of rigid and articulated Medium and Heavy Commercial Vehicles (HCVs).

The processed peak hour traffic count data, including PCU values, is included within Appendix B.

2.3 Planning context

The area of the proposed development is zoned within the 'Cavan County Development Plan 2022-2028'. The policies, objectives and development management standards contained within the Development Plan apply to the proposed residential development.

A master-plan was previously developed covering a wider area than the currently proposed residential development. Two potential developments are located within the master-planned area:

- Planning permission was granted in 2023 for a proposed three storey medical centre on a site to the south of the proposed residential development (Cavan County Council planning reference 21/601 and ABP planning reference 313955 refer) it is understood that the granted development will not proceed in its current form.
- Planning permission was also previously granted for a 160-bed nursing home on a site to the south of the proposed residential development (Cavan Council planning reference 19/236). This development was not completed, but a planning application has been submitted for a revised 112-bed nursing home (Cavan County Council planning reference 24/60481). The smaller nursing home was granted by Cavan County Council but the decision has since been appealed (An Coimisiún Pleanála (ACP) reference 323185).

Operational phase trip generation potentially associated with both of these aforementioned granted medical centre and smaller nursing home developments has been included within this Traffic and Transport Assessment based on the trip generation information submitted in the relevant planning applications, and is shown within the calculations contained in Appendix C.

2.4 Road safety

Collision data is not currently publicly available due to ongoing issues in relation to GDPR and associated data-sharing agreements between An Garda Síochána and the Road Safety Authority. A Stage 1 Road Safety Audit of the proposed development has been prepared under separate cover.

2.5 Proposed transport schemes

As part of preparing this Traffic and Transport Assessment a review has been undertaken of proposed transport schemes in the vicinity of the proposed development. The Cavan County Development Plan 2022-2028 contains an objective '*to assess the need for and the economic benefits of distributor/relief roads or new streets in the town and environs area*'. The Active Travel section of Cavan Council Council has also advised TTRSA that external consultants are currently advancing a scheme to extend the currently constructed Cavan Urban Greenway from the existing greenway access to the Cavan General Hospital to Railway Road. This will link the greenway to a second scheme improving active travel facilities between Cavan Town Centre and the main access to Cavan General Hospital, utilising: Railway Road; Farnham Road; and, Golf Links Road.

2.6 Other planned developments

Consultation of the national planning application map viewer (on 15th October 2025) highlighted that other ongoing and committed development within this area of Cavan Town includes: a 13 bedroom extension to the existing St. Christopher's Hospice which is accessed off Loreto Road (Cavan County Council planning reference 23/60015); and, development at Cavan General Hospital for an emergency unit, endoscopy unit and inpatient wards (Cavan County Council planning reference 24/60276). The documentation submitted with the planning applications for these developments indicates that they do not result in trip generation over and above the TII traffic growth factors covered in Section 3.3 of this report.

3 Assessment of development impact

3.1 Trip generation and modal split

Trip generation for the proposed development has been predicted based on trip generation traffic counts undertaken previously undertaken by TTRSA at the Drumgola Woods and Rocklands housing estates, both located within Cavan town. The peak hour trips generated by these housing estates, the associated trip rate per (dwelling) unit, and also the predicted trip generation for the proposed development are included within the Trip Rate Calculations contained within Appendix C. The associated AM and PM peak hour arrivals and departures are also summarised in Table 3.1.

Table 3.1: Predicted peak hour trip generation for the proposed development

Time Period	Arrivals			Departures		
	Car/ LGV	HGV/ Bus	PCUs	Car/ LGV	HGV/ Bus	PCUs
AM Peak Hour	39	0	39	69	0	69
PM Peak Hour	41	0	41	24	0	25 [^]

Vehicular trips for the proposed development and PCUs are rounded to whole numbers : [^]includes 1 PCU related to other vehicular access by bicycle and motorcycle

An Outline (strategic framework) Mobility Management Plan for the proposed development has been prepared under separate cover.

3.2 Trip distribution and assignment

For the purpose of this assessment, the generated trips have been assigned to existing directional movements on the local road network at the junctions covered within the traffic assessment detailed in Section 3.4 of this report. The impact of the distribution and assignment of development related trips is detailed in Appendix C.

3.3 Opening and future year traffic

Subject to planning being granted, TTRSA have been informed by Lisdaran Developments Ltd. that the proposed development will be opened in phases with the final phase been completed in summer 2029. Local traffic has been growthed to this 'opening' year and future assessment years of 2034 and 2044 (five and 15 years after opening) using composite TII link based central growth factors for County Cavan with 5.4% HCVs, consistent with HCV traffic during the peak hours on Loreto Road. The growth factors applied are specified below and the impact of the resulting background traffic growth is detailed within Appendix C.

- From 2023 to 2029 a factor of 1.076;
- From 2023 to 2034 a factor of 1.101; and
- From 2023 to 2044 a factor of 1.148.

3.4 Assessment of junction operation

As required by the scoping covered within Section 1.3 of this Traffic and Transport Assessment, the following junctions have been assessed for AM and PM peak hour scenarios, in the opening (2029) and future assessment years (2034 and 2044). Two scenarios have been assessed, firstly a baseline scenario including the operational phase trip generation potentially associated with the granted medical centre and smaller nursing home developments (as covered within Section 2.3 of this Traffic and Transport Assessment) and secondly a with development scenario including aforementioned operational phase trip generation potentially associated with the granted medical centre and smaller nursing home developments and the trip generation predicted for the proposed development as covered within Section 3.1 of this Traffic and Transport Assessment. The junctions covered by the assessment are:

- The amended site access junction onto Loreto Road, including right-turn lane, assessed using PICADY, which is recognised by TII as an industry standard software package for modelling priority controlled junctions;
- The existing L1532/L1513 Loreto Cross junction at Drumgola, also assessed using PICADY, with a conceptual traffic signal control of this junction also been assessed using LINSIG, which is recognised by TII as an industry standard software package for modelling traffic signal controlled junctions;
- The existing L1514/L1513 Drumelis mini-roundabout junction, assessed using ARCADY which is recognised by TII as an industry standard software package for modelling roundabout junctions; and,
- The R198/L1514 Rock Cross junction (the existing south-western R198 Farnham Road / (L15133) Link junction at Rock Cross, and the existing eastern R198 Farnham Road / L1514 Golf Links Road junction at Rock Cross) also assessed using PICADY.

The assessment has been undertaken using PCU values. The criteria used to assess the performance of a junction for a given traffic demand within the aforementioned traffic modelling software are:

- Ratio of Flow to Capacity (RFC), also termed Degree of Saturation (Deg Sat) in LINSIG, is a measure of junction performance in terms of saturation. A value of 1.00, which can also be considered as 100% saturation, represents an arm of the junction operating at maximum capacity, in that any increase in the rate of vehicles arriving on the link will result in significant additional queue lengths. Traditionally a figure of 0.85 or 85% is the maximum acceptable degree of saturation for priority and roundabout junctions, with a figure of 0.90 or 90% being applied for traffic signal controlled junctions. Anything above this levels is considered to be congested.
- Queue lengths (measured in PCUs) are primarily used to check for blocking back through adjacent junctions.

The results of the assessment are summarised in Table 3.2 through Table 3.7, and the modelling output files are provided in Appendix D.

In summary, the modelling output shows that with the exception of the L1532/L1513 Loreto Cross junction at Drumgola, which will be operating over capacity in the 2034 AM peak in the baseline scenario, the existing junctions assessed have spare capacity in the baseline and with development scenarios. The modelling also shows that the L1532/L1513 Loreto Cross junction at Drumgola would operate with significant levels of spare capacity if traffic signal control was introduced to allow vehicles to exit from the L1513 Loreto Road.

Table 3.2 shows that the permitted access junction off Loreto Road (as amended from the existing junction), will operate with 81% spare capacity in the 2044 AM peak hour and 75% spare capacity in the 2044 PM peak hour in the with development scenario. Queuing is forecast to be less than one PCU in all of the scenarios tested.

Table 3.2 – Summary of PICADY output for the permitted Loreto Road/development access junction

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-C	D1	0.1	7.33	0.08	A	D7	0.2	7.44	0.13	A
Stream B-AD		0.1	11.34	0.09	B		0.3	11.19	0.22	B
Stream A-BCD		0.0	5.88	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.66	0.15	A		0.1	6.36	0.07	A
	2034 Baseline									
Stream B-C	D2	0.1	7.35	0.08	A	D8	0.2	7.45	0.13	A
Stream B-AD		0.1	11.44	0.09	B		0.3	11.25	0.22	B
Stream A-BCD		0.0	5.90	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.69	0.15	A		0.1	6.37	0.07	A
	2044 Baseline									
Stream B-C	D3	0.1	7.40	0.08	A	D9	0.2	7.48	0.13	A
Stream B-AD		0.1	11.62	0.09	B		0.3	11.36	0.22	B
Stream A-BCD		0.0	5.93	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.74	0.15	A		0.1	6.39	0.07	A
	2029 With Development									
Stream B-C	D4	0.2	8.23	0.15	A	D10	0.2	7.75	0.15	A
Stream B-AD		0.2	12.99	0.18	B		0.4	12.11	0.26	B
Stream A-BCD		0.0	5.97	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.06	0.18	A		0.1	6.69	0.11	A
	2034 With Development									
Stream B-C	D5	0.2	8.26	0.15	A	D11	0.2	7.76	0.15	A
Stream B-AD		0.2	13.12	0.18	B		0.4	12.17	0.26	B
Stream A-BCD		0.0	5.99	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.09	0.18	A		0.1	6.70	0.11	A
	2044 With Development									
Stream B-C	D6	0.2	8.32	0.15	A	D12	0.2	7.36	0.14	A
Stream B-AD		0.2	13.35	0.19	B		0.3	11.33	0.25	B
Stream A-BCD		0.0	6.03	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.15	0.18	A		0.1	6.39	0.10	A

Arm A = L1513 Loreto Road (to/from North) : Arm B = Existing/Proposed development access : Arm C = L1513 Loreto Road (to/from South) : Arm D = Existing private agricultural/residential access

Table 3.3 shows that the existing L1532/L1513 Loreto Cross junction at Drumgola, will become increasingly congested over time in both the baseline and with development scenarios. The issue with capacity relates to the inability for vehicles to exit the L1513 Loreto Road due to L1532 traffic movements. Whilst the predicted level of queuing could be contained within the existing road network, road users may become increasingly frustrated with delays. Installing traffic signal control at this junction would address the identified capacity issue as highlighted in Table 3.4. It should be noted that the traffic impact of the proposed development on this junction is 3.8%.

Table 3.3 – Summary of PICADY output for the existing L1532/L1513 Loreto Cross junction at Drumgola

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-C	D1	0.7	20.71	0.41	C	D7	0.8	12.57	0.43	B
Stream B-A		4.6	58.47	0.84	F		1.3	18.48	0.55	C
Stream C-AB		1.5	15.41	0.59	C		0.2	7.50	0.18	A
	2034 Baseline									
Stream B-C	D2	1.0	27.66	0.49	D	D8	0.8	12.88	0.44	B
Stream B-A		5.5	68.42	0.87	F		1.3	19.15	0.56	C
Stream C-AB		1.6	15.93	0.60	C		0.2	7.57	0.19	A
	2044 Baseline									
Stream B-C	D3	5.2	125.98	0.96	F	D9	0.9	13.64	0.46	B
Stream B-A		8.1	95.30	0.93	F		1.5	20.58	0.59	C
Stream C-AB		1.8	17.02	0.62	C		0.3	7.69	0.20	A
	2029 With Development									
Stream B-C	D4	3.6	95.55	0.85	F	D10	0.9	13.12	0.45	B
Stream B-A		7.7	90.23	0.92	F		1.4	19.68	0.57	C
Stream C-AB		1.7	16.40	0.61	C		0.3	7.70	0.20	A
	2034 With Development									
Stream B-C	D5	5.8	141.09	0.97	F	D11	0.9	13.51	0.46	B
Stream B-A		9.7	109.54	0.95	F		1.5	20.42	0.58	C
Stream C-AB		1.8	17.01	0.62	C		0.3	7.75	0.20	A
	2044 With Development									
Stream B-C	D6	8.2	201.70	1.03	F	D12	1.0	14.34	0.48	B
Stream B-A		15.2	157.73	1.02	F		1.6	22.05	0.61	C
Stream C-AB		2.0	18.22	0.65	C		0.3	7.88	0.21	A

Arm A = L1532 to/from Cavan Town : Arm B = L1513 Loreto Road : Arm C = L1532 to/from N3

Table 3.4 shows that conceptual traffic signal control of the L1532/L1513 Loreto Cross junction at Drumgola allows vehicles to exit from the L1513 Loreto Road, providing a potential solution to the capacity constraints identified with this existing priority controlled junction. The scenarios summarised below are all based on: a 60 second cycle time and the same traffic data used for the PICADY modelling of this junction. It is likely that any traffic signal control at this location would operate using vehicle actuation rather than a fixed cycle time, and therefore the cycle time would be reduced to a minimum based on demand, and the predicted mean max queuing would also be reduced compared to the PCU values shown in Table 3.4.

Table 3.4 – Summary of LINSIG output for conceptual traffic signal control of the L1532/L1513 Loreto Cross junction at Drumgola with a fixed 60 second cycle time

Scenario	Year	AM		PM	
		Mean Max Queue (PCU)	Deg Sat (%)	Mean Max Queue (PCU)	Deg Sat (%)
Baseline	2029	5.2	67.6	3.9	46.4
	2034	5.9	69.0	4.0	47.4
	2044	6.2	71.7	4.2	49.1
With Development	2029	6.4	70.0	4.1	48.4
	2034	6.4	73.6	5.2	49.3
	2044	7.1	76.2	5.5	51.2

Table 3.5 shows that the existing L1514/L1513 Drumelis mini-roundabout junction, as recently altered by Cavan County Council, will operate with 42% spare capacity in the 2044 AM peak hour and 61% spare capacity in the 2044 PM peak hour in the with development scenario. Queuing is forecast to be less than one PCU in all of the scenarios tested.

Table 3.5 – Summary of ARCADY output for the existing L1514/L1513 Drumelis mini roundabout junction

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Arm A	D1	0.9	10.05	0.45	B	D7	0.5	8.04	0.34	A
Arm B		0.5	7.23	0.30	A		0.1	5.54	0.11	A
Arm C		1.0	8.58	0.50	A		0.4	5.69	0.29	A
	2034 Baseline									
Arm A	D2	0.9	10.28	0.46	B	D8	0.6	8.14	0.35	A
Arm B		0.5	7.33	0.30	A		0.1	5.58	0.11	A
Arm C		1.1	8.81	0.51	A		0.5	5.74	0.30	A
	2044 Baseline									
Arm A	D3	1.0	10.66	0.48	B	D9	0.6	8.31	0.36	A
Arm B		0.5	7.54	0.32	A		0.1	5.64	0.11	A
Arm C		1.2	9.26	0.53	A		0.5	5.82	0.31	A
	2029 With Development									
Arm A	D4	1.0	10.58	0.47	B	D10	0.6	8.41	0.37	A
Arm B		0.5	7.44	0.31	A		0.1	5.69	0.12	A
Arm C		1.3	9.58	0.55	A		0.5	5.81	0.31	A
	2034 With Development									
Arm A	D5	1.0	10.83	0.48	B	D11	0.6	8.51	0.37	A
Arm B		0.5	7.54	0.32	A		0.1	5.72	0.12	A
Arm C		1.3	9.88	0.56	A		0.5	5.87	0.31	A
	2044 With Development									
Arm A	D6	1.1	11.26	0.50	B	D12	0.7	8.70	0.39	A
Arm B		0.5	7.76	0.33	A		0.1	5.79	0.12	A
Arm C		1.5	10.45	0.58	B		0.5	5.94	0.32	A

Arm A = L1514 Golf Links Road to/from Cavan Town : Arm B = Local Road to/from South : Arm C = L1513 Loreto Road

Table 3.6 shows that the existing south-western R198 Farnham Road / (L15133) Link junction at Rock Cross, will operate with 77% spare capacity in the 2044 AM peak hour and 54% spare capacity in the 2044 PM peak hour in the with development scenario. Queuing is forecast to be less than one PCU in all of the scenarios tested.

Table 3.6 – Summary of PICADY output for the existing south-western R198 Farnham Road / (L15133) Link junction at Rock Cross

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-AC	D1	0.1	7.94	0.08	A	D7	0.2	8.66	0.14	A
Stream C-AB		0.3	9.21	0.20	A		0.8	11.81	0.42	B
	2034 Baseline									
Stream B-AC	D2	0.1	8.00	0.08	A	D8	0.2	8.68	0.14	A
Stream C-AB		0.3	9.30	0.21	A		0.8	11.95	0.43	B
	2044 Baseline									
Stream B-AC	D3	0.1	8.10	0.08	A	D9	0.2	8.95	0.15	A
Stream C-AB		0.3	9.45	0.21	A		0.9	12.50	0.45	B
	2029 With Development									
Stream B-AC	D4	0.1	8.01	0.08	A	D10	0.2	8.71	0.14	A
Stream C-AB		0.3	9.33	0.21	A		0.8	11.93	0.43	B
	2034 With Development									
Stream B-AC	D5	0.1	8.08	0.08	A	D11	0.2	8.80	0.15	A
Stream C-AB		0.3	9.42	0.22	A		0.8	12.18	0.44	B
	2044 With Development									
Stream B-AC	D6	0.1	8.19	0.09	A	D12	0.2	9.00	0.16	A
Stream C-AB		0.3	9.60	0.23	A		0.9	12.64	0.46	B

Arm A = R198 Farnham Road to/from West : Arm B = (L15133) Link to L1514 Golf Links Road : Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

Table 3.7 shows that the existing eastern R198 Farnham Road / L1514 Golf Links Road junction at Rock Cross, will operate with 55% spare capacity in the 2044 AM peak hour and 42% spare capacity in the 2044 PM peak hour in the with development scenario. Queuing is forecast to be less than one PCU in all of the scenarios tested.

Table 3.7 – Summary of PICADY output for the existing eastern R198 Farnham Road / L1514 Golf Links Road junction at Rock Cross

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-AC	D1	0.7	9.46	0.40	A	D7	1.2	11.80	0.54	B
Stream C-AB		0.2	7.55	0.16	A		0.7	9.65	0.38	A
	2034 Baseline									
Stream B-AC	D2	0.8	9.66	0.42	A	D8	1.3	12.11	0.55	B
Stream C-AB		0.2	7.60	0.17	A		0.7	9.76	0.39	A
	2044 Baseline									
Stream B-AC	D3	0.8	10.00	0.43	B	D9	1.4	12.80	0.57	B
Stream C-AB		0.2	7.73	0.18	A		0.7	10.01	0.41	B
	2029 With Development									
Stream B-AC	D4	0.8	9.78	0.42	A	D10	1.3	12.05	0.55	B
Stream C-AB		0.2	7.59	0.17	A		0.7	9.75	0.39	A
	2034 With Development									
Stream B-AC	D5	0.8	9.99	0.43	A	D11	1.3	12.37	0.56	B
Stream C-AB		0.2	7.64	0.17	A		0.7	9.88	0.40	A
	2044 With Development									
Stream B-AC	D6	0.9	10.36	0.45	B	D12	1.5	13.04	0.58	B
Stream C-AB		0.2	7.73	0.18	A		0.8	10.15	0.41	B

Arm A = R198 Farnham Road to/from West : Arm B = L1514 Golf Links Road : Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

4 Internal layout and external access

4.1 External access

As noted in Section 1.1, the proposed development is to be accessed from the L1513 Loreto Road, approximately 350m to the north-east of its junction with Golf Links Road. The site existing access junction will be amended as part of the proposed development to the form of junction granted under Cavan County Council planning reference 21/601 and ABP planning reference 313955, including a right-turn lane facility on the Loreto Road, and also a footpath on the eastern side of the L1513 Loreto Road. No other alterations are proposed external the proposed development site.

4.2 Internal road access

The configuration of the proposed development as depicted within the site layout drawing contained in Appendix A (Michael Fitzpatrick Architects drawing reference 24174- RCL- MFA-00- 00- DR- A-518 Rev P03, dated 23/10/2025) comprises a low density residential area aligning the northern section of the development site and a higher density residential area to the south-eastern area of the site. These two areas of the site will be linked by a spine access road which will access onto the granted site access road and in-turn onto Loreto Road. The proposed crèche is also accessed from the granted site access road. A Quality Audit has been prepared under separate cover, the preparation of which, reviewed the roads with the proposed development against the geometric standards within DMURS.

4.3 Pedestrian access internal to the proposed development

The site layout drawing contained in Appendix A (Michael Fitzpatrick Architects drawing reference 24174- RCL- MFA-00- 00- DR- A-518 Rev P03, dated 23/10/2025) depicts a network of footpath routes with uncontrolled pedestrian crossing point. Additional 'amenity' type pedestrian routes are also provided, including connecting to the Cavan Urban Greenway.

4.4 Car parking and bicycle parking

The level of bicycle and car parking required for new housing developments, including the proposed crèche, are specified within Table 7.4 of the prevailing '*Cavan County Development Plan*'. Specifically:

- Bicycle parking for the housing is to be agreed with Cavan County Council;
- One cycle parking stand (five racks for the parking of ten bicycles) is to be provided at the crèche;
- A maximum of two car parking spaces per residential unit for houses;
- A maximum of one car parking space per residential unit and one visitor car parking space for each four residential units for apartments; and,
- A maximum of one car parking space per 4 children and one car parking space for each staff member, and also set-down is to be provided at the crèche.

The proposed development includes: one car parking space per duplex unit and two car parking spaces per dwelling, 206 car parking spaces overall, of which 22 are visitor car parking spaces for the duplex units and ten car parking spaces are located at the crèche. Proposed bicycle parking comprises: 160 bicycle parking spaces including 98 bicycle parking spaces for the duplex apartments, 52 bicycle parking spaces for visitors, and 10 bicycle parking spaces located at the crèche.

4.5 Service vehicles

The proposed development has been designed to accommodate access and deliveries by service vehicles. Swept-path analysis for refuse vehicle access have been prepared by Alan Traynor Consulting Engineers.

Appendix A

Michael Fitzpatrick Architects Site Layout

Drawing Title – Site Plan

Drawing Number – 24174- RCL- MFA-00- 00- DR- A-518 Rev P03

Drawing Dated – 23/10/2025

Received by TTRSA on 22nd October 2025. Scaled copy. For information only.

Appendix B

Processed Traffic Survey Data including PCU Conversion

Arm A = L1513 Loreto Road (to/from North)
Arm B = Existing/Proposed development access
Arm C = L1513 Loreto Road (to/from South)
Arm D = Existing private agricultural/residential access*

PCU Factors

Cycle 0.2
Motorcycle 0.4
Car/LGV 1
HGV/PSV 2.3

Incidents: None
Weather: Dry

Cycle	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	11	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0	0	0	0

Motorcycle	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0	0	0	0

Car / LGV	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	43	0	0	0	0	43	0	0	0	0	0
08:15 – 08:29	0	49	0	0	0	0	73	0	0	0	0	0
08:30 – 08:44	0	62	0	0	0	0	75	0	0	0	0	0
08:45 – 08:59	0	67	1	0	0	0	43	0	0	1	0	0
15:45 – 15:59	0	39	0	0	0	0	53	0	1	0	0	1
16:00 – 16:14	0	24	0	0	0	0	49	0	1	0	0	0
16:15 – 16:29	0	22	0	0	0	0	39	0	0	1	0	0
16:30 – 16:44	0	19	0	0	0	0	52	0	1	1	0	1

HGV/PSV	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	1	0	0	0	0	7	0	0	0	0	0
08:15 – 08:29	0	2	0	0	0	0	4	0	0	0	0	0
08:30 – 08:44	0	3	0	0	0	0	4	0	0	0	0	0
08:45 – 08:59	0	2	0	0	0	0	3	0	0	0	0	0
15:45 – 15:59	0	4	0	0	0	0	3	0	0	0	0	0
16:00 – 16:14	0	3	0	0	0	0	4	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	1	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	3	0	0	0	0	0

Total Vehicles	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	44	0	0	0	0	50	0	0	0	0	0
08:15 – 08:29	0	51	0	0	0	0	77	0	0	0	0	0
08:30 – 08:44	0	65	0	0	0	0	79	0	0	0	0	0
08:45 – 08:59	0	69	1	0	0	0	57	0	0	1	0	0
15:45 – 15:59	0	43	0	0	0	0	56	0	1	0	0	1
16:00 – 16:14	0	27	0	0	0	0	53	0	1	0	0	0
16:15 – 16:29	0	22	0	0	0	0	40	0	0	1	0	0
16:30 – 16:44	0	19	0	0	0	0	55	0	1	1	0	1

PCUS	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 08:14	0	45	0	0	0	0	59	0	0	0	0	0
08:15 – 08:29	0	54	0	0	0	0	82	0	0	0	0	0
08:30 – 08:44	0	69	0	0	0	0	84	0	0	0	0	0
08:45 – 08:59	0	72	1	0	0	0	52	0	0	1	0	0
15:45 – 15:59	0	48	0	0	0	0	60	0	1	0	0	1
16:00 – 16:14	0	31	0	0	0	0	58	0	1	0	0	0
16:15 – 16:29	0	22	0	0	0	0	41	0	0	1	0	0
16:30 – 16:44	0	19	0	0	0	0	59	0	1	1	0	1

PCUs are rounded to the nearest whole number

PCUS	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
08:00 – 09:00	0	239	1	0	0	0	278	0	0	1	0	0
15:45 – 16:44	0	120	0	0	0	0	218	0	3	2	0	2

*=Private access trips from previous traffic survey at this location. PCUs are rounded to the nearest whole number

Processed Cavan County Council MCC Data Thursday 30th March 2023
Existing L1513 Loreto Road/L1532 (Loreto Cross) priority junction



Arm A = L1532 to/from Cavan Town
Arm B = L1513 Loreto Road
Arm C = L1532 to/from N3

PCU Factors

Cycle 0.2
Motorcycle 0.4
Car/LGV 1
HGV/PSV 2.3

Incidents: None
Weather: Dry

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	1	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Motorcycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Car / LGV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	23	10	26	23	28	43
08:15 – 08:29	65	20	62	13	41	59
08:30 – 08:44	55	26	69	30	58	57
08:45 – 08:59	31	45	42	24	87	59
15:45 – 15:59	35	37	46	30	29	19
16:00 – 16:14	23	25	36	43	21	15
16:15 – 16:29	10	27	28	23	26	13
16:30 – 16:44	12	27	23	40	22	16

HGV/PSV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	3	0	8	0	1	2
08:15 – 08:29	3	0	8	1	0	3
08:30 – 08:44	1	3	2	2	2	2
08:45 – 08:59	2	0	0	2	0	2
15:45 – 15:59	6	1	9	2	1	6
16:00 – 16:14	2	1	7	4	0	2
16:15 – 16:29	0	1	0	1	1	0
16:30 – 16:44	0	2	0	2	0	1

