

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: J.Astley Road_Alexander Avenue.j10

Path: C:\Users\NJA05275\OneDrive - WSP O365\1_Projects_JK\46_Earl Shilton - Junction modelling\03 WIP\TP\02 CAD BIM Models\231220-Junction 10 Models

Report generation date: 20-12-2023 14:04:31

- »Base 2023, AM
- »Base 2023, PM
- »2036 DM, AM
- »2036 DM, PM
- »2036 DS, AM
- »2036 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base 2023									
Stream B-C	D1	0.1	6.37	0.10	A	D2	0.1	6.03	0.05	A
Stream B-A		0.0	8.95	0.04	A		0.1	8.36	0.06	A
Stream C-AB		0.1	6.76	0.11	A		0.1	6.21	0.09	A
	2036 DM									
Stream B-C	D3	0.1	6.39	0.10	A	D4	0.1	5.93	0.05	A
Stream B-A		0.0	8.92	0.04	A		0.1	8.86	0.09	A
Stream C-AB		0.1	6.79	0.11	A		0.1	6.22	0.09	A
	2036 DS									
Stream B-C	D5	0.4	9.75	0.27	A	D6	0.1	7.83	0.13	A
Stream B-A		0.8	15.81	0.44	C		0.6	13.66	0.39	B
Stream C-AB		0.3	7.88	0.19	A		0.2	7.36	0.17	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.

Page 1 of 1

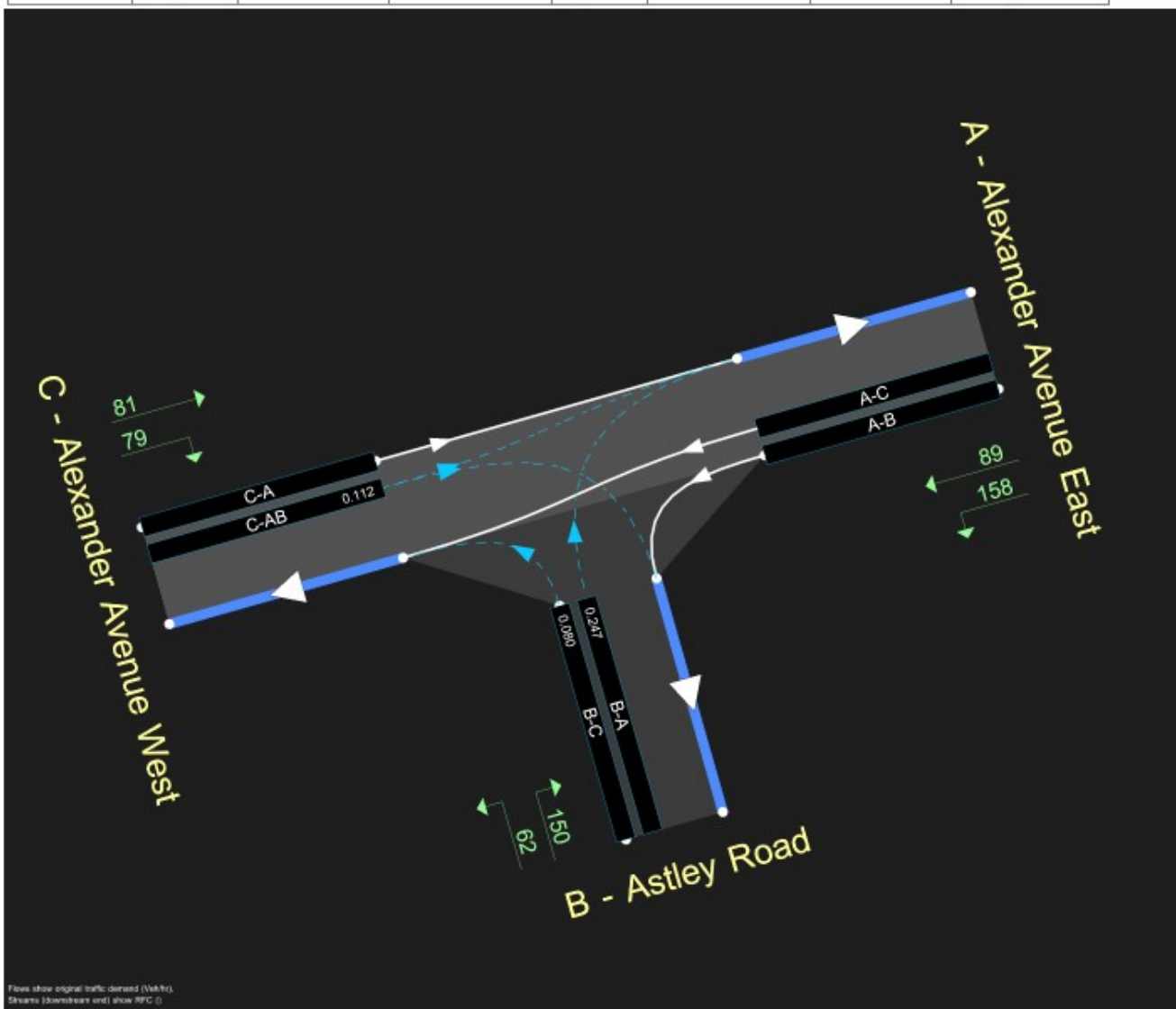
File summary

File Description

Title	Astley Road_Alexander Avenue
Location	
Site number	
Date	29-11-2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	INCS04445
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	Veh	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 2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2036 DM	PM	ONE HOUR	16:45	18:15	15	✓
D5	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2036 DS	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		2.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.79	A

Arms

Arms

Arm	Name	Description	Arm type
A	Alexander Avenue East		Major
B	Astley Road		Minor
C	Alexander Avenue West		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 - Alexander Avenue West	5.76			31.6	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Astley Road	One lane plus flare	8.39	3.58	3.03	3.03	3.03	✓	1.00	17	18

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	511	0.093	0.235	0.148	0.336
B-C	669	0.105	0.265	-	-
C-B	592	0.232	0.232	-	-

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 2023	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	140	100.000
B - Astley Road		ONE HOUR	✓	70	100.000
C - Alexander Avenue West		ONE HOUR	✓	113	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	0	21	119
	B - Astley Road	15	0	55
	C - Alexander Avenue West	58	55	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	0.00	0.15	0.85
	B - Astley Road	0.21	0.00	0.79
	C - Alexander Avenue West	0.51	0.49	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	0	0	0
	B - Astley Road	7	0	0
	C - Alexander Avenue West	0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	1.000	1.000	1.000
	B - Astley Road	1.070	1.000	1.000
	C - Alexander Avenue West	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	07:45-08:00	105	105
	08:00-08:15	128	128
	08:15-08:30	154	154
	08:30-08:45	154	154
	08:45-09:00	128	128
	09:00-09:15	105	105
B - Astley Road	07:45-08:00	53	53
	08:00-08:15	63	64
	08:15-08:30	77	78
	08:30-08:45	77	78
	08:45-09:00	63	64
	09:00-09:15	53	53
C - Alexander Avenue West	07:45-08:00	85	85
	08:00-08:15	102	102
	08:15-08:30	124	124
	08:30-08:45	124	124
	08:45-09:00	102	102
	09:00-09:15	85	85

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.37	0.1	A	50	78
B-A	0.04	8.95	0.0	A	14	21
C-AB	0.11	6.76	0.1	A	56	83
C-A					48	72
A-B					19	29
A-C					109	164

