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Dunshaughlin Public Realm Scheme

Junction Assessment Report

Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland 2040

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1. INTRODUCTION

1.1 DESCRIPTION OF THE SCHEME

1.1.1 Background

TOBIN Consulting Engineers have been commissioned by Meath County Council to provide design consultancy services for the Dunshaughlin Public Realm Scheme. This DMURS Quality Audit report aims to assess the scheme from the perspective of the Design Manual for Urban Roads and Streets on aspects of safety, accessibility and streetscape. This project includes the provision of upgraded public realm facilities along the R147 Main Street in Dunshaughlin incorporating improved pedestrian permeability and active travel upgrades, pedestrian priority junction works, traffic calming and Pedestrian facilities along "The Dales".

Dunshaughlin lies within easy reach of Navan, and Dublin, being located in the southeast of County Meath. As a rapidly growing urban area experiencing significant population increases, it is important that Dunshaughlin maintains good transportation linkages to surrounding urban and rural areas, while also maintaining and enhancing its strong community roots. This will be a key factor in attracting future economic and residential populations and maintaining Dunshaughlin as an attractive location that builds upon the years of effort developing the pride of place associated with the town. The Main Street is recognised as a constrained route which caters for local and regional road traffic. Aside from the M3 motorway which bounds Dunshaughlin to the west, the R147 Main Street provides the only linkage north to south through the town currently. This traffic is a mixture of heavy goods vehicles (HGVs), bus and utility service vehicles, as well as regional and local car traffic. Traffic is observed as relatively significant and constant throughout the day, particularly at peak times with up to 12,000 AADT. The historical context of the R147 Main Street (previously N3) was its place along the main connection route of Dublin – Navan – Cavan and The North. This is still in evidence emphasised by the vehicular priority through which the R147 is still built upon.

The introduction of improved active travel provisions, improved pedestrian permeability and junction upgrades, would assist in shifting priority in the town centre towards vulnerable road users. These works, in conjunction with a regenerated street scape, would enhance the town centre as an area to live and do business. These works will create improved access for all vulnerable road users to access the existing bus services in a safe and comfortable manner, which will encourage use of the service.

1.1.2 The Scheme

The proposed development will consist of:

- Amendments to the junctions between the R147 Main Street and 'The Dales' side road
- Amendments to the junctions between the R147 Main Street and 'The Bungalows' side road
- Amendments to the junctions between the R147 Main Street and 'Supple Park' side road
- Streetscape upgrades along the R147 Main Street
- Streetscape Upgrades along The Bungalows side road
- Rationalising of on-street parking provision

- All associated ancillary highway works relevant (drainage, utilities, public lighting, KFPA, signs and lines and pavement design).

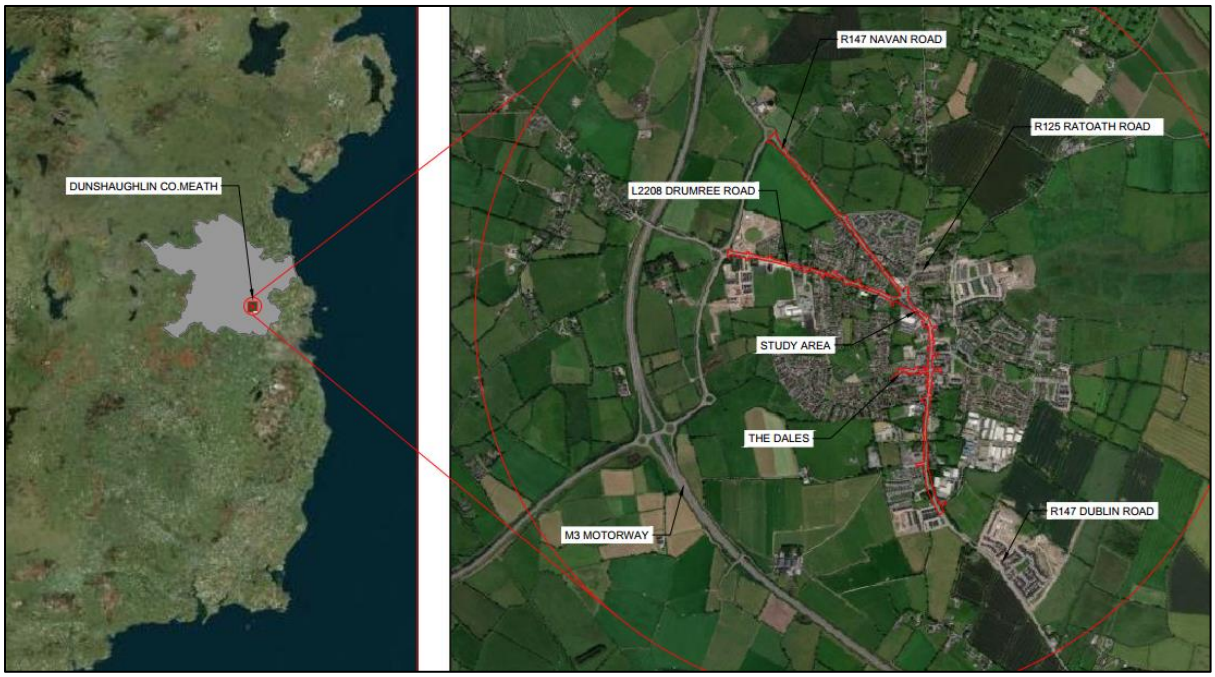

Figure 1-1: Location and aerial view of Dunshaughlin Co. Meath. Google Map imagery © 2021

2. JUNCTION SURVEYS

Tracsis (Traffic Data Collection and Analytics) were commissioned to carry out traffic surveys on behalf of Meath County Council in November 2022. These surveys were carried out during a neutral traffic period as identified in TII - PE-PAG-02016-01.

Automatic Traffic Counters (ATCs) were set up to determine a baseline of the traffic volumes experienced in Dunshaughlin over a period of 7 days These ATCs were set up along the main routes to the Main Street:

- ATC1 – R147 North
- ATC2 – Drumree Road
- ATC3 – R147 South

Figure 2-1: Locations of Traffic Counters and Turning Movements for the Junction Survey Google Map imagery © 2021

In addition, Junction Turning Counts were taken along the following junctions of the R147 Main Street sited within the study area for this Scheme.

- R147 / The Dales
- R147/ The Bungalows

The purpose of this report is to investigate the feasibility of the signalisation of the R147 / The Dales Junction and the potential impact the removal of the existing right turn lane at the R147

/ The Bungalows would have as part of the Dunshaughlin Public Realm Scheme. A summary of the 12-hour Junction Turning Counts observed during the surveys conducted by Tracsis Ltd. for both junctions are displayed below.

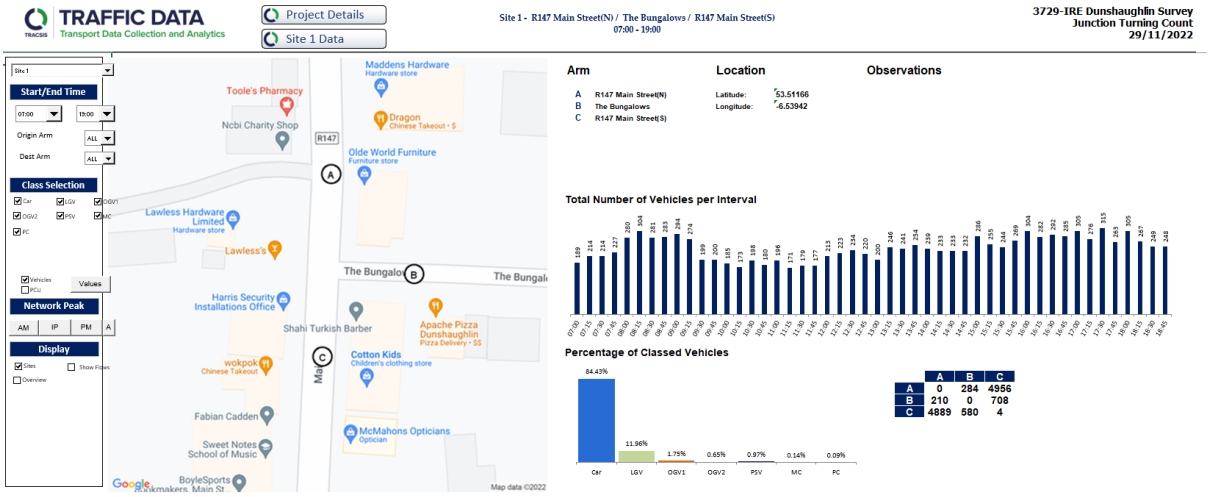

Figure 2-2: Junction Turning Counts for R147 Main Street/ The Bungalows Junction (Tracsis Survey November 2022)

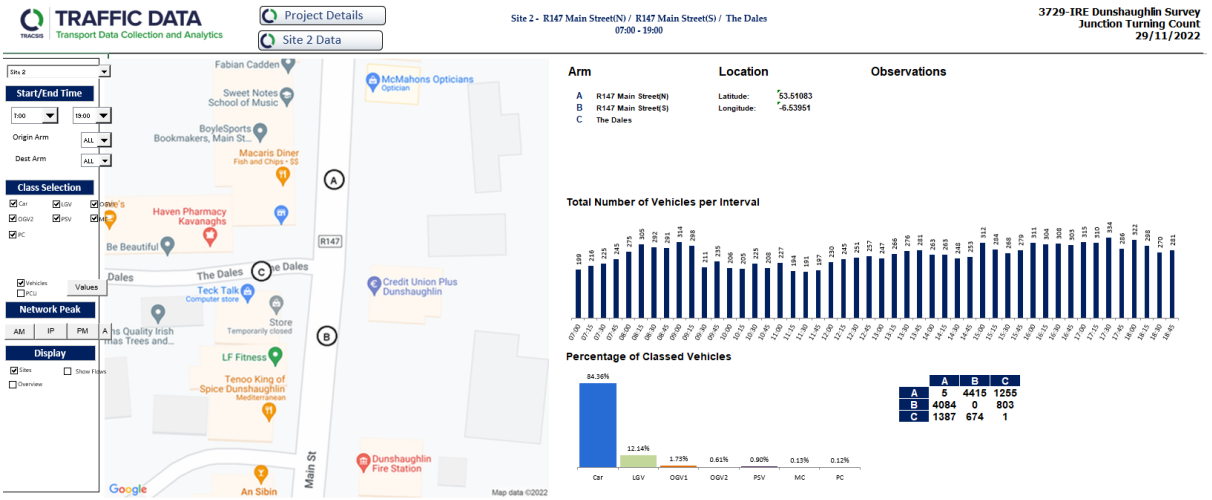

Figure 2-3 Junction Turning Counts for R147 Main Street/ The Dales Junction (Tracsis Survey November 2022)

The origin/destination traffic demand tables for all the different scenarios tested for the analysed junctions are provided in **Appendix A**

3. METHODOLOGY

The existing R147/ The Dales and R147/ The Bungalows priority T-junctions have been analysed using the Transport Research Laboratory (TRL) computer program JUNCTIONS 10 – PICADY, a widely accepted tool used for the analysis of priority junctions. The proposed signalisation of the R147/ The Dales has been analysed using the JCT Consultancy computer program LinSig.

The key parameters examined in the results of the analysis are:

- The Ratio of Flow to Capacity Value (RFC) - The desirable RFC Values for junctions assessed using PICADY is less than 0.85. Values over 1.00 indicate that the approach arm is over capacity.
- Degree of Saturation (DoS) - The desirable DoS Values for junctions assessed is less than 0.90 / 90% which is generally taken as the maximum acceptable Degree of
- Saturation for a Lane to avoid significant performance issues on the Lane. Values over 1.00 indicate that the approach arm is over capacity.
- Maximum queue length on any approach to the junctions; and
- Average delay for each vehicle passing through the junction during the modelled period.
- PRC – Practical Reserve Capacity (%) is calculated from the maximum degree of saturation on a Lane controlled by the Stage Stream and is measure of how much additional traffic could pass through a junction by the Stage Stream whilst maintaining a maximum degree of saturation of 90% on all Lanes.

PICADY requires the following input data:

- Basic modelling parameters (usually peak hour traffic counts synthesised over a 90-minute model period)
- Geometric parameters (including lane numbers, widths, visibility, storage provision, etc.)
- Traffic demand data (usually peak hour origin/destination table with composition of heavy goods vehicles input)

LinSig V3 requires similar input data to PICADY, but also requires the following:

- Basic modelling parameters (usually peak hour traffic counts synthesised over a 60-minute model period)
- Geometric parameters (including lane numbers, widths, visibility, storage provision, etc.)
- Traffic demand data (usually peak hour origin/destination table with composition of heavy goods vehicles input)
- Signal phases,
- Stage sequences,
- Intergreen split times

*For the purpose of this report, the Junctions 10 – PICADY and LinSig models input, the varying vehicle types have been converted into passenger car units (PCU) prior to input. 1 PCU is equivalent to a car / light vehicle while a large HGV is equivalent to 2.3PCU. The results of the PICADY and LinSig analysis are presented in **Appendices B and C**.

4. JUNCTION ASSESSMENT

4.1 ASSESSMENT TIME AND YEARS

The performance of the existing and proposed junction has been analysed for the critical AM peak hour (08:15 – 09:15), and PM peak hour (16:45 – 17:45). This analysis was carried out for the current year, year of opening of the development, expected to be 2024, and the design years of the development in 2029 and 2039, 5 years and 15 years beyond the expected full completion of the development.

4.2 APPROACH

4.2.1 R147/ The Bungalows Junction (Junction 1)

4.2.1.1 Existing

The R147/ The Bungalows priority junction comprises a right turn pocket with stacking length of 15metres (approximately 2.6PCU). The Bungalows form the minor arm of the junction, and R147 accommodates the right turn pocket.

The existing R147/ The Bungalows priority junction was assessed using Junctions 10 – PICADY.

4.2.1.2 Proposed

The amendments of R147/ The Bungalows junction include the removal of right turn pocket and redesign in accordance with DMURS. The traffic impact of redesigned R147/ The Bungalows priority junction was assessed using Junctions 10 – PICADY.

4.2.2 R147/ The Dales Junction (Junction 2)

4.2.2.1 Existing

The existing R147/ The Dales junction is a priority-controlled T-junction comprises a right turn pocket along R147. The Dales forms the minor arm of the junction. The right turn pocket on R147 also provide approximately 15m in stacking length (approximately 2.6PCU).

The existing R147/ The Dales priority junction was assessed using Junctions 10 – PICADY.

4.2.2.2 Proposed

The amendments of R147/ The Dales junction include the removal of right turn pocket, relocation of signalised pedestrian crossing, redesign of R147 in accordance with DMURS, and signalisation of the junction. The traffic impact of the signalisation and redesign of R147/ The Dales junction was assessed using LinSig.

Due to the upgrades, the R147/ the Dales junction has transitioned from a priority-controlled junction to a signalised junction. Consequently, there is no traffic signal phases for this junction. Therefore, an estimation of the intergreen time was obtained by using the "QuickGreen" tool developed by JCT consultancy.

5. JUNCTION ANALYSIS RESULTS

5.1 JUNCTION ANALYSIS RESULTS

5.1.1 R147/ The Bungalows Priority Controlled Junction (Junction 1)

A summary of the analysis results for the R147/ The Bungalows priority junction for the AM and PM peak hours are provided below in Table 5-1.

Table 5.1: Junction 1 Results: R147/ The Bungalows Junction

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Base Year 2022									
Stream B-AC	0.5	12.62	0.35	B	1.67	0.3	10.08	0.21	B	1.38
Stream C-AB	0.1	7.77	0.07	A		0.2	7.67	0.19	A	
	No Dev - Year of Opening [2024]									
Stream B-AC	0.6	12.85	0.36	B	1.7	0.3	10.18	0.22	B	1.39
Stream C-AB	0.1	7.83	0.08	A		0.2	7.73	0.19	A	
	With Dev - Year of Opening [2024]									
Stream B-AC	0.6	12.85	0.36	B	1.77	0.3	10.18	0.22	B	1.76
Stream C-AB	0.2	5.15	0.1	A		0.8	5.23	0.3	A	
	No Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	14.82	0.42	B	1.92	0.3	11.06	0.25	B	1.49
Stream C-AB	0.1	8.17	0.08	A		0.3	7.99	0.21	A	
	With Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	14.82	0.42	B	2	0.3	11.07	0.25	B	1.97
Stream C-AB	0.3	5.13	0.12	A		1.1	5.44	0.35	A	
	No Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	16.24	0.45	C	2.08	0.4	11.54	0.27	B	1.53
Stream C-AB	0.1	8.46	0.09	A		0.3	8.16	0.22	A	
	With Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	16.25	0.45	C	2.18	0.4	11.56	0.27	B	2.11
Stream C-AB	0.3	5.15	0.13	A		1.3	5.65	0.38	A	

The above results indicate that the R147/ The Bungalows priority junction is currently way under capacity, under the maximum desirable of 0.85 RFC in the AM and PM peak. The maximum RFC reaching 0.45 in the AM peak without the development in 2039 and same RFC with the development. The removal of right turn pocket presented a small change in the queue, with a maximum increase of 1vehicle in the design year of 2039 compared with the existing junction's design. Full outputs from JUNCTIONS 10 PICADY are included in Appendix B.

5.1.2 R147/ The Dales Junction (Junction 2)

5.1.2.1 Existing R147/ The Dales Priority Controlled Junction

A summary of the analysis results for the existing R147/ The Dales priority junction for the AM and PM peak hours are provided below in Table 5.2.

Table 5.2: Junction 2 Results: Existing R147/ The Dales Junction

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	Base Year 2022									
Stream B-AC	0.5	13.64	0.35	B	1.88	1.2	18.56	0.54	C	3.88
Stream C-AB	0.2	7.1	0.16	A		0.3	8.64	0.25	A	
	No Dev - Year of Opening [2024]									
Stream B-AC	0.6	13.98	0.36	B	1.91	1.2	19.35	0.56	C	4.03
Stream C-AB	0.2	7.14	0.16	A		0.3	8.74	0.25	A	
	No Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	16.16	0.42	C	2.16	1.7	24.59	0.64	C	4.92
Stream C-AB	0.2	7.51	0.18	A		0.4	9.29	0.28	A	
	No Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	18.06	0.45	C	2.36	2.1	29.37	0.69	D	5.74
Stream C-AB	0.2	7.68	0.19	A		0.4	9.66	0.3	A	

The above results indicate that the existing R147/ The Dales priority junction is currently under capacity, under the maximum desirable of 0.85 RFC in the AM and PM peak. The maximum RFC reaching 0.69 in the PM peak without the development in 2039, with a maximum delay of 2PCU. Full outputs from JUNCTIONS 10 PICADY are included in Appendix B.

5.1.2.2 Proposed R147/ The Dales Signalised Junction

The summary of the LinSig analysis for proposed signalisation of Junction 2 for the forecasted baseflow traffic and with Development traffic for the design years in the morning and evening peak hours is outlined in the following Sections. The results tables indicate the Degree of Saturation[1], Average Delay[2] (PCU/s), Maximum Mean Queue[3] (MMQ) for all traffic streams and the Practical Reserve Capacity (PRC)[4] for the junction. The LinSig analysis was carried out using a 120 second cycle time.

[1] Degree of Saturation is defined as the ratio of demand flow to the maximum flow which can be passed through the intersection from a particular approach. (Degree of Saturation = Demand / Capacity). The maximum degree of saturation is 95%.

[2] Delay (sec/PCU). The average delay per PCU to traffic on the route caused by queuing.

[3] The Mean Maximum Queue is the sum of the Maximum Back of Uniform Queue and the Random & Oversaturation Queue. It represents the maximum queue within a typical cycle averaged over all the cycles within the modelled time period.

4 Practical Reserve Capacity (%) s a measure of how much additional traffic could pass through a junction controlled by the Stage Stream whilst maintaining a maximum degree of saturation of 90% on all Lanes.