Total Vehicles	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	26	10	34	23	29	45
08:15 – 08:29	68	20	70	14	41	62
08:30 – 08:44	56	29	71	32	60	59
08:45 – 08:59	33	45	42	26	87	61
15:45 – 15:59	41	38	55	32	30	25
16:00 – 16:14	26	26	43	47	21	17
16:15 – 16:29	10	28	28	24	27	13
16:30 – 16:44	12	29	23	42	22	17

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	30	10	44	23	30	48
08:15 – 08:29	72	20	80	15	41	66
08:30 – 08:44	57	33	74	35	63	62
08:45 – 08:59	36	45	42	29	87	64
15:45 – 15:59	49	39	67	35	31	33
16:00 – 16:14	28	27	52	52	21	20
16:15 – 16:29	10	29	28	25	28	13
16:30 – 16:44	12	32	23	45	22	18

PCUs are rounded to the nearest whole number

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 09:00	195	108	240	102	221	239
15:45 – 16:44	99	128	170	157	103	84

PCUs are rounded to the nearest whole number

Processed Cavan County Council MCC Data Thursday 30th March 2023
Existing Loreto Road/Golf Links Road (Drumelis) mini-roundabout junction



Arm A = L1514 Golf Links Road to/from Cavan Town
Arm B = (L1513) Local Road to/from South
Arm C = L1513 Loreto Road

PCU Factors

Cycle 0.2
Motorcycle 0.4
Car/LGV 1
HGV/PSV 2.3

Incidents: None
Weather: Dry

Cycle	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	11	0	0	0
15:45 – 15:59	0	0	0	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0

Motorcycle	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0

Car / LGV	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	36	2	0	7	43	7	1
08:15 – 08:29	0	9	48	3	0	25	49	24	0
08:30 – 08:44	1	21	40	25	0	35	62	37	0
08:45 – 08:59	0	13	18	32	0	25	67	27	0
15:45 – 15:59	0	1	37	3	0	17	40	15	0
16:00 – 16:14	0	3	38	1	0	12	24	12	1
16:15 – 16:29	0	3	34	2	0	5	22	12	0
16:30 – 16:44	0	3	42	2	0	11	20	7	0

HGV/PSV	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	5	0	0	2	1	1	0
08:15 – 08:29	0	0	4	0	0	0	2	0	0
08:30 – 08:44	0	0	3	0	0	1	3	0	0
08:45 – 08:59	0	0	3	0	0	0	2	0	0
15:45 – 15:59	0	0	3	0	0	0	4	0	0
16:00 – 16:14	0	0	2	0	0	2	3	2	0
16:15 – 16:29	0	0	0	0	0	1	0	0	0
16:30 – 16:44	0	0	3	0	0	0	0	0	0

Total Vehicles	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	41	2	0	9	44	8	1
08:15 – 08:29	0	9	52	3	0	25	51	24	0
08:30 – 08:44	1	21	43	25	0	36	65	37	0
08:45 – 08:59	0	13	21	32	0	36	69	27	0
15:45 – 15:59	0	1	40	3	0	17	44	15	0
16:00 – 16:14	0	3	40	1	0	14	27	14	1
16:15 – 16:29	0	3	34	2	0	6	22	12	0
16:30 – 16:44	0	3	45	2	0	11	20	7	0

PCUS	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 08:14	0	0	48	2	0	12	45	9	1
08:15 – 08:29	0	9	57	3	0	25	54	24	0
08:30 – 08:44	1	21	47	25	0	37	69	37	0
08:45 – 08:59	0	13	25	32	0	27	72	27	0
15:45 – 15:59	0	1	44	3	0	17	49	15	0
16:00 – 16:14	0	3	43	1	0	17	31	17	1
16:15 – 16:29	0	3	34	2	0	7	22	12	0
16:30 – 16:44	0	3	49	2	0	11	20	7	0

PCUs are rounded to the nearest whole number

PCUS	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
08:00 – 09:00	1	43	177	62	0	101	239	97	1
15:45 – 16:44	0	10	169	8	0	52	122	51	1

PCUs are rounded to the nearest whole number

Processed Cavan County Council MCC Data Thursday 30th March 2023
Existing South-western R198/Link junction at Rock Cross



Arm A = R198 Farnham Road to/from West

Arm B = (L15133) Link to L1514 Golf Links Road

Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

PCU Factors

Cycle 0.2

Motorcycle 0.4

Car/LGV 1

HGV/PSV 2.3

Incidents: None

Weather: Dry

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Motorcycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Car / LGV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	11	49	10	0	0	12
08:15 – 08:29	19	48	4	0	0	16
08:30 – 08:44	20	43	4	0	0	15
08:45 – 08:59	22	36	7	0	0	14
15:45 – 15:59	10	23	12	0	0	41
16:00 – 16:14	6	38	15	1	0	46
16:15 – 16:29	4	23	4	3	1	42
16:30 – 16:44	2	20	19	0	1	41

HGV/PSV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	1	2	0	0	0	3
08:15 – 08:29	0	2	1	0	0	1
08:30 – 08:44	0	2	1	0	0	2
08:45 – 08:59	2	3	1	0	0	0
15:45 – 15:59	3	0	0	0	0	2
16:00 – 16:14	0	1	1	0	0	2
16:15 – 16:29	0	2	0	0	0	4
16:30 – 16:44	1	0	0	0	0	2

Total Vehicles	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	12	51	10	0	0	15
08:15 – 08:29	19	50	5	0	0	17
08:30 – 08:44	20	45	5	0	0	17
08:45 – 08:59	24	39	8	0	0	14
15:45 – 15:59	13	23	12	0	0	43
16:00 – 16:14	6	39	16	1	0	48
16:15 – 16:29	4	25	4	3	1	46
16:30 – 16:44	3	20	19	0	1	43

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	13	54	10	0	0	19
08:15 – 08:29	19	53	6	0	0	18
08:30 – 08:44	20	48	6	0	0	20
08:45 – 08:59	27	43	9	0	0	14
15:45 – 15:59	17	23	12	0	0	46
16:00 – 16:14	6	40	17	1	0	51
16:15 – 16:29	4	28	4	3	1	51
16:30 – 16:44	4	20	19	0	1	46

PCUs are rounded to the nearest whole number

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 09:00	79	197	32	0	0	71
15:45 – 16:44	31	111	52	4	2	193

PCUs are rounded to the nearest whole number

Processed Cavan County Council MCC Data Thursday 30th March 2023
Existing Eastern R198/Golf Links Road junction at Rock Cross



Arm A = R198 Farnham Road to/from West

Arm B = L1514 Golf Links Road

Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

PCU Factors

Cycle 0.2
Motorcycle 0.4
Car/LGV 1
HGV/PSV 2.3

Incidents: None

Weather: Dry

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Motorcycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
15:45 – 15:59	0	0	0	0	0	0
16:00 – 16:14	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0

Car / LGV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	49	0	50	71	12
08:15 – 08:29	0	48	0	50	95	16
08:30 – 08:44	0	43	0	49	89	15
08:45 – 08:59	0	36	0	54	67	14
15:45 – 15:59	0	22	1	62	35	40
16:00 – 16:14	0	41	1	72	36	46
16:15 – 16:29	0	24	0	58	42	43
16:30 – 16:44	0	20	1	67	44	40

HGV/PSV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	2	0	0	6	3
08:15 – 08:29	0	2	0	3	2	1
08:30 – 08:44	0	2	0	1	6	2
08:45 – 08:59	0	3	0	4	2	0
15:45 – 15:59	0	0	0	4	5	2
16:00 – 16:14	0	1	0	6	5	2
16:15 – 16:29	0	2	0	2	0	4
16:30 – 16:44	0	0	0	0	1	2

Total Vehicles	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	51	0	50	77	15
08:15 – 08:29	0	50	0	53	97	17
08:30 – 08:44	0	45	0	50	95	17
08:45 – 08:59	0	39	0	58	69	14
15:45 – 15:59	0	22	1	66	40	42
16:00 – 16:14	0	42	1	78	41	48
16:15 – 16:29	0	26	0	60	42	47
16:30 – 16:44	0	20	1	67	45	42

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	54	0	50	85	19
08:15 – 08:29	0	53	0	57	100	18
08:30 – 08:44	0	48	0	51	103	20
08:45 – 08:59	0	43	0	63	72	14
15:45 – 15:59	0	22	1	71	47	45
16:00 – 16:14	0	43	1	86	48	51
16:15 – 16:29	0	29	0	63	42	52
16:30 – 16:44	0	20	1	67	46	45

PCUs are rounded to the nearest whole number

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 09:00	0	197	0	221	359	71
15:45 – 16:44	0	114	3	287	182	192

PCUs are rounded to the nearest whole number

Appendix C

Trip Generation Calculations Traffic Calculations Summary

Trip Rate Calculations
Cavan Town – Residential including creche



Drumgola (256 units inc. creche)	Arrivals					Departures					
	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total	Time Period	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total
Time Period											
AM	0	0	96	1	97	AM	0	0	179	0	179
PM	0	0	105	0	105	PM	0	0	55	0	55

Rocklands (194 units inc. creche)	Arrivals					Departures					
	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total	Time Period	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total
Time Period											
AM	0	0	63	0	63	AM	1	0	104	0	105
PM	0	0	64	1	65	PM	0	1	44	2	47

Combined (Drumgola + Rocklands)												
Time Period		Arrivals					Departures					
		Bicycle	Mcycle	Car/LGV	HGV/Bus	Total	Time Period	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total
AM		0	0	159	1	160	AM	1	0	283	0	284
PM		0	0	169	1	170	PM	0	1	99	2	102

Trip Rate Per Residential Unit inc. Creche	Arrivals					Departures					
	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total	Time Period	Bicycle	Mcycle	Car/LGV	HGV/Bus	Total
Time Period											
AM	0.000	0.000	0.353	0.002	0.356	AM	0.002	0.000	0.629	0.000	1
PM	0.000	0.000	0.376	0.002	0.378	PM	0.000	0.002	0.220	0.004	0

Proposed (109 units inc. Creche)	Arrivals					Departures					
	Bicycle	Mcycle	Car/LGV	HGV/Bus	PCUS	Time Period	Bicycle	Mcycle	Car/LGV	HGV/Bus	PCUS
Time Period											
AM	0	0	39	0	39	AM	0	0	69	0	69
PM	0	0	41	0	41	PM	0	0	24	0	25

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Traffic Calculations Summary
L1513 Loreto Road / Access junction, Lisdarn, Co. Cavan

Arm A = L1513 Loreto Road (to/from North)
Arm B = Existing/Proposed development access
Arm C = L1513 Loreto Road (to/from South)
Arm D = Existing private agricultural/residential access



Scenarios	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
2023 AM 08:00-08:59	0	239	1	0	0	0	278	0	0	1	0	0
2029 AM Factor (1.076)	0	258	1	0	0	0	299	0	0	1	0	0
2034 AM Factor (1.101)	0	264	1	0	0	0	306	0	0	1	0	0
2044 AM Factor (1.148)	0	275	1	0	0	0	319	0	0	1	0	0
AM Peak Medical Centre Trips	101	0	0	26	36	0	0	73	0	0	0	0
AM Peak Nursing Home Trips	8	0	0	3	4	0	0	7	0	0	0	0
2029 AM with Medical Centre + Nursing Home	109	258	1	29	40	0	299	79	0	1	0	0
2034 AM with Medical Centre + Nursing Home	109	264	1	29	40	0	306	79	0	1	0	0
2044 AM with Medical Centre + Nursing Home	109	275	1	29	40	0	319	79	0	1	0	0
AM Peak Proposed Development Trips	22	0	0	31	38	0	0	17	0	0	0	0
2029 AM With Development	131	258	1	60	77	0	299	96	0	1	0	0
2034 AM With Development	131	264	1	60	77	0	306	96	0	1	0	0
2044 AM With Development	131	275	1	60	77	0	319	96	0	1	0	0

Scenarios	A-B	A-C	A-D	B-A	B-C	B-D	C-A	C-B	C-D	D-A	D-B	D-C
2023 PM 15:45-16:44	0	120	0	0	0	0	218	0	3	2	0	2
2029 PM Factor (1.076)	0	129	0	0	0	0	235	0	3	2	0	2
2034 PM Factor (1.101)	0	132	0	0	0	0	240	0	3	2	0	2
2044 PM Factor (1.148)	0	138	0	0	0	0	251	0	3	2	0	2
PM Peak Medical Centre Trips	26	0	0	77	59	0	0	34	0	0	0	0
PM Peak Nursing Home Trips	8	0	0	10	9	0	0	7	0	0	0	0
2029 PM with Medical Centre + Nursing Home	34	129	0	87	68	0	235	41	3	2	0	2
2034 PM with Medical Centre + Nursing Home	34	132	0	87	68	0	240	41	3	2	0	2
2044 PM with Medical Centre + Nursing Home	34	138	0	87	68	0	251	41	3	2	0	2
PM Peak Proposed Development Trips	19	0	0	13	12	0	0	22	0	0	0	0
2029 PM With Development	53	129	0	101	79	0	235	63	3	2	0	2
2034 PM With Development	53	132	0	101	79	0	240	63	3	2	0	2
2044 PM With Development	53	138	0	101	79	0	251	63	3	2	0	2

2029 Peak Hour Traffic Without Development 1417
2029 Peak Hour Development Traffic 174
Percentage Impact of Development Traffic 12.3%

Traffic Calculations Summary
Existing L1513 Loreto Road/L1532 (Loreto Cross) priority junction



Arm A = L1532 to/from Cavan Town
Arm B = L1513 Loreto Road
Arm C = L1532 to/from N3

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 AM 08:00-08:59	195	108	240	102	221	239
2029 AM Factor (1.076)	209	116	259	109	238	257
2034 AM Factor (1.101)	214	119	265	112	243	263
2044 AM Factor (1.148)	224	124	276	117	254	274
AM Peak Medical Centre Trips	45	0	18	8	0	56
AM Peak Nursing Home Trips	4	0	2	1	0	4
2029 AM with Medical Centre + Nursing Home	259	116	279	118	238	317
2034 AM with Medical Centre + Nursing Home	263	119	285	120	243	323
2044 AM with Medical Centre + Nursing Home	273	124	296	125	254	334
AM Peak Proposed Development Trips	10	0	22	9	0	12
2029 AM With Development	268	116	301	127	238	329
2034 AM With Development	273	119	307	130	243	335
2044 AM With Development	282	124	318	134	254	346

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 PM 15:45-16:44	99	128	170	157	103	84
2029 PM Factor (1.076)	106	137	183	169	110	90
2034 PM Factor (1.101)	109	140	187	173	113	92
2044 PM Factor (1.148)	113	146	195	180	118	96
PM Peak Medical Centre Trips	14	0	40	37	0	12
PM Peak Nursing Home Trips	4	0	5	5	0	3
2029 PM with Medical Centre + Nursing Home	124	137	228	211	110	105
2034 PM with Medical Centre + Nursing Home	127	140	232	214	113	108
2044 PM with Medical Centre + Nursing Home	131	146	240	222	118	112
PM Peak Proposed Development Trips	10	0	7	6	0	9
2029 PM With Development	135	137	235	217	110	114
2034 PM With Development	137	140	239	221	113	116
2044 PM With Development	142	146	247	228	118	120

2029 Peak Hour Traffic Without Development 2242
2029 Peak Hour Development Traffic 86
Percentage Impact of Development Traffic 3.8%

Traffic Calculations Summary

Existing Loreto Road/Golf Links Road (Drumelis) mini-roundabout junction

Arm A = L1514 Golf Links Road to/from Cavan Town
Arm B = (L1513) Local Road to/from South
Arm C = L1513 Loreto Road



Scenarios	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
2023 AM 08:00-08:59	1	43	177	62	0	101	239	97	1
2029 AM Factor (1.076)	1	46	190	67	0	109	258	105	1
2034 AM Factor (1.101)	1	47	194	68	0	111	264	107	1
2044 AM Factor (1.148)	1	49	203	71	0	116	275	112	1
AM Peak Medical Centre Trips	0	0	46	0	0	27	26	10	0
AM Peak Nursing Home Trips	0	0	4	0	0	2	2	1	0
2029 AM with Medical Centre + Nursing Home	1	46	240	67	0	138	286	116	1
2034 AM with Medical Centre + Nursing Home	1	47	245	68	0	140	292	119	1
2044 AM with Medical Centre + Nursing Home	1	49	253	71	0	145	303	123	1
AM Peak Proposed Development Trips	0	0	11	0	0	6	27	11	0
2029 AM With Development	1	46	251	67	0	144	313	127	1
2034 AM With Development	1	47	256	68	0	146	319	130	1
2044 AM With Development	1	49	264	71	0	151	330	134	1

Scenarios	A-A	A-B	A-C	B-A	B-B	B-C	C-A	C-B	C-C
2023 PM 15:45-16:44	0	10	169	8	0	52	122	51	1
2029 PM Factor (1.076)	0	11	182	9	0	56	131	54	1
2034 PM Factor (1.101)	0	11	187	9	0	57	134	56	1
2044 PM Factor (1.148)	0	11	194	9	0	60	140	58	1
PM Peak Medical Centre Trips	0	0	26	0	0	8	42	17	0
PM Peak Nursing Home Trips	0	0	6	0	0	2	6	3	0
2029 PM with Medical Centre + Nursing Home	0	11	214	9	0	66	179	74	1
2034 PM with Medical Centre + Nursing Home	0	11	218	9	0	67	182	76	1
2044 PM with Medical Centre + Nursing Home	0	11	226	9	0	69	188	78	1
PM Peak Proposed Development Trips	0	0	17	0	0	5	8	3	0
2029 PM With Development	0	11	231	9	0	71	187	78	1
2034 PM With Development	0	11	235	9	0	72	191	79	1
2044 PM With Development	0	11	243	9	0	74	196	81	1

2029 Peak Hour Traffic Without Development 1449
2029 Peak Hour Development Traffic 88
Percentage Impact of Development Traffic 6.1%

Traffic Calculations Summary
Existing South-western R198/Link junction at Rock Cross

Arm A = R198 Farnham Road to/from West
Arm B = (L15133) Link to L1514 Golf Links Road
Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 AM 08:00-08:59	79	197	32	0	0	71
2029 AM Factor (1.076)	85	212	34	0	0	76
2034 AM Factor (1.101)	87	217	35	0	0	78
2044 AM Factor (1.148)	91	226	37	0	0	81
AM Peak Medical Centre Trips	14	0	2	0	0	18
AM Peak Nursing Home Trips	1	0	0	0	0	2
2029 AM with Medical Centre + Nursing Home	100	212	36	0	0	96
2034 AM with Medical Centre + Nursing Home	102	217	37	0	0	98
2044 AM with Medical Centre + Nursing Home	106	226	38	0	0	101
AM Peak Proposed Development Trips	3	0	2	0	0	4
2029 AM With Development	104	212	38	0	0	100
2034 AM With Development	106	217	39	0	0	102
2044 AM With Development	109	226	40	0	0	106

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 PM 15:45-16:44	31	111	52	4	2	193
2029 PM Factor (1.076)	34	119	56	4	2	208
2034 PM Factor (1.101)	34	122	58	4	2	212
2044 PM Factor (1.148)	36	127	60	5	2	222
PM Peak Medical Centre Trips	2	0	5	0	0	7
PM Peak Nursing Home Trips	0	0	1	0	0	1
2029 PM with Medical Centre + Nursing Home	36	119	62	5	2	216
2034 PM with Medical Centre + Nursing Home	36	122	63	5	2	221
2044 PM with Medical Centre + Nursing Home	38	127	66	5	2	230
PM Peak Proposed Development Trips	1	0	1	0	0	3
2029 PM With Development	36	119	63	5	2	219
2034 PM With Development	37	122	64	5	2	224
2044 PM With Development	39	127	67	5	2	233

2029 Peak Hour Traffic Without Development884
2029 Peak Hour Development Traffic15
Percentage Impact of Development Traffic1.7%

Traffic Calculations Summary
Existing Eastern R198/Golf Links Road junction at Rock Cross



Arm A = R198 Farnham Road to/from West
Arm B = L1514 Golf Links Road
Arm C = R198 Farnham Road (Upper Swellan) to/from Town Centre

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 AM 08:00-08:59	0	197	0	221	359	71
2029 AM Factor (1.076)	0	212	0	238	386	76
2034 AM Factor (1.101)	0	217	0	244	395	78
2044 AM Factor (1.148)	0	226	0	254	412	81
AM Peak Medical Centre Trips	0	0	0	12	0	13
AM Peak Nursing Home Trips	0	0	0	1	0	1
2029 AM with Medical Centre + Nursing Home	0	212	0	251	386	90
2034 AM with Medical Centre + Nursing Home	0	217	0	257	395	92
2044 AM with Medical Centre + Nursing Home	0	226	0	267	412	95
AM Peak Proposed Development Trips	0	0	0	12	0	3
2029 AM With Development	0	212	0	263	386	93
2034 AM With Development	0	217	0	269	395	95
2044 AM With Development	0	226	0	279	412	98

Scenarios	A-B	A-C	B-A	B-C	C-A	C-B
2023 PM 15:45-16:44	0	114	3	287	182	192
2029 PM Factor (1.076)	0	123	3	308	196	207
2034 PM Factor (1.101)	0	125	3	316	201	211
2044 PM Factor (1.148)	0	131	3	329	209	220
PM Peak Medical Centre Trips	0	0	0	29	0	10
PM Peak Nursing Home Trips	0	0	0	4	0	2
2029 PM with Medical Centre + Nursing Home	0	123	4	341	196	219
2034 PM with Medical Centre + Nursing Home	0	125	4	348	201	223
2044 PM with Medical Centre + Nursing Home	0	131	4	362	209	232
PM Peak Proposed Development Trips	0	0	0	5	0	5
2029 PM With Development	0	123	4	347	196	223
2034 PM With Development	0	125	4	354	201	228
2044 PM With Development	0	131	4	367	209	237

2029 Peak Hour Traffic Without Development 1821
2029 Peak Hour Development Traffic 26
Percentage Impact of Development Traffic 1.4%

Appendix D

Traffic Modelling Output Files

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: Loreto_Site_Access.j9

Path: D:\ttrsa\projects\T250210_Cavan_Lisdarn_Residential_TTA_S1_RSA_QA_MMP\tta\traffic_modelling

Report generation date: 24/10/2025 13:04:19

-
- »2029 Baseline, AM
 - »2034 Baseline, AM
 - »2044 Baseline, AM
 - »2029 With Development, AM
 - »2034 With Development, AM
 - »2044 With Development, AM
 - »2029 Baseline, PM
 - »2034 Baseline, PM
 - »2044 Baseline, PM
 - »2029 With Development, PM
 - »2034 With Development, PM
 - »2044 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-C	D1	0.1	7.33	0.08	A	D7	0.2	7.44	0.13	A
Stream B-AD		0.1	11.34	0.09	B		0.3	11.19	0.22	B
Stream A-BCD		0.0	5.88	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.66	0.15	A		0.1	6.36	0.07	A
	2034 Baseline									
Stream B-C	D2	0.1	7.35	0.08	A	D8	0.2	7.45	0.13	A
Stream B-AD		0.1	11.44	0.09	B		0.3	11.25	0.22	B
Stream A-BCD		0.0	5.90	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.69	0.15	A		0.1	6.37	0.07	A
	2044 Baseline									
Stream B-C	D3	0.1	7.40	0.08	A	D9	0.2	7.48	0.13	A
Stream B-AD		0.1	11.62	0.09	B		0.3	11.36	0.22	B
Stream A-BCD		0.0	5.93	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	7.74	0.15	A		0.1	6.39	0.07	A
	2029 With Development									
Stream B-C	D4	0.2	8.23	0.15	A	D10	0.2	7.75	0.15	A
Stream B-AD		0.2	12.99	0.18	B		0.4	12.11	0.26	B
Stream A-BCD		0.0	5.97	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.06	0.18	A		0.1	6.69	0.11	A
	2034 With Development									
Stream B-C	D5	0.2	8.26	0.15	A	D11	0.2	7.76	0.15	A
Stream B-AD		0.2	13.12	0.18	B		0.4	12.17	0.26	B
Stream A-BCD		0.0	5.99	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.09	0.18	A		0.1	6.70	0.11	A
	2044 With Development									
Stream B-C	D6	0.2	8.32	0.15	A	D12	0.2	7.36	0.14	A
Stream B-AD		0.2	13.35	0.19	B		0.3	11.33	0.25	B
Stream A-BCD		0.0	6.03	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.2	8.15	0.18	A		0.1	6.39	0.10	A

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

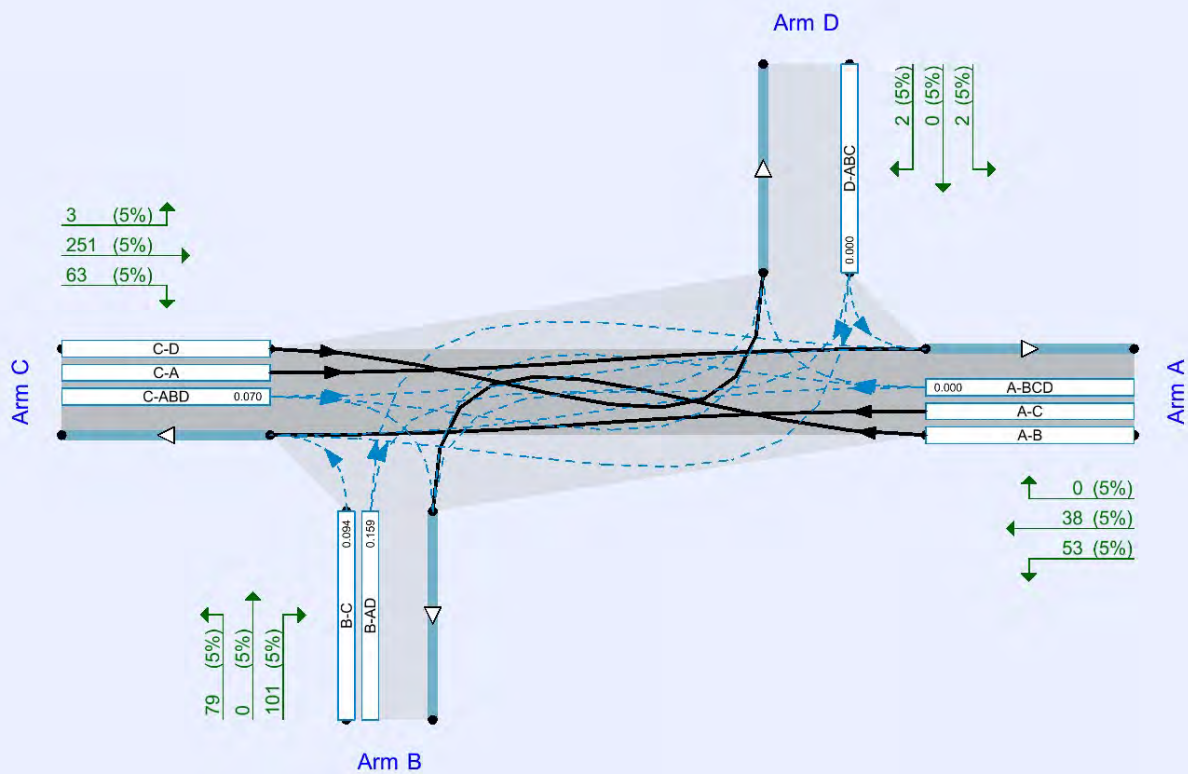
File summary

File Description

Title	Proposed Loreto Road Access to Lisdaran Residential Development
Location	Cavan
Site number	
Date	20/10/2025
Version	TTA
Status	Final
Identifier	
Client	Lisdaran Developments
Jobnumber	250210
Enumerator	TTRSA
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 (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Analysis Set Details