Main Results for each time segment

07:45 - 08:00

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-C	41	10	640	0.065	41	0.0	0.1	6.011	A
B-A	11	3	438	0.026	11	0.0	0.0	8.442	A
C-AB	45	11	598	0.075	44	0.0	0.1	6.503	A
C-A	40	10			40				
A-B	16	4			16				
A-C	90	22			90				

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-C	49	12	634	0.078	49	0.1	0.1	6.159	A
B-A	13	3	430	0.031	13	0.0	0.0	8.652	A
C-AB	54	14	599	0.090	54	0.1	0.1	6.607	A
C-A	47	12			47				
A-B	19	5			19				
A-C	107	27			107				

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-C	61	15	626	0.097	60	0.1	0.1	6.368	A
B-A	17	4	419	0.039	16	0.0	0.0	8.953	A
C-AB	68	17	601	0.113	68	0.1	0.1	6.755	A
C-A	57	14			57				
A-B	23	6			23				
A-C	131	33			131				

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-C	61	15	626	0.097	61	0.1	0.1	6.368	A
B-A	17	4	419	0.039	17	0.0	0.0	8.953	A
C-AB	68	17	601	0.113	68	0.1	0.1	6.759	A
C-A	57	14			57				
A-B	23	6			23				
A-C	131	33			131				

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-C	49	12	634	0.078	50	0.1	0.1	6.161	A
B-A	13	3	429	0.031	14	0.0	0.0	8.654	A
C-AB	54	14	599	0.091	54	0.1	0.1	6.614	A
C-A	47	12			47				
A-B	19	5			19				
A-C	107	27			107				

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-C	41	10	640	0.065	41	0.1	0.1	6.020	A
B-A	11	3	437	0.026	11	0.0	0.0	8.451	A
C-AB	45	11	598	0.075	45	0.1	0.1	6.514	A
C-A	40	10			40				
A-B	16	4			16				
A-C	90	22			90				

Base 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		2.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.41	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 2023	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	97	100.000
B - Astley Road		ONE HOUR	✓	52	100.000
C - Alexander Avenue West		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	12	85
B - Astley Road		23	0	29
C - Alexander Avenue West		93	44	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0.00	0.12	0.88
B - Astley Road		0.44	0.00	0.56
C - Alexander Avenue West		0.68	0.32	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	0	0	0
	B - Astley Road	4	0	0
	C - Alexander Avenue West	0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
	A - Alexander Avenue East	1.000	1.000	1.000
	B - Astley Road	1.040	1.000	1.000
	C - Alexander Avenue West	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	16:45-17:00	73	73
	17:00-17:15	87	87
	17:15-17:30	107	107
	17:30-17:45	107	107
	17:45-18:00	87	87
	18:00-18:15	73	73
B - Astley Road	16:45-17:00	39	40
	17:00-17:15	47	48
	17:15-17:30	57	58
	17:30-17:45	57	58
	17:45-18:00	47	48
	18:00-18:15	39	40
C - Alexander Avenue West	16:45-17:00	103	103
	17:00-17:15	123	123
	17:15-17:30	151	151
	17:30-17:45	151	151
	17:45-18:00	123	123
	18:00-18:15	103	103

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	6.03	0.1	A	27	40
B-A	0.06	8.36	0.1	A	21	32
C-AB	0.09	6.21	0.1	A	47	70
C-A					79	118
A-B					11	17
A-C					78	117

Main Results for each time segment

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-C	22	5	640	0.034	22	0.0	0.0	5.816	A
B-A	17	4	473	0.037	17	0.0	0.0	7.891	A
C-AB	37	9	623	0.080	37	0.0	0.1	6.141	A
C-A	66	16			66				
A-B	9	2			9				
A-C	64	16			64				

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-C	26	7	636	0.041	26	0.0	0.0	5.904	A
B-A	21	5	466	0.044	21	0.0	0.0	8.083	A
C-AB	46	11	629	0.073	46	0.1	0.1	6.169	A
C-A	78	19			78				
A-B	11	3			11				
A-C	76	19			76				

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-C	32	8	629	0.051	32	0.0	0.1	6.027	A
B-A	25	6	466	0.056	25	0.0	0.1	8.358	A
C-AB	58	14	638	0.091	58	0.1	0.1	6.207	A
C-A	93	23			93				
A-B	13	3			13				
A-C	94	23			94				

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-C	32	8	629	0.051	32	0.1	0.1	6.028	A
B-A	25	6	466	0.056	25	0.1	0.1	8.359	A
C-AB	58	14	638	0.091	58	0.1	0.1	6.209	A
C-A	93	23			93				
A-B	13	3			13				
A-C	94	23			94				

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-C	26	7	636	0.041	26	0.1	0.0	5.906	A
B-A	21	5	466	0.044	21	0.1	0.0	8.084	A
C-AB	46	11	629	0.073	46	0.1	0.1	6.173	A
C-A	77	19			77				
A-B	11	3			11				
A-C	76	19			76				

18:00 - 18:15

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-C	22	5	640	0.034	22	0.0	0.0	5.822	A
B-A	17	4	473	0.037	17	0.0	0.0	7.896	A
C-AB	37	9	623	0.060	37	0.1	0.1	6.151	A
C-A	66	16			66				
A-B	9	2			9				
A-C	64	16			64				

2036 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		2.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.68	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	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	155	100.000
B - Astley Road		ONE HOUR	✓	71	100.000
C - Alexander Avenue West		ONE HOUR	✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	38	117
B - Astley Road		16	0	55
C - Alexander Avenue West		80	55	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0.00	0.25	0.75
B - Astley Road		0.23	0.00	0.77
C - Alexander Avenue West		0.52	0.48	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	0	0
B - Astley Road		0	0	0
C - Alexander Avenue West		0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		1.000	1.000	1.000
B - Astley Road		1.000	1.000	1.000
C - Alexander Avenue West		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	07:45-08:00	117	117
	08:00-08:15	139	139
	08:15-08:30	171	171
	08:30-08:45	171	171
	08:45-09:00	139	139
	09:00-09:15	117	117
B - Astley Road	07:45-08:00	53	54
	08:00-08:15	64	65
	08:15-08:30	78	79
	08:30-08:45	78	79
	08:45-09:00	64	65
	09:00-09:15	53	54
C - Alexander Avenue West	07:45-08:00	87	87
	08:00-08:15	103	103
	08:15-08:30	127	127
	08:30-08:45	127	127
	08:45-09:00	103	103
	09:00-09:15	87	87

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.39	0.1	A	50	76
B-A	0.04	8.92	0.0	A	15	22
C-AB	0.11	6.79	0.1	A	56	84
C-A					50	75
A-B					35	52
A-C					107	161

Main Results for each time segment

07:45 - 08:00

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-C	41	10	639	0.065	41	0.0	0.1	6.023	A
B-A	12	3	441	0.027	12	0.0	0.0	8.395	A
C-AB	45	11	596	0.075	44	0.0	0.1	6.523	A
C-A	42	10			42				
A-B	29	7			29				
A-C	88	22			88				

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-C	49	12	632	0.078	49	0.1	0.1	6.174	A
B-A	14	4	432	0.033	14	0.0	0.0	8.611	A
C-AB	54	14	597	0.091	54	0.1	0.1	6.632	A
C-A	49	12			49				
A-B	34	9			34				
A-C	105	26			105				