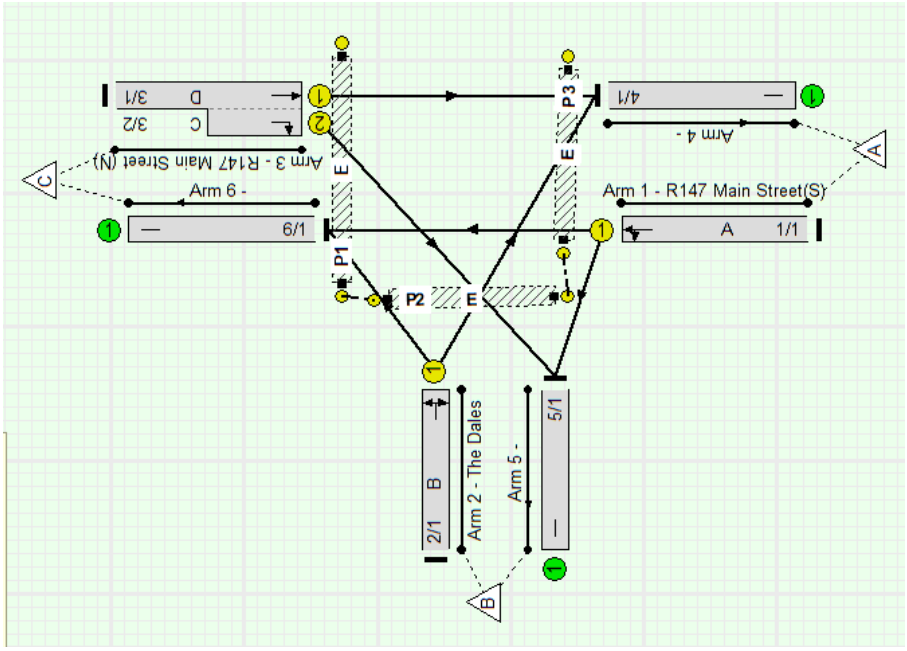

Figure 5-1 Proposed Signalised Junction 2 - Traffic Stream Layout

Table 5.3: Junction 2 Results: Proposed R147/ The Dales Signalised Junction

Traffic Stream		Time	Cycle Time (s)	Degree of Saturation (%)	Av. Delay Per PCU (s/PCU)	Max Queue (PCU)	PRC (%)
with Development Year of Opening - 2024 (AM)							
Arm A	Stream 1	08:15 - 09:15	120	48.9%	26.8	10.2	35.8%
Arm B	Stream 1	08:15 - 09:15	120	65.8%	72.6	5.1	
Arm C	Stream 1 & 2	08:15 - 09:15	120	66.3%	18.8	8.8	
with Development Year of Opening - 2024 (PM)							
Arm A	Stream 1	16:45 - 17:45	120	80.8%	43.3	19.9	11.4%
Arm B	Stream 1	16:45 - 17:45	120	80.3%	77.2	8.6	
Arm C	Stream 1 & 2	16:45 - 17:45	120	77.2%	32.5	5.7	
with Development Year of Opening - 2029 (AM)							
Arm A	Stream 1	08:15 - 09:15	120	57.2%	30.8	12.4	23.5%
Arm B	Stream 1	08:15 - 09:15	120	72.2%	78.4	5.9	
Arm C	Stream 1 & 2	08:15 - 09:15	120	72.9%	20	10.7	
with Development Year of Opening - 2029 (PM)							
Arm A	Stream 1	16:45 - 17:45	120	88.1%	51.3	23.9	2.2%
Arm B	Stream 1	16:45 - 17:45	120	87.0%	90.7	10.3	
Arm C	Stream 1 & 2	16:45 - 17:45	120	84.0%	37.6	6.9	
with Development Year of Opening - 2039 (AM)							
Arm A	Stream 1	08:15 - 09:15	120	63.3%	32.5	14.2	12.7%
Arm B	Stream 1	08:15 - 09:15	120	79.1%	87.6	6.9	
Arm C	Stream 1 & 2	08:15 - 09:15	120	79.9%	24	14	
with Development Year of Opening - 2039 (PM)							
Arm A	Stream 1	16:45 - 17:45	120	96.0%	73.5	31.4	-6.6%

Traffic Stream		Time	Cycle Time (s)	Degree of Saturation (%)	Av. Delay Per PCU (s/PCU)	Max Queue (PCU)	PRC (%)
Arm B	Stream 1	16:45 - 17:45	120	94.6%	120	13.3	
Arm C	Stream 1 & 2	16:45 - 17:45	120	92.1%	51.4	9.7	

The LinSig analysis estimate that the signalisation of the R147/ The Dales junction will operate with capacity during the designs year of 2024 and 2029. A maximum degree of saturation (DoS) of 88.1% in PM peak of 2029, is under the maximum desirable of 95% in the AM and PM peak.

By the design year of 2039, the anticipated traffic demand is expected to exceed the capacity of the junction, resulting in a maximum DoS of 96% in the PM peak. Which is over the maximum desirable of 95%.

6. CONCLUSION

6.1 COMPARISON OF EXISTING VS PROPOSED DESIGN

6.1.1 Junction 1 – The Bungalows

The traffic model has shown that the proposed redesign of R147/ The Bungalows junction, by removal of the right turn pocket and following DMURS standard, the proposed junction will operate with similar capacity, with a maximum increase on junction delay of 0.58s.

6.1.2 Junction 2 – The Dales

The traffic model has shown that the proposed redesign and signalisation of R147/ The Dales junction, by removal of the right turn pocket, following DMURS standard and signalisation of the junction, the proposed junction will operate with capacity up to the design year 2029. The traffic model demonstrated that the proposed junction will operate over capacity with the future traffic demand on design year 2039. By the advent of 2039, it is anticipated that alternative routes will be completed which will reduce the traffic demand through the centre of the town. These include the completion of the Outer Relief Road connecting the R147 & Lagore Road and the Completion of the Western Distributor Road connecting the R147 to the R125 (M3 Link)

Appendix A ORIGIN/ DESTINATION MATRICES

Traffic Calculations for Dunshaughlin Public Realm Scheme

Site 1 - The Bungalows Junction

At Present AM Peak (08:15 - 09:15)

Seasonally Adjusted 2023

Base Year	*2023*
YoO	*2024*
YoO+5	*2029*
YoO+15	*2034*

Route	A	HGV	B	HGV	C	HGV
A	0	0	28	0	556	27
B	26	2	0	0	113	0
C	356	28	32	1	0	0

2024 - Year of Opening

Meath County	***LGV***	***HGV***
2016 - 2030 index	*1.0173*	*1.0365*
Years	*1*	*1*
Growth Factor	***1.017***	***1.037***

Route	A	HGV	B	HGV	C	HGV
A	0	0	28	0	565	28
B	26	2	0	0	115	0
C	362	29	33	1	0	0

2029 (5 Years after Opening)

Meath County	***LGV***	***HGV***
2016-2030	*1.0173*	*1.0365*
Years	*6*	*6*
Growth Factor	***1.108***	***1.240***

Route	A	HGV	B	HGV	C	HGV
A	0	0	31	0	616	33
B	29	2	0	0	125	0
C	394	35	35	1	0	0

2030(5 Years after Opening)

	Meath County	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*7*	*7*
	Growth Factor	***1.128***	***1.285***

2039 (15 Years after Opening)

	Meath County	***LGV***	***HGV***
2030-2040		*1.0070*	*1.0186*
	Years	*4*	*4*
	Growth Factor	***1.028***	***1.077***
	Combined Factors	***1.160***	***1.384***

Route	A	HGV	B	HGV	C	HGV
A	0	0	32	0	645	37
B	30	3	0	0	131	0
C	413	39	37	1	0	0

Traffic Calculations for Dunshaughlin Public Realm Scheme

Site 1 - The Dales Junction

At Present PM Peak (16:45 - 17:45)

Seasonally Adjusted 2023

Base Year	*2023*
YoO	*2024*
YoO+5	*2029*
YoO+15	*2034*

2024 - Year of Opening

Meath county	***LGV***	***HGV***
2016 - 2030 index	*1.0173*	*1.0365*
Years	*1*	*1*
Growth Factor	***1.017***	***1.037***

2029 (5 Years after Opening)

Meath county	***LGV***	***HGV***
2016-2030	*1.0173*	*1.0365*
Years	*6*	*6*
Growth Factor	***1.108***	***1.240***

2030(5 Years after Opening)

	Meath county	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*7*	*7*
	Growth Factor	***1.128***	***1.285***

2039 (15 Years after Opening)

	Meath county	***LGV***	***HGV***
2030-2040		*1.0070*	*1.0186*
	Years	*4*	*4*
	Growth Factor	***1.028***	***1.077***
	Combined Factors	***1.160***	***1.384***

Route	A	HGV	B	HGV	C	HGV
A	0	0	41	0	392	5
B	25	0	0	0	63	1
C	548	7	95	0	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	42	0	399	5
B	25	0	0	0	64	1
C	557	7	97	0	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	45	0	434	6
B	28	0	0	0	70	1
C	607	9	105	0	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	48	0	455	7
B	29	0	0	0	73	1
C	635	10	110	0	0	0

Traffic Calculations for The Dales

Site 2 - The Dales Junction

At Present AM Peak (08:15 - 09:15)

Seasonally Adjusted 2023

Base Year	*2023*
YoO	*2024*
YoO+5	*2029*
YoO+15	*2034*

2024 - Year of Opening

	Meath County	***LGV***	***HGV***
2016 - 2030 index		*1.0173*	*1.0365*
	Years	*1*	*1*
Growth Factor		***1.017***	***1.037***

2029 (5 Years after Opening)

	Meath County	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*6*	*6*
Growth Factor		***1.108***	***1.240***

2030(5 Years after Opening)

	Meath County	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*7*	*7*
Growth Factor		***1.128***	***1.285***

2039 (15 Years after Opening)

	Meath County	***LGV***	***HGV***
2030-2040		*1.0070*	*1.0186*
	Years	*4*	*4*
Growth Factor		***1.028***	***1.077***
Combined Factors		***1.160***	***1.384***

Route	A	HGV	B	HGV	C	HGV
A	0	0	41	1	312	26
B	50	0	0	0	75	3
C	597	24	82	2	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	42	1	317	27
B	51	0	0	0	76	3
C	607	25	83	2	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	45	1	346	32
B	55	0	0	0	83	4
C	661	30	91	2	0	0

Route	A	HGV	B	HGV	C	HGV
A	0	0	48	1	362	36
B	58	0	0	0	87	4
C	692	33	95	3	0	0

Traffic Calculations for Toppins Field

Site 2 - The Dales Junction

At Present PM Peak (16:45 - 17:45)

Seasonally Adjusted 2023

Base Year	*2023*
YoO	*2024*
YoO+5	*2029*
YoO+15	*2034*

Route	A	HGV	B	HGV	C	HGV
A	0	0	92	0	494	7
B	59	0	0	0	150	0
C	332	4	118	2	0	0

2024 - Year of Opening

	Meath county	***LGV***	***HGV***
2016 - 2030 index		*1.0173*	*1.0365*
	Years	*1*	*1*
Growth Factor		***1.017***	***1.037***

Route	A	HGV	B	HGV	C	HGV
A	0	0	94	0	502	7
B	60	0	0	0	153	0
C	338	4	120	2	0	0

2029 (5 Years after Opening)

	Meath county	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*6*	*6*
Growth Factor		***1.108***	***1.240***

Route	A	HGV	B	HGV	C	HGV
A	0	0	102	0	547	9
B	65	0	0	0	166	0
C	368	5	131	2	0	0

2030(5 Years after Opening)

	Meath county	***LGV***	***HGV***
2016-2030		*1.0173*	*1.0365*
	Years	*7*	*7*
Growth Factor		***1.128***	***1.285***

2039 (15 Years after Opening)

	Meath county	***LGV***	***HGV***
2030-2040		*1.0070*	*1.0186*
	Years	*4*	*4*
Growth Factor		***1.028***	***1.077***
Combined Factors		***1.160***	***1.384***

Route	A	HGV	B	HGV	C	HGV
A	0	0	107	0	573	10
B	68	0	0	0	174	0
C	385	6	137	3	0	0

Appendix B JUNCTIONS 10 PICADY DETAILED OUTPUT - JUNCTION 1 & 2

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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Filename: 11514 R147 Bungalows.j10
Path: \\fserver5-dub\Tobin\Projects\11514 – Dunshaughlin Public Realm Scheme\05-Design\01-Calculations\Junctions 10
Report generation date: 05/07/2023 12:16:26

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Base Year 2022									
Stream B-AC	0.5	12.62	0.35	B	1.67	0.3	10.08	0.21	B	1.38
Stream C-AB	0.1	7.77	0.07	A		0.2	7.67	0.19	A	
	No Dev - Year of Opening [2024]									
Stream B-AC	0.6	12.85	0.36	B	1.70	0.3	10.18	0.22	B	1.39
Stream C-AB	0.1	7.83	0.08	A		0.2	7.73	0.19	A	
	No Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	14.82	0.42	B	1.92	0.3	11.06	0.25	B	1.49
Stream C-AB	0.1	8.17	0.08	A		0.3	7.99	0.21	A	
	No Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	16.24	0.45	C	2.08	0.4	11.54	0.27	B	1.53
Stream C-AB	0.1	8.46	0.09	A		0.3	8.16	0.22	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

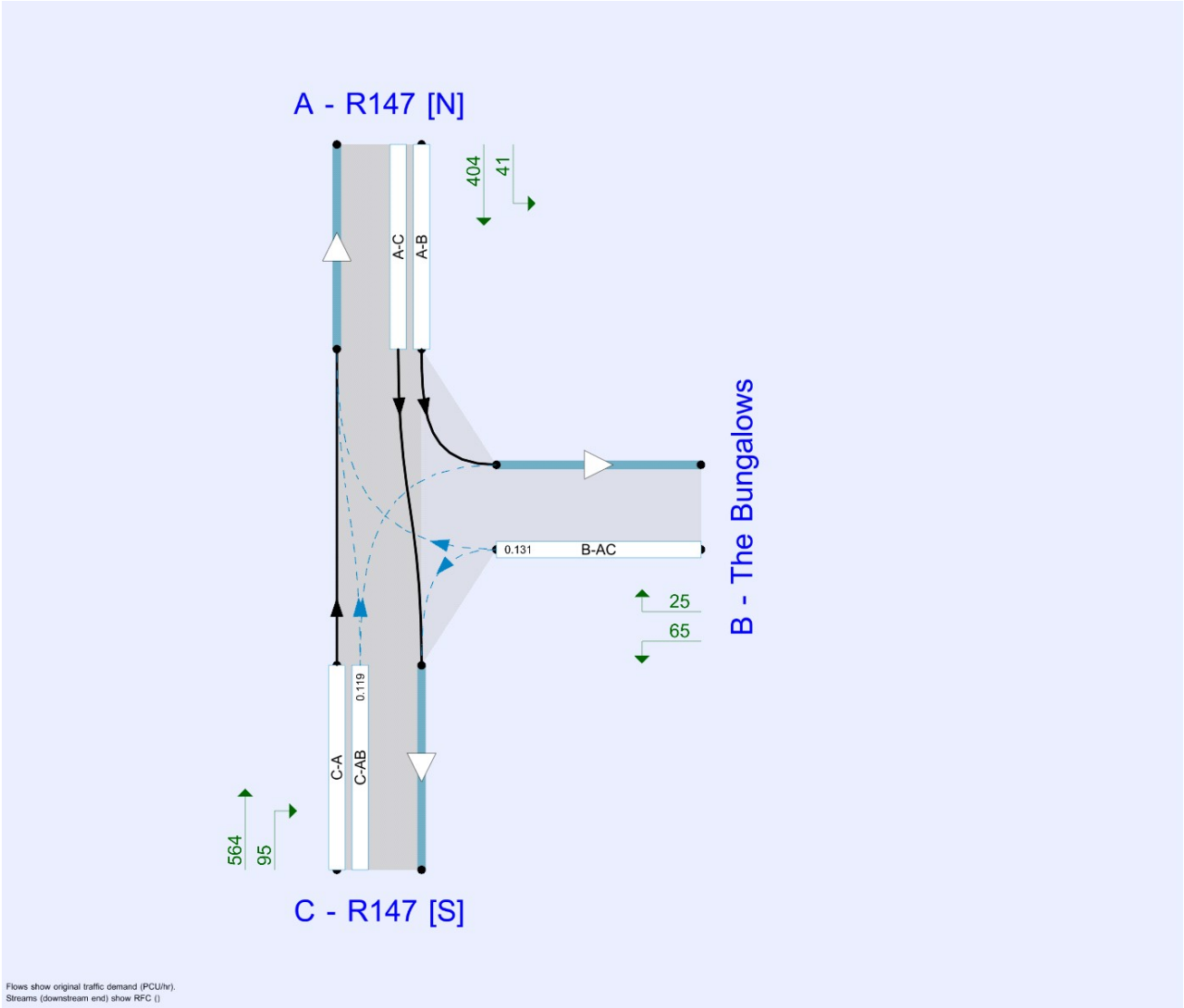
File summary

File Description

Title	
Location	
Site number	
Date	23/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN\Gabriela.Iha
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	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓					0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year 2022	AM	ONE HOUR	08:00	09:30	15	✓
D2	Base Year 2022	PM	ONE HOUR	16:30	18:00	15	✓
D3	No Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓
D4	No Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓
D7	No Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓
D8	No Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓
D11	No Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓
D12	No Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Base Year 2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.67	A

Arms

Arms

Arm	Name	Description	Arm type
A	R147 [N]		Major
B	The Bungalows		Minor
C	R147 [S]		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R147 [S]	9.00		✓	2.32	160.0	✓	2.32

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 - The Bungalows	One lane	3.60	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	520	0.082	0.208	0.131	0.297
B-C	671	0.089	0.226	-	-
C-B	675	0.228	0.228	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year 2022	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	646	100.000
B - The Bungalows		ONE HOUR	✓	144	100.000
C - R147 [S]		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	28	618
	B - The Bungalows	31	0	113
	C - R147 [S]	420	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	7	0	0
	C - R147 [S]	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	12.62	0.5	2.5	B	130	195
C-AB	0.07	7.77	0.1	0.5	A	30	46
C-A						360	540
A-B						26	39
A-C						540	810

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	501	0.213	106	0.0	0.3	9.091	A
C-AB	25	6	549	0.045	25	0.0	0.0	6.871	A
C-A	295	74			295				
A-B	21	5			21				
A-C	443	111			443				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	128	32	476	0.268	127	0.3	0.4	10.305	B
C-AB	30	7	528	0.056	30	0.0	0.1	7.224	A
C-A	353	88			353				
A-B	25	6			25				
A-C	529	132			529				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	442	0.354	156	0.4	0.5	12.557	B
C-AB	36	9	500	0.073	36	0.1	0.1	7.768	A
C-A	432	108			432				
A-B	31	8			31				
A-C	648	162			648				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	442	0.354	156	0.5	0.5	12.617	B
C-AB	36	9	500	0.073	36	0.1	0.1	7.769	A
C-A	432	108			432				
A-B	31	8			31				
A-C	648	162			648				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	128	32	476	0.268	128	0.5	0.4	10.368	B
C-AB	30	7	528	0.056	30	0.1	0.1	7.226	A
C-A	353	88			353				
A-B	25	6			25				
A-C	529	132			529				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	501	0.213	107	0.4	0.3	9.158	A
C-AB	25	6	549	0.045	25	0.1	0.0	6.878	A
C-A	295	74			295				
A-B	21	5			21				
A-C	443	111			443				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.03	0.26	0.54	0.54			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.03	0.30	1.38	2.53			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