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

2029 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		1.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	L1513 Loreto Road to/from North		Major
B	Proposed Development Access		Minor
C	L1513 Loreto Road to/from South		Major
D	Existing Agricultural/Residential Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00		✓	3.00	220.0	✓	1.00
C	6.00		✓	3.00	120.0	✓	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes		3.00	3.00	70	70
D	One lane	2.20			14	24

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-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	762	-	-	-	0.295	0.295	0.295	-	0.295	-	-
B-AD	535	0.097	0.246	-	-	-	0.155	0.352	0.155	0.097	0.246
B-C	668	0.102	0.259	-	-	-	-	-	-	0.102	0.259
C-B	699	0.271	0.271	-	-	-	-	-	-	0.271	0.271
D-A	588	-	-	-	0.228	0.090	0.228	-	0.090	-	-
D-BC	454	0.132	0.132	0.299	0.209	0.083	0.209	-	0.083	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	368	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	378	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
	A	0	109	258	1
	B	29	0	40	0
	C	299	79	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	7.33	0.1	A	37	55
B-AD	0.09	11.34	0.1	B	27	40
A-BCD	0.00	5.88	0.0	A	0.92	1
A-B					100	150
A-C					237	355
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.15	7.66	0.2	A	72	109
C-D					0	0
C-A					274	412

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	601	0.050	30	0.0	0.1	6.740	A
B-AD	22	5	424	0.052	22	0.0	0.1	9.581	A
ABCD	0.75	0.19	690	0.001	0.75	0.0	0.0	5.589	A
AB	82	21			82				
AC	194	49			194				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	625	0.095	59	0.0	0.1	6.801	A
C-D	0	0			0				
C-A	225	56			225				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	588	0.061	36	0.1	0.1	6.976	A
B-AD	26	7	402	0.065	26	0.1	0.1	10.254	B
ABCD	0.90	0.22	676	0.001	0.90	0.0	0.0	5.706	A
AB	98	24			98				
AC	232	58			232				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	610	0.116	71	0.1	0.1	7.143	A
C-D	0	0			0				
C-A	269	67			269				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	570	0.077	44	0.1	0.1	7.330	A
B-AD	32	8	372	0.086	32	0.1	0.1	11.332	B
ABCD	1	0.28	657	0.002	1	0.0	0.0	5.876	A
AB	120	30			120				
AC	284	71			284				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	590	0.147	87	0.1	0.2	7.655	A
C-D	0	0			0				
C-A	329	82			329				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	570	0.077	44	0.1	0.1	7.330	A
B-AD	32	8	372	0.086	32	0.1	0.1	11.341	B
ABCD	1	0.28	657	0.002	1	0.0	0.0	5.876	A
AB	120	30			120				
AC	284	71			284				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	590	0.147	87	0.2	0.2	7.658	A
C-D	0	0			0				
C-A	329	82			329				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	588	0.061	36	0.1	0.1	6.979	A
B-AD	26	7	402	0.065	26	0.1	0.1	10.266	B
A-BCD	0.90	0.22	676	0.001	0.90	0.0	0.0	5.709	A
A-B	98	24			98				
A-C	232	58			232				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	610	0.116	71	0.2	0.1	7.150	A
C-D	0	0			0				
C-A	269	67			269				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	601	0.050	30	0.1	0.1	6.744	A
B-AD	22	5	423	0.052	22	0.1	0.1	9.598	A
A-BCD	0.75	0.19	690	0.001	0.75	0.0	0.0	5.592	A
A-B	82	21			82				
A-C	194	49			194				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	625	0.095	60	0.1	0.1	6.819	A
C-D	0	0			0				
C-A	225	56			225				

2034 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		1.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	374	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	385	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	109	264	1
	B	29	0	40	0
	C	306	79	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	7.35	0.1	A	37	55
B-AD	0.09	11.44	0.1	B	27	40
ABCD	0.00	5.90	0.0	A	0.92	1
A-B					100	150
A-C					242	363
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.15	7.69	0.2	A	72	109
C-D					0	0
C-A					281	421

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	600	0.050	30	0.0	0.1	6.754	A
B-AD	22	5	422	0.052	22	0.0	0.1	9.627	A
ABCD	0.75	0.19	688	0.001	0.75	0.0	0.0	5.602	A
A-B	82	21			82				
A-C	199	50			199				
D-ABC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	623	0.095	59	0.0	0.1	6.816	A
C-D	0	0			0				
C-A	230	58			230				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	587	0.061	36	0.1	0.1	6.994	A
B-AD	26	7	399	0.065	26	0.1	0.1	10.317	B
ABCD	0.90	0.22	674	0.001	0.90	0.0	0.0	5.722	A
A-B	98	24			98				
A-C	237	59			237				
D-ABC	0	0	416	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	609	0.117	71	0.1	0.1	7.163	A
C-D	0	0			0				
C-A	275	69			275				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	568	0.078	44	0.1	0.1	7.354	A
B-AD	32	8	369	0.087	32	0.1	0.1	11.427	B
A-BCD	1	0.28	654	0.002	1	0.0	0.0	5.896	A
A-B	120	30			120				
A-C	291	73			291				
D-ABC	0	0	393	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	588	0.148	87	0.1	0.2	7.682	A
C-D	0	0			0				
C-A	337	84			337				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	568	0.078	44	0.1	0.1	7.355	A
B-AD	32	8	369	0.087	32	0.1	0.1	11.436	B
A-BCD	1	0.28	654	0.002	1	0.0	0.0	5.896	A
A-B	120	30			120				
A-C	291	73			291				
D-ABC	0	0	393	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	588	0.148	87	0.2	0.2	7.686	A
C-D	0	0			0				
C-A	337	84			337				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	587	0.061	36	0.1	0.1	6.999	A
B-AD	26	7	399	0.065	26	0.1	0.1	10.328	B
A-BCD	0.90	0.22	674	0.001	0.90	0.0	0.0	5.722	A
A-B	98	24			98				
A-C	237	59			237				
D-ABC	0	0	416	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	609	0.117	71	0.2	0.1	7.173	A
C-D	0	0			0				
C-A	275	69			275				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	600	0.050	30	0.1	0.1	6.758	A
B-AD	22	5	421	0.052	22	0.1	0.1	9.645	A
A-BCD	0.75	0.19	688	0.001	0.75	0.0	0.0	5.602	A
A-B	82	21			82				
A-C	199	50			199				
D-ABC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	623	0.095	60	0.1	0.1	6.836	A
C-D	0	0			0				
C-A	230	58			230				

2044 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	385	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	398	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	109	275	1
	B	29	0	40	0
	C	319	79	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	7.40	0.1	A	37	55
B-AD	0.09	11.62	0.1	B	27	40
ABCD	0.00	5.93	0.0	A	0.92	1
A-B					100	150
A-C					252	379
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.15	7.74	0.2	A	72	109
C-D					0	0
C-A					293	439

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	598	0.050	30	0.0	0.1	6.775	A
B-AD	22	5	418	0.052	22	0.0	0.1	9.715	A
ABCD	0.75	0.19	686	0.001	0.75	0.0	0.0	5.625	A
A-B	82	21			82				
A-C	207	52			207				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	621	0.096	59	0.0	0.1	6.848	A
C-D	0	0			0				
C-A	240	60			240				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	584	0.062	36	0.1	0.1	7.027	A
B-AD	26	7	395	0.066	26	0.1	0.1	10.436	B
ABCD	0.90	0.22	671	0.001	0.90	0.0	0.0	5.751	A
A-B	98	24			98				
A-C	247	62			247				
D-ABC	0	0	412	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	606	0.117	71	0.1	0.1	7.198	A
C-D	0	0			0				
C-A	287	72			287				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	565	0.078	44	0.1	0.1	7.400	A
B-AD	32	8	364	0.088	32	0.1	0.1	11.606	B
A-BCD	1	0.28	650	0.002	1	0.0	0.0	5.934	A
A-B	120	30			120				
A-C	303	76			303				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	585	0.149	87	0.1	0.2	7.732	A
C-D	0	0			0				
C-A	351	88			351				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	565	0.078	44	0.1	0.1	7.401	A
B-AD	32	8	364	0.088	32	0.1	0.1	11.615	B
A-BCD	1	0.28	650	0.002	1	0.0	0.0	5.934	A
A-B	120	30			120				
A-C	303	76			303				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-ABD	87	22	585	0.149	87	0.2	0.2	7.737	A
C-D	0	0			0				
C-A	351	88			351				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	584	0.062	36	0.1	0.1	7.030	A
B-AD	26	7	395	0.066	26	0.1	0.1	10.447	B
A-BCD	0.90	0.22	671	0.001	0.90	0.0	0.0	5.754	A
A-B	98	24			98				
A-C	247	62			247				
D-ABC	0	0	412	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	606	0.117	71	0.2	0.1	7.206	A
C-D	0	0			0				
C-A	287	72			287				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	598	0.050	30	0.1	0.1	6.784	A
B-AD	22	5	418	0.052	22	0.1	0.1	9.733	A
A-BCD	0.75	0.19	685	0.001	0.75	0.0	0.0	5.628	A
A-B	82	21			82				
A-C	207	52			207				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-ABD	59	15	621	0.096	60	0.1	0.1	6.861	A
C-D	0	0			0				
C-A	240	60			240				

2029 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	390	100.000
B		ONE HOUR	✓	137	100.000
C		ONE HOUR	✓	395	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	131	258	1
	B	60	0	77	0
	C	299	96	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.23	0.2	A	71	106
B-AD	0.18	12.99	0.2	B	55	83
ABCD	0.00	5.97	0.0	A	0.92	1
A-B					120	180
A-C					237	355
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.18	8.06	0.2	A	88	132
C-D					0	0
C-A					274	412

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	591	0.098	58	0.0	0.1	7.213	A
B-AD	45	11	417	0.108	45	0.0	0.1	10.323	B
ABCD	0.75	0.19	683	0.001	0.75	0.0	0.0	5.645	A
A-B	99	25			99				
A-C	194	49			194				
D-ABC	0	0	427	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	620	0.117	72	0.0	0.1	7.017	A
C-D	0	0			0				
C-A	225	56			225				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	575	0.120	69	0.1	0.1	7.608	A
B-AD	54	13	394	0.137	54	0.1	0.2	11.308	B
ABCD	0.90	0.22	668	0.001	0.90	0.0	0.0	5.777	A
A-B	118	29			118				
A-C	232	58			232				
D-ABC	0	0	410	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	605	0.143	86	0.1	0.2	7.428	A
C-D	0	0			0				
C-A	269	67			269				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	553	0.153	85	0.1	0.2	8.220	A
B-AD	66	17	363	0.182	66	0.2	0.2	12.965	B
A-BCD	1	0.28	647	0.002	1	0.0	0.0	5.968	A
A-B	144	36			144				
A-C	284	71			284				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	583	0.181	105	0.2	0.2	8.056	A
C-D	0	0			0				
C-A	329	82			329				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	553	0.153	85	0.2	0.2	8.229	A
B-AD	66	17	363	0.182	66	0.2	0.2	12.991	B
A-BCD	1	0.28	647	0.002	1	0.0	0.0	5.968	A
A-B	144	36			144				
A-C	284	71			284				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	583	0.181	106	0.2	0.2	8.064	A
C-D	0	0			0				
C-A	329	82			329				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	575	0.120	69	0.2	0.1	7.622	A
B-AD	54	13	394	0.137	54	0.2	0.2	11.341	B
A-BCD	0.90	0.22	668	0.001	0.90	0.0	0.0	5.780	A
A-B	118	29			118				
A-C	232	58			232				
D-ABC	0	0	410	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	605	0.143	87	0.2	0.2	7.437	A
C-D	0	0			0				
C-A	269	67			269				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	591	0.098	58	0.1	0.1	7.234	A
B-AD	45	11	417	0.108	45	0.2	0.1	10.365	B
A-BCD	0.75	0.19	683	0.001	0.75	0.0	0.0	5.647	A
A-B	99	25			99				
A-C	194	49			194				
D-ABC	0	0	427	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	620	0.117	72	0.2	0.1	7.035	A
C-D	0	0			0				
C-A	225	56			225				

2034 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	396	100.000
B		ONE HOUR	✓	137	100.000
C		ONE HOUR	✓	402	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	131	264	1
	B	60	0	77	0
	C	306	96	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.26	0.2	A	71	106
B-AD	0.18	13.12	0.2	B	55	83
ABCD	0.00	5.99	0.0	A	0.92	1
A-B					120	180
A-C					242	363
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.18	8.09	0.2	A	88	132
C-D					0	0
C-A					281	421

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	590	0.098	58	0.0	0.1	7.229	A
B-AD	45	11	415	0.109	45	0.0	0.1	10.374	B
ABCD	0.75	0.19	682	0.001	0.75	0.0	0.0	5.658	A
A-B	99	25			99				
A-C	199	50			199				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	619	0.117	72	0.0	0.1	7.033	A
C-D	0	0			0				
C-A	230	58			230				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	574	0.121	69	0.1	0.1	7.630	A
B-AD	54	13	392	0.138	54	0.1	0.2	11.385	B
ABCD	0.90	0.23	666	0.001	0.90	0.0	0.0	5.793	A
A-B	118	29			118				
A-C	237	59			237				
D-ABC	0	0	408	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	603	0.143	86	0.1	0.2	7.449	A
C-D	0	0			0				
C-A	275	69			275				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	551	0.154	85	0.1	0.2	8.253	A
B-AD	66	17	360	0.184	66	0.2	0.2	13.089	B
A-BCD	1	0.28	644	0.002	1	0.0	0.0	5.989	A
A-B	144	36			144				
A-C	291	73			291				
D-ABC	0	0	383	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	582	0.182	105	0.2	0.2	8.087	A
C-D	0	0			0				
C-A	337	84			337				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	551	0.154	85	0.2	0.2	8.261	A
B-AD	66	17	360	0.184	66	0.2	0.2	13.116	B
A-BCD	1	0.28	644	0.002	1	0.0	0.0	5.989	A
A-B	144	36			144				
A-C	291	73			291				
D-ABC	0	0	383	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	582	0.182	106	0.2	0.2	8.095	A
C-D	0	0			0				
C-A	337	84			337				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	574	0.121	69	0.2	0.1	7.644	A
B-AD	54	13	392	0.138	54	0.2	0.2	11.416	B
A-BCD	0.90	0.23	666	0.001	0.90	0.0	0.0	5.797	A
A-B	118	29			118				
A-C	237	59			237				
D-ABC	0	0	408	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	603	0.143	87	0.2	0.2	7.461	A
C-D	0	0			0				
C-A	275	69			275				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	590	0.098	58	0.1	0.1	7.250	A
B-AD	45	11	415	0.109	45	0.2	0.1	10.422	B
A-BCD	0.75	0.19	681	0.001	0.75	0.0	0.0	5.662	A
A-B	99	25			99				
A-C	199	50			199				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	619	0.117	72	0.2	0.1	7.051	A
C-D	0	0			0				
C-A	230	58			230				

2044 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	137	100.000
C		ONE HOUR	✓	415	100.000
D		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	131	275	1
	B	60	0	77	0
	C	319	96	0	0
	D	1	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.32	0.2	A	71	106
B-AD	0.19	13.35	0.2	B	55	83
ABCD	0.00	6.03	0.0	A	0.92	1
A-B					120	180
A-C					252	379
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.18	8.15	0.2	A	88	132
C-D					0	0
C-A					293	439

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	588	0.099	58	0.0	0.1	7.259	A
B-AD	45	11	412	0.110	45	0.0	0.1	10.475	B
ABCD	0.75	0.19	679	0.001	0.75	0.0	0.0	5.682	A
A-B	99	25			99				
A-C	207	52			207				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	617	0.117	72	0.0	0.1	7.062	A
C-D	0	0			0				
C-A	240	60			240				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	571	0.121	69	0.1	0.1	7.671	A
B-AD	54	13	388	0.139	54	0.1	0.2	11.528	B
ABCD	0.90	0.23	662	0.001	0.90	0.0	0.0	5.823	A
A-B	118	29			118				
A-C	247	62			247				
D-ABC	0	0	404	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	601	0.144	86	0.1	0.2	7.487	A
C-D	0	0			0				
C-A	287	72			287				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	548	0.155	85	0.1	0.2	8.313	A
B-AD	66	17	355	0.186	66	0.2	0.2	13.323	B
A-BCD	1	0.28	640	0.002	1	0.0	0.0	6.028	A
A-B	144	36			144				
A-C	303	76			303				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	578	0.183	105	0.2	0.2	8.143	A
C-D	0	0			0				
C-A	351	88			351				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	548	0.155	85	0.2	0.2	8.322	A
B-AD	66	17	355	0.186	66	0.2	0.2	13.353	B
A-BCD	1	0.28	640	0.002	1	0.0	0.0	6.029	A
A-B	144	36			144				
A-C	303	76			303				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	106	26	578	0.183	106	0.2	0.2	8.151	A
C-D	0	0			0				
C-A	351	88			351				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	17	571	0.121	69	0.2	0.1	7.685	A
B-AD	54	13	388	0.139	54	0.2	0.2	11.565	B
A-BCD	0.90	0.23	662	0.001	0.90	0.0	0.0	5.824	A
A-B	118	29			118				
A-C	247	62			247				
D-ABC	0	0	404	0.000	0	0.0	0.0	0.000	A
C-ABD	86	22	601	0.144	87	0.2	0.2	7.500	A
C-D	0	0			0				
C-A	287	72			287				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	14	587	0.099	58	0.1	0.1	7.281	A
B-AD	45	11	412	0.110	45	0.2	0.1	10.523	B
A-BCD	0.75	0.19	678	0.001	0.75	0.0	0.0	5.684	A
A-B	99	25			99				
A-C	207	52			207				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	617	0.117	72	0.2	0.1	7.080	A
C-D	0	0			0				
C-A	240	60			240				

2029 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	163	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	279	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	34	129	0
	B	87	0	68	0
	C	235	41	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	7.44	0.2	A	62	94
B-AD	0.22	11.19	0.3	B	80	120
ABCD	0.00	0.00	0.0	A	0	0
A-B					31	47
A-C					118	178
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.07	6.36	0.1	A	38	56
C-D					3	4
C-A					216	323

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	618	0.083	51	0.0	0.1	6.789	A
B-AD	65	16	470	0.139	65	0.0	0.2	9.489	A
ABCD	0	0	1380	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	97	24			97				
D-ABC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	666	0.046	31	0.0	0.1	6.060	A
C-D	2	0.56			2				
C-A	177	44			177				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	607	0.101	61	0.1	0.1	7.050	A
B-AD	78	20	457	0.171	78	0.2	0.2	10.148	B
ABCD	0	0	1352	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	116	29			116				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	660	0.056	37	0.1	0.1	6.184	A
C-D	3	0.67			3				
C-A	211	53			211				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	593	0.126	75	0.1	0.2	7.432	A
B-AD	96	24	440	0.218	95	0.2	0.3	11.173	B
A-BCD	0	0	1313	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	142	36			142				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	651	0.069	45	0.1	0.1	6.360	A
C-D	3	0.83			3				
C-A	259	65			259				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	593	0.126	75	0.2	0.2	7.437	A
B-AD	96	24	440	0.218	96	0.3	0.3	11.194	B
A-BCD	0	0	1313	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	142	36			142				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	651	0.069	45	0.1	0.1	6.360	A
C-D	3	0.83			3				
C-A	259	65			259				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	607	0.101	61	0.2	0.1	7.059	A
B-AD	78	20	457	0.171	78	0.3	0.2	10.175	B
A-BCD	0	0	1352	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	116	29			116				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	660	0.056	37	0.1	0.1	6.185	A
C-D	3	0.67			3				
C-A	211	53			211				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	618	0.083	51	0.1	0.1	6.803	A
B-AD	65	16	470	0.139	66	0.2	0.2	9.532	A
A-BCD	0	0	1380	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	97	24			97				
D-ABC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	666	0.046	31	0.1	0.1	6.064	A
C-D	2	0.56			2				
C-A	177	44			177				

2034 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	166	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	284	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	34	132	0
	B	87	0	68	0
	C	240	41	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	7.45	0.2	A	62	94
B-AD	0.22	11.25	0.3	B	80	120
ABCD	0.00	0.00	0.0	A	0	0
A-B					31	47
A-C					121	182
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.07	6.37	0.1	A	38	56
C-D					3	4
C-A					220	330

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	617	0.083	51	0.0	0.1	6.796	A
B-AD	65	16	469	0.140	65	0.0	0.2	9.515	A
ABCD	0	0	1378	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	99	25			99				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	666	0.046	31	0.0	0.1	6.066	A
C-D	2	0.56			2				
C-A	181	45			181				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	607	0.101	61	0.1	0.1	7.060	A
B-AD	78	20	456	0.171	78	0.2	0.2	10.185	B
ABCD	0	0	1349	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	119	30			119				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	659	0.056	37	0.1	0.1	6.191	A
C-D	3	0.67			3				
C-A	216	54			216				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	592	0.126	75	0.1	0.2	7.446	A
B-AD	96	24	438	0.219	95	0.2	0.3	11.227	B
A-BCD	0	0	1310	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	145	36			145				
D-ABC	0	0	417	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	650	0.069	45	0.1	0.1	6.369	A
C-D	3	0.83			3				
C-A	264	66			264				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	592	0.126	75	0.2	0.2	7.450	A
B-AD	96	24	438	0.219	96	0.3	0.3	11.248	B
A-BCD	0	0	1310	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	145	36			145				
D-ABC	0	0	417	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	650	0.069	45	0.1	0.1	6.369	A
C-D	3	0.83			3				
C-A	264	66			264				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	607	0.101	61	0.2	0.1	7.066	A
B-AD	78	20	456	0.172	79	0.3	0.2	10.214	B
A-BCD	0	0	1349	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	119	30			119				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	659	0.056	37	0.1	0.1	6.195	A
C-D	3	0.67			3				
C-A	216	54			216				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	617	0.083	51	0.1	0.1	6.810	A
B-AD	65	16	469	0.140	66	0.2	0.2	9.560	A
A-BCD	0	0	1378	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	99	25			99				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	666	0.046	31	0.1	0.1	6.069	A
C-D	2	0.56			2				
C-A	181	45			181				

2044 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		2.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	172	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	295	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	34	138	0
	B	87	0	68	0
	C	251	41	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	7.48	0.2	A	62	94
B-AD	0.22	11.36	0.3	B	80	120
ABCD	0.00	0.00	0.0	A	0	0
A-B					31	47
A-C					127	190
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.07	6.39	0.1	A	38	56
C-D					3	4
C-A					230	345

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	616	0.083	51	0.0	0.1	6.811	A
B-AD	65	16	467	0.140	65	0.0	0.2	9.572	A
ABCD	0	0	1373	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	104	26			104				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	664	0.046	31	0.0	0.1	6.078	A
C-D	2	0.56			2				
C-A	189	47			189				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	605	0.101	61	0.1	0.1	7.080	A
B-AD	78	20	453	0.173	78	0.2	0.2	10.263	B
ABCD	0	0	1343	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	124	31			124				
D-ABC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	658	0.056	37	0.1	0.1	6.206	A
C-D	3	0.67			3				
C-A	226	56			226				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	590	0.127	75	0.1	0.2	7.473	A
B-AD	96	24	435	0.220	95	0.2	0.3	11.344	B
A-BCD	0	0	1303	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	152	38			152				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	648	0.070	45	0.1	0.1	6.388	A
C-D	3	0.83			3				
C-A	276	69			276				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	590	0.127	75	0.2	0.2	7.478	A
B-AD	96	24	435	0.220	96	0.3	0.3	11.364	B
A-BCD	0	0	1302	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	152	38			152				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-ABD	45	11	648	0.070	45	0.1	0.1	6.388	A
C-D	3	0.83			3				
C-A	276	69			276				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	61	15	605	0.101	61	0.2	0.1	7.085	A
B-AD	78	20	453	0.173	79	0.3	0.2	10.292	B
A-BCD	0	0	1343	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	124	31			124				
D-ABC	0	0	432	0.000	0	0.0	0.0	0.000	A
C-ABD	37	9	658	0.056	37	0.1	0.1	6.207	A
C-D	3	0.67			3				
C-A	226	56			226				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	616	0.083	51	0.1	0.1	6.828	A
B-AD	65	16	467	0.140	66	0.2	0.2	9.618	A
A-BCD	0	0	1373	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	104	26			104				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-ABD	31	8	664	0.046	31	0.1	0.1	6.084	A
C-D	2	0.56			2				
C-A	189	47			189				

2029 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		3.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	182	100.000
B		ONE HOUR	✓	180	100.000
C		ONE HOUR	✓	301	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	53	129	0
	B	101	0	79	0
	C	235	63	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	7.75	0.2	A	72	109
B-AD	0.26	12.11	0.4	B	93	139
A-BCD	0.00	0.00	0.0	A	0	0
A-B					49	73
A-C					118	178
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.11	6.69	0.1	A	58	87
C-D					3	4
C-A					216	323