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-C	61	15	624	0.097	60	0.1	0.1	6.388	A
B-A	18	4	421	0.042	18	0.0	0.0	8.922	A
C-AB	68	17	598	0.114	68	0.1	0.1	6.786	A
C-A	58	15			58				
A-B	42	10			42				
A-C	129	32			129				

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-C	61	15	624	0.097	61	0.1	0.1	6.388	A
B-A	18	4	421	0.042	18	0.0	0.0	8.923	A
C-AB	68	17	599	0.114	68	0.1	0.1	6.791	A
C-A	58	15			58				
A-B	42	10			42				
A-C	129	32			129				

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-C	49	12	632	0.078	50	0.1	0.1	6.178	A
B-A	14	4	432	0.033	14	0.0	0.0	8.614	A
C-AB	54	14	597	0.091	55	0.1	0.1	6.636	A
C-A	49	12			49				
A-B	34	9			34				
A-C	105	26			105				

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-C	41	10	638	0.065	41	0.1	0.1	6.030	A
B-A	12	3	441	0.027	12	0.0	0.0	8.402	A
C-AB	45	11	596	0.075	45	0.1	0.1	6.531	A
C-A	42	10			42				
A-B	29	7			29				
A-C	88	22			88				

2036 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		2.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.61	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	2036 DM	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	107	100.000
B - Astley Road		ONE HOUR	✓	64	100.000
C - Alexander Avenue West		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	21	88
B - Astley Road		35	0	29
C - Alexander Avenue West		95	44	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0.00	0.20	0.80
B - Astley Road		0.55	0.00	0.45
C - Alexander Avenue West		0.68	0.32	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	0	0
B - Astley Road		3	0	0
C - Alexander Avenue West		0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		1.000	1.000	1.000
B - Astley Road		1.030	1.000	1.000
C - Alexander Avenue West		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	16:45-17:00	81	81
	17:00-17:15	96	96
	17:15-17:30	118	118
	17:30-17:45	118	118
	17:45-18:00	96	96
	18:00-18:15	81	81
B - Astley Road	16:45-17:00	48	49
	17:00-17:15	58	58
	17:15-17:30	70	72
	17:30-17:45	70	72
	17:45-18:00	58	58
	18:00-18:15	48	49
C - Alexander Avenue West	16:45-17:00	105	105
	17:00-17:15	125	125
	17:15-17:30	153	153
	17:30-17:45	153	153
	17:45-18:00	125	125
	18:00-18:15	105	105

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	5.93	0.1	A	27	40
B-A	0.09	8.86	0.1	A	32	48
C-AB	0.09	6.22	0.1	A	47	71
C-A					80	121
A-B					19	29
A-C					79	118

Main Results for each time segment

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-C	22	5	654	0.033	22	0.0	0.0	5.694	A
B-A	26	7	462	0.057	26	0.0	0.1	8.250	A
C-AB	37	9	622	0.060	37	0.0	0.1	6.149	A
C-A	67	17			67				
A-B	16	4			16				
A-C	65	16			65				

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-C	26	7	648	0.040	26	0.0	0.0	5.792	A
B-A	31	8	455	0.069	31	0.1	0.1	8.500	A
C-AB	46	11	628	0.073	46	0.1	0.1	6.179	A
C-A	79	20			79				
A-B	19	5			19				
A-C	77	19			77				

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-C	32	8	639	0.050	32	0.0	0.1	5.925	A
B-A	39	10	445	0.087	38	0.1	0.1	8.859	A
C-AB	58	15	637	0.091	58	0.1	0.1	6.219	A
C-A	95	24			95				
A-B	23	6			23				
A-C	95	24			95				

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-C	32	8	639	0.050	32	0.1	0.1	5.926	A
B-A	39	10	445	0.087	39	0.1	0.1	8.862	A
C-AB	58	15	637	0.091	58	0.1	0.1	6.221	A
C-A	95	24			95				
A-B	23	6			23				
A-C	95	24			95				

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-C	26	7	647	0.040	26	0.1	0.0	5.795	A
B-A	31	8	455	0.069	32	0.1	0.1	8.505	A
C-AB	46	11	628	0.073	46	0.1	0.1	6.182	A
C-A	79	20			79				
A-B	19	5			19				
A-C	77	19			77				

18:00 - 18:15

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-C	22	5	653	0.033	22	0.0	0.0	5.705	A
B-A	26	7	462	0.057	26	0.1	0.1	8.283	A
C-AB	37	9	622	0.060	38	0.1	0.1	6.157	A
C-A	67	17			67				
A-B	16	4			16				
A-C	65	16			65				

2036 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		6.26	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.26	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
D5	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	293	100.000
B - Astley Road		ONE HOUR	✓	285	100.000
C - Alexander Avenue West		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	162	131
B - Astley Road		164	0	121
C - Alexander Avenue West		62	87	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0.00	0.55	0.45
B - Astley Road		0.58	0.00	0.42
C - Alexander Avenue West		0.42	0.58	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	0	0
B - Astley Road		1	0	0
C - Alexander Avenue West		0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		1.000	1.000	1.000
B - Astley Road		1.010	1.000	1.000
C - Alexander Avenue West		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	07:45-08:00	221	221
	08:00-08:15	263	263
	08:15-08:30	323	323
	08:30-08:45	323	323
	08:45-09:00	263	263
	09:00-09:15	221	221
B - Astley Road	07:45-08:00	215	216
	08:00-08:15	256	258
	08:15-08:30	314	316
	08:30-08:45	314	316
	08:45-09:00	256	258
	09:00-09:15	215	216
C - Alexander Avenue West	07:45-08:00	112	112
	08:00-08:15	134	134
	08:15-08:30	164	164
	08:30-08:45	164	164
	08:45-09:00	134	134
	09:00-09:15	112	112

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	9.75	0.4	A	111	167
B-A	0.44	15.81	0.8	C	150	226
C-AB	0.19	7.88	0.3	A	89	134
C-A					48	72
A-B					149	223
A-C					120	180

Main Results for each time segment

07:45 - 08:00

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-C	91	23	576	0.158	90	0.0	0.2	7.402	A
B-A	123	31	445	0.277	122	0.0	0.4	11.082	B
C-AB	71	18	574	0.124	71	0.0	0.2	7.149	A
C-A	41	10			41				
A-B	122	30			122				
A-C	99	25			99				

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-C	109	27	549	0.198	109	0.2	0.2	8.177	A
B-A	147	37	431	0.342	147	0.4	0.5	12.667	B
C-AB	87	22	571	0.152	87	0.2	0.2	7.437	A
C-A	47	12			47				
A-B	146	36			146				
A-C	118	29			118				

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-C	133	33	504	0.265	133	0.2	0.4	9.695	A
B-A	181	45	408	0.442	180	0.5	0.8	15.661	C
C-AB	109	27	566	0.193	109	0.2	0.3	7.870	A
C-A	55	14			55				
A-B	178	45			178				
A-C	144	36			144				

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-C	133	33	502	0.265	133	0.4	0.4	9.752	A
B-A	181	45	408	0.442	181	0.8	0.8	15.814	C
C-AB	109	27	566	0.193	109	0.3	0.3	7.879	A
C-A	55	14			55				
A-B	178	45			178				
A-C	144	36			144				

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-C	109	27	547	0.199	109	0.4	0.3	8.233	A
B-A	147	37	430	0.343	148	0.8	0.5	12.813	B
C-AB	87	22	571	0.152	87	0.3	0.2	7.450	A
C-A	47	12			47				
A-B	146	36			146				
A-C	118	29			118				