Base Year 2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.38	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year 2022	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	445	100.000
B - The Bungalows		ONE HOUR	✓	90	100.000
C - R147 [S]		ONE HOUR	✓	659	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	41	404
	B - The Bungalows	25	0	65
	C - R147 [S]	564	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	10.08	0.3	1.3	B	81	122
C-AB	0.19	7.67	0.2	1.0	A	88	133
C-A						511	767
A-B						38	56
A-C						367	551

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	508	0.131	66	0.0	0.1	8.138	A
C-AB	72	18	602	0.119	71	0.0	0.1	6.775	A
C-A	420	105			420				
A-B	31	8			31				
A-C	301	75			301				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	486	0.164	80	0.1	0.2	8.851	A
C-AB	86	22	590	0.146	86	0.1	0.2	7.141	A
C-A	501	125			501				
A-B	37	9			37				
A-C	360	90			360				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	455	0.215	97	0.2	0.3	10.064	B
C-AB	107	27	576	0.186	107	0.2	0.2	7.663	A
C-A	613	153			613				
A-B	45	11			45				
A-C	440	110			440				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	455	0.215	98	0.3	0.3	10.081	B
C-AB	107	27	576	0.186	107	0.2	0.2	7.673	A
C-A	613	153			613				
A-B	45	11			45				
A-C	440	110			440				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	486	0.164	80	0.3	0.2	8.873	A
C-AB	86	22	590	0.146	86	0.2	0.2	7.150	A
C-A	501	125			501				
A-B	37	9			37				
A-C	360	90			360				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	508	0.132	67	0.2	0.2	8.167	A
C-AB	72	18	602	0.119	72	0.2	0.1	6.792	A
C-A	420	105			420				
A-B	31	8			31				
A-C	301	75			301				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.23	0.03	0.26	0.46	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.30	0.96	1.27			N/A	N/A
C-AB	0.23	0.03	0.28	0.54	1.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

No Dev - Year of Opening [2024], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.70	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	No Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	658	100.000
B - The Bungalows		ONE HOUR	✓	146	100.000
C - R147 [S]		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	28	630
	B - The Bungalows	31	0	115
	C - R147 [S]	429	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	7	0	0
	C - R147 [S]	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	12.85	0.6	2.6	B	132	198
C-AB	0.08	7.83	0.1	0.5	A	31	47
C-A						368	552
A-B						26	39
A-C						551	826

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	499	0.217	107	0.0	0.3	9.164	A
C-AB	26	6	547	0.047	25	0.0	0.0	6.906	A
C-A	302	75			302				
A-B	21	5			21				
A-C	452	113			452				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	474	0.273	129	0.3	0.4	10.424	B
C-AB	31	8	526	0.058	31	0.0	0.1	7.271	A
C-A	360	90			360				
A-B	25	6			25				
A-C	539	135			539				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	439	0.361	158	0.4	0.6	12.780	B
C-AB	38	9	497	0.075	37	0.1	0.1	7.833	A
C-A	441	110			441				
A-B	31	8			31				
A-C	661	165			661				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	439	0.361	158	0.6	0.6	12.846	B
C-AB	38	9	497	0.075	38	0.1	0.1	7.835	A
C-A	441	110			441				
A-B	31	8			31				
A-C	661	165			661				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	474	0.273	130	0.6	0.4	10.492	B
C-AB	31	8	526	0.058	31	0.1	0.1	7.273	A
C-A	360	90			360				
A-B	25	6			25				
A-C	539	135			539				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	499	0.217	109	0.4	0.3	9.236	A
C-AB	26	6	547	0.047	26	0.1	0.0	6.913	A
C-A	302	75			302				
A-B	21	5			21				
A-C	452	113			452				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.03	0.30	1.38	2.63			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

No Dev - Year of Opening [2024], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	No Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	453	100.000
B - The Bungalows		ONE HOUR	✓	91	100.000
C - R147 [S]		ONE HOUR	✓	671	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	42	411
	B - The Bungalows	25	0	66
	C - R147 [S]	574	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	10.18	0.3	1.3	B	82	123
C-AB	0.19	7.73	0.2	1.1	A	90	135
C-A						520	780
A-B						39	58
A-C						373	560

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	507	0.133	67	0.0	0.2	8.172	A
C-AB	73	18	601	0.122	73	0.0	0.1	6.809	A
C-A	427	107			427				
A-B	32	8			32				
A-C	306	77			306				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	485	0.166	80	0.2	0.2	8.906	A
C-AB	88	22	589	0.150	88	0.1	0.2	7.185	A
C-A	510	127			510				
A-B	38	9			38				
A-C	366	91			366				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	453	0.218	98	0.2	0.3	10.157	B
C-AB	109	27	575	0.190	109	0.2	0.2	7.720	A
C-A	623	156			623				
A-B	46	12			46				
A-C	448	112			448				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	453	0.218	99	0.3	0.3	10.176	B
C-AB	109	27	575	0.190	109	0.2	0.2	7.728	A
C-A	623	156			623				
A-B	46	12			46				
A-C	448	112			448				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	484	0.166	81	0.3	0.2	8.929	A
C-AB	88	22	589	0.150	88	0.2	0.2	7.195	A
C-A	510	127			510				
A-B	38	9			38				
A-C	366	91			366				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	507	0.133	68	0.2	0.2	8.205	A
C-AB	73	18	601	0.122	74	0.2	0.1	6.826	A
C-A	427	107			427				
A-B	32	8			32				
A-C	306	77			306				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.24	0.03	0.26	0.46	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.30	0.98	1.29			N/A	N/A
C-AB	0.24	0.03	0.28	0.66	1.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

No Dev - Year of Opening+5 [2029], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.92	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	No Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	724	100.000
B - The Bungalows		ONE HOUR	✓	160	100.000
C - R147 [S]		ONE HOUR	✓	512	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	31	693
	B - The Bungalows	35	0	125
	C - R147 [S]	474	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	8	0	0
	C - R147 [S]	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	14.82	0.7	3.2	B	144	217
C-AB	0.08	8.17	0.1	0.5	A	34	51
C-A						403	604
A-B						28	43
A-C						606	908

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	483	0.245	117	0.0	0.3	9.795	A
C-AB	28	7	536	0.052	28	0.0	0.1	7.081	A
C-A	330	83			330				
A-B	23	6			23				
A-C	497	124			497				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	456	0.311	141	0.3	0.4	11.424	B
C-AB	33	8	513	0.065	33	0.1	0.1	7.506	A
C-A	394	99			394				
A-B	28	7			28				
A-C	593	148			593				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	416	0.417	172	0.4	0.7	14.705	B
C-AB	41	10	481	0.085	41	0.1	0.1	8.165	A
C-A	483	121			483				
A-B	34	9			34				
A-C	727	182			727				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	416	0.417	173	0.7	0.7	14.819	B
C-AB	41	10	481	0.085	41	0.1	0.1	8.169	A
C-A	483	121			483				
A-B	34	9			34				
A-C	727	182			727				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	456	0.311	142	0.7	0.5	11.534	B
C-AB	33	8	513	0.065	33	0.1	0.1	7.509	A
C-A	394	99			394				
A-B	28	7			28				
A-C	593	148			593				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	483	0.245	119	0.5	0.3	9.892	A
C-AB	28	7	536	0.052	28	0.1	0.1	7.088	A
C-A	330	83			330				
A-B	23	6			23				
A-C	497	124			497				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.03	0.26	0.70	0.70			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.03	0.29	1.34	3.24			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.38	1.21	1.35			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.27	0.49	0.82			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

No Dev - Year of Opening+5 [2029], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.49	A

Junction Network

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

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	No Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	494	100.000
B - The Bungalows		ONE HOUR	✓	101	100.000
C - R147 [S]		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	45	449
	B - The Bungalows	28	0	73
	C - R147 [S]	627	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.25	11.06	0.3	1.5	B	91	137
C-AB	0.21	7.99	0.3	1.2	A	98	147
C-A						568	852
A-B						41	62
A-C						408	612

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	496	0.151	74	0.0	0.2	8.526	A
C-AB	80	20	595	0.134	79	0.0	0.2	6.965	A
C-A	467	117			467				
A-B	34	8			34				
A-C	335	84			335				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.190	89	0.2	0.2	9.422	A
C-AB	96	24	583	0.164	96	0.2	0.2	7.388	A
C-A	557	139			557				
A-B	40	10			40				
A-C	400	100			400				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	435	0.252	109	0.2	0.3	11.028	B
C-AB	119	30	570	0.210	119	0.2	0.3	7.982	A
C-A	680	170			680				
A-B	50	12			50				
A-C	489	122			489				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	435	0.252	110	0.3	0.3	11.056	B
C-AB	119	30	570	0.210	119	0.3	0.3	7.993	A
C-A	680	170			680				
A-B	50	12			50				
A-C	489	122			489				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.190	90	0.3	0.2	9.456	A
C-AB	96	24	583	0.164	96	0.3	0.2	7.400	A
C-A	557	139			557				
A-B	40	10			40				
A-C	400	100			400				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	496	0.151	75	0.2	0.2	8.565	A
C-AB	80	20	595	0.134	80	0.2	0.2	6.988	A
C-A	467	117			467				
A-B	34	8			34				
A-C	335	84			335				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.27	0.03	0.26	0.46	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.31	1.16	1.48			N/A	N/A
C-AB	0.27	0.03	0.30	0.93	1.24			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

No Dev - Year of Opening+15 [2039], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		2.08	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	No Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	763	100.000
B - The Bungalows		ONE HOUR	✓	168	100.000
C - R147 [S]		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	32	731
	B - The Bungalows	37	0	131
	C - R147 [S]	502	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	8	0	0
	C - R147 [S]	9	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.45	16.24	0.8	3.6	C	152	227
C-AB	0.09	8.46	0.1	0.5	A	35	53
C-A						423	634
A-B						29	44
A-C						639	958

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	475	0.262	123	0.0	0.3	10.183	B
C-AB	29	7	524	0.055	29	0.0	0.1	7.262	A
C-A	347	87			347				
A-B	24	6			24				
A-C	524	131			524				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	446	0.333	148	0.3	0.5	12.073	B
C-AB	35	9	500	0.069	35	0.1	0.1	7.728	A
C-A	414	103			414				
A-B	29	7			29				
A-C	626	156			626				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	45	403	0.451	181	0.5	0.8	16.074	C
C-AB	43	11	468	0.091	42	0.1	0.1	8.458	A
C-A	507	127			507				
A-B	35	9			35				
A-C	767	192			767				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	45	403	0.451	182	0.8	0.8	16.242	C
C-AB	43	11	468	0.091	43	0.1	0.1	8.461	A
C-A	507	127			507				
A-B	35	9			35				
A-C	767	192			767				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	446	0.333	150	0.8	0.5	12.218	B
C-AB	35	9	500	0.069	35	0.1	0.1	7.734	A
C-A	414	103			414				
A-B	29	7			29				
A-C	626	156			626				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	475	0.262	125	0.5	0.4	10.297	B
C-AB	29	7	524	0.055	29	0.1	0.1	7.270	A
C-A	347	87			347				
A-B	24	6			24				
A-C	524	131			524				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.80	0.03	0.26	0.80	0.80			N/A	N/A
C-AB	0.10	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.03	0.29	1.31	3.61			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.47	1.29	1.39			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	0.95	1.23			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

No Dev - Year of Opening+15 [2039], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.53	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	No Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	518	100.000
B - The Bungalows		ONE HOUR	✓	105	100.000
C - R147 [S]		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	48	470
	B - The Bungalows	29	0	76
	C - R147 [S]	658	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.54	0.4	1.3	B	95	142
C-AB	0.22	8.16	0.3	1.3	A	103	155
C-A						590	884
A-B						44	66
A-C						427	641

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	490	0.159	77	0.0	0.2	8.703	A
C-AB	84	21	592	0.141	83	0.0	0.2	7.065	A
C-A	485	121			485				
A-B	36	9			36				
A-C	350	88			350				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	464	0.201	93	0.2	0.2	9.695	A
C-AB	101	25	579	0.174	100	0.2	0.2	7.515	A
C-A	578	145			578				
A-B	43	11			43				
A-C	418	105			418				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	426	0.268	114	0.2	0.4	11.511	B
C-AB	126	31	567	0.222	126	0.2	0.3	8.148	A
C-A	705	176			705				
A-B	53	13			53				
A-C	512	128			512				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	426	0.268	114	0.4	0.4	11.545	B
C-AB	126	31	567	0.222	126	0.3	0.3	8.160	A
C-A	705	176			705				
A-B	53	13			53				
A-C	512	128			512				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	464	0.201	93	0.4	0.3	9.733	A
C-AB	101	25	580	0.174	101	0.3	0.2	7.531	A
C-A	578	145			578				
A-B	43	11			43				
A-C	418	105			418				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	490	0.159	78	0.3	0.2	8.747	A
C-AB	84	21	592	0.141	84	0.2	0.2	7.090	A
C-A	485	121			485				
A-B	36	9			36				
A-C	350	88			350				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	1.23	1.28			N/A	N/A
C-AB	0.29	0.03	0.31	1.03	1.32			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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Filename: 11514 R147 Bungalows Proposed.j10
Path: \\fserver5-dub\Tobin\Projects\11514 – Dunshaughlin Public Realm Scheme\05-Design\01-Calculations\Junctions 10
Report generation date: 04/07/2023 15:12:20

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	With Dev -Year of Opening [2024]									
Stream B-AC	0.6	12.85	0.36	B	1.77	0.3	10.18	0.22	B	1.76
Stream C-AB	0.2	5.15	0.10	A		0.8	5.23	0.30	A	
	With Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	14.82	0.42	B	2.00	0.3	11.07	0.25	B	1.97
Stream C-AB	0.3	5.13	0.12	A		1.1	5.44	0.35	A	
	With Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	16.25	0.45	C	2.18	0.4	11.56	0.27	B	2.11
Stream C-AB	0.3	5.15	0.13	A		1.3	5.65	0.38	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

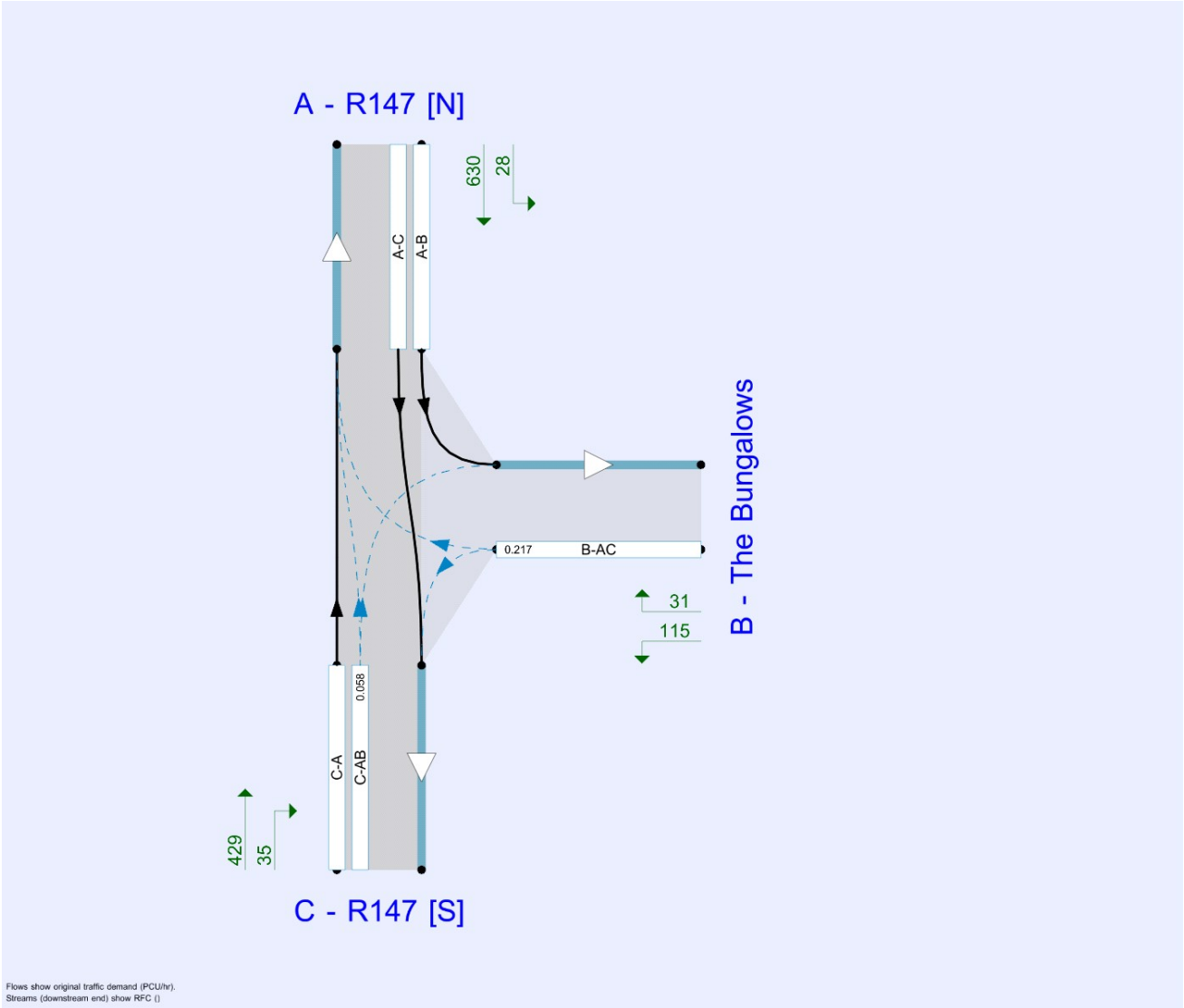
File summary

File Description

Title	
Location	
Site number	
Date	23/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN\Gabriela.Iha
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	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓					0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	With Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓
D4	With Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓
D7	With Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓
D8	With Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓
D11	With Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓
D12	With Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

With Dev - Year of Opening [2024], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.77	A

Arms

Arms

Arm	Name	Description	Arm type
A	R147 [N]		Major
B	The Bungalows		Minor
C	R147 [S]		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R147 [S]	9.00			160.0	✓	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 - The Bungalows	One lane	3.60	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	520	0.082	0.208	0.131	0.297
B-C	671	0.089	0.226	-	-
C-B	667	0.225	0.225	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	With Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	658	100.000
B - The Bungalows		ONE HOUR	✓	146	100.000
C - R147 [S]		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	28	630
	B - The Bungalows	31	0	115
	C - R147 [S]	429	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	7	0	0
	C - R147 [S]	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	12.85	0.6	2.6	B	132	198
C-AB	0.10	5.15	0.2	1.3	A	62	92
C-A						338	506
A-B						26	39
A-C						551	826

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	499	0.217	107	0.0	0.3	9.164	A
C-AB	43	11	744	0.058	43	0.0	0.1	5.131	A
C-A	284	71			284				
A-B	21	5			21				
A-C	452	113			452				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	474	0.273	129	0.3	0.4	10.424	B
C-AB	58	14	768	0.075	58	0.1	0.1	5.065	A
C-A	333	83			333				
A-B	25	6			25				
A-C	539	135			539				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	439	0.361	158	0.4	0.6	12.781	B
C-AB	84	21	802	0.104	83	0.1	0.2	5.003	A
C-A	395	99			395				
A-B	31	8			31				
A-C	661	165			661				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	159	40	439	0.361	158	0.6	0.6	12.848	B
C-AB	84	21	803	0.104	84	0.2	0.2	5.012	A
C-A	395	99			395				
A-B	31	8			31				
A-C	661	165			661				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	474	0.273	130	0.6	0.4	10.493	B
C-AB	58	14	768	0.075	58	0.2	0.1	5.090	A
C-A	333	83			333				
A-B	25	6			25				
A-C	539	135			539				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	499	0.217	109	0.4	0.3	9.236	A
C-AB	43	11	744	0.058	43	0.1	0.1	5.148	A
C-A	284	71			284				
A-B	21	5			21				
A-C	452	113			452				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.13	0.03	0.27	0.49	0.90			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.22	0.03	0.27	0.49	1.29			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.03	0.30	1.38	2.63			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