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	613	0.097	59	0.0	0.1	6.954	A
B-AD	76	19	463	0.164	75	0.0	0.2	9.916	A
A-BCD	0	0	1374	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	97	24			97				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	662	0.072	47	0.0	0.1	6.259	A
C-D	2	0.56			2				
C-A	177	44			177				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	601	0.118	71	0.1	0.1	7.268	A
B-AD	91	23	449	0.202	91	0.2	0.3	10.747	B
A-BCD	0	0	1344	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	116	29			116				
D-ABC	0	0	431	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	655	0.086	57	0.1	0.1	6.436	A
C-D	3	0.67			3				
C-A	211	53			211				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	584	0.149	87	0.1	0.2	7.740	A
B-AD	111	28	429	0.259	111	0.3	0.4	12.078	B
A-BCD	0	0	1304	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	142	36			142				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	645	0.108	69	0.1	0.1	6.690	A
C-D	3	0.83			3				
C-A	259	65			259				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	584	0.149	87	0.2	0.2	7.747	A
B-AD	111	28	429	0.259	111	0.4	0.4	12.110	B
A-BCD	0	0	1303	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	142	36			142				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	645	0.108	69	0.1	0.1	6.690	A
C-D	3	0.83			3				
C-A	259	65			259				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	601	0.118	71	0.2	0.1	7.279	A
B-AD	91	23	449	0.202	91	0.4	0.3	10.786	B
A-BCD	0	0	1344	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	116	29			116				
D-ABC	0	0	431	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	655	0.086	57	0.1	0.1	6.438	A
C-D	3	0.67			3				
C-A	211	53			211				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	612	0.097	60	0.1	0.1	6.972	A
B-AD	76	19	463	0.164	76	0.3	0.2	9.976	A
A-BCD	0	0	1373	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	97	24			97				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	662	0.072	48	0.1	0.1	6.268	A
C-D	2	0.56			2				
C-A	177	44			177				

2034 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	185	100.000
B		ONE HOUR	✓	180	100.000
C		ONE HOUR	✓	306	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	53	132	0
	B	101	0	79	0
	C	240	63	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	7.76	0.2	A	72	109
B-AD	0.26	12.17	0.4	B	93	139
A-BCD	0.00	0.00	0.0	A	0	0
A-B					49	73
A-C					121	182
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.11	6.70	0.1	A	58	87
C-D					3	4
C-A					220	330

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	612	0.097	59	0.0	0.1	6.962	A
B-AD	76	19	462	0.165	75	0.0	0.2	9.946	A
A-BCD	0	0	1372	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	99	25			99				
D-ABC	0	0	444	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	662	0.072	47	0.0	0.1	6.266	A
C-D	2	0.56			2				
C-A	181	45			181				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	600	0.118	71	0.1	0.1	7.279	A
B-AD	91	23	447	0.203	91	0.2	0.3	10.788	B
A-BCD	0	0	1342	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	119	30			119				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	654	0.087	57	0.1	0.1	6.444	A
C-D	3	0.67			3				
C-A	216	54			216				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	583	0.149	87	0.1	0.2	7.755	A
B-AD	111	28	428	0.260	111	0.3	0.4	12.142	B
A-BCD	0	0	1300	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	145	36			145				
D-ABC	0	0	411	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	644	0.108	69	0.1	0.1	6.700	A
C-D	3	0.83			3				
C-A	264	66			264				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	583	0.149	87	0.2	0.2	7.762	A
B-AD	111	28	428	0.260	111	0.4	0.4	12.174	B
A-BCD	0	0	1300	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	145	36			145				
D-ABC	0	0	411	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	644	0.108	69	0.1	0.1	6.700	A
C-D	3	0.83			3				
C-A	264	66			264				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	600	0.118	71	0.2	0.1	7.292	A
B-AD	91	23	447	0.203	91	0.4	0.3	10.828	B
A-BCD	0	0	1341	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	119	30			119				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	654	0.087	57	0.1	0.1	6.446	A
C-D	3	0.67			3				
C-A	216	54			216				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	612	0.097	60	0.1	0.1	6.983	A
B-AD	76	19	462	0.165	76	0.3	0.2	10.006	B
A-BCD	0	0	1371	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	99	25			99				
D-ABC	0	0	444	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	662	0.072	48	0.1	0.1	6.274	A
C-D	2	0.56			2				
C-A	181	45			181				

2044 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Loreto Road/Access Junction	Right-Left Stagger	Two-way		3.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	91	100.000
B		ONE HOUR	✓	180	100.000
C		ONE HOUR	✓	317	100.000
D		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	53	38	0
	B	101	0	79	0
	C	251	63	0	3
	D	2	0	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	5	5	5	5
	B	5	5	5	5
	C	5	5	5	5
	D	5	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	7.36	0.2	A	72	109
B-AD	0.25	11.33	0.3	B	93	139
A-BCD	0.00	0.00	0.0	A	0	0
A-B					49	73
A-C					35	52
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.10	6.39	0.1	A	58	87
C-D					3	4
C-A					230	345

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	630	0.094	59	0.0	0.1	6.739	A
B-AD	76	19	478	0.159	75	0.0	0.2	9.545	A
A-BCD	0	0	1367	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	29	7			29				
D-ABC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	681	0.070	47	0.0	0.1	6.076	A
C-D	2	0.56			2				
C-A	189	47			189				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	622	0.114	71	0.1	0.1	6.989	A
B-AD	91	23	467	0.195	91	0.2	0.3	10.236	B
A-BCD	0	0	1336	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	34	9			34				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	677	0.084	57	0.1	0.1	6.206	A
C-D	3	0.67			3				
C-A	226	56			226				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	611	0.142	87	0.1	0.2	7.352	A
B-AD	111	28	451	0.246	111	0.3	0.3	11.302	B
A-BCD	0	0	1293	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	42	10			42				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	672	0.103	69	0.1	0.1	6.388	A
C-D	3	0.83			3				
C-A	276	69			276				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	611	0.142	87	0.2	0.2	7.357	A
B-AD	111	28	451	0.246	111	0.3	0.3	11.328	B
A-BCD	0	0	1293	0.000	0	0.0	0.0	0.000	A
A-B	58	15			58				
A-C	42	10			42				
D-ABC	0	0	418	0.000	0	0.0	0.0	0.000	A
C-ABD	69	17	672	0.103	69	0.1	0.1	6.388	A
C-D	3	0.83			3				
C-A	276	69			276				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	18	622	0.114	71	0.2	0.1	6.995	A
B-AD	91	23	467	0.195	91	0.3	0.3	10.270	B
A-BCD	0	0	1335	0.000	0	0.0	0.0	0.000	A
A-B	48	12			48				
A-C	34	9			34				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	57	14	677	0.084	57	0.1	0.1	6.208	A
C-D	3	0.67			3				
C-A	226	56			226				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	630	0.094	60	0.1	0.1	6.754	A
B-AD	76	19	478	0.159	76	0.3	0.2	9.602	A
A-BCD	0	0	1366	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	29	7			29				
D-ABC	0	0	448	0.000	0	0.0	0.0	0.000	A
C-ABD	47	12	681	0.070	48	0.1	0.1	6.082	A
C-D	2	0.56			2				
C-A	189	47			189				

Junctions 9	
PICADY 9 - Priority Intersection Module	
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Filename: L1532_Loreto_at_Drumgola.j9

Path: D:\ttrsa\projects\T250210_Cavan_Lisdarn_Residential_TTA_S1_RSA_QA_MMP\tta\traffic_modelling

Report generation date: 24/10/2025 13:08:34

-
- »2029 Baseline, AM
 - »2034 Baseline, AM
 - »2044 Baseline, AM
 - »2029 With Development, AM
 - »2034 With Development, AM
 - »2044 With Development, AM
 - »2029 Baseline, PM
 - »2034 Baseline, PM
 - »2044 Baseline, PM
 - »2029 With Development, PM
 - »2034 With Development, PM
 - »2044 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-C	D1	0.7	20.71	0.41	C	D7	0.8	12.57	0.43	B
Stream B-A		4.6	58.47	0.84	F		1.3	18.48	0.55	C
Stream C-AB		1.5	15.41	0.59	C		0.2	7.50	0.18	A
	2034 Baseline									
Stream B-C	D2	1.0	27.66	0.49	D	D8	0.8	12.88	0.44	B
Stream B-A		5.5	68.42	0.87	F		1.3	19.15	0.56	C
Stream C-AB		1.6	15.93	0.60	C		0.2	7.57	0.19	A
	2044 Baseline									
Stream B-C	D3	5.2	125.98	0.96	F	D9	0.9	13.64	0.46	B
Stream B-A		8.1	95.30	0.93	F		1.5	20.58	0.59	C
Stream C-AB		1.8	17.02	0.62	C		0.3	7.69	0.20	A
	2029 With Development									
Stream B-C	D4	3.6	95.55	0.85	F	D10	0.9	13.12	0.45	B
Stream B-A		7.7	90.23	0.92	F		1.4	19.68	0.57	C
Stream C-AB		1.7	16.40	0.61	C		0.3	7.70	0.20	A
	2034 With Development									
Stream B-C	D5	5.8	141.09	0.97	F	D11	0.9	13.51	0.46	B
Stream B-A		9.7	109.54	0.95	F		1.5	20.42	0.58	C
Stream C-AB		1.8	17.01	0.62	C		0.3	7.75	0.20	A
	2044 With Development									
Stream B-C	D6	8.2	201.70	1.03	F	D12	1.0	14.34	0.48	B
Stream B-A		15.2	157.73	1.02	F		1.6	22.05	0.61	C
Stream C-AB		2.0	18.22	0.65	C		0.3	7.88	0.21	A

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

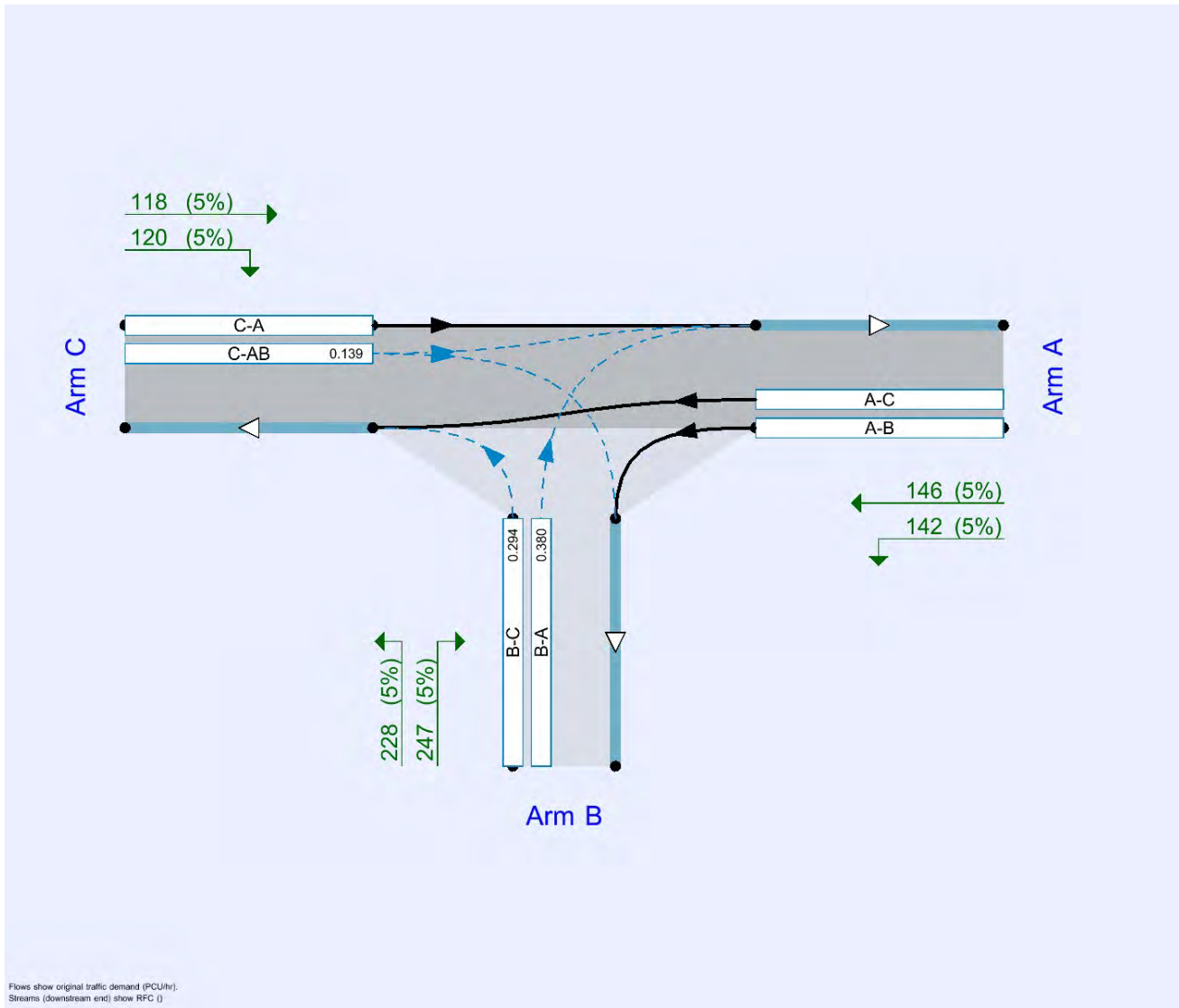
File summary

File Description

Title	L1532/Loreto Road (Loreto Cross) Junction
Location	Cavan
Site number	
Date	20/10/2025
Version	TTA
Status	Final
Identifier	
Client	Lisdaran Developments
Jobnumber	T250210
Enumerator	TTRSA
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Analysis Set Details

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

2029 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		17.84	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	L1532 to/from Cavan Town		Major
B	Loreto Road		Minor
C	L1532 to/from N3		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.30		✓	3.00	132.0	✓	7.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.35	6.30	6.00	5.70		5.00	120	52

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	626	0.112	0.284	0.179	0.406
B-C	626	0.095	0.240	-	-
C-B	707	0.270	0.270	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	375	100.000
B		ONE HOUR	✓	397	100.000
C		ONE HOUR	✓	555	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	259	116
	B	279	0	118
	C	238	317	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.41	20.71	0.7	C	108	162
B-A	0.84	58.47	4.6	F	256	384
C-AB	0.59	15.41	1.5	C	293	439
C-A					217	325
A-B					238	356
A-C					106	160

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	516	0.172	88	0.0	0.2	8.973	A
B-A	210	53	450	0.467	206	0.0	0.9	15.595	C
C-AB	239	60	631	0.378	236	0.0	0.6	9.699	A
C-A	179	45			179				
A-B	195	49			195				
A-C	87	22			87				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	27	478	0.222	106	0.2	0.3	10.336	B
B-A	251	63	415	0.604	248	0.9	1.5	22.734	C
C-AB	286	71	617	0.463	285	0.6	0.9	11.543	B
C-A	213	53			213				
A-B	233	58			233				
A-C	104	26			104				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	32	345	0.377	129	0.3	0.6	17.705	C
B-A	307	77	367	0.836	297	1.5	4.1	48.722	E
C-AB	354	88	603	0.586	351	0.9	1.5	15.156	C
C-A	257	64			257				
A-B	285	71			285				
A-C	128	32			128				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	32	315	0.412	130	0.6	0.7	20.707	C
B-A	307	77	367	0.837	305	4.1	4.6	58.475	F
C-AB	354	88	603	0.586	354	1.5	1.5	15.412	C
C-A	257	64			257				
A-B	285	71			285				
A-C	128	32			128				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	27	466	0.228	108	0.7	0.3	10.811	B
B-A	251	63	415	0.605	262	4.6	1.7	26.933	D
C-AB	286	71	617	0.463	288	1.5	0.9	11.776	B
C-A	213	53			213				
A-B	233	58			233				
A-C	104	26			104				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	513	0.173	89	0.3	0.2	9.103	A
B-A	210	53	449	0.468	213	1.7	1.0	16.534	C
C-AB	239	60	631	0.378	240	0.9	0.7	9.878	A
C-A	179	45			179				
A-B	195	49			195				
A-C	87	22			87				

2034 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		20.70	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	382	100.000
B		ONE HOUR	✓	405	100.000
C		ONE HOUR	✓	566	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	263	119
	B	285	0	120
	C	243	323	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.49	27.66	1.0	D	110	165
B-A	0.87	68.42	5.5	F	262	392
C-AB	0.60	15.93	1.6	C	299	448
C-A					221	331
A-B					241	362
A-C					109	164

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	23	513	0.176	89	0.0	0.2	9.074	A
B-A	215	54	447	0.480	211	0.0	1.0	16.083	C
C-AB	243	61	630	0.386	241	0.0	0.7	9.839	A
C-A	183	46			183				
A-B	198	50			198				
A-C	90	22			90				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	471	0.229	108	0.2	0.3	10.577	B
B-A	256	64	411	0.623	253	1.0	1.7	24.008	C
C-AB	291	73	616	0.473	290	0.7	0.9	11.784	B
C-A	218	54			218				
A-B	236	59			236				
A-C	107	27			107				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	132	33	313	0.423	130	0.3	0.8	20.936	C
B-A	314	78	362	0.866	301	1.7	4.8	54.575	F
C-AB	361	90	603	0.599	359	0.9	1.6	15.640	C
C-A	262	65			262				
A-B	290	72			290				
A-C	131	33			131				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	132	33	269	0.490	131	0.8	1.0	27.657	D
B-A	314	78	362	0.867	311	4.8	5.5	68.421	F
C-AB	361	90	603	0.599	361	1.6	1.6	15.935	C
C-A	262	65			262				
A-B	290	72			290				
A-C	131	33			131				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	455	0.237	110	1.0	0.3	11.266	B
B-A	256	64	411	0.624	271	5.5	1.9	29.883	D
C-AB	291	73	616	0.473	294	1.6	1.0	12.046	B
C-A	218	54			218				
A-B	236	59			236				
A-C	107	27			107				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	23	509	0.178	91	0.3	0.2	9.223	A
B-A	215	54	446	0.481	218	1.9	1.0	17.173	C
C-AB	243	61	630	0.386	245	1.0	0.7	10.036	B
C-A	183	46			183				
A-B	198	50			198				
A-C	90	22			90				

2044 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		35.35	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	397	100.000
B		ONE HOUR	✓	421	100.000
C		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	273	124
	B	296	0	125
	C	254	334	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.96	125.98	5.2	F	115	172
B-A	0.93	95.30	8.1	F	272	407
C-AB	0.62	17.02	1.8	C	310	464
C-A					230	345
A-B					251	376
A-C					114	171

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	24	507	0.186	93	0.0	0.2	9.289	A
B-A	223	56	440	0.507	219	0.0	1.1	17.109	C
C-AB	252	63	627	0.402	249	0.0	0.7	10.123	B
C-A	191	48			191				
A-B	206	51			206				
A-C	93	23			93				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	457	0.246	112	0.2	0.3	11.138	B
B-A	266	67	403	0.661	263	1.1	1.9	26.825	D
C-AB	301	75	613	0.492	300	0.7	1.0	12.274	B
C-A	227	57			227				
A-B	245	61			245				
A-C	111	28			111				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	34	232	0.593	133	0.3	1.4	37.553	E
B-A	326	81	352	0.926	308	1.9	6.4	68.735	F
C-AB	376	94	602	0.625	373	1.0	1.7	16.640	C
C-A	272	68			272				
A-B	301	75			301				
A-C	137	34			137				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	34	143	0.961	122	1.4	5.2	125.979	F
B-A	326	81	351	0.928	319	6.4	8.1	95.303	F
C-AB	376	94	602	0.625	376	1.7	1.8	17.024	C
C-A	272	68			272				
A-B	301	75			301				
A-C	137	34			137				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	428	0.262	132	5.2	0.4	13.810	B
B-A	266	67	399	0.666	289	8.1	2.3	40.199	E
C-AB	301	75	613	0.492	304	1.8	1.1	12.599	B
C-A	227	57			227				
A-B	245	61			245				
A-C	111	28			111				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	24	501	0.188	95	0.4	0.3	9.484	A
B-A	223	56	439	0.508	228	2.3	1.1	18.629	C
C-AB	252	63	627	0.402	253	1.1	0.7	10.345	B
C-A	191	48			191				
A-B	206	51			206				
A-C	93	23			93				

2029 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		32.44	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	384	100.000
B		ONE HOUR	✓	428	100.000
C		ONE HOUR	✓	567	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	268	116
	B	301	0	127
	C	238	329	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.85	95.55	3.6	F	117	175
B-A	0.92	90.23	7.7	F	276	414
C-AB	0.61	16.40	1.7	C	304	457
C-A					216	324
A-B					246	369
A-C					106	160

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	508	0.188	95	0.0	0.2	9.296	A
B-A	227	57	446	0.508	222	0.0	1.1	16.949	C
C-AB	248	62	629	0.394	245	0.0	0.7	9.960	A
C-A	179	45			179				
A-B	202	50			202				
A-C	87	22			87				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	114	29	459	0.249	114	0.2	0.3	11.132	B
B-A	271	68	410	0.660	267	1.1	1.9	26.373	D
C-AB	297	74	616	0.482	295	0.7	1.0	11.994	B
C-A	213	53			213				
A-B	241	60			241				
A-C	104	26			104				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	140	35	245	0.570	136	0.3	1.3	34.169	D
B-A	331	83	361	0.919	314	1.9	6.3	66.082	F
C-AB	369	92	603	0.611	366	1.0	1.6	16.070	C
C-A	256	64			256				
A-B	295	74			295				
A-C	128	32			128				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	140	35	164	0.851	131	1.3	3.6	95.554	F
B-A	331	83	360	0.920	326	6.3	7.7	90.232	F
C-AB	369	92	603	0.611	368	1.6	1.7	16.401	C
C-A	256	64			256				
A-B	295	74			295				
A-C	128	32			128				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	114	29	432	0.265	127	3.6	0.4	13.174	B
B-A	271	68	408	0.664	292	7.7	2.3	38.116	E
C-AB	297	74	616	0.482	299	1.7	1.0	12.281	B
C-A	213	53			213				
A-B	241	60			241				
A-C	104	26			104				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	24	503	0.190	96	0.4	0.3	9.488	A
B-A	227	57	445	0.510	231	2.3	1.2	18.411	C
C-AB	248	62	629	0.394	249	1.0	0.7	10.167	B
C-A	179	45			179				
A-B	202	50			202				
A-C	87	22			87				

2034 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		41.03	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	392	100.000
B		ONE HOUR	✓	437	100.000
C		ONE HOUR	✓	578	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	273	119
	B	307	0	130
	C	243	335	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.97	141.09	5.8	F	119	179
B-A	0.95	109.54	9.7	F	282	423
C-AB	0.62	17.01	1.8	C	310	466
C-A					220	330
A-B					251	376
A-C					109	164

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	24	505	0.194	97	0.0	0.3	9.423	A
B-A	231	58	442	0.523	227	0.0	1.1	17.547	C
C-AB	252	63	628	0.402	250	0.0	0.7	10.116	B
C-A	183	46			183				
A-B	206	51			206				
A-C	90	22			90				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	29	451	0.259	116	0.3	0.4	11.506	B
B-A	276	69	405	0.681	272	1.1	2.1	28.100	D
C-AB	302	76	614	0.492	301	0.7	1.0	12.264	B
C-A	217	54			217				
A-B	245	61			245				
A-C	107	27			107				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	143	36	191	0.748	135	0.4	2.5	61.366	F
B-A	338	85	355	0.951	317	2.1	7.4	75.150	F
C-AB	377	94	603	0.625	374	1.0	1.7	16.627	C
C-A	260	65			260				
A-B	301	75			301				
A-C	131	33			131				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	143	36	147	0.972	130	2.5	5.8	141.093	F
B-A	338	85	354	0.955	329	7.4	9.7	109.538	F
C-AB	377	94	603	0.625	376	1.7	1.8	17.010	C
C-A	260	65			260				
A-B	301	75			301				
A-C	131	33			131				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	29	409	0.286	138	5.8	0.4	15.340	C
B-A	276	69	402	0.687	304	9.7	2.6	47.123	E
C-AB	302	76	614	0.492	305	1.8	1.1	12.585	B
C-A	217	54			217				
A-B	245	61			245				
A-C	107	27			107				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	24	498	0.196	99	0.4	0.3	9.652	A
B-A	231	58	441	0.524	237	2.6	1.2	19.324	C
C-AB	252	63	628	0.402	254	1.1	0.7	10.340	B
C-A	183	46			183				
A-B	206	51			206				
A-C	90	22			90				

2044 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		57.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	406	100.000
B		ONE HOUR	✓	452	100.000
C		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	282	124
	B	318	0	134
	C	254	346	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	1.03	201.70	8.2	F	123	184
B-A	1.02	157.73	15.2	F	292	438
C-AB	0.65	18.22	2.0	C	322	483
C-A					229	343
A-B					259	388
A-C					114	171

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	25	498	0.203	100	0.0	0.3	9.661	A
B-A	239	60	435	0.550	234	0.0	1.2	18.735	C
C-AB	261	65	625	0.417	258	0.0	0.8	10.408	B
C-A	191	48			191				
A-B	212	53			212				
A-C	93	23			93				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	120	30	432	0.279	120	0.3	0.4	12.336	B
B-A	286	71	397	0.719	281	1.2	2.5	31.813	D
C-AB	312	78	611	0.511	311	0.8	1.1	12.779	B
C-A	227	57			227				
A-B	254	63			254				
A-C	111	28			111				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	37	143	1.030	124	0.4	6.3	137.466	F
B-A	350	88	345	1.013	319	2.5	10.2	95.423	F
C-AB	392	98	603	0.650	388	1.1	1.9	17.714	C
C-A	269	67			269				
A-B	310	78			310				
A-C	137	34			137				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	37	152	0.974	140	6.3	8.2	201.702	F
B-A	350	88	343	1.022	330	10.2	15.2	157.734	F
C-AB	392	98	603	0.650	392	1.9	2.0	18.217	C
C-A	269	67			269				
A-B	310	78			310				
A-C	137	34			137				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	120	30	331	0.364	151	8.2	0.6	24.908	C
B-A	286	71	394	0.726	333	15.2	3.4	80.326	F
C-AB	312	78	611	0.511	316	2.0	1.2	13.187	B
C-A	227	57			227				
A-B	254	63			254				
A-C	111	28			111				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	25	489	0.206	102	0.6	0.3	10.002	B
B-A	239	60	434	0.551	247	3.4	1.4	21.390	C
C-AB	261	65	625	0.417	262	1.2	0.8	10.665	B
C-A	191	48			191				
A-B	212	53			212				
A-C	93	23			93				

2029 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		8.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	261	100.000
B		ONE HOUR	✓	439	100.000
C		ONE HOUR	✓	215	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	124	137
	B	228	0	211
	C	110	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	12.57	0.8	B	194	290
B-A	0.55	18.48	1.3	C	209	314
C-AB	0.18	7.50	0.2	A	96	145
C-A					101	151
A-B					114	171
A-C					126	189