Unsignalised level of service

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-C	91	23	574	0.159	91	0.3	0.2	7.464	A
B-A	123	31	445	0.277	124	0.5	0.4	11.234	B
C-AB	71	18	574	0.124	72	0.2	0.2	7.173	A
C-A	41	10			41				
A-B	122	30			122				
A-C	99	25			99				

2036 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Astley Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	B - Astley Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Major arm width	C - Alexander Avenue West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

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	Alexander Avenue/Astley Road	T-Junction	Two-way	Two-way	Two-way		5.19	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.19	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
D6	2036 DS	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Alexander Avenue East		ONE HOUR	✓	247	100.000
B - Astley Road		ONE HOUR	✓	212	100.000
C - Alexander Avenue West		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	158	89
B - Astley Road		150	0	62
C - Alexander Avenue West		81	79	0

Proportions

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0.00	0.64	0.36
B - Astley Road		0.71	0.00	0.29
C - Alexander Avenue West		0.51	0.49	0.00

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		0	0	0
B - Astley Road		1	0	0
C - Alexander Avenue West		0	0	0

Average PCU Per Veh

From	To			
		A - Alexander Avenue East	B - Astley Road	C - Alexander Avenue West
A - Alexander Avenue East		1.000	1.000	1.000
B - Astley Road		1.010	1.000	1.000
C - Alexander Avenue West		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Alexander Avenue East	16:45-17:00	188	188
	17:00-17:15	222	222
	17:15-17:30	272	272
	17:30-17:45	272	272
	17:45-18:00	222	222
	18:00-18:15	188	188
B - Astley Road	16:45-17:00	180	181
	17:00-17:15	191	192
	17:15-17:30	233	235
	17:30-17:45	233	235
	17:45-18:00	191	192
	18:00-18:15	180	181
C - Alexander Avenue West	16:45-17:00	120	120
	17:00-17:15	144	144
	17:15-17:30	176	176
	17:30-17:45	176	176
	17:45-18:00	144	144
	18:00-18:15	120	120

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.13	7.83	0.1	A	57	85
B-A	0.39	13.66	0.6	B	138	206
C-AB	0.17	7.36	0.2	A	83	125
C-A					63	95
A-B					145	217
A-C					82	123

2023-12-20 14:04:41

Main Results for each time segment

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-C	47	12	584	0.080	46	0.0	0.1	6.696	A
B-A	113	28	456	0.247	112	0.0	0.3	10.402	B
C-AB	66	17	592	0.112	66	0.0	0.1	6.842	A
C-A	54	14			54				
A-B	119	30			119				
A-C	67	17			67				

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-C	56	14	562	0.099	56	0.1	0.1	7.103	A
B-A	135	34	445	0.303	134	0.3	0.4	11.578	B
C-AB	81	20	592	0.137	81	0.1	0.2	7.048	A
C-A	63	16			63				
A-B	142	36			142				
A-C	80	20			80				

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-C	68	17	528	0.129	68	0.1	0.1	7.818	A
B-A	165	41	429	0.385	164	0.4	0.6	13.582	B
C-AB	103	26	592	0.173	102	0.2	0.2	7.347	A
C-A	74	18			74				
A-B	174	43			174				
A-C	98	24			98				

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-C	68	17	528	0.129	68	0.1	0.1	7.834	A
B-A	165	41	429	0.385	165	0.6	0.6	13.659	B
C-AB	103	26	592	0.173	103	0.2	0.2	7.356	A
C-A	74	18			74				
A-B	174	43			174				
A-C	98	24			98				

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-C	56	14	562	0.099	56	0.1	0.1	7.121	A
B-A	135	34	445	0.303	136	0.6	0.4	11.671	B
C-AB	81	20	592	0.137	81	0.2	0.2	7.057	A
C-A	63	16			63				
A-B	142	36			142				
A-C	80	20			80				

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18:00 - 18:15

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-C	47	12	583	0.080	47	0.1	0.1	6.722	A
B-A	113	28	456	0.248	113	0.4	0.3	10.515	B
C-AB	66	17	592	0.112	67	0.2	0.1	6.862	A
C-A	54	14			54				
A-B	119	30			119				
A-C	67	17			67				

Junctions 10									
ARCADY 10 - Roundabout Module									
Version: 10.0.1.1519									
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Filename: K.Alexander Avenue_High Street.j10

Path: C:\Users\NCS04445\WSP_O365\Ayyapusetty, Jayakrishna - 46_Earl Shilton - Junction modelling\03 WIP\TP\02 CAD BIM Models\231220-Junction 10 Models

Report generation date: 20/12/2023 10:42:00

»Base 2023, AM
»Base 2023, PM
»2036 DM, AM
»2036 DM, PM
»2036 DS, AM
»2036 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base 2023									
A - High Street (SW)	D1	1.3	10.34	0.57	B	D2	1.2	9.54	0.54	A
B - High Street (NE)		0.9	8.70	0.46	A		1.5	11.92	0.60	B
C - Alexander Avenue		0.5	8.50	0.32	A		0.3	8.27	0.23	A
	2036 DM									
A - High Street (SW)	D3	1.0	8.87	0.50	A	D4	1.0	8.63	0.49	A
B - High Street (NE)		0.8	8.46	0.45	A		1.4	11.62	0.59	B
C - Alexander Avenue		0.4	8.25	0.31	A		0.3	8.20	0.23	A
	2036 DS									
A - High Street (SW)	D5	1.4	10.87	0.59	B	D6	1.2	9.87	0.56	A
B - High Street (NE)		1.0	9.72	0.51	A		1.8	13.60	0.65	B
C - Alexander Avenue		0.8	10.57	0.44	B		0.4	9.38	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.