With Dev - Year of Opening [2024], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.76	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	With Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	453	100.000
B - The Bungalows		ONE HOUR	✓	91	100.000
C - R147 [S]		ONE HOUR	✓	671	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	42	411
	B - The Bungalows	25	0	66
	C - R147 [S]	574	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	10.18	0.3	1.3	B	82	123
C-AB	0.30	5.23	0.8	2.1	A	212	317
C-A						399	598
A-B						39	58
A-C						373	560

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	507	0.133	67	0.0	0.2	8.172	A
C-AB	143	36	876	0.163	141	0.0	0.3	4.897	A
C-A	358	90			358				
A-B	32	8			32				
A-C	306	77			306				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	484	0.166	80	0.2	0.2	8.907	A
C-AB	197	49	922	0.213	196	0.3	0.5	4.967	A
C-A	401	100			401				
A-B	38	9			38				
A-C	366	91			366				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	452	0.218	98	0.2	0.3	10.160	B
C-AB	294	74	986	0.298	293	0.5	0.8	5.204	A
C-A	438	110			438				
A-B	46	12			46				
A-C	448	112			448				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	452	0.218	99	0.3	0.3	10.182	B
C-AB	295	74	987	0.299	295	0.8	0.8	5.226	A
C-A	438	109			438				
A-B	46	12			46				
A-C	448	112			448				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	484	0.167	81	0.3	0.2	8.933	A
C-AB	197	49	923	0.214	199	0.8	0.5	4.998	A
C-A	401	100			401				
A-B	38	9			38				
A-C	366	91			366				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	507	0.133	68	0.2	0.2	8.208	A
C-AB	144	36	877	0.164	144	0.5	0.4	4.928	A
C-A	357	89			357				
A-B	32	8			32				
A-C	306	77			306				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.50	0.50	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.83	0.03	0.26	0.83	0.83			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.30	0.98	1.29			N/A	N/A
C-AB	0.84	0.05	0.61	1.61	2.12			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.52	0.52	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.36	0.00	0.00	0.36	0.36			N/A	N/A

With Dev - Year of Opening+5 [2029], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		2.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	With Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	724	100.000
B - The Bungalows		ONE HOUR	✓	160	100.000
C - R147 [S]		ONE HOUR	✓	512	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	31	693
	B - The Bungalows	35	0	125
	C - R147 [S]	474	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	8	0	0
	C - R147 [S]	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	14.82	0.7	3.2	B	144	217
C-AB	0.12	5.13	0.3	1.5	A	72	108
C-A						364	547
A-B						28	43
A-C						606	908

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	483	0.245	117	0.0	0.3	9.795	A
C-AB	49	12	754	0.066	49	0.0	0.1	5.103	A
C-A	309	77			309				
A-B	23	6			23				
A-C	497	124			497				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	456	0.311	141	0.3	0.4	11.424	B
C-AB	67	17	780	0.086	67	0.1	0.2	5.044	A
C-A	360	90			360				
A-B	28	7			28				
A-C	593	148			593				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	416	0.417	172	0.4	0.7	14.707	B
C-AB	99	25	820	0.121	99	0.2	0.3	4.991	A
C-A	424	106			424				
A-B	34	9			34				
A-C	727	182			727				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	416	0.417	173	0.7	0.7	14.823	B
C-AB	100	25	820	0.122	100	0.3	0.3	5.007	A
C-A	424	106			424				
A-B	34	9			34				
A-C	727	182			727				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	456	0.311	142	0.7	0.5	11.534	B
C-AB	68	17	781	0.087	68	0.3	0.2	5.074	A
C-A	360	90			360				
A-B	28	7			28				
A-C	593	148			593				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	483	0.245	119	0.5	0.3	9.894	A
C-AB	50	12	754	0.066	50	0.2	0.1	5.127	A
C-A	308	77			308				
A-B	23	6			23				
A-C	497	124			497				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.03	0.26	0.70	0.70			N/A	N/A
C-AB	0.28	0.03	0.28	0.50	1.46			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.03	0.29	1.34	3.24			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.38	1.21	1.35			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.27	0.49	0.82			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

With Dev - Year of Opening+5 [2029], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		1.97	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.97	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	With Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	494	100.000
B - The Bungalows		ONE HOUR	✓	101	100.000
C - R147 [S]		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	45	449
	B - The Bungalows	28	0	73
	C - R147 [S]	627	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.25	11.07	0.3	1.5	B	91	137
C-AB	0.35	5.44	1.1	3.6	A	250	375
C-A						416	624
A-B						41	62
A-C						408	612

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	496	0.151	74	0.0	0.2	8.526	A
C-AB	165	41	898	0.184	163	0.0	0.4	4.901	A
C-A	381	95			381				
A-B	34	8			34				
A-C	335	84			335				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.190	89	0.2	0.2	9.425	A
C-AB	231	58	948	0.244	230	0.4	0.6	5.024	A
C-A	422	105			422				
A-B	40	10			40				
A-C	400	100			400				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	435	0.252	109	0.2	0.3	11.034	B
C-AB	353	88	1020	0.346	352	0.6	1.1	5.403	A
C-A	446	111			446				
A-B	50	12			50				
A-C	489	122			489				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	435	0.252	110	0.3	0.3	11.066	B
C-AB	354	89	1021	0.347	354	1.1	1.1	5.435	A
C-A	445	111			445				
A-B	50	12			50				
A-C	489	122			489				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	471	0.190	90	0.3	0.2	9.462	A
C-AB	232	58	949	0.244	234	1.1	0.6	5.064	A
C-A	420	105			420				
A-B	40	10			40				
A-C	400	100			400				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	496	0.151	75	0.2	0.2	8.569	A
C-AB	166	42	899	0.185	167	0.6	0.4	4.939	A
C-A	380	95			380				
A-B	34	8			34				
A-C	335	84			335				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.41	0.00	0.00	0.41	0.41			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.61	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.06	0.03	0.26	1.06	1.06			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.31	1.16	1.49			N/A	N/A
C-AB	1.08	0.05	0.51	2.45	3.62			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.64	0.55	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.42	0.00	0.00	0.42	0.42			N/A	N/A

With Dev - Year of Opening+15 [2039], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		2.18	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	With Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	763	100.000
B - The Bungalows		ONE HOUR	✓	168	100.000
C - R147 [S]		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	32	731
	B - The Bungalows	37	0	131
	C - R147 [S]	502	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	5
	B - The Bungalows	8	0	0
	C - R147 [S]	9	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.45	16.25	0.8	3.6	C	152	227
C-AB	0.13	5.15	0.3	1.2	A	79	119
C-A						379	568
A-B						29	44
A-C						639	958

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	475	0.262	123	0.0	0.3	10.183	B
C-AB	54	13	755	0.071	53	0.0	0.1	5.126	A
C-A	322	81			322				
A-B	24	6			24				
A-C	524	131			524				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	446	0.333	148	0.3	0.5	12.077	B
C-AB	74	18	783	0.094	73	0.1	0.2	5.066	A
C-A	375	94			375				
A-B	29	7			29				
A-C	626	156			626				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	45	403	0.451	181	0.5	0.8	16.077	C
C-AB	110	28	826	0.134	110	0.2	0.3	5.024	A
C-A	439	110			439				
A-B	35	9			35				
A-C	767	192			767				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	45	403	0.451	182	0.8	0.8	16.248	C
C-AB	111	28	826	0.134	111	0.3	0.3	5.043	A
C-A	439	110			439				
A-B	35	9			35				
A-C	767	192			767				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	446	0.333	150	0.8	0.5	12.219	B
C-AB	74	18	784	0.094	75	0.3	0.2	5.099	A
C-A	375	94			375				
A-B	29	7			29				
A-C	626	156			626				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	124	31	475	0.262	125	0.5	0.4	10.300	B
C-AB	54	13	755	0.071	54	0.2	0.1	5.151	A
C-A	322	80			322				
A-B	24	6			24				
A-C	524	131			524				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.80	0.03	0.26	0.80	0.80			N/A	N/A
C-AB	0.33	0.03	0.28	0.50	1.18			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.03	0.29	1.31	3.61			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.47	1.29	1.40			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

09:15 - 09:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	0.95	1.23			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

With Dev - Year of Opening+15 [2039], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Bungalows	T-Junction	Two-way	Two-way	Two-way		2.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	With Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [N]		ONE HOUR	✓	518	100.000
B - The Bungalows		ONE HOUR	✓	105	100.000
C - R147 [S]		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	48	470
	B - The Bungalows	29	0	76
	C - R147 [S]	658	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [N]	B - The Bungalows	C - R147 [S]
From	A - R147 [N]	0	0	1
	B - The Bungalows	0	0	2
	C - R147 [S]	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.56	0.4	1.3	B	95	142
C-AB	0.38	5.65	1.3	4.8	A	275	412
C-A						418	627
A-B						44	66
A-C						427	641

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	490	0.159	77	0.0	0.2	8.703	A
C-AB	179	45	905	0.197	177	0.0	0.5	4.941	A
C-A	390	97			390				
A-B	36	9			36				
A-C	350	88			350				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	464	0.201	93	0.2	0.2	9.698	A
C-AB	252	63	958	0.263	251	0.5	0.7	5.104	A
C-A	427	107			427				
A-B	43	11			43				
A-C	418	105			418				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	426	0.268	114	0.2	0.4	11.518	B
C-AB	391	98	1033	0.379	389	0.7	1.2	5.607	A
C-A	440	110			440				
A-B	53	13			53				
A-C	512	128			512				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	425	0.268	114	0.4	0.4	11.559	B
C-AB	393	98	1034	0.380	393	1.2	1.3	5.654	A
C-A	439	110			439				
A-B	53	13			53				
A-C	512	128			512				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	463	0.201	93	0.4	0.3	9.740	A
C-AB	254	63	960	0.264	256	1.3	0.7	5.157	A
C-A	425	106			425				
A-B	43	11			43				
A-C	418	105			418				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	490	0.159	78	0.3	0.2	8.751	A
C-AB	180	45	906	0.199	181	0.7	0.5	4.987	A
C-A	388	97			388				
A-B	36	9			36				
A-C	350	88			350				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.69	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.24	0.03	0.27	1.24	1.29			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	1.23	1.28			N/A	N/A
C-AB	1.25	0.05	0.47	3.06	4.79			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.72	0.55	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693
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Filename: 11514 R147 The Dales.j10
Path: \\fserver5-dub\Tobin\Projects\11514 – Dunshaughlin Public Realm Scheme\05-Design\01-Calculations\Junctions 10
Report generation date: 05/07/2023 12:34:51

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	Base Year 2022									
Stream B-AC	0.5	13.10	0.34	B	1.83	1.1	17.51	0.53	C	3.73
Stream C-AB	0.2	7.17	0.16	A		0.3	8.79	0.25	A	
	No Dev - Year of Opening [2024]									
Stream B-AC	0.5	13.43	0.35	B	1.86	1.2	18.25	0.54	C	3.86
Stream C-AB	0.2	7.21	0.16	A		0.4	8.89	0.25	A	
	No Dev - Year of Opening+5 [2029]									
Stream B-AC	0.7	15.59	0.41	C	2.11	1.6	23.17	0.62	C	4.71
Stream C-AB	0.2	7.60	0.18	A		0.4	9.48	0.29	A	
	No Dev - Year of Opening+15 [2039]									
Stream B-AC	0.8	17.49	0.45	C	2.31	2.0	27.67	0.67	D	5.48
Stream C-AB	0.2	7.78	0.19	A		0.5	9.87	0.31	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

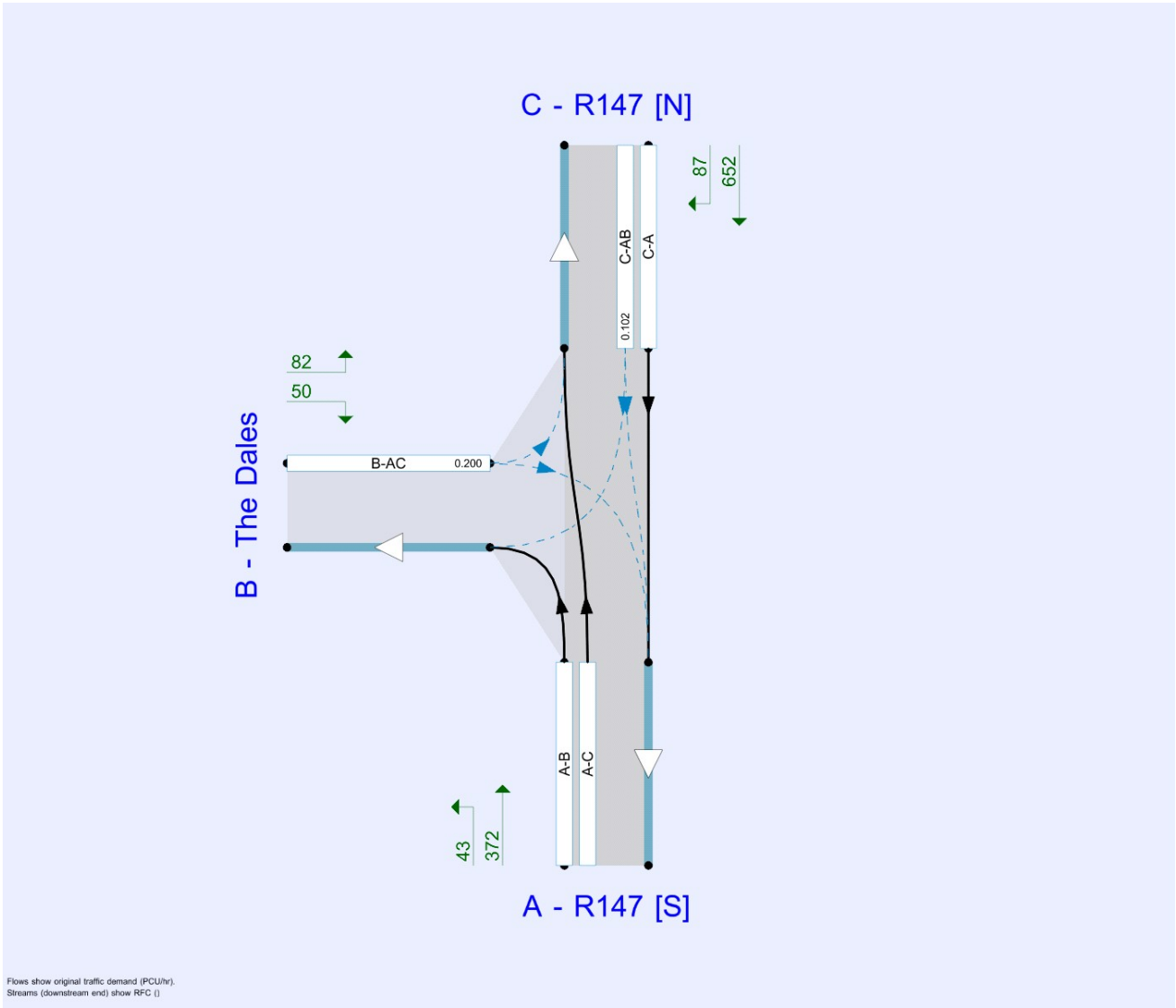
File summary

File Description

Title	
Location	
Site number	
Date	23/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TOBIN\Gabriela.Iha
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓	✓				0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year 2022	AM	ONE HOUR	08:00	09:30	15	✓
D2	Base Year 2022	PM	ONE HOUR	16:30	18:00	15	✓
D3	No Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓
D4	No Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓
D7	No Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓
D8	No Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓
D11	No Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓
D12	No Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Base Year 2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		1.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.83	A

Arms

Arms

Arm	Name	Description	Arm type
A	R147 [S]		Major
B	The Dales		Minor
C	R147 [N]		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R147 [N]	6.40		✓	2.85	185.0	✓	2.60

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 - The Dales	One lane	4.02	26	20

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	546	0.098	0.247	0.156	0.353
B-C	702	0.106	0.267	-	-
C-B	729	0.278	0.278	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year 2022	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	415	100.000
B - The Dales		ONE HOUR	✓	132	100.000
C - R147 [N]		ONE HOUR	✓	739	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	43	372
	B - The Dales	50	0	82
	C - R147 [N]	652	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	2	8
	B - The Dales	0	0	4
	C - R147 [N]	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.34	13.10	0.5	2.4	B	121	182	33.33	11.01	0.37	33.33	11.01
C-AB	0.16	7.17	0.2	0.5	A	80	121	13.69	6.81	0.15	13.69	6.81
C-A						598	897					
A-B						39	59					
A-C						341	512					

Main Results for each time segment

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	99	25	498	0.200	98	0.0	0.3	9.205	A
C-AB	66	16	644	0.102	65	0.0	0.1	6.335	A
C-A	491	123			491				
A-B	32	8			32				
A-C	280	70			280				

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	119	30	469	0.253	118	0.3	0.3	10.505	B
C-AB	79	20	629	0.125	78	0.1	0.1	6.672	A
C-A	586	146			586				
A-B	39	10			39				
A-C	334	84			334				

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	145	36	427	0.340	145	0.3	0.5	13.034	B
C-AB	97	24	609	0.159	97	0.1	0.2	7.166	A
C-A	717	179			717				
A-B	47	12			47				
A-C	410	102			410				

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	145	36	427	0.340	145	0.5	0.5	13.096	B
C-AB	97	24	609	0.159	97	0.2	0.2	7.172	A
C-A	717	179			717				
A-B	47	12			47				
A-C	410	102			410				

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	119	30	469	0.253	119	0.5	0.4	10.571	B
C-AB	79	20	629	0.125	79	0.2	0.1	6.682	A
C-A	586	146			586				
A-B	39	10			39				
A-C	334	84			334				

09:15 - 09:30

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	99	25	498	0.200	100	0.4	0.3	9.272	A
C-AB	66	16	644	0.102	66	0.1	0.1	6.351	A
C-A	491	123			491				
A-B	32	8			32				
A-C	280	70			280				

Queueing Delay Results for each time segment

08:00 - 08:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	3.62	0.24	9.205	A
C-AB	1.71	0.11	6.335	A

08:15 - 08:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.97	0.33	10.505	B
C-AB	2.18	0.15	6.672	A

08:30 - 08:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.44	0.50	13.034	B
C-AB	2.90	0.19	7.166	A

08:45 - 09:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.82	0.52	13.096	B
C-AB	2.92	0.19	7.172	A

09:00 - 09:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	5.49	0.37	10.571	B
C-AB	2.21	0.15	6.682	A

09:15 - 09:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.00	0.27	9.272	A
C-AB	1.75	0.12	6.351	A

Queue Variation Results for each time segment

08:00 - 08:15

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

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.03	0.26	0.52	0.52			N/A	N/A
C-AB	0.19	0.03	0.26	0.47	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.03	0.31	1.43	2.39			N/A	N/A
C-AB	0.19	0.03	0.26	0.47	0.49			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Base Year 2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		3.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.73	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year 2022	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	602	100.000
B - The Dales		ONE HOUR	✓	209	100.000
C - R147 [N]		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	92	510
	B - The Dales	59	0	150
	C - R147 [N]	341	123	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	0	1
	B - The Dales	0	0	0
	C - R147 [N]	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.53	17.51	1.1	4.4	C	192	288	64.54	13.46	0.72	64.55	13.46
C-AB	0.25	8.79	0.3	1.5	A	114	171	23.07	8.08	0.26	23.07	8.09
C-A						312	467					
A-B						84	127					
A-C						468	702					

Main Results for each time segment

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	157	39	507	0.310	156	0.0	0.4	10.188	B
C-AB	93	23	606	0.153	92	0.0	0.2	7.141	A
C-A	256	64			256				
A-B	69	17			69				
A-C	384	96			384				