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	592	0.268	157	0.0	0.4	8.823	A
B-A	172	43	497	0.345	169	0.0	0.6	11.683	B
C-AB	79	20	654	0.121	78	0.0	0.1	6.688	A
C-A	83	21			83				
A-B	93	23			93				
A-C	103	26			103				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	571	0.332	189	0.4	0.5	10.063	B
B-A	205	51	481	0.426	204	0.6	0.8	13.849	B
C-AB	94	24	644	0.147	94	0.1	0.2	7.011	A
C-A	99	25			99				
A-B	111	28			111				
A-C	123	31			123				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	540	0.430	231	0.5	0.8	12.447	B
B-A	251	63	459	0.547	249	0.8	1.2	18.185	C
C-AB	116	29	629	0.184	115	0.2	0.2	7.492	A
C-A	121	30			121				
A-B	137	34			137				
A-C	151	38			151				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	58	539	0.431	232	0.8	0.8	12.566	B
B-A	251	63	459	0.547	251	1.2	1.3	18.481	C
C-AB	116	29	629	0.184	116	0.2	0.2	7.498	A
C-A	121	30			121				
A-B	137	34			137				
A-C	151	38			151				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	47	570	0.333	191	0.8	0.5	10.181	B
B-A	205	51	481	0.426	207	1.3	0.8	14.114	B
C-AB	94	24	644	0.147	95	0.2	0.2	7.019	A
C-A	99	25			99				
A-B	111	28			111				
A-C	123	31			123				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	40	591	0.269	159	0.5	0.4	8.938	A
B-A	172	43	497	0.345	173	0.8	0.6	11.907	B
C-AB	79	20	654	0.121	79	0.2	0.1	6.707	A
C-A	83	21			83				
A-B	93	23			93				
A-C	103	26			103				

2034 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		8.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	267	100.000
B		ONE HOUR	✓	446	100.000
C		ONE HOUR	✓	221	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	127	140
	B	232	0	214
	C	113	108	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.44	12.88	0.8	B	196	295
B-A	0.56	19.15	1.3	C	213	319
C-AB	0.19	7.57	0.2	A	99	149
C-A					104	156
A-B					117	175
A-C					128	193

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	161	40	590	0.273	160	0.0	0.4	8.912	A
B-A	175	44	495	0.353	172	0.0	0.6	11.853	B
C-AB	81	20	653	0.125	81	0.0	0.2	6.728	A
C-A	85	21			85				
A-B	96	24			96				
A-C	105	26			105				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	48	569	0.338	192	0.4	0.5	10.208	B
B-A	209	52	479	0.435	208	0.6	0.8	14.142	B
C-AB	97	24	642	0.151	97	0.2	0.2	7.064	A
C-A	102	25			102				
A-B	114	29			114				
A-C	126	31			126				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	536	0.440	234	0.5	0.8	12.743	B
B-A	255	64	456	0.560	253	0.8	1.3	18.813	C
C-AB	119	30	628	0.189	119	0.2	0.2	7.567	A
C-A	124	31			124				
A-B	140	35			140				
A-C	154	39			154				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	535	0.441	236	0.8	0.8	12.879	B
B-A	255	64	456	0.560	255	1.3	1.3	19.152	C
C-AB	119	30	628	0.189	119	0.2	0.2	7.573	A
C-A	124	31			124				
A-B	140	35			140				
A-C	154	39			154				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	48	567	0.339	193	0.8	0.6	10.338	B
B-A	209	52	479	0.435	210	1.3	0.8	14.442	B
C-AB	97	24	642	0.151	97	0.2	0.2	7.073	A
C-A	102	25			102				
A-B	114	29			114				
A-C	126	31			126				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	161	40	589	0.274	162	0.6	0.4	9.036	A
B-A	175	44	495	0.353	176	0.8	0.6	12.096	B
C-AB	81	20	653	0.125	81	0.2	0.2	6.745	A
C-A	85	21			85				
A-B	96	24			96				
A-C	105	26			105				

2044 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		9.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	277	100.000
B		ONE HOUR	✓	462	100.000
C		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	131	146
	B	240	0	222
	C	118	112	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.46	13.64	0.9	B	204	306
B-A	0.59	20.58	1.5	C	220	330
C-AB	0.20	7.69	0.3	A	103	154
C-A					108	162
A-B					120	180
A-C					134	201

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	167	42	587	0.285	165	0.0	0.4	9.111	A
B-A	181	45	492	0.367	178	0.0	0.6	12.197	B
C-AB	84	21	651	0.130	84	0.0	0.2	6.788	A
C-A	89	22			89				
A-B	99	25			99				
A-C	110	27			110				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	50	564	0.354	199	0.4	0.6	10.540	B
B-A	216	54	475	0.454	215	0.6	0.9	14.744	B
C-AB	101	25	640	0.157	101	0.2	0.2	7.143	A
C-A	106	27			106				
A-B	118	29			118				
A-C	131	33			131				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	244	61	528	0.463	243	0.6	0.9	13.458	B
B-A	264	66	451	0.586	262	0.9	1.4	20.139	C
C-AB	123	31	625	0.197	123	0.2	0.3	7.678	A
C-A	130	32			130				
A-B	144	36			144				
A-C	161	40			161				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	244	61	527	0.464	244	0.9	0.9	13.638	B
B-A	264	66	451	0.586	264	1.4	1.5	20.584	C
C-AB	123	31	625	0.197	123	0.3	0.3	7.685	A
C-A	130	32			130				
A-B	144	36			144				
A-C	161	40			161				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	50	562	0.355	201	0.9	0.6	10.697	B
B-A	216	54	475	0.454	218	1.5	0.9	15.111	C
C-AB	101	25	640	0.157	101	0.3	0.2	7.153	A
C-A	106	27			106				
A-B	118	29			118				
A-C	131	33			131				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	167	42	585	0.286	168	0.6	0.4	9.249	A
B-A	181	45	492	0.367	182	0.9	0.6	12.472	B
C-AB	84	21	651	0.130	84	0.2	0.2	6.806	A
C-A	89	22			89				
A-B	99	25			99				
A-C	110	27			110				

2029 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		8.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	272	100.000
B		ONE HOUR	✓	452	100.000
C		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	135	137
	B	235	0	217
	C	110	114	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.45	13.12	0.9	B	199	299
B-A	0.57	19.68	1.4	C	216	323
C-AB	0.20	7.70	0.3	A	105	157
C-A					101	151
A-B					124	186
A-C					126	189

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	589	0.277	162	0.0	0.4	8.976	A
B-A	177	44	494	0.358	175	0.0	0.6	11.984	B
C-AB	86	21	652	0.132	85	0.0	0.2	6.794	A
C-A	83	21			83				
A-B	102	25			102				
A-C	103	26			103				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	567	0.344	194	0.4	0.6	10.314	B
B-A	211	53	477	0.443	210	0.6	0.8	14.370	B
C-AB	102	26	641	0.160	102	0.2	0.2	7.151	A
C-A	99	25			99				
A-B	121	30			121				
A-C	123	31			123				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	60	533	0.448	238	0.6	0.8	12.973	B
B-A	259	65	454	0.570	257	0.8	1.4	19.308	C
C-AB	126	31	626	0.200	125	0.2	0.3	7.689	A
C-A	121	30			121				
A-B	149	37			149				
A-C	151	38			151				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	239	60	532	0.449	239	0.8	0.9	13.125	B
B-A	259	65	454	0.570	259	1.4	1.4	19.684	C
C-AB	126	31	626	0.200	126	0.3	0.3	7.696	A
C-A	121	30			121				
A-B	149	37			149				
A-C	151	38			151				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	566	0.345	196	0.9	0.6	10.456	B
B-A	211	53	477	0.442	213	1.4	0.9	14.693	B
C-AB	102	26	641	0.160	103	0.3	0.2	7.163	A
C-A	99	25			99				
A-B	121	30			121				
A-C	123	31			123				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	41	588	0.278	164	0.6	0.4	9.103	A
B-A	177	44	494	0.358	178	0.9	0.6	12.238	B
C-AB	86	21	652	0.132	86	0.2	0.2	6.814	A
C-A	83	21			83				
A-B	102	25			102				
A-C	103	26			103				

2034 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		9.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	277	100.000
B		ONE HOUR	✓	460	100.000
C		ONE HOUR	✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	137	140
	B	239	0	221
	C	113	116	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.46	13.51	0.9	B	203	304
B-A	0.58	20.42	1.5	C	219	329
C-AB	0.20	7.75	0.3	A	106	160
C-A					104	156
A-B					126	189
A-C					128	193

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	166	42	588	0.283	165	0.0	0.4	9.077	A
B-A	180	45	492	0.366	178	0.0	0.6	12.161	B
C-AB	87	22	651	0.134	87	0.0	0.2	6.825	A
C-A	85	21			85				
A-B	103	26			103				
A-C	105	26			105				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	565	0.352	198	0.4	0.6	10.481	B
B-A	215	54	475	0.452	214	0.6	0.9	14.678	B
C-AB	104	26	640	0.163	104	0.2	0.2	7.191	A
C-A	102	25			102				
A-B	123	31			123				
A-C	126	31			126				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	243	61	530	0.459	242	0.6	0.9	13.336	B
B-A	263	66	451	0.583	261	0.9	1.4	19.991	C
C-AB	128	32	625	0.204	127	0.2	0.3	7.746	A
C-A	124	31			124				
A-B	151	38			151				
A-C	154	39			154				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	243	61	528	0.461	243	0.9	0.9	13.511	B
B-A	263	66	451	0.583	263	1.4	1.5	20.420	C
C-AB	128	32	625	0.204	128	0.3	0.3	7.753	A
C-A	124	31			124				
A-B	151	38			151				
A-C	154	39			154				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	50	563	0.353	200	0.9	0.6	10.638	B
B-A	215	54	475	0.452	217	1.5	0.9	15.038	C
C-AB	104	26	640	0.163	105	0.3	0.2	7.204	A
C-A	102	25			102				
A-B	123	31			123				
A-C	126	31			126				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	166	42	586	0.284	167	0.6	0.4	9.213	A
B-A	180	45	492	0.366	181	0.9	0.6	12.434	B
C-AB	87	22	651	0.134	88	0.2	0.2	6.842	A
C-A	85	21			85				
A-B	103	26			103				
A-C	105	26			105				

2044 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1532/Loreto Road (Loreto Cross) Junction	T-Junction	Two-way		9.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	288	100.000
B		ONE HOUR	✓	475	100.000
C		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	142	146
	B	247	0	228
	C	118	120	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.48	14.34	1.0	B	209	314
B-A	0.61	22.05	1.6	C	227	340
C-AB	0.21	7.88	0.3	A	110	165
C-A					108	162
A-B					130	195
A-C					134	201

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	172	43	584	0.294	170	0.0	0.4	9.276	A
B-A	186	46	489	0.380	183	0.0	0.6	12.515	B
C-AB	90	23	648	0.139	90	0.0	0.2	6.886	A
C-A	89	22			89				
A-B	107	27			107				
A-C	110	27			110				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	205	51	560	0.366	204	0.4	0.6	10.819	B
B-A	222	56	471	0.471	221	0.6	0.9	15.315	C
C-AB	108	27	637	0.169	108	0.2	0.2	7.277	A
C-A	106	27			106				
A-B	128	32			128				
A-C	131	33			131				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	251	63	521	0.482	250	0.6	1.0	14.109	B
B-A	272	68	446	0.610	269	0.9	1.6	21.475	C
C-AB	132	33	621	0.213	132	0.2	0.3	7.868	A
C-A	130	32			130				
A-B	156	39			156				
A-C	161	40			161				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	251	63	520	0.483	251	1.0	1.0	14.338	B
B-A	272	68	446	0.610	272	1.6	1.6	22.052	C
C-AB	132	33	621	0.213	132	0.3	0.3	7.875	A
C-A	130	32			130				
A-B	156	39			156				
A-C	161	40			161				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	205	51	558	0.367	206	1.0	0.6	11.009	B
B-A	222	56	471	0.471	225	1.6	1.0	15.767	C
C-AB	108	27	637	0.169	108	0.3	0.2	7.287	A
C-A	106	27			106				
A-B	128	32			128				
A-C	131	33			131				

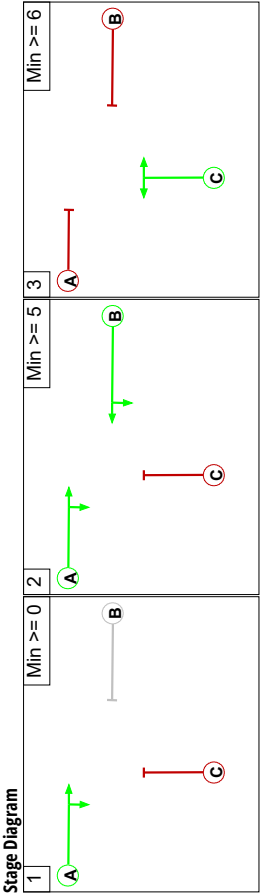
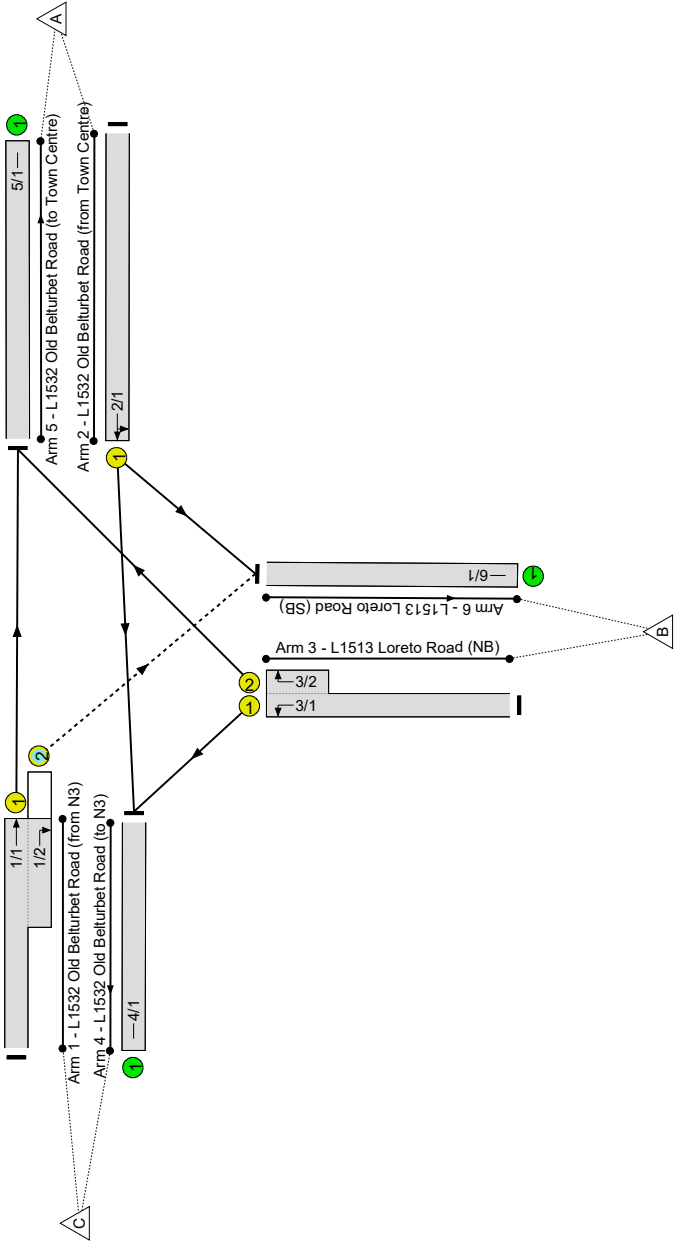
16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	172	43	582	0.295	172	0.6	0.5	9.429	A
B-A	186	46	489	0.380	187	1.0	0.7	12.828	B
C-AB	90	23	648	0.139	91	0.2	0.2	6.910	A
C-A	89	22			89				
A-B	107	27			107				
A-C	110	27			110				

User and Project Details

Project:	Lisdarn Large Residential Development
Title:	L1532 Loreto Road (Loreto Cross) at Drumgola
Location:	Drumgola, Co. Cavan
Client:	Lisdaran Developments
Date Completed:	20/10/2025
Model Purpose:	Feasibility
Model Assumptions:	As close to existing junction geometry as possible
Flow Details:	As per TIA Appendix C
Company:	TTRSA
Address:	Barran, Blacklion, County Cavan
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		-9999	6
B	Traffic		-9999	6
C	Traffic		-9999	6

Phases in Stage

Stage No.	Phases in Stage
1	A
2	A B
3	C

Phase Intergreens Matrix

	Starting Phase		
Terminating Phase		A	B
	A		-
	B	-	
	C	7	6

Lane Input Data

Junction: Loreto Road at Drumgola												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (L1532 Old Belturbet Road (from N3))	U	A	2	3	173.9	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
1/2 (L1532 Old Belturbet Road (from N3))	O	A	2	3	7.0	Geom	-	3.00	0.00	N	Arm 6 Right	12.00
2/1 (L1532 Old Belturbet Road (from Town Centre))	U	B	2	3	33.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	9.40
3/1 (L1513 Loreto Road (NB))	U	C	2	3	69.6	Geom	-	3.25	5.00	Y	Arm 4 Left	12.50
3/2 (L1513 Loreto Road (NB))	U	C	2	3	4.0	Geom	-	3.00	5.00	N	Arm 5 Right	15.60
4/1 (L1532 Old Belturbet Road (to N3))	U		2	3	173.9	Geom	-	3.00	0.00	Y		
5/1 (L1532 Old Belturbet Road (to Town Centre))	U		2	3	31.3	Geom	-	3.00	0.00	Y		
6/1 (L1513 Loreto Road (SB))	U		2	3	69.6	Geom	-	3.00	0.00	Y		

Traffic Flows, Desired

FG1: '2029 AM Baseline'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	0	259	116	375
	279	0	118	397
	238	317	0	555
Tot.	517	576	234	1327

FG2: '2034 AM Baseline'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	0	263	119
	B	285	0	120
	C	243	323	0
	Tot.	528	586	239
				1353

FG3: '2044 AM Baseline'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	0	273	124
	B	296	0	125
	C	254	334	0
	Tot.	550	607	249
				1406

FG4: '2029 AM With Development'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	0	268	116
	B	301	0	127
	C	238	329	0
	Tot.	539	597	243
				1379

FG5: '2034 AM With Development'

Desired Flow :

Origin	Destination		
	A	B	C
	0	273	119
			392

	B	307	0	130	437
	C	243	335	0	578
	Tot.	550	608	249	1407

FG6: '2044 AM With Development'
Desired Flow :

Origin	Destination				
	A	B	C	Tot.	
	A	0	282	124	406
	B	318	0	134	452
	C	254	346	0	600
	Tot.	572	628	258	1458

FG7: '2029 PM Baseline'
Desired Flow :

Origin	Destination				
	A	B	C	Tot.	
	A	0	124	137	261
	B	228	0	211	439
	C	110	105	0	215
	Tot.	338	229	348	915

FG8: '2034 PM Baseline'
Desired Flow :

Origin	Destination				
	A	B	C	Tot.	
	A	0	127	140	267
	B	232	0	214	446
	C	113	108	0	221
	Tot.	345	235	354	934

FG9: '2044 PM Baseline'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	131	146	277
	B	0	222	462
	C	112	0	230
Tot.	358	243	368	969

FG10: '2029 PM With Development'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	135	137	272
	B	0	217	452
	C	114	0	224
Tot.	345	249	354	948

FG11: '2034 PM With Development'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	137	140	277
	B	0	221	460
	C	116	0	229
Tot.	352	253	361	966

FG12: '2044 PM With Development'

Desired Flow :

Origin	Destination			
	A	B	C	Tot.
	A	142	146	288

	B	247	0	228	475
	C	118	120	0	238
	Tot.	365	262	374	1001

Stage Timings

Scenario 1: '2029 AM Baseline' (FG1: '2029 AM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	27	17
Change Point	0	7	36

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	67.6%	4.5	8.2	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	67.6%	4.5	8.2	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	29	555	1915:1827	354+472	67.2 : 67.2%	1.5	3.3	21.3	4.2	5.2
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	27	375	1725	805	46.6%	1.1	1.6	15.1	4.2	4.6
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	17	397	1545:1683	175+413	67.6 : 67.6%	1.9	2.9	26.5	3.9	4.9
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	234	1915	1915	12.2%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	517	1915	1915	27.0%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	576	1915	1915	30.1%	0.0	0.2	1.3	0.0	0.2
C1				PRC for Signalled Lanes (%): 33.2	PRC Over All Lanes (%): 33.2	Total Delay for Signalled Lanes (pcuHr): 7.77			Total Delay Over All Lanes (pcuHr): 8.24			Cycle Time (s): 60	

Stage Timings

Scenario 2: '2034 AM Baseline' (FG2: '2034 AM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	6	21	17
Change Point	0	13	36

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drumgola	-	-	-	-	-	-	-	69.0%	5.0	8.7	-	-	-
	Loreto Road at Drumgola	-	-	-	-	-	-	69.0%	5.0	8.7	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	29	566	1915:1827	365+486	66.5 : 66.5%	1.4	2.8	17.6	3.2	4.2
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	21	382	1725	633	60.4%	1.6	2.4	22.6	5.1	5.9
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	17	405	1545:1683	174+413	69.0 : 69.0%	1.9	3.0	27.0	4.1	5.2
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	239	1915	1915	12.5%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	528	1915	1915	27.6%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	586	1915	1915	30.6%	0.0	0.2	1.4	2.8	3.0
C1				PRC for Signalled Lanes (%): 30.4 PRC Over All Lanes (%): 30.4	Total Delay for Signalled Lanes (pcuHr): 8.20 Total Delay Over All Lanes (pcuHr): 8.70				Cycle Time (s): 60				

Stage Timings

Scenario 3: '2044 AM Baseline' (FG3: '2044 AM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	6	21	17
Change Point	0	13	36

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	71.7%	5.2	9.5	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	71.7%	5.2	9.5	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	29	588	1915:1827	361+475	70.4 : 70.4%	1.5	3.1	19.0	3.3	4.5
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	21	397	1726	633	62.7%	1.7	2.6	23.2	5.4	6.2
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	17	421	1545:1683	174+413	71.7 : 71.7%	2.0	3.3	28.0	4.4	5.6
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	249	1915	1915	13.0%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	550	1915	1915	28.7%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	607	1915	1915	31.7%	0.0	0.2	1.5	2.8	3.0
C1				PRC for Signalled Lanes (%): 25.5	PRC Over All Lanes (%): 25.5	Total Delay for Signalled Lanes (pcuHr): 8.94			Total Delay Over All Lanes (pcuHr): 9.46			Cycle Time (s): 60	

Stage Timings

Scenario 4: '2029 AM With Development' (FG4: '2029 AM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	7	19	18
Change Point	0	14	35

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	70.0%	5.3	9.4	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	70.0%	5.3	9.4	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	28	567	1915:1827	340+470	70.0 : 70.0%	1.5	3.0	18.9	3.4	4.5
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	19	384	1723	574	66.9%	1.8	2.8	26.5	5.4	6.4
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	18	428	1545:1683	182+432	69.6 : 69.6%	2.0	3.1	26.1	4.4	5.5
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	243	1915	1915	12.7%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	539	1915	1915	28.1%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	597	1915	1915	31.2%	0.0	0.2	1.5	3.3	3.5
C1				PRC for Signalled Lanes (%): PRC Over All Lanes (%)	28.6 28.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes (pcuHr):			8.91 9.43	Cycle Time (s):		60	

Stage Timings

Scenario 5: '2034 AM With Development' (FG5: '2034 AM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	6	20	18
Change Point	0	13	35

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	73.6%	5.4	9.9	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	73.6%	5.4	9.9	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	28	578	1915:1827	330+455	73.6 : 73.6%	1.5	3.4	21.3	3.4	4.8
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	20	392	1723	603	65.0%	1.8	2.7	24.9	5.4	6.4
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	18	437	1545:1683	183+432	71.1 : 71.1%	2.0	3.2	26.6	4.6	5.8
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	249	1915	1915	13.0%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	550	1915	1915	28.7%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	608	1915	1915	31.7%	0.0	0.2	1.5	3.2	3.4
C1				PRC for Signalled Lanes (%): 22.3 PRC Over All Lanes (%): 22.3	Total Delay for Signalled Lanes (pcuHr): 9.36 Total Delay Over All Lanes (pcuHr): 9.88				Cycle Time (s): 60				

Stage Timings

Scenario 6: '2044 AM With Development' (FG6: '2044 AM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	7	19	18
Change Point	0	14	35

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	76.2%	5.7	10.8	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	76.2%	5.7	10.8	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	28	600	1915:1827	333+454	76.2 : 76.2%	1.6	3.6	21.7	3.7	5.2
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	19	406	1724	575	70.6%	2.0	3.2	28.0	5.9	7.1
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	18	452	1545:1683	182+432	73.6 : 73.6%	2.1	3.5	27.7	4.7	6.1
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	258	1915	1915	13.5%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	572	1915	1915	29.9%	0.0	0.2	1.3	0.0	0.2
6/1	L1513 Loreto Road (SB)	U	-	-	628	1915	1915	32.8%	0.0	0.3	1.5	3.3	3.5
C1				PRC for Signalled Lanes (%): 18.1 PRC Over All Lanes (%): 18.1	Total Delay for Signalled Lanes (pcuHr): 10.26 Total Delay Over All Lanes (pcuHr): 10.81				Cycle Time (s): 60				

Stage Timings

Scenario 7: '2029 PM Baseline' (FC7: '2029 PM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	46.4%	3.3	4.8	-	-	-
Loreto Road at Drungola	-	-	-	-	-	-	-	46.4%	3.3	4.8	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	215	1915:1827	409+371	26.9 : 28.3%	0.8	1.2	20.0	1.3	1.4
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	261	1780	564	46.3%	1.2	1.6	22.3	3.5	3.9
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	439	1545:1683	455+491	46.4 : 46.4%	1.3	1.7	14.1	2.4	2.8
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	348	1915	1915	18.2%	0.0	0.1	1.1	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	338	1915	1915	17.7%	0.0	0.1	1.1	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	229	1915	1915	12.0%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalled Lanes (%): 94.0 PRC Over All Lanes (%): 94.0	94.0 94.0	Total Delay for Signalled Lanes (pcuHr): 4.53 Total Delay Over All Lanes (pcuHr): 4.81			4.53 4.81	Cycle Time (s): 60			

Stage Timings

Scenario 8: '2034 PM Baseline' (FC8: '2034 PM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	47.4%	3.4	5.0	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	47.4%	3.4	5.0	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	221	1915:1827	401+365	28.2 : 29.6%	0.8	1.2	20.3	1.3	1.5
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	267	1780	564	47.4%	1.2	1.7	22.5	3.6	4.0
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	446	1545:1683	454+492	47.2 : 47.2%	1.3	1.8	14.1	2.4	2.9
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	354	1915	1915	18.5%	0.0	0.1	1.2	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	345	1915	1915	18.0%	0.0	0.1	1.1	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	235	1915	1915	12.3%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalled Lanes (%): 90.0	PRC Over All Lanes (%): 90.0	Total Delay for Signalled Lanes (pcuHr): 4.67			Total Delay Over All Lanes (pcuHr): 4.96			Cycle Time (s): 60	