10/12/2023 10:42:00

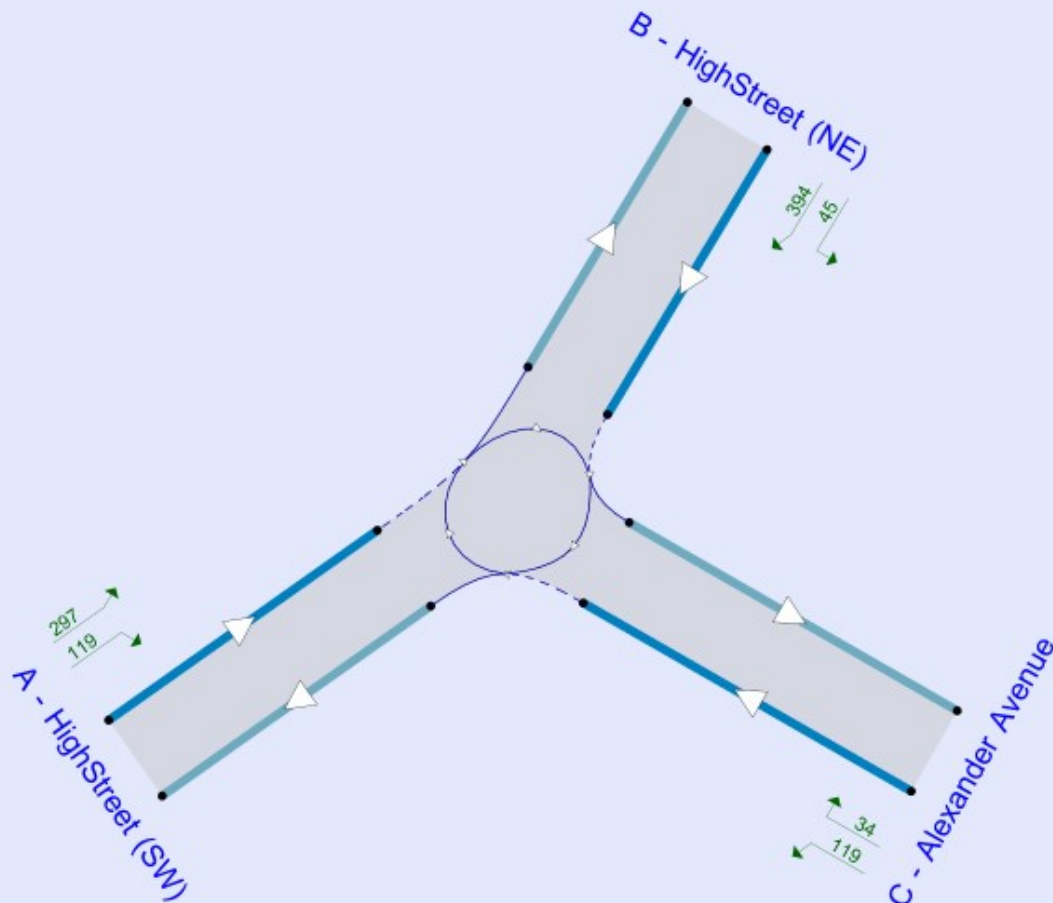
File summary

File Description

Title	Earl Shilton JunctionN modelling
Location	52.576395, -1.311331
Site number	
Date	29/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJA05275
Description	Assessment of Existing Junction layout

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	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	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
JUNCTIONS 9	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 2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2036 DM	PM	ONE HOUR	16:45	18:15	15	✓
D5	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2036 DS	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	9.40	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		9.40	A

Arms

Arms

Arm	Name	Description
A	HighStreet (SW)	
B	HighStreet (NE)	
C	Alexander Avenue	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A - HighStreet (SW)	3.49	2.53	3.00	2.3	15.26	14.72	0.0	
B - HighStreet (NE)	3.13	2.97	3.60	1.5	9.40	6.87	0.0	
C - Alexander Avenue	3.10	3.10	4.08	1.2	13.09	9.08	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - HighStreet (SW)	0.805	857
B - HighStreet (NE)	0.599	839
C - Alexander Avenue	0.806	820

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2023	AM	ONE HOUR	07:45	09:15	15	✓

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

Source: TRL Junctions 10 (10.0.1.1519) - 20/12/2023

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	418	100.000
B - High Street (NE)		ONE HOUR	✓	325	100.000
C - Alexander Avenue		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
	A - High Street (SW)	0	346	72
	B - High Street (NE)	284	0	41
	C - Alexander Avenue	130	53	0

Proportions

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
	A - High Street (SW)	0.00	0.83	0.17
	B - High Street (NE)	0.87	0.00	0.13
	C - Alexander Avenue	0.71	0.29	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
	A - High Street (SW)	0	2	0
	B - High Street (NE)	3	0	0
	C - Alexander Avenue	0	0	0

Average PCU Per Veh

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
	A - High Street (SW)	1.000	1.020	1.000
	B - High Street (NE)	1.030	1.000	1.000
	C - Alexander Avenue	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - High Street (SW)	07:45-08:00	315	320
	08:00-08:15	376	382
	08:15-08:30	460	468
	08:30-08:45	460	468
	08:45-09:00	376	382
	09:00-09:15	315	320
B - High Street (NE)	07:45-08:00	245	251
	08:00-08:15	292	300
	08:15-08:30	358	367
	08:30-08:45	358	367
	08:45-09:00	292	300
	09:00-09:15	245	251
C - Alexander Avenue	07:45-08:00	138	138
	08:00-08:15	165	165
	08:15-08:30	201	201
	08:30-08:45	201	201
	08:45-09:00	165	165
	09:00-09:15	138	138

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - High Street (SW)	0.57	10.34	1.3	B	384	575
B - High Street (NE)	0.46	8.70	0.9	A	298	447
C - Alexander Avenue	0.32	8.50	0.5	A	168	252

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	315	79	40	819	0.384	312	309	0.0	0.6	7.066	A
B - High Street (NE)	245	81	54	787	0.311	243	298	0.0	0.4	6.801	A
C - Alexander Avenue	138	34	212	688	0.200	137	84	0.0	0.2	6.524	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	376	94	48	815	0.461	375	371	0.6	0.8	8.170	A
B - High Street (NE)	292	73	65	780	0.374	292	358	0.4	0.6	7.357	A
C - Alexander Avenue	165	41	255	681	0.249	164	101	0.2	0.3	7.241	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	460	115	58	808	0.569	458	455	0.8	1.3	10.237	B
B - High Street (NE)	358	89	79	772	0.464	357	438	0.6	0.8	8.653	A
C - Alexander Avenue	201	50	312	625	0.322	201	124	0.3	0.5	8.469	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	460	115	58	808	0.570	460	456	1.3	1.3	10.341	B
B - High Street (NE)	358	89	79	772	0.464	358	439	0.8	0.9	8.696	A
C - Alexander Avenue	201	50	313	625	0.322	201	124	0.5	0.5	8.501	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	376	94	48	814	0.461	378	373	1.3	0.9	8.274	A
B - High Street (NE)	292	73	65	780	0.375	293	360	0.9	0.6	7.412	A
C - Alexander Avenue	165	41	256	680	0.249	165	102	0.5	0.3	7.281	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	315	79	40	819	0.384	316	312	0.9	0.6	7.167	A
B - High Street (NE)	245	61	54	786	0.311	245	301	0.6	0.5	6.661	A
C - Alexander Avenue	138	34	214	686	0.201	138	85	0.3	0.3	6.573	A

Base 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 87% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	10.43	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		10.43	B

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 2023	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	404	100.000
B - High Street (NE)		ONE HOUR	✓	415	100.000
C - Alexander Avenue		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	302	102
	B - High Street (NE)	370	0	45
	C - Alexander Avenue	87	34	0

Proportions

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0.00	0.75	0.25
	B - High Street (NE)	0.89	0.00	0.11
	C - Alexander Avenue	0.72	0.28	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		0	2	0
B - High Street (NE)		2	0	0
C - Alexander Avenue		0	0	0

Average PCU Per Veh

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		1.000	1.020	1.000
B - High Street (NE)		1.020	1.000	1.000
C - Alexander Avenue		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - High Street (SW)	16:45-17:00	304	309
	17:00-17:15	363	369
	17:15-17:30	445	451
	17:30-17:45	445	451
	17:45-18:00	363	369
	18:00-18:15	304	309
B - High Street (NE)	16:45-17:00	312	318
	17:00-17:15	373	380
	17:15-17:30	457	465
	17:30-17:45	457	465
	17:45-18:00	373	380
	18:00-18:15	312	318
C - Alexander Avenue	16:45-17:00	91	91
	17:00-17:15	109	109
	17:15-17:30	133	133
	17:30-17:45	133	133
	17:45-18:00	109	109
	18:00-18:15	91	91

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - High Street (SW)	0.54	9.54	1.2	A	371	558
B - High Street (NE)	0.60	11.92	1.5	B	381	571
C - Alexander Avenue	0.23	8.27	0.3	A	111	167

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	304	76	25	829	0.367	302	341	0.0	0.6	6.801	A
B - High Street (NE)	312	78	76	780	0.401	310	251	0.0	0.7	7.617	A
C - Alexander Avenue	91	23	276	649	0.140	90	110	0.0	0.2	6.435	A