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	188	47	478	0.393	187	0.4	0.6	12.355	B
C-AB	111	28	584	0.191	111	0.2	0.2	7.771	A
C-A	306	76			306				
A-B	83	21			83				
A-C	458	115			458				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	435	0.528	228	0.6	1.1	17.228	C
C-AB	138	35	556	0.248	138	0.2	0.3	8.768	A
C-A	373	93			373				
A-B	101	25			101				
A-C	562	140			562				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	58	435	0.529	230	1.1	1.1	17.511	C
C-AB	138	35	556	0.248	138	0.3	0.3	8.786	A
C-A	373	93			373				
A-B	101	25			101				
A-C	562	140			562				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	188	47	478	0.393	190	1.1	0.7	12.578	B
C-AB	111	28	583	0.191	112	0.3	0.2	7.791	A
C-A	306	76			306				
A-B	83	21			83				
A-C	458	115			458				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	507	0.310	158	0.7	0.5	10.343	B
C-AB	93	23	606	0.153	93	0.2	0.2	7.167	A
C-A	256	64			256				
A-B	69	17			69				
A-C	384	96			384				

Queueing Delay Results for each time segment

16:30 - 16:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	6.30	0.42	10.188	B
C-AB	2.73	0.18	7.141	A

16:45 - 17:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	9.13	0.61	12.355	B
C-AB	3.61	0.24	7.771	A

17:00 - 17:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	15.14	1.01	17.228	C
C-AB	5.08	0.34	8.768	A

17:15 - 17:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	16.36	1.09	17.511	C
C-AB	5.15	0.34	8.786	A

17:30 - 17:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	10.47	0.70	12.578	B
C-AB	3.69	0.25	7.791	A

17:45 - 18:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.12	0.47	10.343	B
C-AB	2.81	0.19	7.167	A

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.16	0.91	1.38	1.44			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.08	0.03	0.27	1.08	1.95			N/A	N/A
C-AB	0.34	0.03	0.26	0.47	0.50			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.10	0.03	0.29	1.16	4.37			N/A	N/A
C-AB	0.34	0.03	0.32	1.18	1.49			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.06	0.66	1.40	1.49			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.39	1.25	1.40			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

No Dev - Year of Opening [2024], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		1.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.86	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	No Dev - Year of Opening [2024]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	423	100.000
B - The Dales		ONE HOUR	✓	134	100.000
C - R147 [N]		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	44	379
	B - The Dales	51	0	83
	C - R147 [N]	664	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	2	8
	B - The Dales	0	0	4
	C - R147 [N]	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.35	13.43	0.5	2.5	B	123	184	34.47	11.21	0.38	34.48	11.22
C-AB	0.16	7.21	0.2	0.5	A	81	122	13.93	6.85	0.15	13.93	6.85
C-A						609	913					
A-B						40	61					
A-C						348	522					

Main Results for each time segment

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	101	25	495	0.204	100	0.0	0.3	9.310	A
C-AB	66	17	642	0.103	66	0.0	0.1	6.364	A
C-A	500	125			500				
A-B	33	8			33				
A-C	285	71			285				

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	120	30	465	0.259	120	0.3	0.4	10.672	B
C-AB	80	20	627	0.127	79	0.1	0.1	6.706	A
C-A	597	149			597				
A-B	40	10			40				
A-C	341	85			341				

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	148	37	422	0.350	147	0.4	0.5	13.357	B
C-AB	98	25	607	0.162	98	0.1	0.2	7.212	A
C-A	730	182			730				
A-B	48	12			48				
A-C	417	104			417				

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	148	37	422	0.350	148	0.5	0.5	13.431	B
C-AB	98	25	607	0.161	98	0.2	0.2	7.215	A
C-A	730	182			730				
A-B	48	12			48				
A-C	417	104			417				

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	120	30	465	0.259	121	0.5	0.4	10.745	B
C-AB	80	20	627	0.127	80	0.2	0.2	6.716	A
C-A	597	149			597				
A-B	40	10			40				
A-C	341	85			341				

09:15 - 09:30

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	101	25	495	0.204	101	0.4	0.3	9.380	A
C-AB	66	17	642	0.103	67	0.2	0.1	6.379	A
C-A	500	125			500				
A-B	33	8			33				
A-C	285	71			285				

Queueing Delay Results for each time segment

08:00 - 08:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	3.72	0.25	9.310	A
C-AB	1.74	0.12	6.364	A

08:15 - 08:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	5.12	0.34	10.672	B
C-AB	2.22	0.15	6.706	A

08:30 - 08:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.73	0.52	13.357	B
C-AB	2.96	0.20	7.212	A

08:45 - 09:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	8.13	0.54	13.431	B
C-AB	2.98	0.20	7.215	A

09:00 - 09:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	5.67	0.38	10.745	B
C-AB	2.25	0.15	6.716	A

09:15 - 09:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.11	0.27	9.380	A
C-AB	1.78	0.12	6.379	A

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.03	0.26	0.54	0.54			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.03	0.31	1.44	2.51			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

No Dev - Year of Opening [2024], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		3.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.86	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	No Dev - Year of Opening [2024]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	613	100.000
B - The Dales		ONE HOUR	✓	213	100.000
C - R147 [N]		ONE HOUR	✓	472	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	94	519
	B - The Dales	60	0	153
	C - R147 [N]	347	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	0	1
	B - The Dales	0	0	0
	C - R147 [N]	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.54	18.25	1.2	4.6	C	195	293	67.71	13.86	0.75	67.72	13.86
C-AB	0.25	8.89	0.4	1.5	A	116	174	23.73	8.17	0.26	23.73	8.17
C-A						317	475					
A-B						86	129					
A-C						476	714					

Main Results for each time segment

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	160	40	505	0.318	159	0.0	0.5	10.345	B
C-AB	94	24	603	0.157	94	0.0	0.2	7.193	A
C-A	261	65			261				
A-B	71	18			71				
A-C	391	98			391				

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	191	48	475	0.403	191	0.5	0.7	12.643	B
C-AB	113	28	581	0.195	113	0.2	0.2	7.840	A
C-A	311	78			311				
A-B	85	21			85				
A-C	467	117			467				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	431	0.544	233	0.7	1.1	17.923	C
C-AB	141	35	554	0.254	140	0.2	0.3	8.874	A
C-A	379	95			379				
A-B	103	26			103				
A-C	571	143			571				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	235	59	431	0.544	234	1.1	1.2	18.253	C
C-AB	141	35	554	0.254	141	0.3	0.4	8.890	A
C-A	379	95			379				
A-B	103	26			103				
A-C	571	143			571				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	191	48	474	0.404	193	1.2	0.7	12.892	B
C-AB	113	28	581	0.195	114	0.4	0.3	7.862	A
C-A	311	78			311				
A-B	85	21			85				
A-C	467	117			467				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	505	0.318	161	0.7	0.5	10.512	B
C-AB	94	24	603	0.157	95	0.3	0.2	7.220	A
C-A	261	65			261				
A-B	71	18			71				
A-C	391	98			391				

Queueing Delay Results for each time segment

16:30 - 16:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	6.52	0.43	10.345	B
C-AB	2.80	0.19	7.193	A

16:45 - 17:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	9.50	0.63	12.643	B
C-AB	3.70	0.25	7.840	A

17:00 - 17:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	15.99	1.07	17.923	C
C-AB	5.24	0.35	8.874	A

17:15 - 17:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	17.35	1.16	18.253	C
C-AB	5.32	0.35	8.890	A

17:30 - 17:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	10.96	0.73	12.892	B
C-AB	3.79	0.25	7.862	A

17:45 - 18:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.39	0.49	10.512	B
C-AB	2.88	0.19	7.220	A

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.17	0.91	1.38	1.44			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.14	0.03	0.27	1.14	2.66			N/A	N/A
C-AB	0.35	0.03	0.26	0.47	0.50			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.17	0.03	0.29	1.19	4.62			N/A	N/A
C-AB	0.35	0.03	0.32	1.21	1.53			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.06	0.66	1.26	1.26			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.39	1.28	1.43			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

No Dev - Year of Opening+5 [2029], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		2.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	No Dev - Year of Opening+5 [2029]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	468	100.000
B - The Dales		ONE HOUR	✓	147	100.000
C - R147 [N]		ONE HOUR	✓	827	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	48	420
	B - The Dales	55	0	92
	C - R147 [N]	730	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	3	9
	B - The Dales	0	0	4
	C - R147 [N]	4	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.41	15.59	0.7	3.3	C	135	202	42.12	12.49	0.47	42.12	12.49
C-AB	0.18	7.60	0.2	1.0	A	90	135	16.19	7.20	0.18	16.19	7.20
C-A						669	1003					
A-B						44	66					
A-C						385	578					

Main Results for each time segment

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	111	28	481	0.230	109	0.0	0.3	9.897	A
C-AB	73	18	634	0.116	73	0.0	0.1	6.604	A
C-A	549	137			549				
A-B	36	9			36				
A-C	316	79			316				

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	132	33	448	0.295	132	0.3	0.4	11.677	B
C-AB	88	22	617	0.142	88	0.1	0.2	7.001	A
C-A	656	164			656				
A-B	43	11			43				
A-C	378	94			378				

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	162	40	398	0.406	161	0.4	0.7	15.459	C
C-AB	109	27	597	0.182	109	0.2	0.2	7.587	A
C-A	802	200			802				
A-B	53	13			53				
A-C	462	116			462				

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	162	40	398	0.406	162	0.7	0.7	15.592	C
C-AB	109	27	597	0.182	109	0.2	0.2	7.596	A
C-A	802	200			802				
A-B	53	13			53				
A-C	462	116			462				

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	132	33	447	0.295	133	0.7	0.4	11.773	B
C-AB	88	22	617	0.142	88	0.2	0.2	7.013	A
C-A	656	164			656				
A-B	43	11			43				
A-C	378	94			378				

09:15 - 09:30

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	111	28	481	0.230	111	0.4	0.3	9.993	A
C-AB	73	18	634	0.116	73	0.2	0.1	6.620	A
C-A	549	137			549				
A-B	36	9			36				
A-C	316	79			316				

Queueing Delay Results for each time segment

08:00 - 08:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.32	0.29	9.897	A
C-AB	1.99	0.13	6.604	A

08:15 - 08:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	6.10	0.41	11.677	B
C-AB	2.57	0.17	7.001	A

08:30 - 08:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	9.70	0.65	15.459	C
C-AB	3.47	0.23	7.587	A

08:45 - 09:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	10.32	0.69	15.592	C
C-AB	3.50	0.23	7.596	A

09:00 - 09:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	6.85	0.46	11.773	B
C-AB	2.61	0.17	7.013	A

09:15 - 09:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.82	0.32	9.993	A
C-AB	2.04	0.14	6.620	A

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.03	0.27	0.68	0.68			N/A	N/A
C-AB	0.23	0.03	0.26	0.47	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.03	0.30	1.46	3.27			N/A	N/A
C-AB	0.23	0.03	0.28	0.51	0.98			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.03	0.34	1.10	1.32			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.03	0.27	0.48	0.50			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

No Dev - Year of Opening+5 [2029], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		4.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.71	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	No Dev - Year of Opening+5 [2029]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	669	100.000
B - The Dales		ONE HOUR	✓	231	100.000
C - R147 [N]		ONE HOUR	✓	515	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	102	567
	B - The Dales	65	0	166
	C - R147 [N]	379	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	0	2
	B - The Dales	0	0	0
	C - R147 [N]	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.62	23.17	1.6	6.8	C	212	318	86.39	16.30	0.96	86.41	16.31
C-AB	0.29	9.48	0.4	1.6	A	127	191	27.57	8.67	0.31	27.57	8.68
C-A						345	518					
A-B						94	140					
A-C						520	780					

Main Results for each time segment

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	174	43	491	0.354	172	0.0	0.5	11.211	B
C-AB	103	26	593	0.174	102	0.0	0.2	7.472	A
C-A	285	71			285				
A-B	77	19			77				
A-C	427	107			427				

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	208	52	457	0.454	207	0.5	0.8	14.288	B
C-AB	124	31	569	0.217	123	0.2	0.3	8.231	A
C-A	339	85			339				
A-B	92	23			92				
A-C	510	127			510				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	409	0.622	251	0.8	1.5	22.401	C
C-AB	155	39	542	0.285	154	0.3	0.4	9.457	A
C-A	412	103			412				
A-B	112	28			112				
A-C	624	156			624				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	409	0.622	254	1.5	1.6	23.169	C
C-AB	155	39	542	0.285	155	0.4	0.4	9.480	A
C-A	412	103			412				
A-B	112	28			112				
A-C	624	156			624				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	208	52	457	0.454	211	1.6	0.9	14.766	B
C-AB	124	31	569	0.217	124	0.4	0.3	8.260	A
C-A	339	85			339				
A-B	92	23			92				
A-C	510	127			510				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	491	0.355	175	0.9	0.6	11.455	B
C-AB	103	26	593	0.174	103	0.3	0.2	7.505	A
C-A	285	71			285				
A-B	77	19			77				
A-C	427	107			427				

Queueing Delay Results for each time segment

16:30 - 16:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.62	0.51	11.211	B
C-AB	3.17	0.21	7.472	A

16:45 - 17:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	11.54	0.77	14.288	B
C-AB	4.26	0.28	8.231	A

17:00 - 17:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	21.16	1.41	22.401	C
C-AB	6.20	0.41	9.457	A

17:15 - 17:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	23.60	1.57	23.169	C
C-AB	6.30	0.42	9.480	A

17:30 - 17:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	13.69	0.91	14.766	B
C-AB	4.37	0.29	8.260	A

17:45 - 18:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	8.78	0.59	11.455	B
C-AB	3.27	0.22	7.505	A

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.14	0.91	1.42	1.48			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.55	0.03	0.29	1.55	6.77			N/A	N/A
C-AB	0.41	0.03	0.26	0.47	0.50			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.59	0.03	0.29	1.59	6.66			N/A	N/A
C-AB	0.42	0.03	0.32	1.34	1.63			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.86	0.05	0.60	1.67	2.28			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.04	0.38	1.50	1.73			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

No Dev - Year of Opening+15 [2039], AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		2.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	No Dev - Year of Opening+15 [2039]	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	496	100.000
B - The Dales		ONE HOUR	✓	155	100.000
C - R147 [N]		ONE HOUR	✓	870	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	51	445
	B - The Dales	58	0	97
	C - R147 [N]	769	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	3	9
	B - The Dales	0	0	5
	C - R147 [N]	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.45	17.49	0.8	3.8	C	142	213	48.25	13.57	0.54	48.25	13.57
C-AB	0.19	7.78	0.2	1.1	A	94	141	17.28	7.36	0.19	17.28	7.36
C-A						704	1057					
A-B						47	70					
A-C						408	613					

Main Results for each time segment

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	117	29	472	0.247	115	0.0	0.3	10.377	B
C-AB	76	19	628	0.122	76	0.0	0.1	6.703	A
C-A	579	145			579				
A-B	38	10			38				
A-C	335	84			335				

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	139	35	436	0.320	139	0.3	0.5	12.472	B
C-AB	92	23	611	0.150	91	0.1	0.2	7.134	A
C-A	690	173			690				
A-B	46	11			46				
A-C	400	100			400				

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	171	43	383	0.446	169	0.5	0.8	17.282	C
C-AB	114	28	591	0.193	113	0.2	0.2	7.766	A
C-A	844	211			844				
A-B	56	14			56				
A-C	490	122			490				

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	171	43	383	0.446	171	0.8	0.8	17.489	C
C-AB	114	28	591	0.193	114	0.2	0.2	7.776	A
C-A	844	211			844				
A-B	56	14			56				
A-C	490	122			490				

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	139	35	436	0.320	141	0.8	0.5	12.628	B
C-AB	92	23	611	0.150	92	0.2	0.2	7.147	A
C-A	690	173			690				
A-B	46	11			46				
A-C	400	100			400				

09:15 - 09:30

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	117	29	471	0.248	117	0.5	0.3	10.495	B
C-AB	76	19	628	0.122	77	0.2	0.1	6.723	A
C-A	579	145			579				
A-B	38	10			38				
A-C	335	84			335				

Queueing Delay Results for each time segment

08:00 - 08:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	4.76	0.32	10.377	B
C-AB	2.11	0.14	6.703	A

08:15 - 08:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	6.85	0.46	12.472	B
C-AB	2.73	0.18	7.134	A

08:30 - 08:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	11.33	0.76	17.282	C
C-AB	3.73	0.25	7.766	A

08:45 - 09:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	12.16	0.81	17.489	C
C-AB	3.77	0.25	7.776	A

09:00 - 09:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	7.79	0.52	12.628	B
C-AB	2.78	0.19	7.147	A

09:15 - 09:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	5.35	0.36	10.495	B
C-AB	2.16	0.14	6.723	A

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.80	0.03	0.27	0.80	0.80			N/A	N/A
C-AB	0.25	0.03	0.26	0.47	0.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.82	0.03	0.30	1.47	3.81			N/A	N/A
C-AB	0.25	0.03	0.29	0.72	1.14			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.04	0.43	1.29	1.42			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.30	0.80	1.17			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

No Dev - Year of Opening+15 [2039], PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	R147/ The Dales	T-Junction	Two-way	Two-way	Two-way		5.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.48	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	No Dev - Year of Opening+15 [2039]	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R147 [S]		ONE HOUR	✓	702	100.000
B - The Dales		ONE HOUR	✓	242	100.000
C - R147 [N]		ONE HOUR	✓	541	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	107	595
	B - The Dales	68	0	174
	C - R147 [N]	398	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R147 [S]	B - The Dales	C - R147 [N]
From	A - R147 [S]	0	0	2
	B - The Dales	0	0	0
	C - R147 [N]	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.67	27.67	2.0	9.7	D	222	333	101.70	18.32	1.13	101.73	18.32
C-AB	0.31	9.87	0.5	1.9	A	134	201	30.27	9.01	0.34	30.27	9.01
C-A						362	543					
A-B						98	147					
A-C						546	819					

Main Results for each time segment

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	182	46	482	0.378	180	0.0	0.6	11.804	B
C-AB	108	27	587	0.185	107	0.0	0.2	7.650	A
C-A	299	75			299				
A-B	81	20			81				
A-C	448	112			448				

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	218	54	447	0.487	216	0.6	0.9	15.506	C
C-AB	131	33	563	0.232	130	0.2	0.3	8.483	A
C-A	356	89			356				
A-B	96	24			96				
A-C	535	134			535				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	266	67	396	0.674	263	0.9	1.9	26.293	D
C-AB	164	41	536	0.306	163	0.3	0.5	9.837	A
C-A	432	108			432				
A-B	118	29			118				
A-C	655	164			655				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	266	67	395	0.674	266	1.9	2.0	27.666	D
C-AB	164	41	536	0.306	164	0.5	0.5	9.868	A
C-A	432	108			432				
A-B	118	29			118				
A-C	655	164			655				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	218	54	447	0.487	222	2.0	1.0	16.242	C
C-AB	131	33	563	0.232	131	0.5	0.3	8.519	A
C-A	356	89			356				
A-B	96	24			96				
A-C	535	134			535				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	182	46	482	0.378	184	1.0	0.6	12.112	B
C-AB	108	27	587	0.185	109	0.3	0.2	7.690	A
C-A	299	75			299				
A-B	81	20			81				
A-C	448	112			448				

Queueing Delay Results for each time segment

16:30 - 16:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	8.38	0.56	11.804	B
C-AB	3.42	0.23	7.650	A

16:45 - 17:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	13.03	0.87	15.506	C
C-AB	4.64	0.31	8.483	A

17:00 - 17:15

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	25.52	1.70	26.293	D
C-AB	6.88	0.46	9.837	A

17:15 - 17:30

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	29.18	1.95	27.666	D
C-AB	7.02	0.47	9.868	A

17:30 - 17:45

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	15.83	1.06	16.242	C
C-AB	4.78	0.32	8.519	A

17:45 - 18:00

Stream	Queueing total delay (PCU-min)	Queueing rate of delay (PCU-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-AC	9.76	0.65	12.112	B
C-AB	3.53	0.24	7.690	A