Stage Timings

Scenario 9: '2044 PM Baseline' (FC9: '2044 PM Baseline', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	49.1%	3.5	5.2	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	49.1%	3.5	5.2	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	230	1915:1827	396+354	29.8 : 31.6%	0.9	1.3	20.7	1.3	1.6
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	277	1781	564	49.1%	1.3	1.8	22.9	3.7	4.2
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	462	1545:1683	455+491	48.8 : 48.8%	1.4	1.8	14.3	2.5	3.0
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	368	1915	1915	19.2%	0.0	0.1	1.2	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	358	1915	1915	18.7%	0.0	0.1	1.2	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	243	1915	1915	12.7%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalised Lanes (%): 83.2	PRC Over All Lanes (%): 83.2	Total Delay for Signalised Lanes (pcuHr): 4.92			Total Delay Over All Lanes (pcuHr): 5.22			Cycle Time (s): 60	

Stage Timings

Scenario 10: '2029 PM With Development' (FG10: '2029 PM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola													
Loreto Road at Drungola	-	-	-	-	-	-	-	48.4%	3.4	5.1	-	-	-
Loreto Road at Drungola	-	-	-	-	-	-	-	48.4%	3.4	5.1	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	224	1915:1827	346+359	31.8 : 31.8%	0.8	1.3	21.0	1.3	1.5
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	272	1774	562	48.4%	1.3	1.7	22.7	3.6	4.1
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	452	1545:1683	454+492	47.8 : 47.8%	1.3	1.8	14.2	2.5	2.9
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	354	1915	1915	18.5%	0.0	0.1	1.2	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	345	1915	1915	18.0%	0.0	0.1	1.1	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	249	1915	1915	13.0%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalled Lanes (%): 85.9	PRC Over All Lanes (%): 85.9	Total Delay for Signalled Lanes (pcuHr): 4.81			Total Delay Over All Lanes (pcuHr): 5.11			Cycle Time (s): 60	

Stage Timings

Scenario 11: '2034 PM With Development' (FG11: '2034 PM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	49.3%	3.5	5.2	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	49.3%	3.5	5.2	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	229	1915:1827	345+354	32.8 : 32.8%	0.9	1.4	21.3	1.3	1.6
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	277	1775	562	49.3%	1.3	1.8	22.9	3.7	4.2
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	460	1545:1683	455+492	48.6 : 48.6%	1.4	1.8	14.3	2.5	3.0
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	361	1915	1915	18.9%	0.0	0.1	1.2	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	352	1915	1915	18.4%	0.0	0.1	1.2	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	253	1915	1915	13.2%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalled Lanes (%): 82.6	PRC Over All Lanes (%): 82.6	Total Delay for Signalled Lanes (pcuHr): 4.94			Total Delay Over All Lanes (pcuHr): 5.25			Cycle Time (s): 60	

Stage Timings

Scenario 12: '2044 PM With Development' (FG12: '2044 PM With Development', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	0	18	26
Change Point	0	7	27

Network Results

Item	Lane Description	Lane Type	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network: L1532 Loreto Road (Loreto Cross) at Drungola	-	-	-	-	-	-	-	51.2%	3.6	5.5	-	-	-
	Loreto Road at Drungola	-	-	-	-	-	-	51.2%	3.6	5.5	-	-	-
1/1+1/2	L1532 Old Belturbet Road (from N3) Ahead Right	U+O	A	20	238	1915:1827	343+349	34.4 : 34.4%	0.9	1.4	21.5	1.4	1.6
2/1	L1532 Old Belturbet Road (from Town Centre) Ahead Left	U	B	18	288	1775	562	51.2%	1.3	1.9	23.3	3.8	4.4
3/1+3/2	L1513 Loreto Road (NB) Left Right	U	C	26	475	1545:1683	454+492	50.2 : 50.2%	1.4	1.9	14.5	2.6	3.1
4/1	L1532 Old Belturbet Road (to N3)	U	-	-	374	1915	1915	19.5%	0.0	0.1	1.2	0.0	0.1
5/1	L1532 Old Belturbet Road (to Town Centre)	U	-	-	365	1915	1915	19.1%	0.0	0.1	1.2	0.0	0.1
6/1	L1513 Loreto Road (SB)	U	-	-	262	1915	1915	13.7%	0.0	0.1	1.1	0.0	0.1
C1				PRC for Signalled Lanes (%): 75.7	PRC Over All Lanes (%): 75.7	Total Delay for Signalled Lanes (pcuHr): 5.19			Total Delay Over All Lanes (pcuHr): 5.51			Cycle Time (s): 60	

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: L1514_Golf_Links_Loreto.j9

Path: D:\ttrsa\projects\T250210_Cavan_Lisdarn_Residential_TTA_S1_RSA_QA_MMP\tta\traffic_modelling

Report generation date: 24/10/2025 13:14:24

»2029 Baseline, AM
 »2034 Baseline, AM
 »2044 Baseline, AM
 »2029 With Development, AM
 »2034 With Development, AM
 »2044 With Development, AM
 »2029 Baseline, PM
 »2034 Baseline, PM
 »2044 Baseline, PM
 »2029 With Development, PM
 »2034 With Development, PM
 »2044 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Arm A	D1	0.9	10.05	0.45	B	D7	0.5	8.04	0.34	A
Arm B		0.5	7.23	0.30	A		0.1	5.54	0.11	A
Arm C		1.0	8.58	0.50	A		0.4	5.69	0.29	A
	2034 Baseline									
Arm A	D2	0.9	10.28	0.46	B	D8	0.6	8.14	0.35	A
Arm B		0.5	7.33	0.30	A		0.1	5.58	0.11	A
Arm C		1.1	8.81	0.51	A		0.5	5.74	0.30	A
	2044 Baseline									
Arm A	D3	1.0	10.66	0.48	B	D9	0.6	8.31	0.36	A
Arm B		0.5	7.54	0.32	A		0.1	5.64	0.11	A
Arm C		1.2	9.26	0.53	A		0.5	5.82	0.31	A
	2029 With Development									
Arm A	D4	1.0	10.58	0.47	B	D10	0.6	8.41	0.37	A
Arm B		0.5	7.44	0.31	A		0.1	5.69	0.12	A
Arm C		1.3	9.58	0.55	A		0.5	5.81	0.31	A
	2034 With Development									
Arm A	D5	1.0	10.83	0.48	B	D11	0.6	8.51	0.37	A
Arm B		0.5	7.54	0.32	A		0.1	5.72	0.12	A
Arm C		1.3	9.88	0.56	A		0.5	5.87	0.31	A
	2044 With Development									
Arm A	D6	1.1	11.26	0.50	B	D12	0.7	8.70	0.39	A
Arm B		0.5	7.76	0.33	A		0.1	5.79	0.12	A
Arm C		1.5	10.45	0.58	B		0.5	5.94	0.32	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.

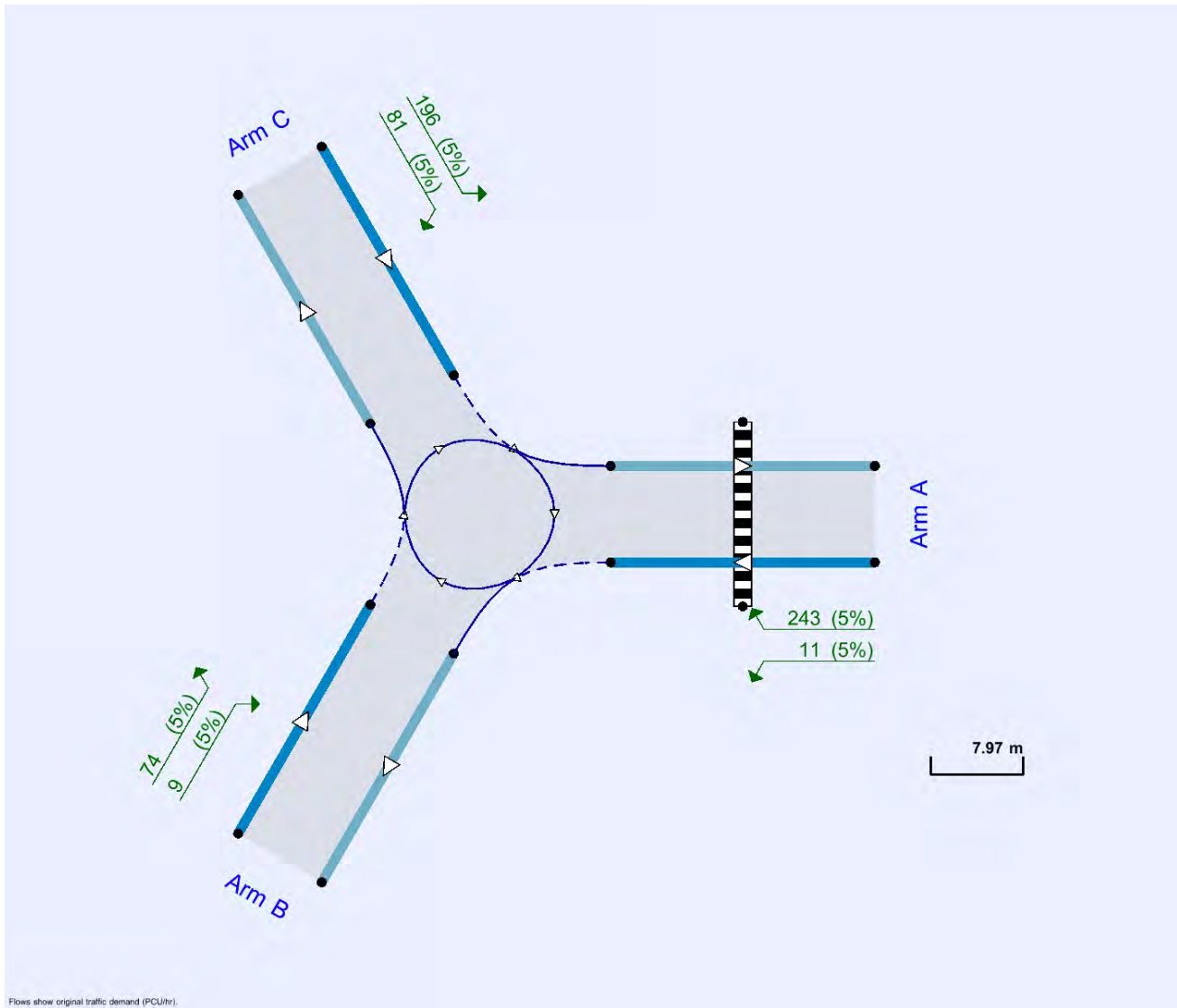
File summary

File Description

Title	L1514 Golf Links Road/Loreto Road (Drumelis mini-roundabout) Junction
Location	Cavan
Site number	
Date	20/10/2025
Version	TTA
Status	Final
Identifier	
Client	Lisdaran Developments
Jobnumber	T250210
Enumerator	TTRSA
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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Analysis Set Details

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

2029 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	8.74	A

Junction Network Options

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

Arms

Arms

Arm	Name	Description
A	L1514 Golf Links Road to/from Cavan Town	
B	Local Road to/from South	
C	Loreto Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	3.06	2.87	3.67	1.3	10.86	9.79	0.0	
B	3.02	2.90	4.84	1.6	15.29	16.16	0.0	
C	3.53	3.19	4.05	4.7	13.21	12.31	0.0	

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
A	1.00	1.00		Distance	8.00	5.71

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.597	776
B	0.646	930
C	0.624	970

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	287	100.000
B		ONE HOUR	✓	205	100.000
C		ONE HOUR	✓	403	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	1	46	240
	B	67	0	138
	C	286	116	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.45	10.05	0.9	B	263	395
B	0.30	7.23	0.5	A	188	282
C	0.50	8.58	1.0	A	370	555

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	216	54	87	7.53	724	0.298	214	265	0.0	0.4	7.532	A
B	154	39	181		814	0.190	153	121	0.0	0.2	5.827	A
C	303	76	51		925	0.328	301	283	0.0	0.5	6.155	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	258	65	105	8.99	714	0.362	257	318	0.4	0.6	8.434	A
B	184	46	217		790	0.233	184	145	0.2	0.3	6.354	A
C	362	91	61		913	0.397	362	340	0.5	0.7	6.984	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	316	79	128	11.01	700	0.452	315	389	0.6	0.9	9.987	A
B	226	56	266		759	0.297	225	178	0.3	0.4	7.215	A
C	444	111	75		893	0.497	442	416	0.7	1.0	8.520	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	316	79	129	11.01	699	0.452	316	390	0.9	0.9	10.046	B
B	226	56	266		758	0.298	226	178	0.4	0.5	7.234	A
C	444	111	75		893	0.497	444	417	1.0	1.0	8.575	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	258	65	106	8.99	713	0.362	259	319	0.9	0.6	8.502	A
B	184	46	218		789	0.234	185	146	0.5	0.3	6.381	A
C	362	91	61		912	0.397	364	342	1.0	0.7	7.040	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	216	54	88	7.53	724	0.299	217	267	0.6	0.5	7.608	A
B	154	39	183		812	0.190	155	122	0.3	0.3	5.863	A
C	303	76	51		925	0.328	304	286	0.7	0.5	6.216	A

2034 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	8.94	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	293	100.000
B		ONE HOUR	✓	208	100.000
C		ONE HOUR	✓	412	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A	B	C	
	A	1	47	245
	B	68	0	140
	C	292	119	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.46	10.28	0.9	B	269	403
B	0.30	7.33	0.5	A	191	286
C	0.51	8.81	1.1	A	378	567

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	221	55	90	7.53	723	0.305	219	270	0.0	0.5	7.617	A
B	157	39	184		811	0.193	156	124	0.0	0.3	5.869	A
C	310	78	52		924	0.336	308	288	0.0	0.5	6.231	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	263	66	108	8.99	712	0.370	263	324	0.5	0.6	8.563	A
B	187	47	222		787	0.238	187	149	0.3	0.3	6.413	A
C	370	93	62		911	0.407	370	346	0.5	0.7	7.104	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	323	81	132	11.01	698	0.462	321	396	0.6	0.9	10.209	B
B	229	57	271		755	0.303	228	182	0.3	0.5	7.306	A
C	454	113	76		891	0.509	452	424	0.7	1.1	8.746	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	323	81	132	11.01	697	0.463	323	397	0.9	0.9	10.277	B
B	229	57	272		755	0.303	229	183	0.5	0.5	7.329	A
C	454	113	76		891	0.509	454	425	1.1	1.1	8.810	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	263	66	108	8.99	712	0.370	264	326	0.9	0.6	8.638	A
B	187	47	223		786	0.238	187	150	0.5	0.3	6.439	A
C	370	93	62		911	0.407	372	348	1.1	0.7	7.170	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	221	55	91	7.53	722	0.305	221	272	0.6	0.5	7.699	A
B	157	39	187		810	0.193	157	125	0.3	0.3	5.905	A
C	310	78	52		924	0.336	311	291	0.7	0.5	6.297	A

2044 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	9.31	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	303	100.000
B		ONE HOUR	✓	216	100.000
C		ONE HOUR	✓	427	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A	B	C	
	A	1	49	253
	B	71	0	145
	C	303	123	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	5	5	5
	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.48	10.66	1.0	B	278	417
B	0.32	7.54	0.5	A	198	297
C	0.53	9.26	1.2	A	392	588

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	228	57	93	7.53	721	0.316	226	280	0.0	0.5	7.757	A
B	163	41	190		807	0.201	162	129	0.0	0.3	5.956	A
C	321	80	54		922	0.349	319	298	0.0	0.6	6.372	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	272	68	111	8.99	710	0.384	272	336	0.5	0.7	8.765	A
B	194	49	229		783	0.248	194	154	0.3	0.3	6.542	A
C	384	96	65		908	0.423	383	358	0.6	0.8	7.331	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	334	83	136	11.01	695	0.480	332	412	0.7	1.0	10.585	B
B	238	59	280		750	0.317	237	189	0.3	0.5	7.512	A
C	470	118	79		886	0.530	468	438	0.8	1.2	9.182	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	334	83	137	11.01	695	0.480	334	413	1.0	1.0	10.662	B
B	238	59	281		749	0.318	238	189	0.5	0.5	7.536	A
C	470	118	79		886	0.531	470	439	1.2	1.2	9.259	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	272	68	112	8.99	709	0.384	274	338	1.0	0.7	8.864	A
B	194	49	230		782	0.248	195	155	0.5	0.4	6.573	A
C	384	96	65		907	0.423	385	360	1.2	0.8	7.406	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	228	57	94	7.53	720	0.317	229	283	0.7	0.5	7.847	A
B	163	41	193		806	0.202	163	130	0.4	0.3	5.997	A
C	321	80	54		921	0.349	322	301	0.8	0.6	6.442	A

2029 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	9.42	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	298	100.000
B		ONE HOUR	✓	211	100.000
C		ONE HOUR	✓	441	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A	B	C	
	A	1	46	251
	B	67	0	144
	C	313	127	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	5	5	5
	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.47	10.58	1.0	B	273	410
B	0.31	7.44	0.5	A	194	290
C	0.55	9.58	1.3	A	405	607

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	224	56	96	7.53	719	0.312	222	285	0.0	0.5	7.727	A
B	159	40	189		808	0.197	158	129	0.0	0.3	5.913	A
C	332	83	51		923	0.360	330	296	0.0	0.6	6.467	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	268	67	115	8.99	708	0.379	267	342	0.5	0.6	8.732	A
B	190	47	227		784	0.242	189	155	0.3	0.3	6.480	A
C	396	99	61		909	0.436	396	355	0.6	0.8	7.488	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	328	82	140	11.01	692	0.474	327	418	0.6	0.9	10.503	B
B	232	58	278		751	0.309	232	190	0.3	0.5	7.412	A
C	486	121	75		888	0.547	484	435	0.8	1.3	9.492	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	328	82	141	11.01	692	0.474	328	419	0.9	1.0	10.578	B
B	232	58	279		750	0.310	232	190	0.5	0.5	7.436	A
C	486	121	75		887	0.547	485	436	1.3	1.3	9.581	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	268	67	116	8.99	707	0.379	269	344	1.0	0.7	8.816	A
B	190	47	228		783	0.242	190	156	0.5	0.3	6.510	A
C	396	99	61		909	0.436	398	357	1.3	0.8	7.576	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	224	56	97	7.53	719	0.312	225	288	0.7	0.5	7.817	A
B	159	40	191		807	0.197	159	131	0.3	0.3	5.950	A
C	332	83	51		922	0.360	333	299	0.8	0.6	6.545	A

2034 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	9.66	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	304	100.000
B		ONE HOUR	✓	214	100.000
C		ONE HOUR	✓	450	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A	B	C	
	A	1	47	256
	B	68	0	146
	C	319	130	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.48	10.83	1.0	B	279	418
B	0.32	7.54	0.5	A	196	295
C	0.56	9.88	1.3	A	413	619

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	229	57	98	7.53	718	0.319	227	290	0.0	0.5	7.816	A
B	161	40	193		806	0.200	160	132	0.0	0.3	5.956	A
C	339	85	52		922	0.367	336	301	0.0	0.6	6.551	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	273	68	117	8.99	706	0.387	273	348	0.5	0.7	8.872	A
B	192	48	231		781	0.246	192	159	0.3	0.3	6.541	A
C	405	101	62		908	0.446	404	361	0.6	0.8	7.630	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	335	84	144	11.01	691	0.485	333	426	0.7	1.0	10.749	B
B	236	59	283		747	0.315	235	194	0.3	0.5	7.511	A
C	495	124	76		886	0.559	494	442	0.8	1.3	9.775	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	335	84	144	11.01	690	0.485	335	427	1.0	1.0	10.833	B
B	236	59	284		747	0.316	236	195	0.5	0.5	7.535	A
C	495	124	76		885	0.560	495	444	1.3	1.3	9.876	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	273	68	118	8.99	706	0.387	275	350	1.0	0.7	8.961	A
B	192	48	233		780	0.247	193	160	0.5	0.4	6.573	A
C	405	101	62		907	0.446	406	364	1.3	0.9	7.723	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	229	57	99	7.53	717	0.319	230	293	0.7	0.5	7.913	A
B	161	40	195		804	0.200	161	134	0.4	0.3	5.997	A
C	339	85	52		921	0.368	340	304	0.9	0.6	6.635	A

2044 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	10.11	B

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	314	100.000
B		ONE HOUR	✓	222	100.000
C		ONE HOUR	✓	465	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	1	49	264
	B	71	0	151
	C	330	134	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.50	11.26	1.1	B	288	432
B	0.33	7.76	0.5	A	204	306
C	0.58	10.45	1.5	B	427	640

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	236	59	101	7.53	716	0.330	234	300	0.0	0.5	7.963	A
B	167	42	198		802	0.208	166	137	0.0	0.3	6.048	A
C	350	88	54		919	0.381	347	311	0.0	0.7	6.709	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	282	71	121	8.99	704	0.401	282	361	0.5	0.7	9.102	A
B	200	50	239		776	0.257	199	164	0.3	0.4	6.672	A
C	418	105	65		904	0.462	417	373	0.7	0.9	7.895	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	346	86	148	11.01	688	0.503	344	441	0.7	1.1	11.165	B
B	244	61	292		742	0.329	244	201	0.4	0.5	7.726	A
C	512	128	79		881	0.581	510	456	0.9	1.4	10.324	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	346	86	149	11.01	688	0.503	346	443	1.1	1.1	11.263	B
B	244	61	293		741	0.330	244	201	0.5	0.5	7.756	A
C	512	128	79		880	0.582	512	458	1.4	1.5	10.451	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	282	71	122	8.99	703	0.401	284	363	1.1	0.7	9.205	A
B	200	50	240		775	0.258	200	165	0.5	0.4	6.710	A
C	418	105	65		903	0.463	420	376	1.5	0.9	8.008	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	236	59	102	7.53	715	0.330	237	304	0.7	0.5	8.068	A
B	167	42	201		800	0.209	167	138	0.4	0.3	6.091	A
C	350	88	54		919	0.381	351	314	0.9	0.7	6.804	A

2029 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	6.63	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	225	100.000
B		ONE HOUR	✓	75	100.000
C		ONE HOUR	✓	254	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	11	214
	B	9	0	66
	C	179	74	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	5	5	5
	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.34	8.04	0.5	A	206	310
B	0.11	5.54	0.1	A	69	103
C	0.29	5.69	0.4	A	233	350

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	169	42	56	7.53	743	0.228	168	141	0.0	0.3	6.689	A
B	56	14	161		826	0.068	56	64	0.0	0.1	4.999	A
C	191	48	7		963	0.199	190	210	0.0	0.3	4.981	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	202	51	67	8.99	736	0.275	202	169	0.3	0.4	7.207	A
B	67	17	193		806	0.084	67	76	0.1	0.1	5.218	A
C	228	57	8		960	0.238	228	252	0.3	0.3	5.261	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	248	62	82	11.01	727	0.341	247	207	0.4	0.5	8.018	A
B	83	21	236		778	0.106	82	93	0.1	0.1	5.541	A
C	280	70	10		956	0.292	279	309	0.3	0.4	5.687	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	248	62	83	11.01	727	0.341	248	207	0.5	0.5	8.038	A
B	83	21	237		777	0.106	83	94	0.1	0.1	5.544	A
C	280	70	10		956	0.292	280	309	0.4	0.4	5.694	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	202	51	68	8.99	736	0.275	203	169	0.5	0.4	7.236	A
B	67	17	194		805	0.084	68	77	0.1	0.1	5.224	A
C	228	57	8		960	0.238	229	253	0.4	0.3	5.269	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	169	42	57	7.53	743	0.228	170	142	0.4	0.3	6.732	A
B	56	14	162		825	0.068	57	64	0.1	0.1	5.012	A
C	191	48	7		963	0.199	192	212	0.3	0.3	4.997	A

2034 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	6.69	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	229	100.000
B		ONE HOUR	✓	76	100.000
C		ONE HOUR	✓	259	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	11	218
	B	9	0	67
	C	182	76	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.35	8.14	0.6	A	210	315
B	0.11	5.58	0.1	A	70	105
C	0.30	5.74	0.5	A	238	356

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	172	43	58	7.53	742	0.232	171	143	0.0	0.3	6.735	A
B	57	14	164		825	0.069	57	65	0.0	0.1	5.016	A
C	195	49	7		963	0.203	194	214	0.0	0.3	5.004	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	206	51	69	8.99	735	0.280	206	171	0.3	0.4	7.271	A
B	68	17	197		803	0.085	68	78	0.1	0.1	5.241	A
C	233	58	8		960	0.243	233	257	0.3	0.3	5.292	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	252	63	85	11.01	726	0.347	252	210	0.4	0.6	8.113	A
B	84	21	241		775	0.108	84	96	0.1	0.1	5.573	A
C	285	71	10		956	0.298	285	314	0.3	0.5	5.736	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	252	63	85	11.01	726	0.347	252	210	0.6	0.6	8.135	A
B	84	21	241		775	0.108	84	96	0.1	0.1	5.576	A
C	285	71	10		956	0.298	285	315	0.5	0.5	5.743	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	206	51	69	8.99	735	0.280	206	172	0.6	0.4	7.300	A
B	68	17	197		803	0.085	68	78	0.1	0.1	5.247	A
C	233	58	8		960	0.243	233	258	0.5	0.3	5.306	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	172	43	58	7.53	742	0.232	173	144	0.4	0.3	6.778	A
B	57	14	165		824	0.069	57	66	0.1	0.1	5.028	A
C	195	49	7		963	0.203	195	216	0.3	0.3	5.022	A

2044 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	6.81	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	237	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	267	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	11	226
	B	9	0	69
	C	188	78	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	5	5	5
	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.36	8.31	0.6	A	217	326
B	0.11	5.64	0.1	A	72	107
C	0.31	5.82	0.5	A	245	368

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	178	45	59	7.53	741	0.241	177	147	0.0	0.3	6.815	A
B	59	15	170		821	0.072	58	67	0.0	0.1	5.051	A
C	201	50	7		962	0.209	200	221	0.0	0.3	5.045	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	213	53	71	8.99	734	0.290	213	177	0.3	0.4	7.386	A
B	70	18	204		799	0.088	70	80	0.1	0.1	5.287	A
C	240	60	8		960	0.250	240	266	0.3	0.4	5.348	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	261	65	87	11.01	724	0.360	260	217	0.4	0.6	8.289	A
B	86	21	249		769	0.112	86	98	0.1	0.1	5.637	A
C	294	73	10		955	0.308	294	325	0.4	0.5	5.817	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	261	65	87	11.01	724	0.360	261	217	0.6	0.6	8.313	A
B	86	21	250		769	0.112	86	98	0.1	0.1	5.640	A
C	294	73	10		955	0.308	294	326	0.5	0.5	5.824	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	213	53	71	8.99	734	0.290	214	177	0.6	0.4	7.415	A
B	70	18	205		798	0.088	70	80	0.1	0.1	5.293	A
C	240	60	8		960	0.250	240	267	0.5	0.4	5.362	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	178	45	60	7.53	741	0.241	179	149	0.4	0.3	6.863	A
B	59	15	171		820	0.072	59	67	0.1	0.1	5.066	A
C	201	50	7		962	0.209	201	223	0.4	0.3	5.066	A