16:45-17:00 - 16:45-17:00

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	363	91	31	826	0.440	362	410	0.6	0.8	7.751	A
B - High Street (NE)	373	93	91	771	0.484	372	301	0.7	0.9	9.002	A
C - Alexander Avenue	109	27	332	615	0.177	109	132	0.2	0.2	7.104	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	445	111	37	822	0.541	443	501	0.8	1.2	9.469	A
B - High Street (NE)	457	114	112	759	0.602	455	369	0.9	1.5	11.752	B
C - Alexander Avenue	133	33	405	570	0.234	133	161	0.2	0.3	8.238	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	445	111	37	822	0.541	445	503	1.2	1.2	9.543	A
B - High Street (NE)	457	114	112	759	0.602	457	370	1.5	1.5	11.918	B
C - Alexander Avenue	133	33	407	568	0.234	133	162	0.3	0.3	8.272	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	363	91	31	826	0.440	365	413	1.2	0.8	7.830	A
B - High Street (NE)	373	93	92	770	0.484	375	303	1.5	1.0	9.157	A
C - Alexander Avenue	109	27	335	613	0.177	109	133	0.3	0.2	7.144	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	304	76	26	829	0.367	305	345	0.8	0.6	6.884	A
B - High Street (NE)	312	78	77	779	0.401	314	254	1.0	0.7	7.746	A
C - Alexander Avenue	91	23	280	647	0.141	91	111	0.2	0.2	6.479	A

2036 DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	8.59	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		8.59	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	2036 DM	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	368	100.000
B - High Street (NE)		ONE HOUR	✓	314	100.000
C - Alexander Avenue		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	293	73
	B - High Street (NE)	272	0	42
	C - Alexander Avenue	126	53	0

Proportions

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0.00	0.80	0.20
	B - High Street (NE)	0.87	0.00	0.13
	C - Alexander Avenue	0.70	0.30	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	2	0
	B - High Street (NE)	3	0	0
	C - Alexander Avenue	0	0	0

Average PCU Per Veh

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	1.000	1.020	1.000
	B - High Street (NE)	1.030	1.000	1.000
	C - Alexander Avenue	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - HighStreet (SW)	07:45-08:00	276	280
	08:00-08:15	329	334
	08:15-08:30	403	409
	08:30-08:45	403	409
	08:45-09:00	329	334
	09:00-09:15	276	280
B - HighStreet (NE)	07:45-08:00	236	243
	08:00-08:15	282	290
	08:15-08:30	346	355
	08:30-08:45	346	355
	08:45-09:00	282	290
	09:00-09:15	236	243
C - Alexander Avenue	07:45-08:00	135	135
	08:00-08:15	161	161
	08:15-08:30	197	197
	08:30-08:45	197	197
	08:45-09:00	161	161
	09:00-09:15	135	135

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - HighStreet (SW)	0.50	8.87	1.0	A	336	504
B - HighStreet (NE)	0.45	8.46	0.8	A	288	432
C - Alexander Avenue	0.31	8.25	0.4	A	164	246

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - HighStreet (SW)	276	69	40	820	0.336	274	297	0.0	0.5	6.568	A
B - HighStreet (NE)	236	59	55	786	0.301	235	259	0.0	0.4	6.507	A
C - Alexander Avenue	135	34	203	693	0.194	134	86	0.0	0.2	6.426	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - HighStreet (SW)	329	82	48	815	0.404	328	357	0.5	0.7	7.386	A
B - HighStreet (NE)	282	71	65	780	0.362	282	310	0.4	0.6	7.219	A
C - Alexander Avenue	161	40	244	668	0.241	161	103	0.2	0.3	7.094	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	403	101	58	809	0.498	402	437	0.7	1.0	8.820	A
B - High Street (NE)	346	88	80	771	0.448	345	380	0.6	0.8	8.419	A
C - Alexander Avenue	197	49	299	634	0.311	197	128	0.3	0.4	8.226	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	403	101	58	809	0.498	403	438	1.0	1.0	8.873	A
B - High Street (NE)	346	88	80	771	0.448	346	381	0.8	0.8	8.458	A
C - Alexander Avenue	197	49	299	633	0.311	197	127	0.4	0.4	8.255	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	329	82	48	815	0.404	330	359	1.0	0.7	7.448	A
B - High Street (NE)	282	71	66	780	0.362	283	312	0.8	0.6	7.263	A
C - Alexander Avenue	161	40	245	667	0.241	161	104	0.4	0.3	7.131	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	276	69	40	819	0.336	276	300	0.7	0.5	6.637	A
B - High Street (NE)	236	59	55	786	0.301	237	261	0.6	0.4	6.563	A
C - Alexander Avenue	135	34	205	692	0.195	135	87	0.3	0.2	6.468	A

2036 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 88% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	9.94	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		9.94	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	2036 DM	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	368	100.000
B - High Street (NE)		ONE HOUR	✓	408	100.000
C - Alexander Avenue		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	268	102
	B - High Street (NE)	363	0	45
	C - Alexander Avenue	88	34	0

Proportions

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0.00	0.72	0.28
	B - High Street (NE)	0.89	0.00	0.11
	C - Alexander Avenue	0.72	0.28	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		0	2	0
B - High Street (NE)		2	0	0
C - Alexander Avenue		0	0	0

Average PCU Per Veh

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		1.000	1.020	1.000
B - High Street (NE)		1.020	1.000	1.000
C - Alexander Avenue		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - High Street (SW)	16:45-17:00	277	281
	17:00-17:15	331	338
	17:15-17:30	405	411
	17:30-17:45	405	411
	17:45-18:00	331	338
	18:00-18:15	277	281
B - High Street (NE)	16:45-17:00	307	313
	17:00-17:15	387	373
	17:15-17:30	449	457
	17:30-17:45	449	457
	17:45-18:00	387	373
	18:00-18:15	307	313
C - Alexander Avenue	16:45-17:00	92	92
	17:00-17:15	110	110
	17:15-17:30	134	134
	17:30-17:45	134	134
	17:45-18:00	110	110
	18:00-18:15	92	92

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - High Street (SW)	0.49	8.63	1.0	A	338	507
B - High Street (NE)	0.59	11.62	1.4	B	374	562
C - Alexander Avenue	0.23	8.20	0.3	A	112	168

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	277	69	25	829	0.334	275	337	0.0	0.5	6.470	A
B - High Street (NE)	307	77	76	780	0.394	305	224	0.0	0.6	7.534	A
C - Alexander Avenue	92	23	271	653	0.141	91	110	0.0	0.2	6.407	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	331	83	31	826	0.400	330	404	0.5	0.7	7.246	A
B - High Street (NE)	367	92	92	771	0.476	366	269	0.6	0.9	8.885	A
C - Alexander Avenue	110	27	325	619	0.177	109	132	0.2	0.2	7.082	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	405	101	37	822	0.493	404	494	0.7	1.0	8.580	A
B - High Street (NE)	449	112	112	759	0.592	447	329	0.9	1.4	11.473	B
C - Alexander Avenue	134	34	398	574	0.234	134	161	0.2	0.3	8.170	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	405	101	37	822	0.493	405	496	1.0	1.0	8.629	A
B - High Street (NE)	449	112	112	759	0.592	449	330	1.4	1.4	11.623	B
C - Alexander Avenue	134	34	400	573	0.234	134	162	0.3	0.3	8.204	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	331	83	31	826	0.400	332	407	1.0	0.7	7.301	A
B - High Street (NE)	367	92	92	771	0.476	369	271	1.4	0.9	9.006	A
C - Alexander Avenue	110	27	328	617	0.178	110	133	0.3	0.2	7.101	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	277	69	26	829	0.334	278	341	0.7	0.5	6.534	A
B - High Street (NE)	307	77	77	779	0.394	308	226	0.9	0.7	7.659	A
C - Alexander Avenue	92	23	274	651	0.141	92	111	0.2	0.2	6.447	A