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.12	0.94	1.23	1.65			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.90	0.03	0.31	3.12	9.72			N/A	N/A
C-AB	0.46	0.03	0.26	0.47	0.50			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.98	0.03	0.30	1.98	8.96			N/A	N/A
C-AB	0.46	0.03	0.32	1.41	1.92			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.98	0.05	0.49	2.13	3.18			N/A	N/A
C-AB	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.04	0.36	1.38	2.31			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

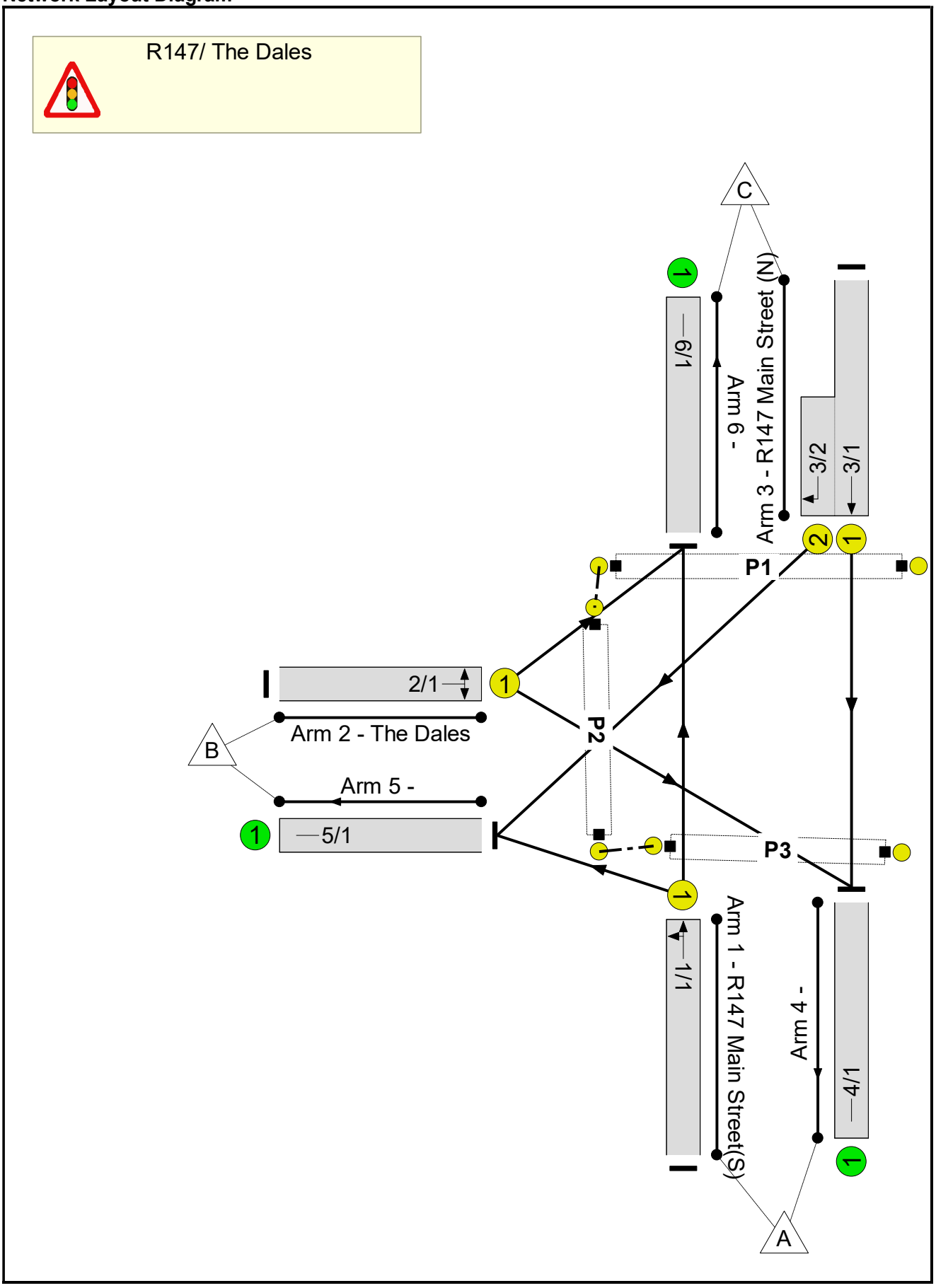
Appendix C LINSIG DETAILED OUTPUT - JUNCTION 2

Full Input Data And Results

User and Project Details

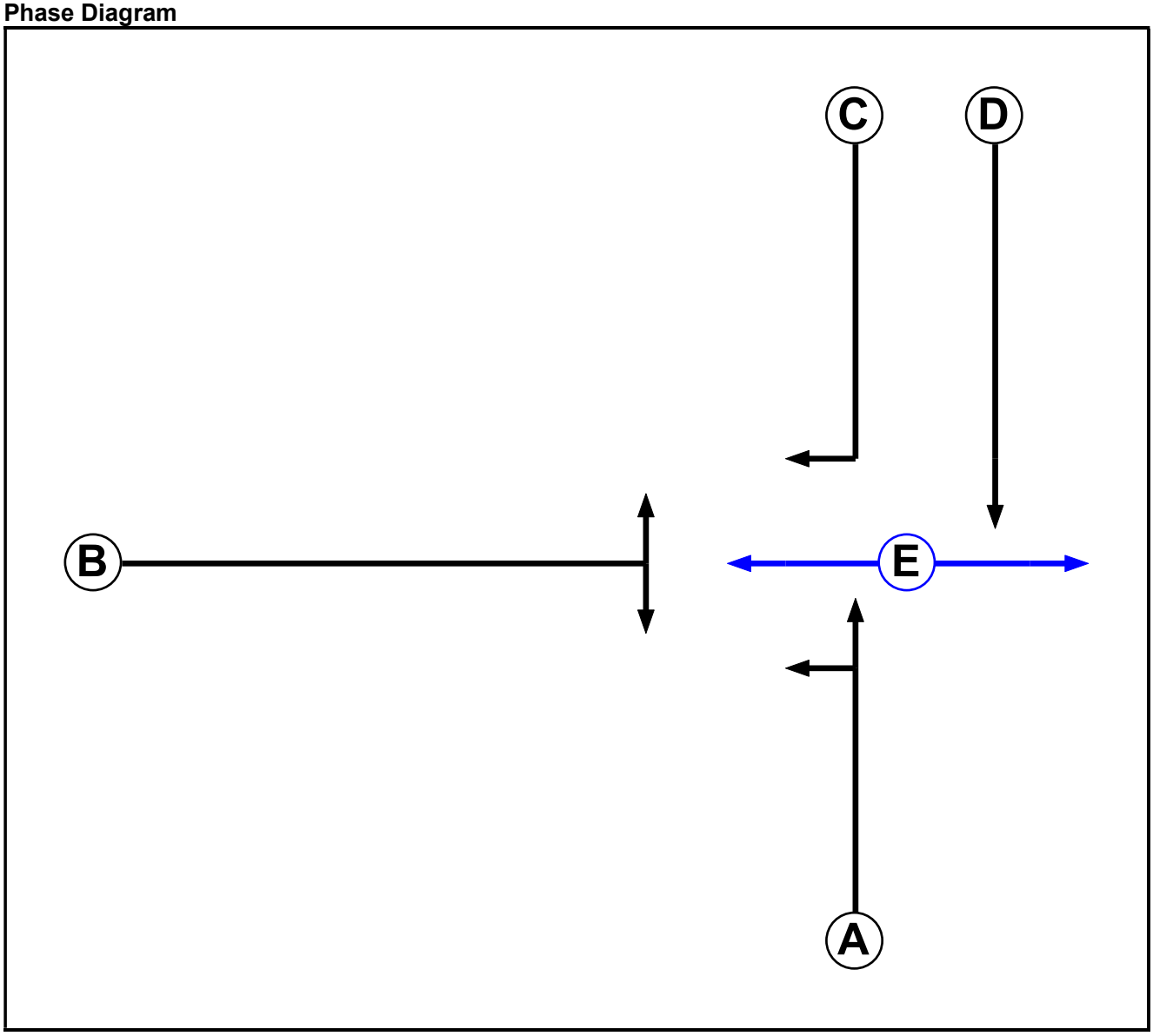
Project:	
Title:	
Location:	
Additional detail:	
File name:	Proposed Junction The Dales D03.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7

Full Input Data And Results

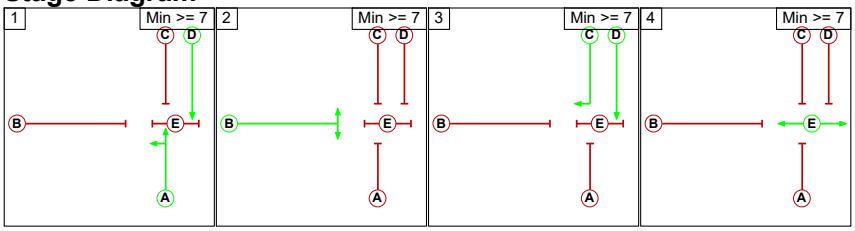
Phase Intergreens Matrix

		Starting Phase				
		A	B	C	D	E
Terminating Phase	A		5	5	-	7
	B	5		5	5	8
	C	5	5		-	8
	D	-	5	-		8
	E	10	10	10	10	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	B
3	C D
4	E

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		5	5	8
	2	5		5	8
	3	5	5		8
	4	10	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: R147/ The Dales
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: R147/ The Dales												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (R147 Main Street(S))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Left	5.00
											Arm 6 Ahead	Inf
2/1 (The Dales)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right	3.80
											Arm 6 Left	2.75
3/1 (R147 Main Street (N))	U	D	2	3	9.9	Geom	-	3.10	0.00	Y	Arm 4 Ahead	Inf
3/2 (R147 Main Street (N))	U	C	2	3	5.3	Geom	-	3.20	0.00	Y	Arm 5 Right	3.80
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Year of Opening'	08:15	09:15	01:00	
2: 'Year of Opening'	16:45	17:45	01:00	
3: 'Year of Opening+5'	08:15	09:15	01:00	
4: 'Year of Opening+5'	16:45	17:45	01:00	
5: 'Year of Opening+15'	08:15	09:15	01:00	
6: 'Year of Opening+15'	16:45	17:45	01:00	
7: 'Flow Group 7'	08:00	09:00	01:00	

Scenario 1: 'Year of Opening AM' (FG1: 'Year of Opening', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	44	379	423
	B	51	0	83	134
	C	664	88	0	752
	Tot.	715	132	462	1309

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Year of Opening AM
Junction: R147/ The Dales	
1/1	423
2/1	134
3/1 (with short)	752(In) 664(Out)
3/2 (short)	88
4/1	715
5/1	132
6/1	462

Lane Saturation Flows

Junction: R147/ The Dales

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	10.4 %	1886	1886
				Arm 6 Ahead	Inf	89.6 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	38.1 %	1287	1287
				Arm 6 Left	2.75	61.9 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Year of Opening PM' (FG2: 'Year of Opening', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	94	519	613
	B	60	0	153	213
	C	347	125	0	472
	Tot.	407	219	672	1298

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: Year of Opening PM
Junction: R147/ The Dales	
1/1	613
2/1	213
3/1 (with short)	472(In) 347(Out)
3/2 (short)	125
4/1	407
5/1	219
6/1	672

Lane Saturation Flows

Junction: R147/ The Dales								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	15.3 %	1859	1859
				Arm 6 Ahead	Inf	84.7 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	28.2 %	1274	1274
				Arm 6 Left	2.75	71.8 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Year of Opening+5 AM' (FG3: 'Year of Opening+5', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	48	420	468
	B	55	0	92	147
	C	730	97	0	827
	Tot.	785	145	512	1442

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: Year of Opening+5 AM
Junction: R147/ The Dales	
1/1	468
2/1	147
3/1 (with short)	827(In) 730(Out)
3/2 (short)	97
4/1	785
5/1	145
6/1	512

Lane Saturation Flows

Junction: R147/ The Dales								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	10.3 %	1887	1887
				Arm 6 Ahead	Inf	89.7 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	37.4 %	1286	1286
				Arm 6 Left	2.75	62.6 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Year of Opening+5 PM' (FG4: 'Year of Opening+5', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	102	567	669
	B	65	0	166	231
	C	379	136	0	515
	Tot.	444	238	733	1415

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: Year of Opening+5 PM
Junction: R147/ The Dales	
1/1	669
2/1	231
3/1 (with short)	515(In) 379(Out)
3/2 (short)	136
4/1	444
5/1	238
6/1	733

Lane Saturation Flows

Junction: R147/ The Dales								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	15.2 %	1860	1860
				Arm 6 Ahead	Inf	84.8 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	28.1 %	1274	1274
				Arm 6 Left	2.75	71.9 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'Year of Opening+15 AM' (FG5: 'Year of Opening+15', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	53	465	518
	B	60	0	101	161
	C	801	105	0	906
	Tot.	861	158	566	1585

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: Year of Opening+15 AM
Junction: R147/ The Dales	
1/1	518
2/1	161
3/1 (with short)	906(In) 801(Out)
3/2 (short)	105
4/1	861
5/1	158
6/1	566

Lane Saturation Flows

Junction: R147/ The Dales								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	10.2 %	1887	1887
				Arm 6 Ahead	Inf	89.8 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	37.3 %	1286	1286
				Arm 6 Left	2.75	62.7 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'Year of Opening+15 PM' (FG6: 'Year of Opening+15', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	111	618	729
	B	71	0	180	251
	C	413	149	0	562
	Tot.	484	260	798	1542

Full Input Data And Results

Traffic Lane Flows

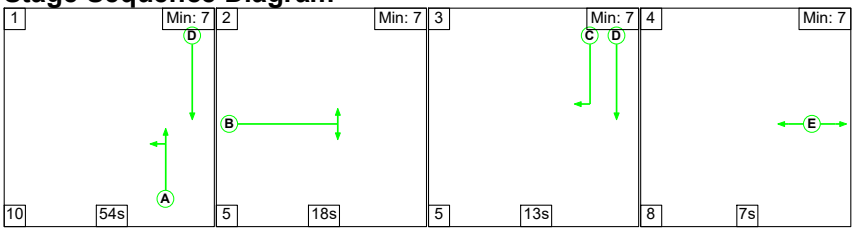
Lane	Scenario 6: Year of Opening+15 PM
Junction: R147/ The Dales	
1/1	729
2/1	251
3/1 (with short)	562(In) 413(Out)
3/2 (short)	149
4/1	484
5/1	260
6/1	798

Lane Saturation Flows

Junction: R147/ The Dales								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (R147 Main Street(S))	3.30	0.00	Y	Arm 5 Left	5.00	15.2 %	1860	1860
				Arm 6 Ahead	Inf	84.8 %		
2/1 (The Dales)	3.00	0.00	Y	Arm 4 Right	3.80	28.3 %	1274	1274
				Arm 6 Left	2.75	71.7 %		
3/1 (R147 Main Street (N))	3.10	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1925	1925
3/2 (R147 Main Street (N))	3.20	0.00	Y	Arm 5 Right	3.80	100.0 %	1387	1387
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Year of Opening AM' (FG1: 'Year of Opening', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

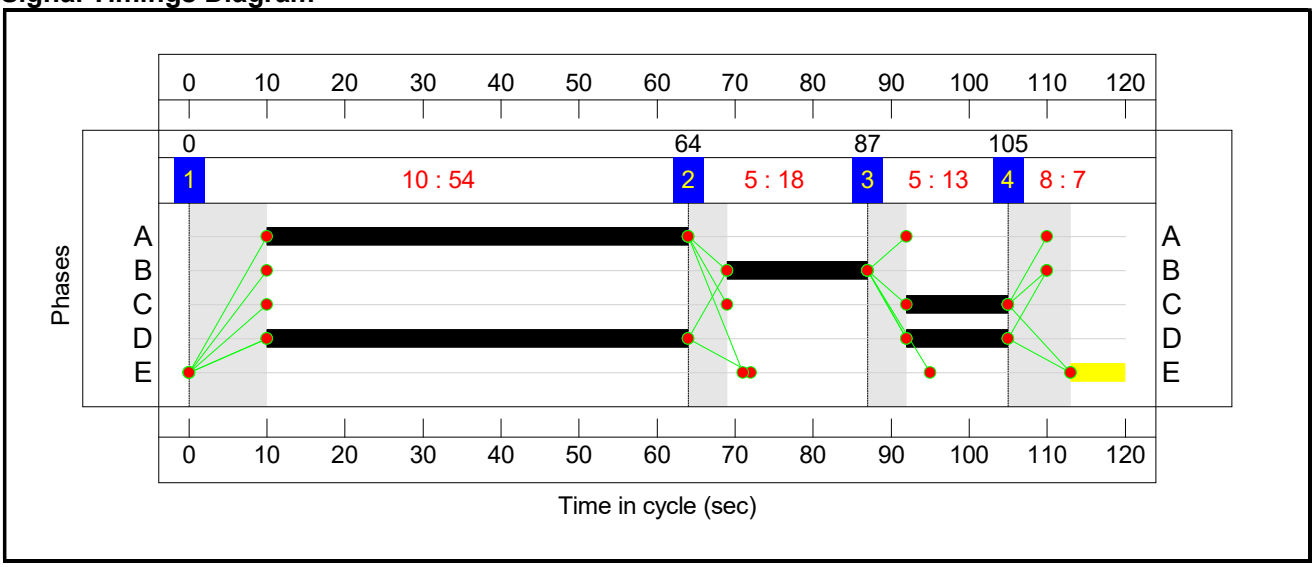


Stage Timings

Stage	1	2	3	4
Duration	54	18	13	7
Change Point	0	64	87	105

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

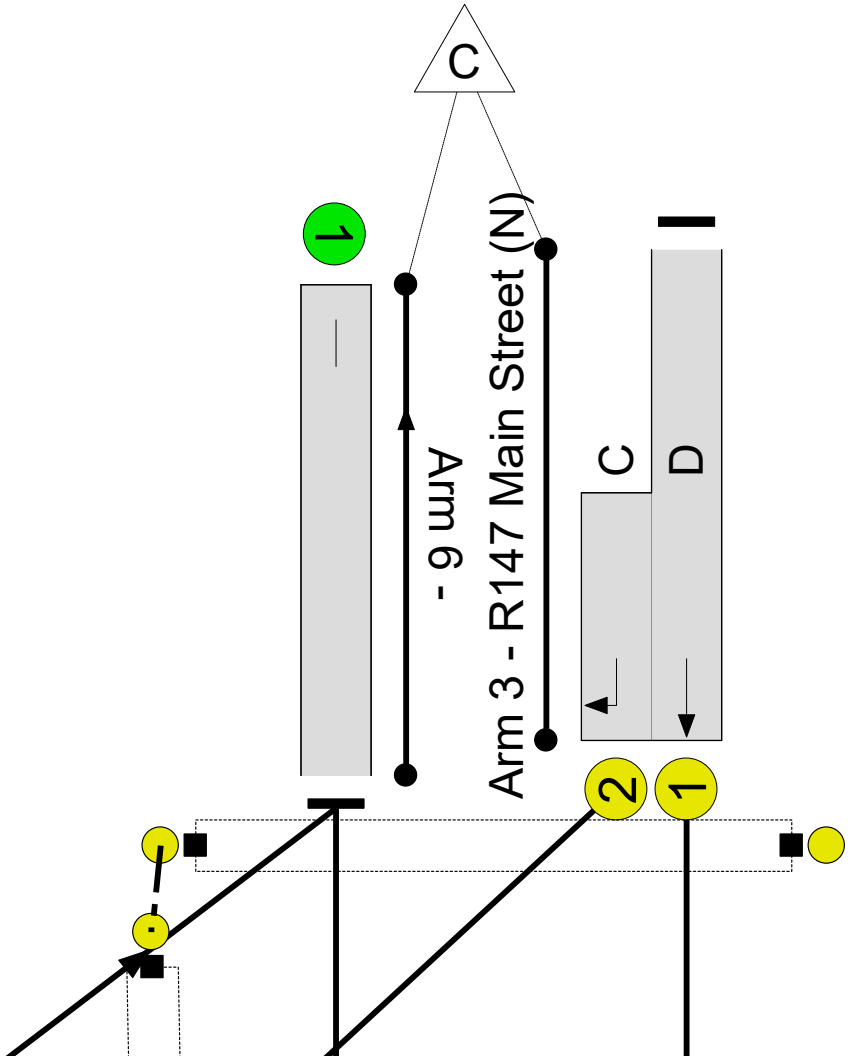
Network Layout Diagram

R147/ The Dales

PRC: 35.8 %

Total Traffic Delay: 9.8 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**66.3%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**66.3%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	54	-	423	1886	864	48.9%
2/1	The Dales Right Left	U	N/A	N/A	B		1	18	-	134	1287	204	65.8%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	67:13	-	752	1925:1387	1002+133	66.3 : 66.3%
4/1		U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**7.4**	**2.4**	**0.0**	**9.8**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**7.4**	**2.4**	**0.0**	**9.8**	**-**	**-**	**-**	**-**
1/1	423	423	-	-	-	2.7	0.5	-	3.1	26.8	9.8	0.5	10.2
2/1	134	134	-	-	-	1.8	0.9	-	2.7	72.6	4.2	0.9	5.1
3/1+3/2	752	752	-	-	-	2.9	1.0	-	3.9	18.8	7.9	1.0	8.8
4/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