2029 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	6.87	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	242	100.000
B		ONE HOUR	✓	80	100.000
C		ONE HOUR	✓	266	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	11	231
	B	9	0	71
	C	187	78	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.37	8.41	0.6	A	222	333
B	0.12	5.69	0.1	A	73	110
C	0.31	5.81	0.5	A	244	366

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	182	46	59	7.53	741	0.246	181	147	0.0	0.3	6.861	A
B	60	15	173		818	0.074	60	67	0.0	0.1	5.077	A
C	200	50	7		962	0.208	199	226	0.0	0.3	5.040	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	218	54	71	8.99	734	0.296	217	176	0.3	0.4	7.448	A
B	72	18	208		796	0.090	72	80	0.1	0.1	5.321	A
C	239	60	8		960	0.249	239	272	0.3	0.4	5.341	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	266	67	87	11.01	724	0.368	266	215	0.4	0.6	8.387	A
B	88	22	255		766	0.115	88	98	0.1	0.1	5.685	A
C	293	73	10		955	0.307	292	333	0.4	0.5	5.807	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	266	67	87	11.01	724	0.368	266	216	0.6	0.6	8.413	A
B	88	22	255		765	0.115	88	98	0.1	0.1	5.688	A
C	293	73	10		955	0.307	293	334	0.5	0.5	5.814	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	218	54	71	8.99	734	0.296	218	177	0.6	0.5	7.480	A
B	72	18	209		795	0.090	72	80	0.1	0.1	5.328	A
C	239	60	8		960	0.249	240	273	0.5	0.4	5.352	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	182	46	60	7.53	741	0.246	183	148	0.5	0.4	6.909	A
B	60	15	175		817	0.074	60	67	0.1	0.1	5.090	A
C	200	50	7		962	0.208	201	229	0.4	0.3	5.060	A

2034 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	6.93	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	246	100.000
B		ONE HOUR	✓	81	100.000
C		ONE HOUR	✓	271	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	11	235
	B	9	0	72
	C	191	79	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	5	5	5
	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.37	8.51	0.6	A	226	339
B	0.12	5.72	0.1	A	74	111
C	0.31	5.87	0.5	A	249	373

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	185	46	60	7.53	741	0.250	184	150	0.0	0.4	6.904	A
B	61	15	176		816	0.075	61	67	0.0	0.1	5.095	A
C	204	51	7		962	0.212	203	230	0.0	0.3	5.066	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	221	55	72	8.99	733	0.302	221	180	0.4	0.5	7.508	A
B	73	18	212		793	0.092	73	81	0.1	0.1	5.345	A
C	244	61	8		960	0.254	243	276	0.3	0.4	5.377	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	271	68	88	11.01	724	0.374	270	220	0.5	0.6	8.466	A
B	89	22	259		763	0.117	89	99	0.1	0.1	5.716	A
C	298	75	10		955	0.312	298	338	0.4	0.5	5.859	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	271	68	88	11.01	724	0.374	271	220	0.6	0.6	8.507	A
B	89	22	260		762	0.117	89	99	0.1	0.1	5.721	A
C	298	75	10		955	0.312	298	339	0.5	0.5	5.866	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	221	55	72	8.99	733	0.302	222	180	0.6	0.5	7.541	A
B	73	18	213		793	0.092	73	81	0.1	0.1	5.354	A
C	244	61	8		959	0.254	244	278	0.5	0.4	5.388	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	185	46	60	7.53	740	0.250	186	151	0.5	0.4	6.953	A
B	61	15	178		815	0.075	61	68	0.1	0.1	5.110	A
C	204	51	7		962	0.212	204	232	0.4	0.3	5.087	A

2044 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and C have 86% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	L1514/Loreto Road Junction	Mini-roundabout		A, B, C	7.06	A

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	254	100.000
B		ONE HOUR	✓	83	100.000
C		ONE HOUR	✓	278	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A	[ONEHOUR]	10.00
B		
C		

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	11	243
	B	9	0	74
	C	196	81	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.39	8.70	0.7	A	233	350
B	0.12	5.79	0.1	A	76	114
C	0.32	5.94	0.5	A	255	383

Main Results for each time segment

15:30 - 15:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	191	48	61	7.53	740	0.259	190	153	0.0	0.4	6.988	A
B	62	16	182		813	0.077	62	69	0.0	0.1	5.132	A
C	209	52	7		962	0.218	208	238	0.0	0.3	5.103	A

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	228	57	74	8.99	732	0.312	228	184	0.4	0.5	7.631	A
B	75	19	219		789	0.095	75	83	0.1	0.1	5.393	A
C	250	62	8		959	0.261	250	285	0.3	0.4	5.427	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	280	70	90	11.01	722	0.387	279	225	0.5	0.7	8.671	A
B	91	23	268		757	0.121	91	101	0.1	0.1	5.783	A
C	306	77	10		955	0.321	306	349	0.4	0.5	5.931	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	280	70	90	11.01	722	0.387	280	226	0.7	0.7	8.702	A
B	91	23	269		757	0.121	91	101	0.1	0.1	5.789	A
C	306	77	10		955	0.321	306	350	0.5	0.5	5.940	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	228	57	74	8.99	732	0.312	229	185	0.7	0.5	7.670	A
B	75	19	220		788	0.095	75	83	0.1	0.1	5.401	A
C	250	62	8		959	0.261	250	287	0.5	0.4	5.441	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	191	48	62	7.53	739	0.259	192	155	0.5	0.4	7.039	A
B	62	16	184		811	0.077	63	69	0.1	0.1	5.147	A
C	209	52	7		962	0.218	210	240	0.4	0.3	5.124	A

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.2.1013				
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Filename: L1514_Golf_Links_R198_Farnham_Southern.j9

Path: D:\ttrsa\projects\T250210_Cavan_Lisdarn_Residential_TTA_S1_RSA_QA_MMP\TTA\traffic_modelling

Report generation date: 24/10/2025 13:34:45

- »2029 Baseline, AM
- »2034 Baseline, AM
- »2044 Baseline, AM
- »2029 With Development, AM
- »2034 With Development, AM
- »2044 With Development, AM
- »2029 Baseline, PM
- »2034 Baseline, PM
- »2044 Baseline, PM
- »2029 With Development, PM
- »2034 With Development, PM
- »2044 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-AC	D1	0.1	7.94	0.08	A	D7	0.2	8.66	0.14	A
Stream C-AB		0.3	9.21	0.20	A		0.8	11.81	0.42	B
	2034 Baseline									
Stream B-AC	D2	0.1	8.00	0.08	A	D8	0.2	8.68	0.14	A
Stream C-AB		0.3	9.30	0.21	A		0.8	11.95	0.43	B
	2044 Baseline									
Stream B-AC	D3	0.1	8.10	0.08	A	D9	0.2	8.95	0.15	A
Stream C-AB		0.3	9.45	0.21	A		0.9	12.50	0.45	B
	2029 With Development									
Stream B-AC	D4	0.1	8.01	0.08	A	D10	0.2	8.71	0.14	A
Stream C-AB		0.3	9.33	0.21	A		0.8	11.93	0.43	B
	2034 With Development									
Stream B-AC	D5	0.1	8.08	0.08	A	D11	0.2	8.80	0.15	A
Stream C-AB		0.3	9.42	0.22	A		0.8	12.18	0.44	B
	2044 With Development									
Stream B-AC	D6	0.1	8.19	0.09	A	D12	0.2	9.00	0.16	A
Stream C-AB		0.3	9.60	0.23	A		0.9	12.64	0.46	B

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

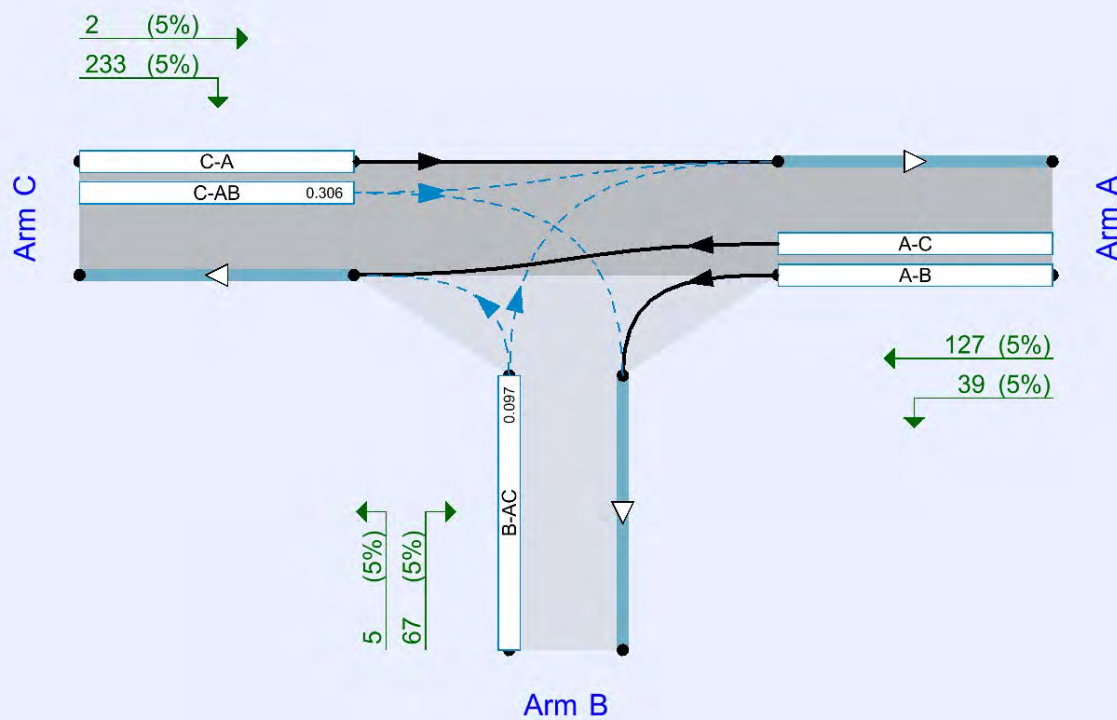
File summary

File Description

Title	L1514/R198 (Rock Cross) Southwestern Junction
Location	Cavan
Site number	
Date	20/10/2025
Version	TTA
Status	Final
Identifier	
Client	Lisdaran Developments
Jobnumber	250210
Enumerator	TTRSA
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 (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Analysis Set Details

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

2029 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R198 Farnham Road to/from West		Major
B	Link to L1514 Golf Links Road		Minor
C	R198 Farnham Road to/from Town Centre		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			49.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.50	130	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	651	0.116	0.293	0.184	0.419
B-C	783	0.117	0.297	-	-
C-B	602	0.228	0.228	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	312	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	100	212
	B	36	0	0
	C	0	96	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	7.94	0.1	A	33	50
C-AB	0.20	9.21	0.3	A	88	132
C-A					0	0
A-B					92	138
A-C					195	292

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	7	565	0.048	27	0.0	0.1	7.152	A
C-AB	72	18	549	0.132	72	0.0	0.2	8.065	A
C-A	0	0			0				
A-B	75	19			75				
A-C	160	40			160				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	548	0.059	32	0.1	0.1	7.467	A
C-AB	86	22	538	0.160	86	0.2	0.2	8.518	A
C-A	0	0			0				
A-B	90	22			90				
A-C	191	48			191				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	525	0.075	40	0.1	0.1	7.934	A
C-AB	106	26	524	0.202	105	0.2	0.3	9.201	A
C-A	0	0			0				
A-B	110	28			110				
A-C	233	58			233				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	525	0.076	40	0.1	0.1	7.937	A
C-AB	106	26	524	0.202	106	0.3	0.3	9.211	A
C-A	0	0			0				
A-B	110	28			110				
A-C	233	58			233				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	8	548	0.059	32	0.1	0.1	7.475	A
C-AB	86	22	538	0.160	87	0.3	0.2	8.534	A
C-A	0	0			0				
A-B	90	22			90				
A-C	191	48			191				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	7	565	0.048	27	0.1	0.1	7.166	A
C-AB	72	18	549	0.132	72	0.2	0.2	8.092	A
C-A	0	0			0				
A-B	75	19			75				
A-C	160	40			160				

2034 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	319	100.000
B		ONE HOUR	✓	37	100.000
C		ONE HOUR	✓	98	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	102	217
	B	37	0	0
	C	0	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.00	0.1	A	34	51
C-AB	0.21	9.30	0.3	A	90	135
C-A					0	0
A-B					94	140
A-C					199	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	563	0.049	28	0.0	0.1	7.189	A
C-AB	74	18	548	0.135	73	0.0	0.2	8.109	A
C-A	0	0			0				
A-B	77	19			77				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	546	0.061	33	0.1	0.1	7.514	A
C-AB	88	22	537	0.164	88	0.2	0.2	8.575	A
C-A	0	0			0				
A-B	92	23			92				
A-C	195	49			195				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	10	522	0.078	41	0.1	0.1	7.998	A
C-AB	108	27	522	0.207	108	0.2	0.3	9.289	A
C-A	0	0			0				
A-B	112	28			112				
A-C	239	60			239				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	10	522	0.078	41	0.1	0.1	8.001	A
C-AB	108	27	522	0.207	108	0.3	0.3	9.299	A
C-A	0	0			0				
A-B	112	28			112				
A-C	239	60			239				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	546	0.061	33	0.1	0.1	7.519	A
C-AB	88	22	537	0.164	88	0.3	0.2	8.596	A
C-A	0	0			0				
A-B	92	23			92				
A-C	195	49			195				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	563	0.049	28	0.1	0.1	7.204	A
C-AB	74	18	548	0.135	74	0.2	0.2	8.140	A
C-A	0	0			0				
A-B	77	19			77				
A-C	163	41			163				

2044 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	332	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	101	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	106	226
	B	38	0	0
	C	0	101	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.10	0.1	A	35	52
C-AB	0.21	9.45	0.3	A	93	139
C-A					0	0
A-B					97	146
A-C					207	311

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	560	0.051	28	0.0	0.1	7.244	A
C-AB	76	19	545	0.139	75	0.0	0.2	8.187	A
C-A	0	0			0				
A-B	80	20			80				
A-C	170	43			170				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	542	0.063	34	0.1	0.1	7.585	A
C-AB	91	23	534	0.170	91	0.2	0.2	8.681	A
C-A	0	0			0				
A-B	95	24			95				
A-C	203	51			203				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	518	0.081	42	0.1	0.1	8.098	A
C-AB	111	28	519	0.214	111	0.2	0.3	9.436	A
C-A	0	0			0				
A-B	117	29			117				
A-C	249	62			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	517	0.081	42	0.1	0.1	8.101	A
C-AB	111	28	519	0.214	111	0.3	0.3	9.449	A
C-A	0	0			0				
A-B	117	29			117				
A-C	249	62			249				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	542	0.063	34	0.1	0.1	7.594	A
C-AB	91	23	534	0.170	91	0.3	0.2	8.699	A
C-A	0	0			0				
A-B	95	24			95				
A-C	203	51			203				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	560	0.051	29	0.1	0.1	7.259	A
C-AB	76	19	545	0.139	76	0.2	0.2	8.216	A
C-A	0	0			0				
A-B	80	20			80				
A-C	170	43			170				

2029 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	316	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	100	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	104	212
	B	38	0	0
	C	0	100	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.01	0.1	A	35	52
C-AB	0.21	9.33	0.3	A	92	138
C-A					0	0
A-B					95	143
A-C					195	292

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	564	0.051	28	0.0	0.1	7.196	A
C-AB	75	19	548	0.137	75	0.0	0.2	8.127	A
C-A	0	0			0				
A-B	78	20			78				
A-C	160	40			160				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	546	0.063	34	0.1	0.1	7.522	A
C-AB	90	22	537	0.167	90	0.2	0.2	8.600	A
C-A	0	0			0				
A-B	93	23			93				
A-C	191	48			191				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	523	0.080	42	0.1	0.1	8.009	A
C-AB	110	28	523	0.211	110	0.2	0.3	9.319	A
C-A	0	0			0				
A-B	115	29			115				
A-C	233	58			233				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	523	0.080	42	0.1	0.1	8.013	A
C-AB	110	28	523	0.211	110	0.3	0.3	9.332	A
C-A	0	0			0				
A-B	115	29			115				
A-C	233	58			233				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	546	0.063	34	0.1	0.1	7.527	A
C-AB	90	22	537	0.167	90	0.3	0.2	8.619	A
C-A	0	0			0				
A-B	93	23			93				
A-C	191	48			191				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	563	0.051	29	0.1	0.1	7.210	A
C-AB	75	19	548	0.137	75	0.2	0.2	8.155	A
C-A	0	0			0				
A-B	78	20			78				
A-C	160	40			160				

2034 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	323	100.000
B		ONE HOUR	✓	39	100.000
C		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	106	217
	B	39	0	0
	C	0	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.08	0.1	A	36	54
C-AB	0.22	9.42	0.3	A	94	140
C-A					0	0
A-B					97	146
A-C					199	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	562	0.052	29	0.0	0.1	7.232	A
C-AB	77	19	547	0.140	76	0.0	0.2	8.174	A
C-A	0	0			0				
A-B	80	20			80				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	35	9	544	0.064	35	0.1	0.1	7.569	A
C-AB	92	23	536	0.171	92	0.2	0.2	8.663	A
C-A	0	0			0				
A-B	95	24			95				
A-C	195	49			195				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	520	0.083	43	0.1	0.1	8.075	A
C-AB	112	28	521	0.215	112	0.2	0.3	9.410	A
C-A	0	0			0				
A-B	117	29			117				
A-C	239	60			239				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	520	0.083	43	0.1	0.1	8.078	A
C-AB	112	28	521	0.215	112	0.3	0.3	9.423	A
C-A	0	0			0				
A-B	117	29			117				
A-C	239	60			239				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	35	9	544	0.064	35	0.1	0.1	7.577	A
C-AB	92	23	536	0.171	92	0.3	0.2	8.680	A
C-A	0	0			0				
A-B	95	24			95				
A-C	195	49			195				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	561	0.052	29	0.1	0.1	7.244	A
C-AB	77	19	547	0.140	77	0.2	0.2	8.204	A
C-A	0	0			0				
A-B	80	20			80				
A-C	163	41			163				

2044 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		2.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	335	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	109	226
	B	40	0	0
	C	0	106	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	8.19	0.1	A	37	55
C-AB	0.23	9.60	0.3	A	97	146
C-A					0	0
A-B					100	150
A-C					207	311

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	8	558	0.054	30	0.0	0.1	7.290	A
C-AB	80	20	545	0.146	79	0.0	0.2	8.261	A
C-A	0	0			0				
A-B	82	21			82				
A-C	170	43			170				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	540	0.067	36	0.1	0.1	7.646	A
C-AB	95	24	534	0.179	95	0.2	0.2	8.783	A
C-A	0	0			0				
A-B	98	24			98				
A-C	203	51			203				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	515	0.086	44	0.1	0.1	8.179	A
C-AB	117	29	518	0.225	116	0.2	0.3	9.575	A
C-A	0	0			0				
A-B	120	30			120				
A-C	249	62			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	515	0.086	44	0.1	0.1	8.186	A
C-AB	117	29	518	0.225	117	0.3	0.3	9.597	A
C-A	0	0			0				
A-B	120	30			120				
A-C	249	62			249				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	540	0.067	36	0.1	0.1	7.655	A
C-AB	95	24	534	0.179	96	0.3	0.2	8.801	A
C-A	0	0			0				
A-B	98	24			98				
A-C	203	51			203				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	8	558	0.054	30	0.1	0.1	7.306	A
C-AB	80	20	545	0.146	80	0.2	0.2	8.294	A
C-A	0	0			0				
A-B	82	21			82				
A-C	170	43			170				

2029 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	155	100.000
B		ONE HOUR	✓	67	100.000
C		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	36	119
	B	62	0	5
	C	2	216	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.14	8.66	0.2	A	61	92
C-AB	0.42	11.81	0.8	B	199	298
C-A					1	2
A-B					33	50
A-C					109	164

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	564	0.089	50	0.0	0.1	7.484	A
C-AB	163	41	577	0.283	161	0.0	0.4	9.240	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	90	22			90				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	545	0.111	60	0.1	0.1	7.942	A
C-AB	195	49	572	0.341	194	0.4	0.5	10.192	B
C-A	1	0.30			1				
A-B	32	8			32				
A-C	107	27			107				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	18	519	0.142	74	0.1	0.2	8.642	A
C-AB	239	60	565	0.423	238	0.5	0.8	11.747	B
C-A	1	0.32			1				
A-B	40	10			40				
A-C	131	33			131				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	74	18	519	0.142	74	0.2	0.2	8.656	A
C-AB	239	60	565	0.423	239	0.8	0.8	11.810	B
C-A	1	0.31			1				
A-B	40	10			40				
A-C	131	33			131				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	545	0.111	60	0.2	0.1	7.962	A
C-AB	195	49	572	0.341	196	0.8	0.6	10.268	B
C-A	1	0.29			1				
A-B	32	8			32				
A-C	107	27			107				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	563	0.090	51	0.1	0.1	7.513	A
C-AB	163	41	577	0.283	164	0.6	0.4	9.337	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	90	22			90				

2034 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	148	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	36	112
	B	63	0	5
	C	2	221	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.14	8.68	0.2	A	62	94
C-AB	0.43	11.95	0.8	B	203	305
C-A					1	2
A-B					33	50
A-C					103	154

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	564	0.091	51	0.0	0.1	7.497	A
C-AB	167	42	578	0.289	165	0.0	0.4	9.296	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	84	21			84				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	545	0.112	61	0.1	0.1	7.960	A
C-AB	199	50	573	0.348	199	0.4	0.6	10.275	B
C-A	1	0.29			1				
A-B	32	8			32				
A-C	101	25			101				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	519	0.144	75	0.1	0.2	8.667	A
C-AB	244	61	567	0.431	243	0.6	0.8	11.879	B
C-A	1	0.31			1				
A-B	40	10			40				
A-C	123	31			123				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	519	0.144	75	0.2	0.2	8.681	A
C-AB	244	61	567	0.431	244	0.8	0.8	11.949	B
C-A	1	0.31			1				
A-B	40	10			40				
A-C	123	31			123				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	544	0.112	61	0.2	0.1	7.978	A
C-AB	199	50	573	0.348	200	0.8	0.6	10.355	B
C-A	1	0.29			1				
A-B	32	8			32				
A-C	101	25			101				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	563	0.091	51	0.1	0.1	7.526	A
C-AB	167	42	578	0.289	167	0.6	0.4	9.397	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	84	21			84				

2044 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	165	100.000
B		ONE HOUR	✓	71	100.000
C		ONE HOUR	✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	38	127
	B	66	0	5
	C	2	230	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.15	8.95	0.2	A	65	98
C-AB	0.45	12.50	0.9	B	212	318
C-A					1	2
A-B					35	52
A-C					117	175

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	557	0.096	53	0.0	0.1	7.631	A
C-AB	174	43	575	0.302	172	0.0	0.5	9.513	A
C-A	1	0.26			1				
A-B	29	7			29				
A-C	96	24			96				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	537	0.119	64	0.1	0.1	8.140	A
C-AB	207	52	570	0.364	207	0.5	0.6	10.600	B
C-A	1	0.28			1				
A-B	34	9			34				
A-C	114	29			114				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	509	0.154	78	0.1	0.2	8.930	A
C-AB	254	64	562	0.452	253	0.6	0.9	12.416	B
C-A	1	0.30			1				
A-B	42	10			42				
A-C	140	35			140				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	509	0.154	78	0.2	0.2	8.946	A
C-AB	254	64	562	0.452	254	0.9	0.9	12.497	B
C-A	1	0.30			1				
A-B	42	10			42				
A-C	140	35			140				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	536	0.119	64	0.2	0.1	8.163	A
C-AB	207	52	570	0.364	208	0.9	0.6	10.693	B
C-A	1	0.28			1				
A-B	34	9			34				
A-C	114	29			114				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	13	556	0.096	54	0.1	0.1	7.662	A
C-AB	174	43	575	0.302	174	0.6	0.5	9.628	A
C-A	1	0.26			1				
A-B	29	7			29				
A-C	96	24			96				

2029 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	155	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	221	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	36	119
	B	63	0	5
	C	2	219	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.14	8.71	0.2	A	62	94
C-AB	0.43	11.93	0.8	B	202	302
C-A					1	2
A-B					33	50
A-C					109	164

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	563	0.091	51	0.0	0.1	7.511	A
C-AB	165	41	577	0.287	164	0.0	0.4	9.289	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	90	22			90				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	544	0.112	61	0.1	0.1	7.978	A
C-AB	198	49	572	0.345	197	0.4	0.6	10.265	B
C-A	1	0.29			1				
A-B	32	8			32				
A-C	107	27			107				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	518	0.145	75	0.1	0.2	8.694	A
C-AB	242	61	565	0.429	241	0.6	0.8	11.866	B
C-A	1	0.31			1				
A-B	40	10			40				
A-C	131	33			131				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	19	517	0.145	75	0.2	0.2	8.708	A
C-AB	242	61	565	0.429	242	0.8	0.8	11.931	B
C-A	1	0.31			1				
A-B	40	10			40				
A-C	131	33			131				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	61	15	543	0.113	61	0.2	0.1	7.997	A
C-AB	198	49	572	0.345	198	0.8	0.6	10.345	B
C-A	1	0.29			1				
A-B	32	8			32				
A-C	107	27			107				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	51	13	562	0.091	51	0.1	0.1	7.543	A
C-AB	165	41	577	0.287	166	0.6	0.4	9.389	A
C-A	1	0.27			1				
A-B	27	7			27				
A-C	90	22			90				

2034 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	159	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	37	122
	B	64	0	5
	C	2	224	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.15	8.80	0.2	A	63	95
C-AB	0.44	12.18	0.8	B	206	309
C-A					1	2
A-B					34	51
A-C					112	168

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	13	561	0.093	52	0.0	0.1	7.558	A
C-AB	169	42	576	0.294	167	0.0	0.4	9.387	A
C-A	1	0.27			1				
A-B	28	7			28				
A-C	92	23			92				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	16	541	0.115	62	0.1	0.1	8.042	A
C-AB	202	51	571	0.354	201	0.4	0.6	10.411	B
C-A	1	0.29			1				
A-B	33	8			33				
A-C	110	27			110				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	514	0.148	76	0.1	0.2	8.786	A
C-AB	248	62	564	0.439	247	0.6	0.8	12.067	B
C-A	1	0.31			1				
A-B	41	10			41				
A-C	134	34			134				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	514	0.148	76	0.2	0.2	8.801	A
C-AB	248	62	564	0.439	248	0.8	0.8	12.175	B
C-A	1	0.31			1				
A-B	41	10			41				
A-C	134	34			134				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	62	16	540	0.115	62	0.2	0.1	8.061	A
C-AB	202	51	571	0.354	203	0.8	0.6	10.498	B
C-A	1	0.29			1				
A-B	33	8			33				
A-C	110	27			110				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	13	560	0.093	52	0.1	0.1	7.588	A
C-AB	169	42	576	0.294	170	0.6	0.5	9.494	A
C-A	1	0.26			1				
A-B	28	7			28				
A-C	92	23			92				