2036 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	10.41	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		10.41	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2036 DS	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	435	100.000
B - High Street (NE)		ONE HOUR	✓	346	100.000
C - Alexander Avenue		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	331	104
	B - High Street (NE)	304	0	42
	C - Alexander Avenue	194	52	0

Proportions

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0.00	0.76	0.24
	B - High Street (NE)	0.88	0.00	0.12
	C - Alexander Avenue	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	2	0
	B - High Street (NE)	3	0	0
	C - Alexander Avenue	0	0	0

Average PCU Per Veh

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	1.000	1.020	1.000
	B - High Street (NE)	1.030	1.000	1.000
	C - Alexander Avenue	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - HighStreet (SW)	07:45-08:00	327	332
	08:00-08:15	391	397
	08:15-08:30	479	486
	08:30-08:45	479	486
	08:45-09:00	391	397
	09:00-09:15	327	332
B - HighStreet (NE)	07:45-08:00	260	267
	08:00-08:15	311	319
	08:15-08:30	381	391
	08:30-08:45	381	391
	08:45-09:00	311	319
	09:00-09:15	260	267
C - Alexander Avenue	07:45-08:00	185	185
	08:00-08:15	221	221
	08:15-08:30	271	271
	08:30-08:45	271	271
	08:45-09:00	221	221
	09:00-09:15	185	185

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - HighStreet (SW)	0.59	10.87	1.4	B	399	599
B - HighStreet (NE)	0.51	9.72	1.0	A	317	478
C - Alexander Avenue	0.44	10.57	0.8	B	226	339

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - HighStreet (SW)	327	82	39	821	0.399	325	372	0.0	0.7	7.222	A
B - HighStreet (NE)	260	65	78	772	0.337	258	286	0.0	0.5	6.978	A
C - Alexander Avenue	185	46	227	678	0.273	184	109	0.0	0.4	7.257	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - HighStreet (SW)	391	98	47	816	0.479	390	447	0.7	0.9	8.428	A
B - HighStreet (NE)	311	78	93	763	0.407	310	343	0.5	0.7	7.933	A
C - Alexander Avenue	221	55	273	650	0.340	221	131	0.4	0.5	8.375	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	479	120	57	810	0.591	477	548	0.9	1.4	10.742	B
B - High Street (NE)	381	95	114	751	0.507	380	420	0.7	1.0	9.652	A
C - Alexander Avenue	271	68	334	612	0.443	270	160	0.5	0.8	10.489	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	479	120	57	810	0.591	479	548	1.4	1.4	10.870	B
B - High Street (NE)	381	95	114	751	0.507	381	422	1.0	1.0	9.724	A
C - Alexander Avenue	271	68	335	611	0.443	271	161	0.8	0.8	10.572	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	391	98	47	816	0.479	393	450	1.4	0.9	8.552	A
B - High Street (NE)	311	78	94	763	0.408	312	346	1.0	0.7	8.010	A
C - Alexander Avenue	221	55	274	649	0.341	222	132	0.8	0.5	8.459	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	327	82	39	821	0.399	329	376	0.9	0.7	7.331	A
B - High Street (NE)	280	65	79	772	0.337	261	289	0.7	0.5	7.080	A
C - Alexander Avenue	185	46	230	677	0.274	186	110	0.5	0.4	7.339	A

2036 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Alexander Avenue/High Street	Mini-roundabout		A, B, C	11.43	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		11.43	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2036 DS	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - High Street (SW)		ONE HOUR	✓	416	100.000
B - High Street (NE)		ONE HOUR	✓	439	100.000
C - Alexander Avenue		ONE HOUR	✓	153	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0	297	119
	B - High Street (NE)	394	0	45
	C - Alexander Avenue	119	34	0

Proportions

	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
From	A - High Street (SW)	0.00	0.71	0.29
	B - High Street (NE)	0.90	0.00	0.10
	C - Alexander Avenue	0.78	0.22	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		0	2	0
B - High Street (NE)		2	0	0
C - Alexander Avenue		0	0	0

Average PCU Per Veh

From	To			
		A - High Street (SW)	B - High Street (NE)	C - Alexander Avenue
A - High Street (SW)		1.000	1.020	1.000
B - High Street (NE)		1.020	1.000	1.000
C - Alexander Avenue		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - High Street (SW)	16:45-17:00	313	318
	17:00-17:15	374	379
	17:15-17:30	458	465
	17:30-17:45	458	465
	17:45-18:00	374	379
	18:00-18:15	313	318
B - High Street (NE)	16:45-17:00	331	336
	17:00-17:15	395	402
	17:15-17:30	483	492
	17:30-17:45	483	492
	17:45-18:00	395	402
	18:00-18:15	331	336
C - Alexander Avenue	16:45-17:00	115	115
	17:00-17:15	138	138
	17:15-17:30	168	168
	17:30-17:45	168	168
	17:45-18:00	138	138
	18:00-18:15	115	115

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - High Street (SW)	0.56	9.87	1.2	A	382	573
B - High Street (NE)	0.65	13.60	1.8	B	403	604
C - Alexander Avenue	0.31	9.38	0.4	A	140	211

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	313	78	25	830	0.378	311	383	0.0	0.6	6.907	A
B - High Street (NE)	331	83	89	772	0.428	328	247	0.0	0.7	8.043	A
C - Alexander Avenue	115	29	294	638	0.180	114	122	0.0	0.2	6.858	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	374	93	30	827	0.452	373	460	0.6	0.8	7.924	A
B - High Street (NE)	395	99	107	762	0.518	393	297	0.7	1.1	9.738	A
C - Alexander Avenue	138	34	353	602	0.229	137	147	0.2	0.3	7.744	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	458	115	37	822	0.557	456	562	0.8	1.2	9.786	A
B - High Street (NE)	483	121	131	748	0.646	481	363	1.1	1.8	13.327	B
C - Alexander Avenue	168	42	431	554	0.304	168	180	0.3	0.4	9.322	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	458	115	37	822	0.557	458	565	1.2	1.2	9.873	A
B - High Street (NE)	483	121	131	747	0.647	483	364	1.8	1.8	13.602	B
C - Alexander Avenue	168	42	434	552	0.305	168	181	0.4	0.4	9.384	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	374	93	31	826	0.453	376	464	1.2	0.8	8.013	A
B - High Street (NE)	395	99	107	761	0.518	397	299	1.8	1.1	9.965	A
C - Alexander Avenue	138	34	357	600	0.229	138	148	0.4	0.3	7.810	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - High Street (SW)	313	78	26	829	0.378	314	388	0.8	0.6	6.997	A
B - High Street (NE)	331	83	90	772	0.428	332	250	1.1	0.8	8.211	A
C - Alexander Avenue	115	29	298	636	0.181	115	124	0.3	0.2	6.920	A