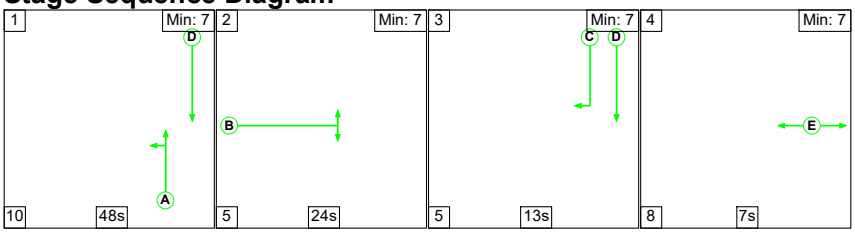
C1 PRC for Signalled Lanes (%): 35.8 Total Delay for Signalled Lanes (pcuHr): 9.77 Cycle Time (s): 120

PRC Over All Lanes (%): 35.8 Total Delay Over All Lanes(pcuHr): 9.77

Full Input Data And Results

Scenario 2: 'Year of Opening PM' (FG2: 'Year of Opening', Plan 1: 'Network Control Plan 1')

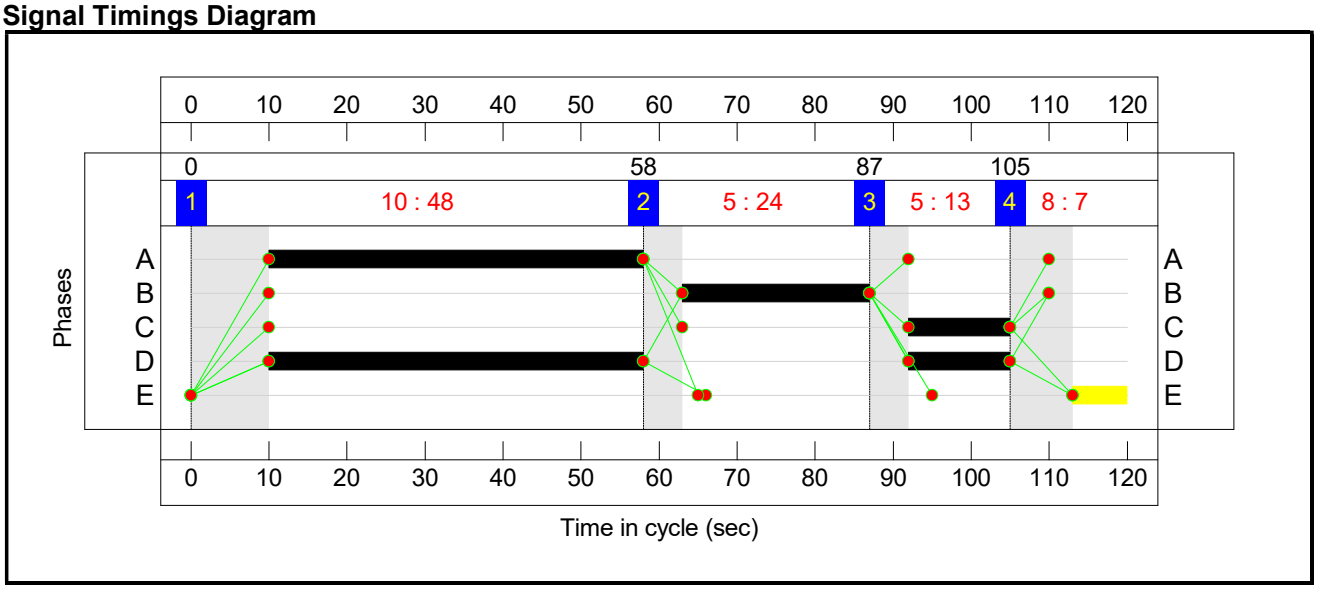
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	48	24	13	7
Change Point	0	58	87	105

Signal Timings Diagram



Full Input Data And Results

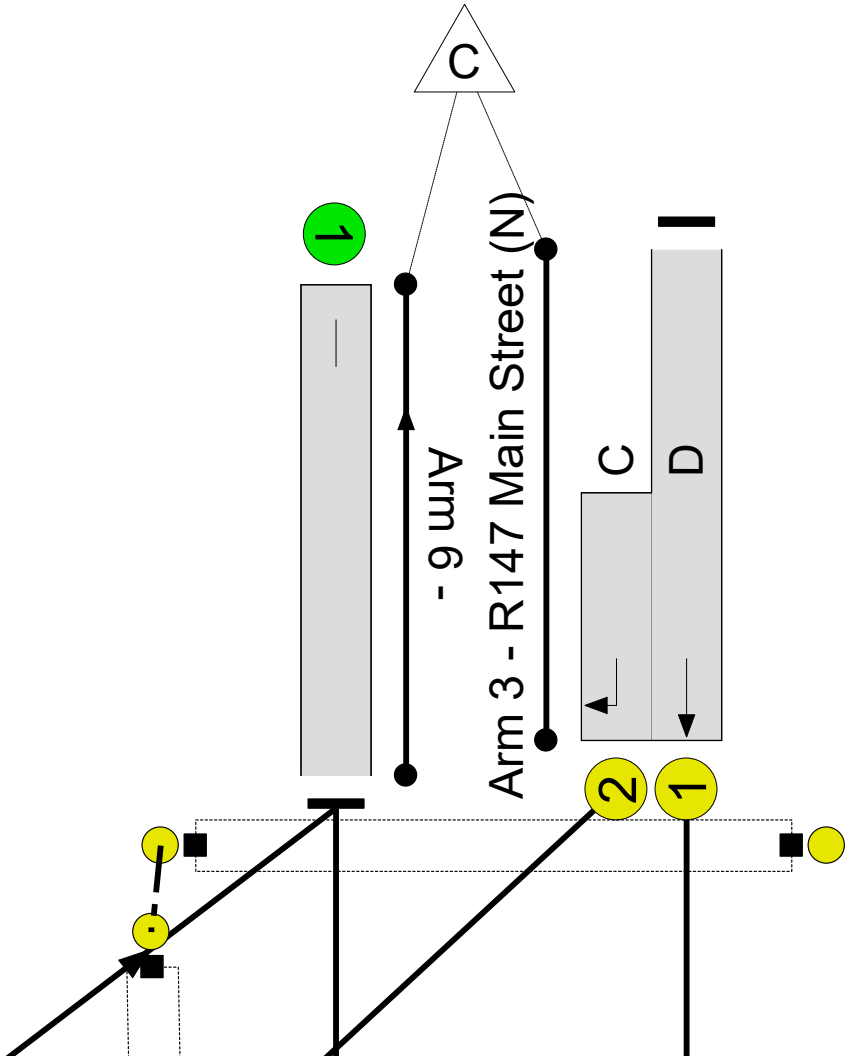
Network Layout Diagram

R147/ The Dales

PRC: 11.4 %

Total Traffic Delay: 16.2 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.8%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.8%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	48	-	613	1859	759	80.8%
2/1	The Dales Right Left	U	N/A	N/A	B		1	24	-	213	1274	265	80.3%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	61:13	-	472	1925:1387	449+162	77.2 : 77.2%
4/1		U	N/A	N/A	-		-	-	-	407	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.6**	**5.6**	**0.0**	**16.2**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**10.6**	**5.6**	**0.0**	**16.2**	**-**	**-**	**-**	**-**
1/1	613	613	-	-	-	5.3	2.0	-	7.4	43.3	17.9	2.0	19.9
2/1	213	213	-	-	-	2.7	1.9	-	4.6	77.2	6.7	1.9	8.6
3/1+3/2	472	472	-	-	-	2.6	1.7	-	4.3	32.5	4.0	1.7	5.7
4/1	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

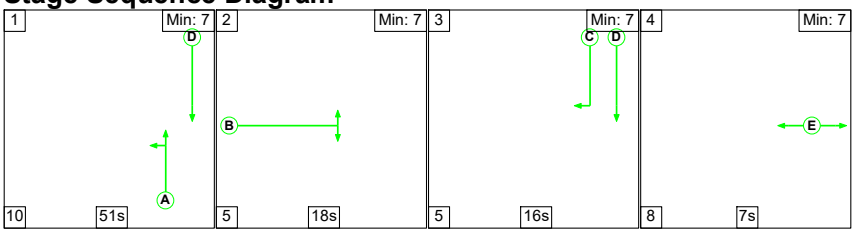
C1 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 16.21 Cycle Time (s): 120

PRC Over All Lanes (%): 11.4 Total Delay Over All Lanes(pcuHr): 16.21

Full Input Data And Results

Scenario 3: 'Year of Opening+5 AM' (FG3: 'Year of Opening+5', Plan 1: 'Network Control Plan 1')

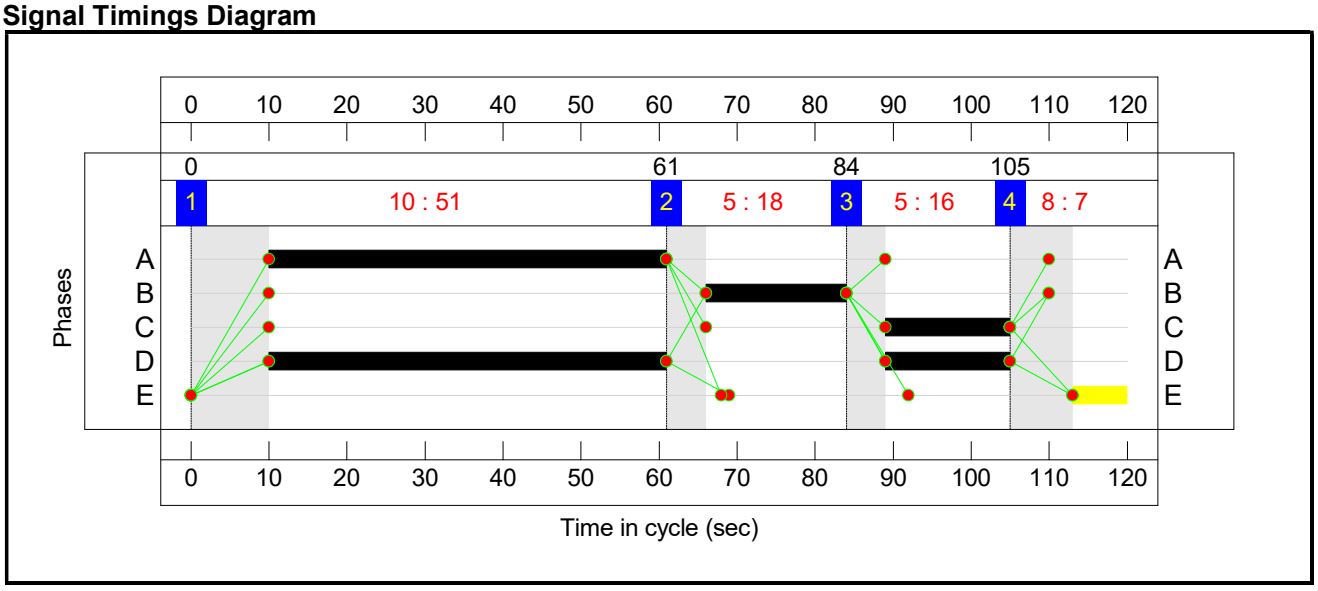
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	51	18	16	7
Change Point	0	61	84	105

Signal Timings Diagram



Full Input Data And Results

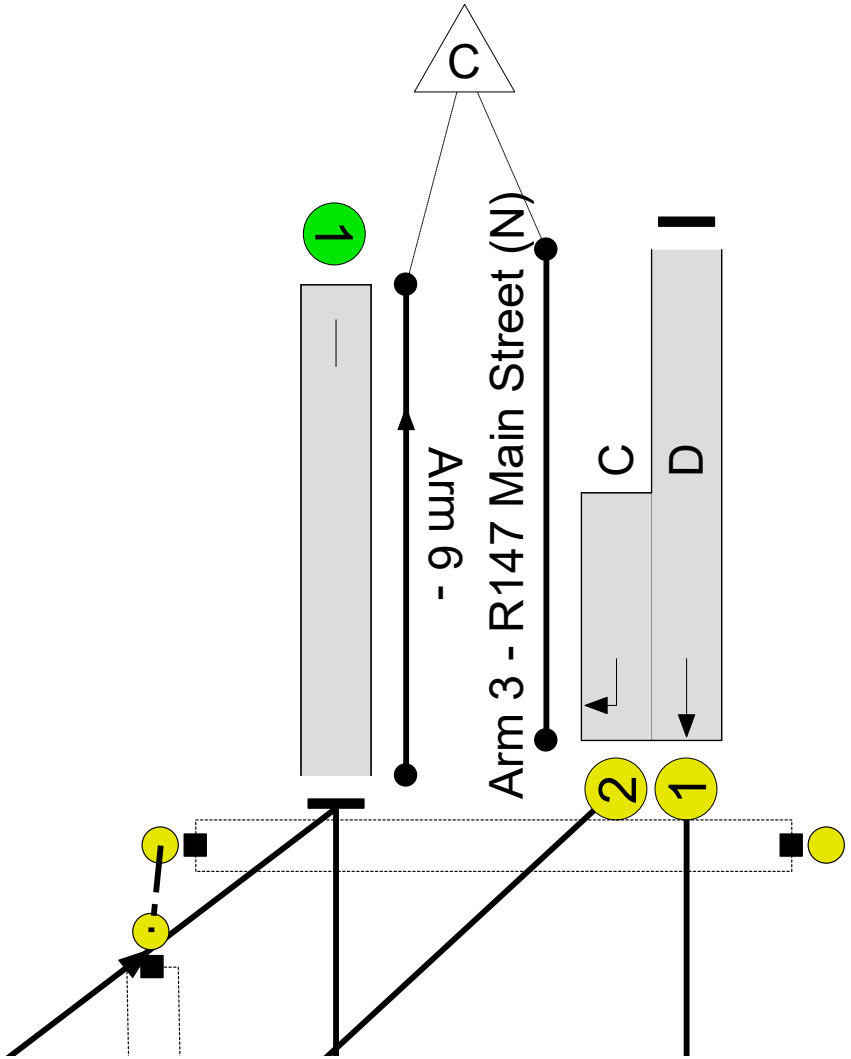
Network Layout Diagram

R147/ The Dales

PRC: 23.5 %

Total Traffic Delay: 11.8 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	51	-	468	1887	818	57.2%
2/1	The Dales Right Left	U	N/A	N/A	B		1	18	-	147	1286	204	72.2%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	67:16	-	827	1925:1387	1002+133	72.9 : 72.9%
4/1		U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**8.5**	**3.2**	**0.0**	**11.8**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**8.5**	**3.2**	**0.0**	**11.8**	**-**	**-**	**-**	**-**
1/1	468	468	-	-	-	3.3	0.7	-	4.0	30.8	11.7	0.7	12.4
2/1	147	147	-	-	-	2.0	1.2	-	3.2	78.4	4.7	1.2	5.9
3/1+3/2	827	827	-	-	-	3.3	1.3	-	4.6	20.0	9.4	1.3	10.7
4/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

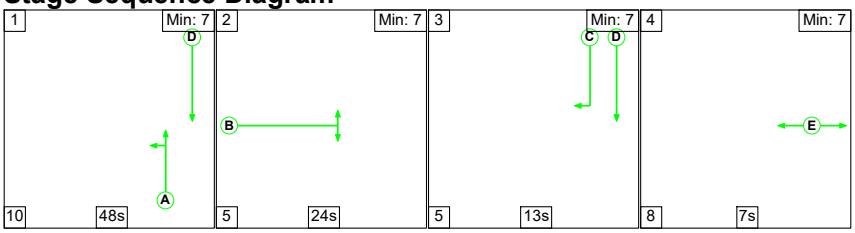
C1 PRC for Signalled Lanes (%): 23.5 Total Delay for Signalled Lanes (pcuHr): 11.79 Cycle Time (s): 120

PRC Over All Lanes (%): 23.5 Total Delay Over All Lanes(pcuHr): 11.79

Full Input Data And Results

Scenario 4: 'Year of Opening+5 PM' (FG4: 'Year of Opening+5', Plan 1: 'Network Control Plan 1')

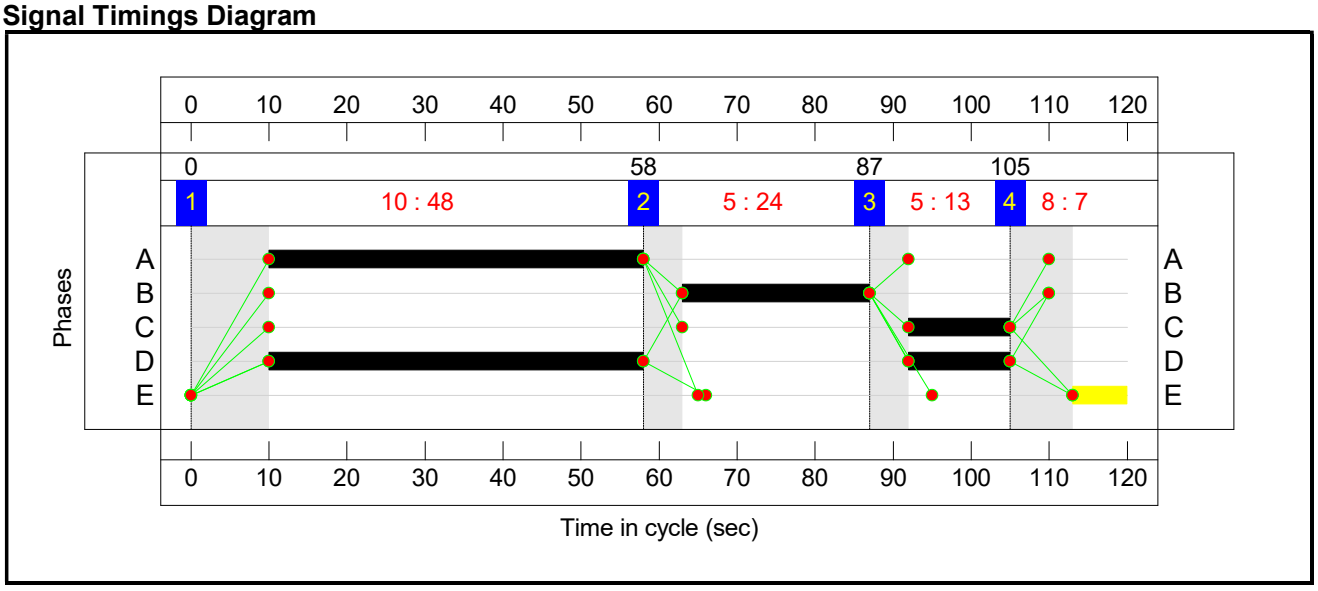
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	48	24	13	7
Change Point	0	58	87	105