2044 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 South-western Junction	T-Junction	Two-way		7.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	166	100.000
B		ONE HOUR	✓	72	100.000
C		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	39	127
	B	67	0	5
	C	2	233	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	9.00	0.2	A	66	99
C-AB	0.46	12.64	0.9	B	215	322
C-A					1	2
A-B					36	54
A-C					117	175

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	54	14	556	0.097	54	0.0	0.1	7.660	A
C-AB	176	44	575	0.306	174	0.0	0.5	9.569	A
C-A	1	0.26			1				
A-B	29	7			29				
A-C	96	24			96				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	536	0.121	65	0.1	0.1	8.179	A
C-AB	210	53	570	0.369	210	0.5	0.6	10.684	B
C-A	1	0.28			1				
A-B	35	9			35				
A-C	114	29			114				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	79	20	508	0.156	79	0.1	0.2	8.987	A
C-AB	258	64	562	0.458	256	0.6	0.9	12.559	B
C-A	1	0.30			1				
A-B	43	11			43				
A-C	140	35			140				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	79	20	507	0.156	79	0.2	0.2	9.004	A
C-AB	258	64	562	0.458	258	0.9	0.9	12.643	B
C-A	1	0.29			1				
A-B	43	11			43				
A-C	140	35			140				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	535	0.121	65	0.2	0.1	8.201	A
C-AB	210	53	570	0.369	211	0.9	0.6	10.782	B
C-A	1	0.28			1				
A-B	35	9			35				
A-C	114	29			114				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	54	14	555	0.098	54	0.1	0.1	7.694	A
C-AB	176	44	575	0.306	177	0.6	0.5	9.689	A
C-A	1	0.26			1				
A-B	29	7			29				
A-C	96	24			96				

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.2.1013				
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Filename: L1514_Golf_Links_R198_Farnham_Eastern.j9

Path: D:\ttrsa\projects\T250210_Cavan_Lisdarn_Residential_TTA_S1_RSA_QA_MMP\tta\traffic_modelling

Report generation date: 24/10/2025 13:38:37

- »2029 Baseline, AM
- »2034 Baseline, AM
- »2044 Baseline, AM
- »2029 With Development, AM
- »2034 With Development, AM
- »2044 With Development, AM
- »2029 Baseline, PM
- »2034 Baseline, PM
- »2044 Baseline, PM
- »2029 With Development, PM
- »2034 With Development, PM
- »2044 With Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2029 Baseline									
Stream B-AC	D1	0.7	9.46	0.40	A	D7	1.2	11.80	0.54	B
Stream C-AB		0.2	7.55	0.16	A		0.7	9.65	0.38	A
	2034 Baseline									
Stream B-AC	D2	0.8	9.66	0.42	A	D8	1.3	12.11	0.55	B
Stream C-AB		0.2	7.60	0.17	A		0.7	9.76	0.39	A
	2044 Baseline									
Stream B-AC	D3	0.8	10.00	0.43	B	D9	1.4	12.80	0.57	B
Stream C-AB		0.2	7.73	0.18	A		0.7	10.01	0.41	B
	2029 With Development									
Stream B-AC	D4	0.8	9.78	0.42	A	D10	1.3	12.05	0.55	B
Stream C-AB		0.2	7.59	0.17	A		0.7	9.75	0.39	A
	2034 With Development									
Stream B-AC	D5	0.8	9.99	0.43	A	D11	1.3	12.37	0.56	B
Stream C-AB		0.2	7.64	0.17	A		0.7	9.88	0.40	A
	2044 With Development									
Stream B-AC	D6	0.9	10.36	0.45	B	D12	1.5	13.04	0.58	B
Stream C-AB		0.2	7.73	0.18	A		0.8	10.15	0.41	B

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

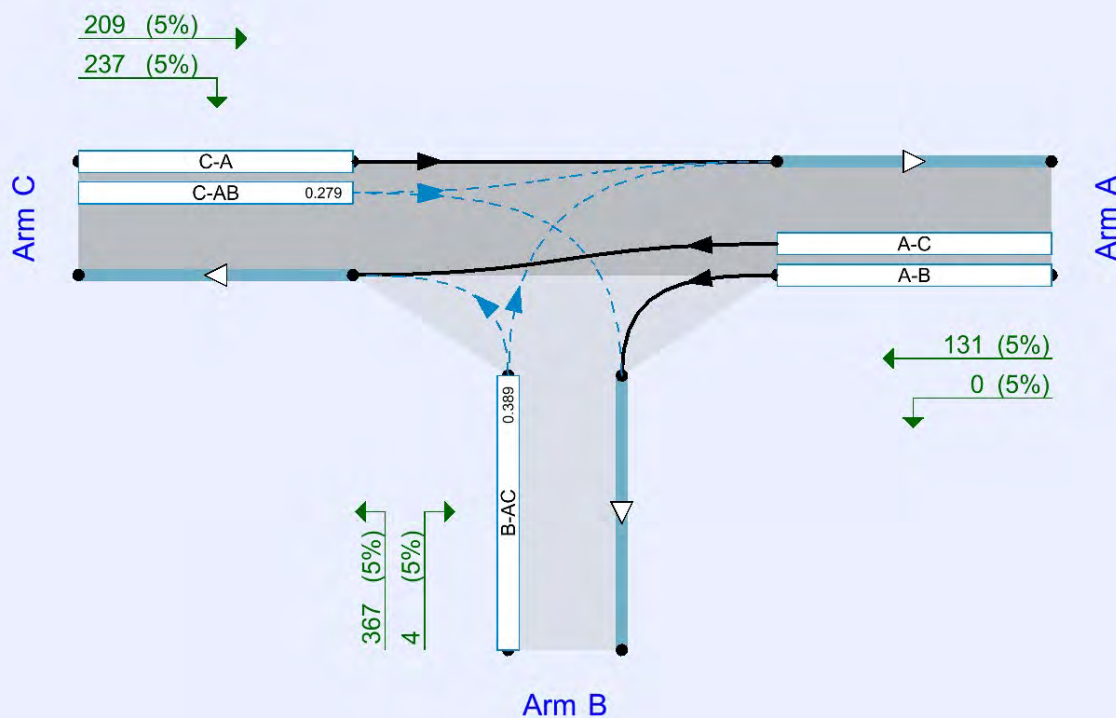
File summary

File Description

Title	L1514/R198 (Rock Cross) Eastern Junction
Location	Cavan
Site number	
Date	20/10/2025
Version	TTA
Status	Final
Identifier	
Client	Lisdaran Developments
Jobnumber	250210
Enumerator	TTRSA
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 (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Analysis Set Details

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

2029 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R198 Farnham Road to/from West		Major
B	L1514 Golf Links Road		Minor
C	R198 Farnham Road to/from Town Centre		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00		✓	3.00	65.0	✓	3.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.25	150	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	630	0.110	0.277	0.174	0.396
B-C	748	0.110	0.277	-	-
C-B	665	0.246	0.246	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2029 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	212	100.000
B		ONE HOUR	✓	251	100.000
C		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	212
	B	0	0	251
	C	386	90	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.40	9.46	0.7	A	230	345
C-AB	0.16	7.55	0.2	A	83	124
C-A					354	531
A-B					0	0
A-C					195	292

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	47	704	0.268	187	0.0	0.4	7.438	A
C-AB	68	17	626	0.108	67	0.0	0.1	6.889	A
C-A	291	73			291				
A-B	0	0			0				
A-C	160	40			160				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	56	695	0.325	225	0.4	0.5	8.188	A
C-AB	81	20	619	0.131	81	0.1	0.2	7.157	A
C-A	347	87			347				
A-B	0	0			0				
A-C	191	48			191				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	69	683	0.404	276	0.5	0.7	9.427	A
C-AB	100	25	610	0.163	99	0.2	0.2	7.543	A
C-A	425	106			425				
A-B	0	0			0				
A-C	233	58			233				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	69	683	0.404	276	0.7	0.7	9.463	A
C-AB	100	25	610	0.163	100	0.2	0.2	7.546	A
C-A	425	106			425				
A-B	0	0			0				
A-C	233	58			233				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	56	695	0.325	226	0.7	0.5	8.232	A
C-AB	81	20	619	0.131	81	0.2	0.2	7.165	A
C-A	347	87			347				
A-B	0	0			0				
A-C	191	48			191				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	47	704	0.268	189	0.5	0.4	7.496	A
C-AB	68	17	626	0.108	68	0.2	0.1	6.906	A
C-A	291	73			291				
A-B	0	0			0				
A-C	160	40			160				

2034 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2034 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	217	100.000
B		ONE HOUR	✓	257	100.000
C		ONE HOUR	✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	0	217
	B	0	0	257
	C	395	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.42	9.66	0.8	A	236	354
C-AB	0.17	7.60	0.2	A	85	127
C-A					362	543
A-B					0	0
A-C					199	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	703	0.275	192	0.0	0.4	7.519	A
C-AB	69	17	625	0.111	69	0.0	0.1	6.918	A
C-A	297	74			297				
A-B	0	0			0				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	694	0.333	231	0.4	0.5	8.304	A
C-AB	83	21	618	0.134	83	0.1	0.2	7.195	A
C-A	355	89			355				
A-B	0	0			0				
A-C	195	49			195				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	682	0.415	282	0.5	0.7	9.617	A
C-AB	102	25	609	0.167	102	0.2	0.2	7.595	A
C-A	434	109			434				
A-B	0	0			0				
A-C	239	60			239				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	682	0.415	283	0.7	0.8	9.656	A
C-AB	102	25	609	0.167	102	0.2	0.2	7.596	A
C-A	434	109			434				
A-B	0	0			0				
A-C	239	60			239				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	694	0.333	232	0.8	0.5	8.352	A
C-AB	83	21	618	0.134	83	0.2	0.2	7.205	A
C-A	355	89			355				
A-B	0	0			0				
A-C	195	49			195				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	703	0.275	194	0.5	0.4	7.579	A
C-AB	69	17	625	0.111	69	0.2	0.1	6.935	A
C-A	297	74			297				
A-B	0	0			0				
A-C	163	41			163				

2044 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2044 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	226	100.000
B		ONE HOUR	✓	267	100.000
C		ONE HOUR	✓	510	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	226
	B	0	0	267
	C	412	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	10.00	0.8	B	245	368
C-AB	0.18	7.73	0.2	A	90	135
C-A					378	567
A-B					0	0
A-C					207	311

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	50	701	0.287	199	0.0	0.4	7.655	A
C-AB	74	18	624	0.118	73	0.0	0.1	6.992	A
C-A	310	78			310				
A-B	0	0			0				
A-C	170	43			170				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	240	60	692	0.347	239	0.4	0.6	8.508	A
C-AB	88	22	616	0.143	88	0.1	0.2	7.292	A
C-A	370	93			370				
A-B	0	0			0				
A-C	203	51			203				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	294	73	679	0.433	293	0.6	0.8	9.953	A
C-AB	109	27	607	0.179	108	0.2	0.2	7.720	A
C-A	453	113			453				
A-B	0	0			0				
A-C	249	62			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	294	73	679	0.433	294	0.8	0.8	10.001	B
C-AB	109	27	607	0.179	109	0.2	0.2	7.726	A
C-A	453	113			453				
A-B	0	0			0				
A-C	249	62			249				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	240	60	692	0.347	241	0.8	0.6	8.564	A
C-AB	88	22	616	0.143	89	0.2	0.2	7.303	A
C-A	370	93			370				
A-B	0	0			0				
A-C	203	51			203				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	50	701	0.287	202	0.6	0.4	7.726	A
C-AB	74	18	624	0.118	74	0.2	0.1	7.012	A
C-A	310	78			310				
A-B	0	0			0				
A-C	170	43			170				

2029 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	212	100.000
B		ONE HOUR	✓	263	100.000
C		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	0	212
	B	0	0	263
	C	386	93	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.42	9.78	0.8	A	241	362
C-AB	0.17	7.59	0.2	A	86	128
C-A					354	531
A-B					0	0
A-C					195	292

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	198	50	704	0.281	196	0.0	0.4	7.568	A
C-AB	70	18	626	0.112	70	0.0	0.1	6.916	A
C-A	291	73			291				
A-B	0	0			0				
A-C	160	40			160				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	236	59	695	0.340	236	0.4	0.5	8.379	A
C-AB	84	21	619	0.135	84	0.1	0.2	7.192	A
C-A	347	87			347				
A-B	0	0			0				
A-C	191	48			191				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	290	72	683	0.424	289	0.5	0.8	9.737	A
C-AB	103	26	610	0.169	103	0.2	0.2	7.585	A
C-A	425	106			425				
A-B	0	0			0				
A-C	233	58			233				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	290	72	683	0.424	290	0.8	0.8	9.781	A
C-AB	103	26	610	0.169	103	0.2	0.2	7.592	A
C-A	425	106			425				
A-B	0	0			0				
A-C	233	58			233				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	236	59	695	0.340	237	0.8	0.6	8.431	A
C-AB	84	21	619	0.135	84	0.2	0.2	7.203	A
C-A	347	87			347				
A-B	0	0			0				
A-C	191	48			191				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	198	50	704	0.281	199	0.6	0.4	7.635	A
C-AB	70	18	626	0.112	70	0.2	0.1	6.933	A
C-A	291	73			291				
A-B	0	0			0				
A-C	160	40			160				

2034 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2034 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	217	100.000
B		ONE HOUR	✓	269	100.000
C		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	0	217
	B	0	0	269
	C	395	95	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	9.99	0.8	A	247	370
C-AB	0.17	7.64	0.2	A	87	131
C-A					362	543
A-B					0	0
A-C					199	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	51	703	0.288	201	0.0	0.4	7.650	A
C-AB	72	18	625	0.115	71	0.0	0.1	6.943	A
C-A	297	74			297				
A-B	0	0			0				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	242	60	694	0.348	241	0.4	0.6	8.500	A
C-AB	86	21	618	0.138	85	0.1	0.2	7.230	A
C-A	355	89			355				
A-B	0	0			0				
A-C	195	49			195				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	296	74	682	0.434	295	0.6	0.8	9.938	A
C-AB	105	26	609	0.173	105	0.2	0.2	7.637	A
C-A	434	109			434				
A-B	0	0			0				
A-C	239	60			239				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	296	74	682	0.434	296	0.8	0.8	9.987	A
C-AB	105	26	609	0.173	105	0.2	0.2	7.643	A
C-A	434	109			434				
A-B	0	0			0				
A-C	239	60			239				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	242	60	694	0.348	243	0.8	0.6	8.557	A
C-AB	86	21	618	0.138	86	0.2	0.2	7.241	A
C-A	355	89			355				
A-B	0	0			0				
A-C	195	49			195				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	51	703	0.288	203	0.6	0.4	7.719	A
C-AB	72	18	625	0.115	72	0.2	0.1	6.960	A
C-A	297	74			297				
A-B	0	0			0				
A-C	163	41			163				

2044 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		3.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2044 With Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	226	100.000
B		ONE HOUR	✓	279	100.000
C		ONE HOUR	✓	510	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	0	226
	B	0	0	279
	C	412	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.45	10.36	0.9	B	256	384
C-AB	0.18	7.73	0.2	A	90	135
C-A					378	567
A-B					0	0
A-C					207	311

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	53	701	0.300	208	0.0	0.5	7.792	A
C-AB	74	18	624	0.118	73	0.0	0.1	6.992	A
C-A	310	78			310				
A-B	0	0			0				
A-C	170	43			170				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	63	692	0.363	250	0.5	0.6	8.713	A
C-AB	88	22	616	0.143	88	0.1	0.2	7.292	A
C-A	370	93			370				
A-B	0	0			0				
A-C	203	51			203				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	307	77	679	0.452	306	0.6	0.9	10.300	B
C-AB	109	27	607	0.179	108	0.2	0.2	7.720	A
C-A	453	113			453				
A-B	0	0			0				
A-C	249	62			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	307	77	679	0.452	307	0.9	0.9	10.357	B
C-AB	109	27	607	0.179	109	0.2	0.2	7.726	A
C-A	453	113			453				
A-B	0	0			0				
A-C	249	62			249				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	251	63	692	0.363	252	0.9	0.6	8.780	A
C-AB	88	22	616	0.143	89	0.2	0.2	7.303	A
C-A	370	93			370				
A-B	0	0			0				
A-C	203	51			203				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	210	53	701	0.300	211	0.6	0.5	7.868	A
C-AB	74	18	624	0.118	74	0.2	0.1	7.012	A
C-A	310	78			310				
A-B	0	0			0				
A-C	170	43			170				

2029 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	123	100.000
B		ONE HOUR	✓	345	100.000
C		ONE HOUR	✓	415	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	0	123
	B	4	0	341
	C	196	219	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.54	11.80	1.2	B	317	475
C-AB	0.38	9.65	0.7	A	204	306
C-A					177	266
A-B					0	0
A-C					113	169

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	260	65	719	0.361	257	0.0	0.6	8.307	A
C-AB	166	41	645	0.257	164	0.0	0.4	7.985	A
C-A	147	37			147				
A-B	0	0			0				
A-C	93	23			93				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	310	78	714	0.435	309	0.6	0.8	9.507	A
C-AB	199	50	644	0.309	198	0.4	0.5	8.637	A
C-A	174	44			174				
A-B	0	0			0				
A-C	111	28			111				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	380	95	706	0.538	378	0.8	1.2	11.694	B
C-AB	247	62	646	0.382	246	0.5	0.7	9.613	A
C-A	210	53			210				
A-B	0	0			0				
A-C	135	34			135				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	380	95	706	0.538	380	1.2	1.2	11.805	B
C-AB	247	62	646	0.382	247	0.7	0.7	9.649	A
C-A	210	53			210				
A-B	0	0			0				
A-C	135	34			135				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	310	78	714	0.435	312	1.2	0.8	9.626	A
C-AB	199	50	644	0.309	200	0.7	0.5	8.683	A
C-A	174	44			174				
A-B	0	0			0				
A-C	111	28			111				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	260	65	719	0.361	261	0.8	0.6	8.423	A
C-AB	166	41	645	0.257	166	0.5	0.4	8.050	A
C-A	147	37			147				
A-B	0	0			0				
A-C	93	23			93				

2034 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	125	100.000
B		ONE HOUR	✓	352	100.000
C		ONE HOUR	✓	424	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	125
	B	4	0	348
	C	201	223	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.55	12.11	1.3	B	323	485
C-AB	0.39	9.76	0.7	A	208	312
C-A					181	272
A-B					0	0
A-C					115	172

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	265	66	719	0.369	263	0.0	0.6	8.403	A
C-AB	169	42	645	0.262	167	0.0	0.4	8.038	A
C-A	150	38			150				
A-B	0	0			0				
A-C	94	24			94				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	316	79	713	0.444	316	0.6	0.8	9.669	A
C-AB	203	51	644	0.315	202	0.4	0.5	8.708	A
C-A	178	45			178				
A-B	0	0			0				
A-C	112	28			112				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	388	97	705	0.549	386	0.8	1.3	11.987	B
C-AB	252	63	647	0.389	251	0.5	0.7	9.716	A
C-A	215	54			215				
A-B	0	0			0				
A-C	138	34			138				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	388	97	705	0.549	387	1.3	1.3	12.111	B
C-AB	252	63	647	0.389	252	0.7	0.7	9.755	A
C-A	215	54			215				
A-B	0	0			0				
A-C	138	34			138				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	316	79	713	0.444	318	1.3	0.9	9.795	A
C-AB	203	51	644	0.315	203	0.7	0.5	8.757	A
C-A	178	45			178				
A-B	0	0			0				
A-C	112	28			112				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	265	66	719	0.369	266	0.9	0.6	8.531	A
C-AB	169	42	645	0.262	169	0.5	0.4	8.105	A
C-A	150	38			150				
A-B	0	0			0				
A-C	94	24			94				

2044 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2044 Baseline	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	131	100.000
B		ONE HOUR	✓	366	100.000
C		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	131
	B	4	0	362
	C	209	232	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.57	12.80	1.4	B	336	504
C-AB	0.41	10.01	0.7	B	217	325
C-A					188	282
A-B					0	0
A-C					120	180

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	69	717	0.384	273	0.0	0.7	8.618	A
C-AB	176	44	645	0.273	174	0.0	0.4	8.164	A
C-A	156	39			156				
A-B	0	0			0				
A-C	99	25			99				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	329	82	712	0.462	328	0.7	0.9	10.018	B
C-AB	211	53	644	0.328	211	0.4	0.5	8.881	A
C-A	185	46			185				
A-B	0	0			0				
A-C	118	29			118				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	403	101	704	0.573	401	0.9	1.4	12.647	B
C-AB	263	66	648	0.406	262	0.5	0.7	9.970	A
C-A	223	56			223				
A-B	0	0			0				
A-C	144	36			144				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	403	101	704	0.573	403	1.4	1.4	12.802	B
C-AB	263	66	648	0.406	263	0.7	0.7	10.015	B
C-A	223	56			223				
A-B	0	0			0				
A-C	144	36			144				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	329	82	712	0.462	331	1.4	0.9	10.170	B
C-AB	211	53	644	0.328	212	0.7	0.5	8.938	A
C-A	185	46			185				
A-B	0	0			0				
A-C	118	29			118				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	69	717	0.384	277	0.9	0.7	8.763	A
C-AB	176	44	645	0.273	176	0.5	0.4	8.234	A
C-A	156	39			156				
A-B	0	0			0				
A-C	99	25			99				

2029 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	123	100.000
B		ONE HOUR	✓	351	100.000
C		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	0	123
	B	4	0	347
	C	196	223	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.55	12.05	1.3	B	322	483
C-AB	0.39	9.75	0.7	A	208	311
C-A					177	265
A-B					0	0
A-C					113	169

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	264	66	719	0.368	262	0.0	0.6	8.383	A
C-AB	169	42	645	0.261	167	0.0	0.4	8.032	A
C-A	147	37			147				
A-B	0	0			0				
A-C	93	23			93				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	316	79	714	0.442	315	0.6	0.8	9.635	A
C-AB	203	51	644	0.314	202	0.4	0.5	8.702	A
C-A	174	44			174				
A-B	0	0			0				
A-C	111	28			111				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	97	706	0.547	385	0.8	1.3	11.925	B
C-AB	251	63	647	0.389	251	0.5	0.7	9.709	A
C-A	210	52			210				
A-B	0	0			0				
A-C	135	34			135				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	97	706	0.547	386	1.3	1.3	12.045	B
C-AB	251	63	647	0.389	251	0.7	0.7	9.748	A
C-A	210	52			210				
A-B	0	0			0				
A-C	135	34			135				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	316	79	714	0.442	317	1.3	0.9	9.759	A
C-AB	203	51	644	0.314	203	0.7	0.5	8.749	A
C-A	174	44			174				
A-B	0	0			0				
A-C	111	28			111				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	264	66	719	0.368	265	0.9	0.6	8.508	A
C-AB	169	42	645	0.261	169	0.5	0.4	8.098	A
C-A	147	37			147				
A-B	0	0			0				
A-C	93	23			93				

2034 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2034 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	125	100.000
B		ONE HOUR	✓	358	100.000
C		ONE HOUR	✓	429	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	125
	B	4	0	354
	C	201	228	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.56	12.37	1.3	B	329	493
C-AB	0.40	9.88	0.7	A	213	319
C-A					181	272
A-B					0	0
A-C					115	172

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	270	67	719	0.375	267	0.0	0.6	8.484	A
C-AB	173	43	645	0.268	171	0.0	0.4	8.098	A
C-A	150	38			150				
A-B	0	0			0				
A-C	94	24			94				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	322	80	713	0.451	321	0.6	0.9	9.800	A
C-AB	207	52	645	0.322	207	0.4	0.5	8.792	A
C-A	178	45			178				
A-B	0	0			0				
A-C	112	28			112				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	394	99	705	0.559	392	0.9	1.3	12.232	B
C-AB	258	64	648	0.398	257	0.5	0.7	9.840	A
C-A	215	54			215				
A-B	0	0			0				
A-C	138	34			138				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	394	99	705	0.559	394	1.3	1.3	12.367	B
C-AB	258	64	648	0.398	258	0.7	0.7	9.879	A
C-A	215	54			215				
A-B	0	0			0				
A-C	138	34			138				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	322	80	713	0.451	324	1.3	0.9	9.937	A
C-AB	207	52	645	0.322	208	0.7	0.5	8.843	A
C-A	178	45			178				
A-B	0	0			0				
A-C	112	28			112				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	270	67	719	0.375	271	0.9	0.7	8.618	A
C-AB	173	43	645	0.268	173	0.5	0.4	8.168	A
C-A	150	38			150				
A-B	0	0			0				
A-C	94	24			94				

2044 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	L1514/R198 Eastern Junction	T-Junction	Two-way		7.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2044 With Development	PM	ONE HOUR	15:30	17:00	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	131	100.000
B		ONE HOUR	✓	371	100.000
C		ONE HOUR	✓	446	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	131
	B	4	0	367
	C	209	237	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	5	5	5
	B	5	5	5
	C	5	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.58	13.04	1.5	B	340	511
C-AB	0.41	10.15	0.8	B	222	332
C-A					188	282
A-B					0	0
A-C					120	180

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	279	70	717	0.389	277	0.0	0.7	8.689	A
C-AB	180	45	645	0.279	178	0.0	0.4	8.223	A
C-A	156	39			156				
A-B	0	0			0				
A-C	99	25			99				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	334	83	712	0.469	333	0.7	0.9	10.133	B
C-AB	216	54	645	0.335	215	0.4	0.5	8.969	A
C-A	185	46			185				
A-B	0	0			0				
A-C	118	29			118				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	408	102	704	0.581	406	0.9	1.4	12.873	B
C-AB	269	67	649	0.415	268	0.5	0.8	10.100	B
C-A	222	56			222				
A-B	0	0			0				
A-C	144	36			144				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	408	102	704	0.581	408	1.4	1.5	13.039	B
C-AB	269	67	649	0.415	269	0.8	0.8	10.147	B
C-A	222	56			222				
A-B	0	0			0				
A-C	144	36			144				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	334	83	712	0.469	335	1.5	1.0	10.298	B
C-AB	216	54	645	0.335	217	0.8	0.6	9.026	A
C-A	185	46			185				
A-B	0	0			0				
A-C	118	29			118				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	279	70	717	0.389	280	1.0	0.7	8.838	A
C-AB	180	45	645	0.279	180	0.6	0.4	8.299	A
C-A	156	39			156				
A-B	0	0			0				
A-C	99	25			99				