Signal Timings Diagram



Full Input Data And Results

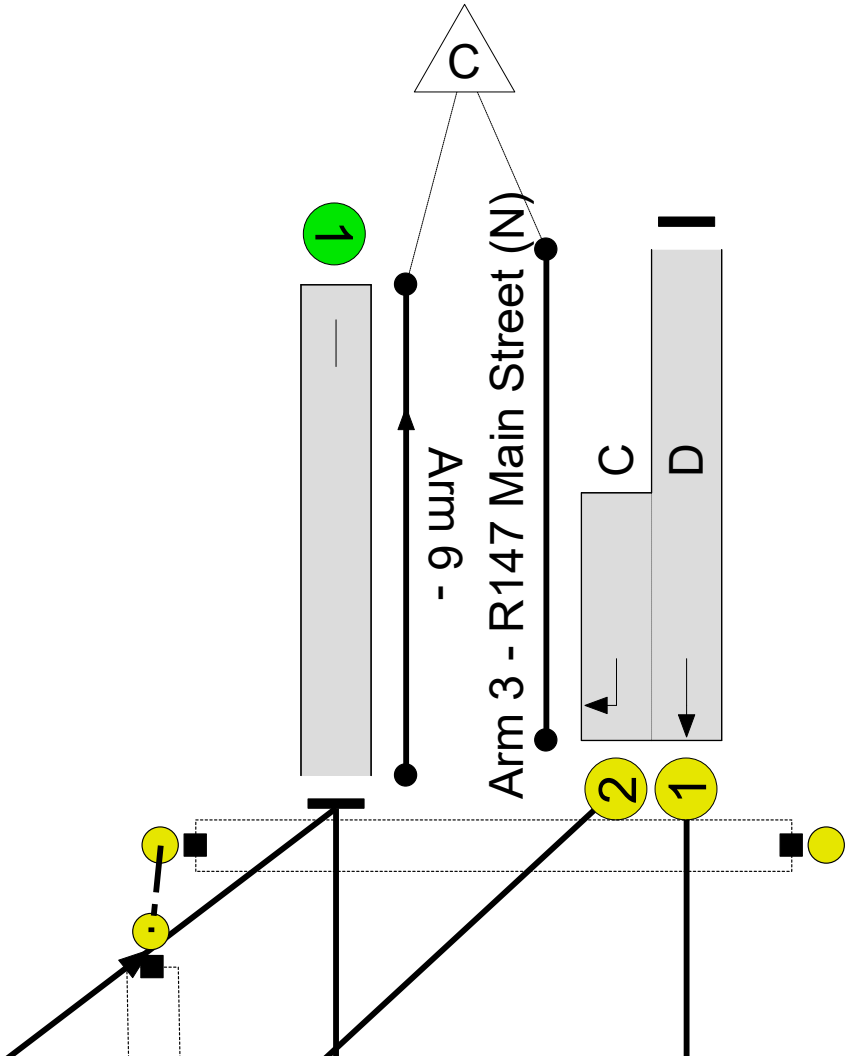
Network Layout Diagram

R147/ The Dales

PRC: 2.2 %

Total Traffic Delay: 20.7 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	48	-	669	1860	759	88.1%
2/1	The Dales Right Left	U	N/A	N/A	B		1	24	-	231	1274	265	87.0%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	61:13	-	515	1925:1387	451+162	84.0 : 84.0%
4/1		U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	238	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	733	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**11.9**	**8.8**	**0.0**	**20.7**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**11.9**	**8.8**	**0.0**	**20.7**	**-**	**-**	**-**	**-**
1/1	669	669	-	-	-	6.1	3.4	-	9.5	51.3	20.4	3.4	23.9
2/1	231	231	-	-	-	2.9	2.9	-	5.8	90.7	7.4	2.9	10.3
3/1+3/2	515	515	-	-	-	2.9	2.5	-	5.4	37.6	4.4	2.5	6.9
4/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	238	238	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

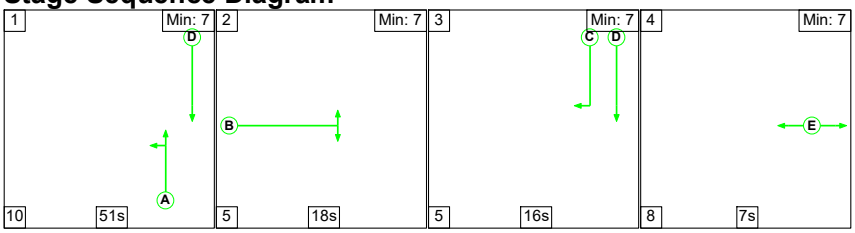
C1 PRC for Signalled Lanes (%): 2.2 Total Delay for Signalled Lanes (pcuHr): 20.73 Cycle Time (s): 120

PRC Over All Lanes (%): 2.2 Total Delay Over All Lanes(pcuHr): 20.73

Full Input Data And Results

Scenario 5: 'Year of Opening+15 AM' (FG5: 'Year of Opening+15', Plan 1: 'Network Control Plan 1')

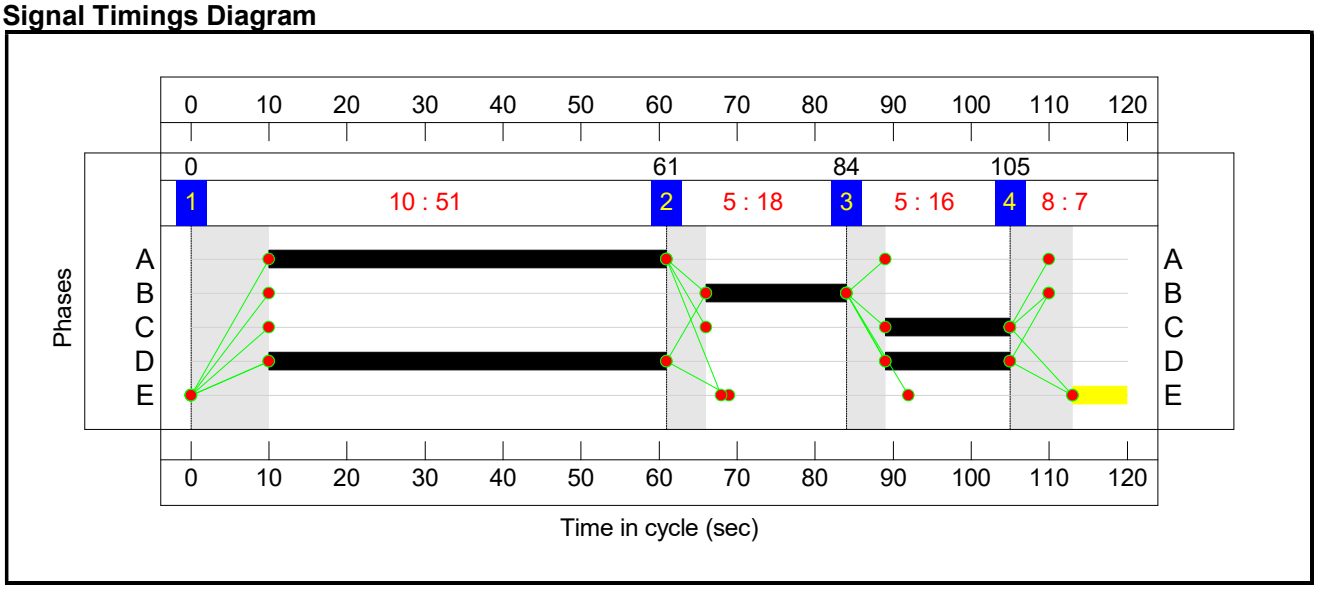
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	51	18	16	7
Change Point	0	61	84	105

Signal Timings Diagram



Full Input Data And Results

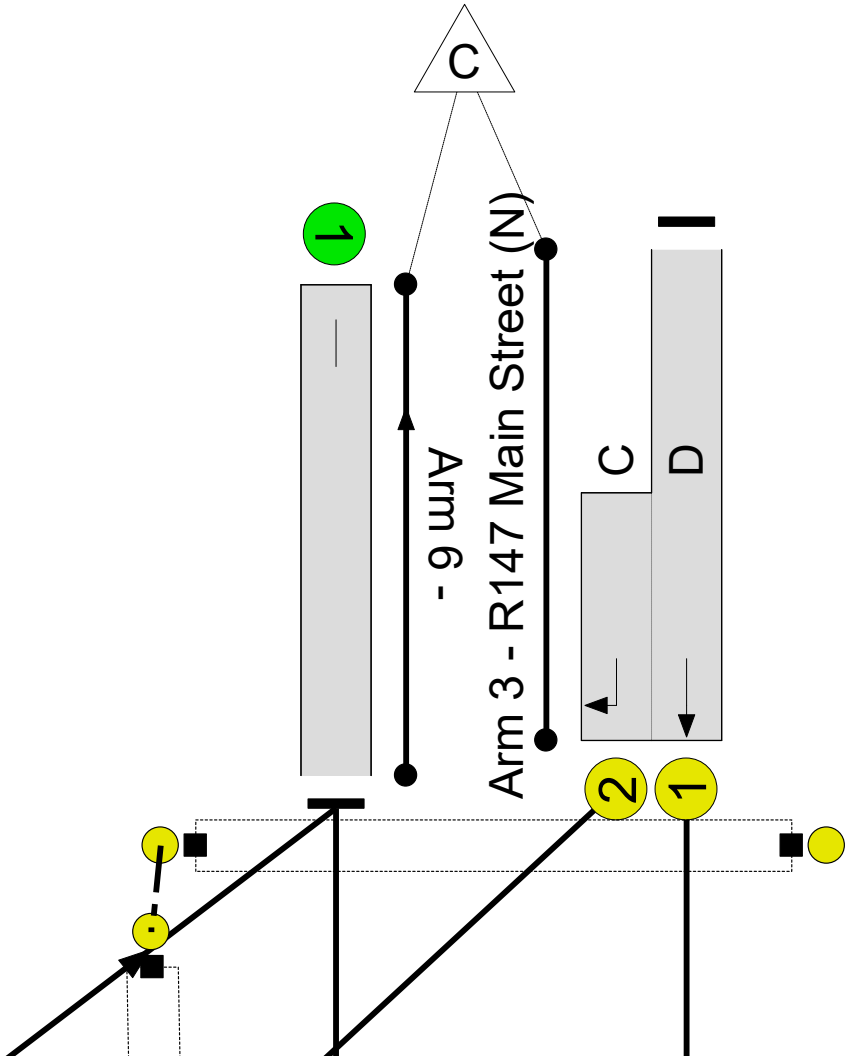
Network Layout Diagram

R147/ The Dales

PRC: 12.7 %

Total Traffic Delay: 14.6 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.9%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.9%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	51	-	518	1887	818	63.3%
2/1	The Dales Right Left	U	N/A	N/A	B		1	18	-	161	1286	204	79.1%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	67:16	-	906	1925:1387	1003+131	79.9 : 79.9%
4/1		U	N/A	N/A	-		-	-	-	861	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	566	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.1**	**4.6**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**10.1**	**4.6**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
1/1	518	518	-	-	-	3.8	0.9	-	4.7	32.5	13.4	0.9	14.2
2/1	161	161	-	-	-	2.2	1.7	-	3.9	87.6	5.1	1.7	6.9
3/1+3/2	906	906	-	-	-	4.1	1.9	-	6.0	24.0	12.0	1.9	14.0
4/1	861	861	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

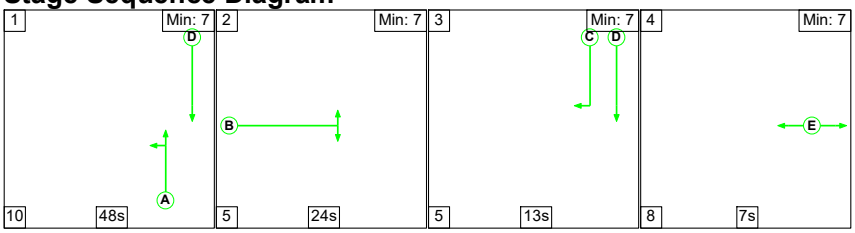
C1 PRC for Signalled Lanes (%): 12.7 Total Delay for Signalled Lanes (pcuHr): 14.64 Cycle Time (s): 120

PRC Over All Lanes (%): 12.7 Total Delay Over All Lanes(pcuHr): 14.64

Full Input Data And Results

Scenario 6: 'Year of Opening+15 PM' (FG6: 'Year of Opening+15', Plan 1: 'Network Control Plan 1')

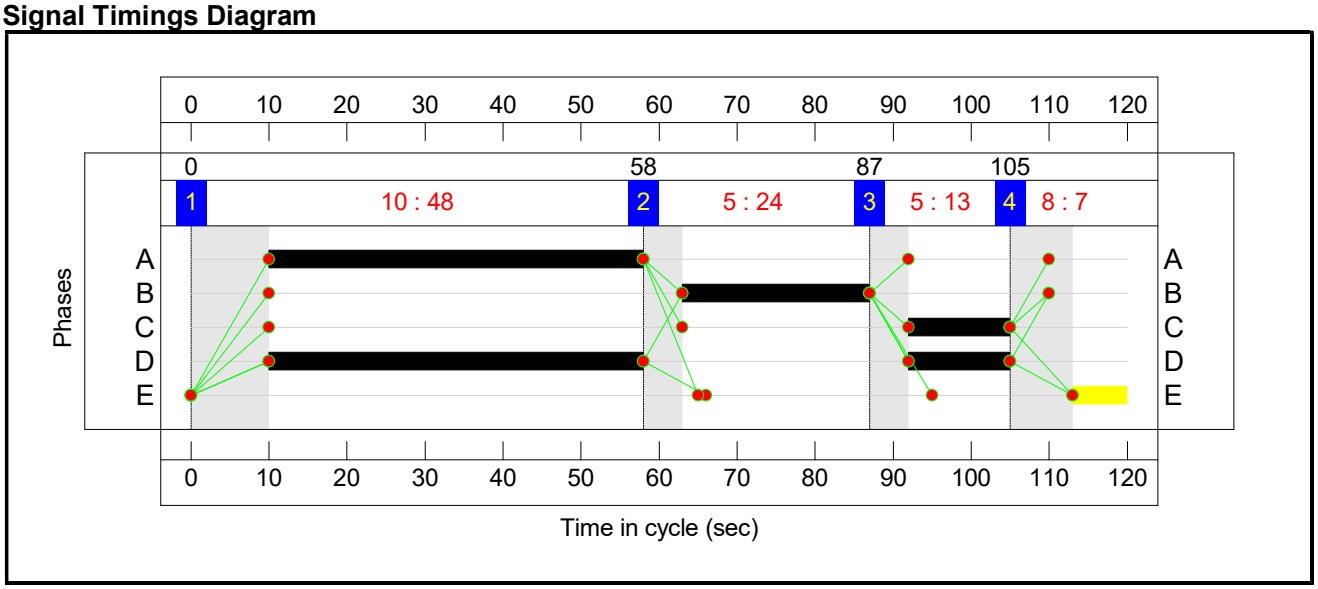
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	48	24	13	7
Change Point	0	58	87	105

Signal Timings Diagram



Full Input Data And Results

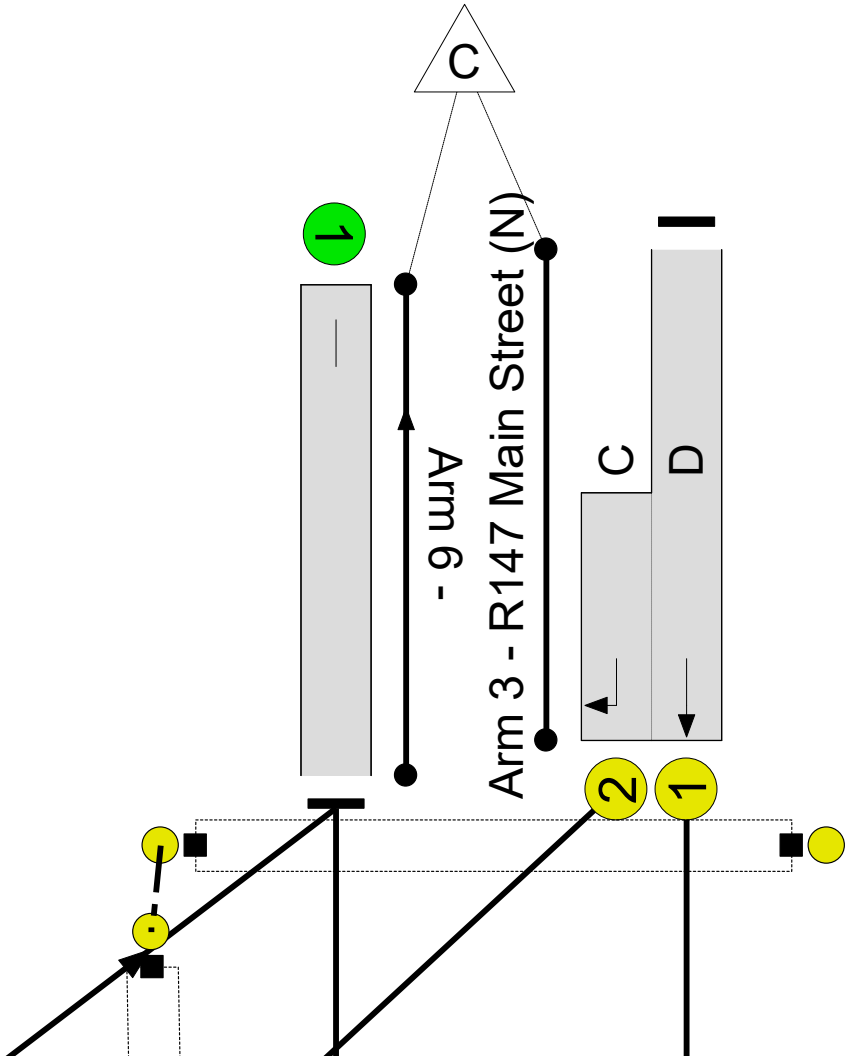
Network Layout Diagram

R147/ The Dales

PRC: -6.6 %

Total Traffic Delay: 31.3 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.0%**
R147/ The Dales	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.0%**
1/1	R147 Main Street(S) Left Ahead	U	N/A	N/A	A		1	48	-	729	1860	759	96.0%
2/1	The Dales Right Left	U	N/A	N/A	B		1	24	-	251	1274	265	94.6%
3/1+3/2	R147 Main Street (N) Ahead Right	U	N/A	N/A	D C		2:1	61:13	-	562	1925:1387	449+162	92.1 : 92.1%
4/1		U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.4**	**17.8**	**0.0**	**31.3**	**-**	**-**	**-**	**-**
R147/ The Dales	**-**	**-**	**0**	**0**	**0**	**13.4**	**17.8**	**0.0**	**31.3**	**-**	**-**	**-**	**-**
1/1	729	729	-	-	-	7.0	7.9	-	14.9	73.5	23.5	7.9	31.4
2/1	251	251	-	-	-	3.3	5.1	-	8.4	120.0	8.2	5.1	13.3
3/1+3/2	562	562	-	-	-	3.2	4.8	-	8.0	51.4	4.9	4.8	9.7
4/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -6.6 Total Delay for Signalled Lanes (pcuHr): 31.27 Cycle Time (s): 120

PRC Over All Lanes (%): -6.6 Total Delay Over All Lanes(pcuHr): 31.27

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