Basic Results Summary

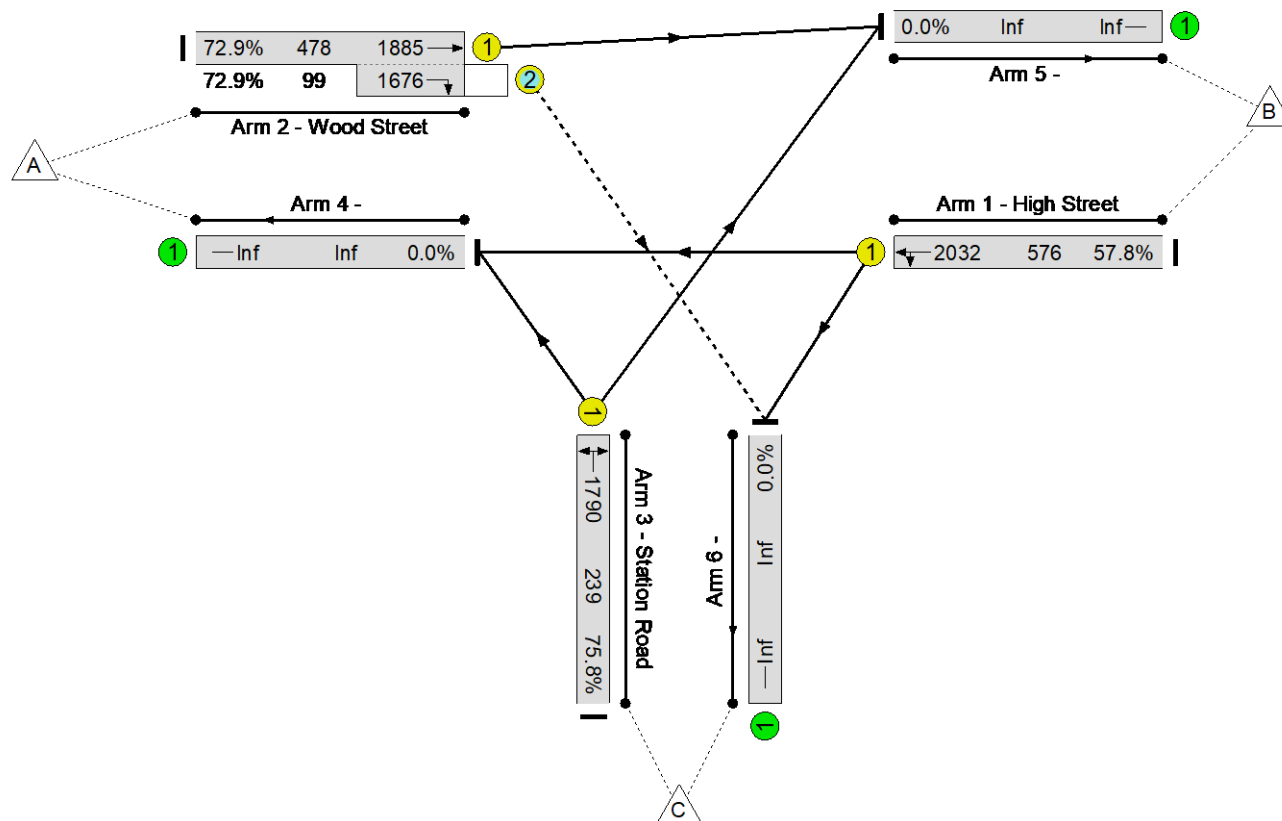
User and Project Details

Project:	Station Road / The Hollow, Earl Shilton
Title:	
Location:	
Model Assumptions:	The model was supplied to WSP by LCC and WSP has used the same model and then updated the Traffic Flows.
Additional detail:	
File name:	L.Station Road_The Hollow LCC Model.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2023 AM' (FG1: '2023 AM Peak', Plan 1: 'Network Control Plan 1')

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
PRC: 18.7 %
Total Traffic Delay: 8.8 pcuHr



Network Results

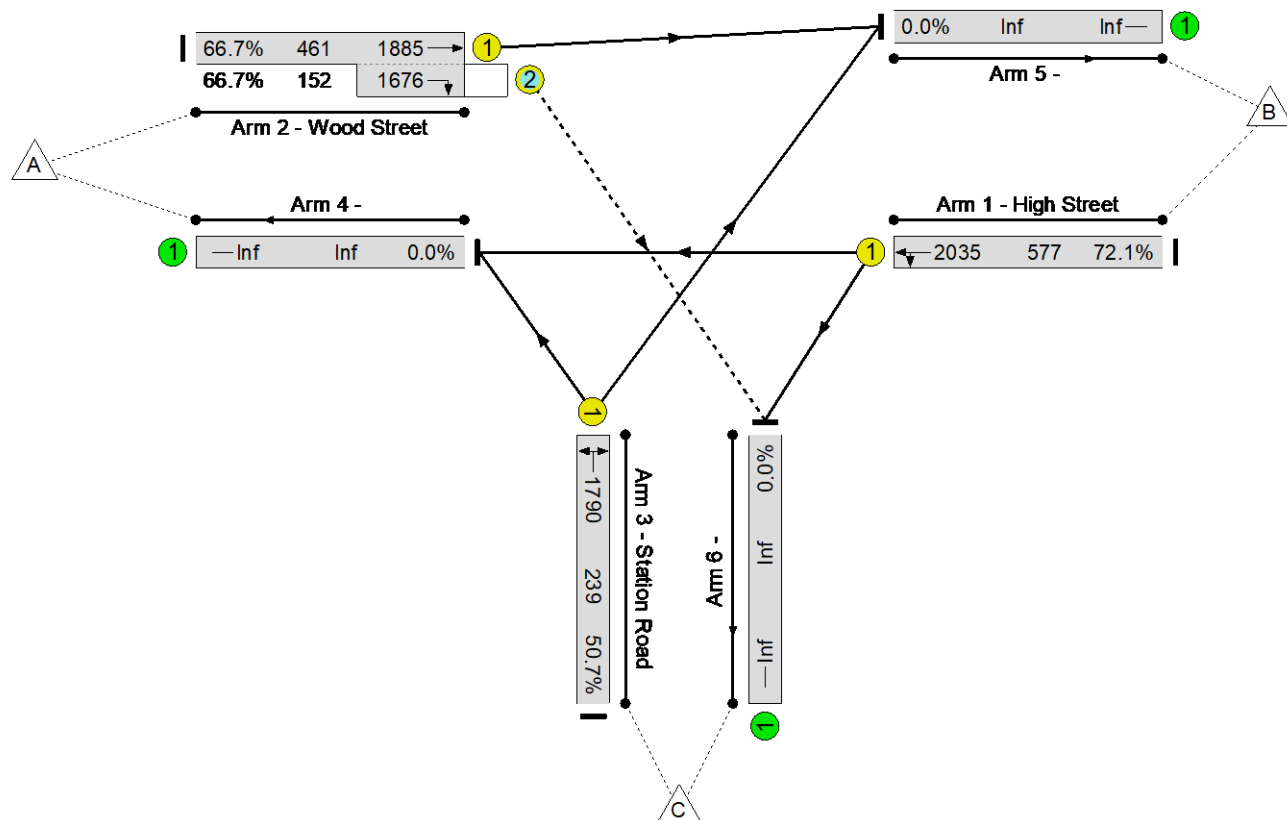
[illegible]

Basic Results Summary

Scenario 2: '2023 PM' (FG2: '2023 PM Peak', Plan 1: 'Network Control Plan 1')

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
PRC: 24.7 %
Total Traffic Delay: 8.2 pcuHr



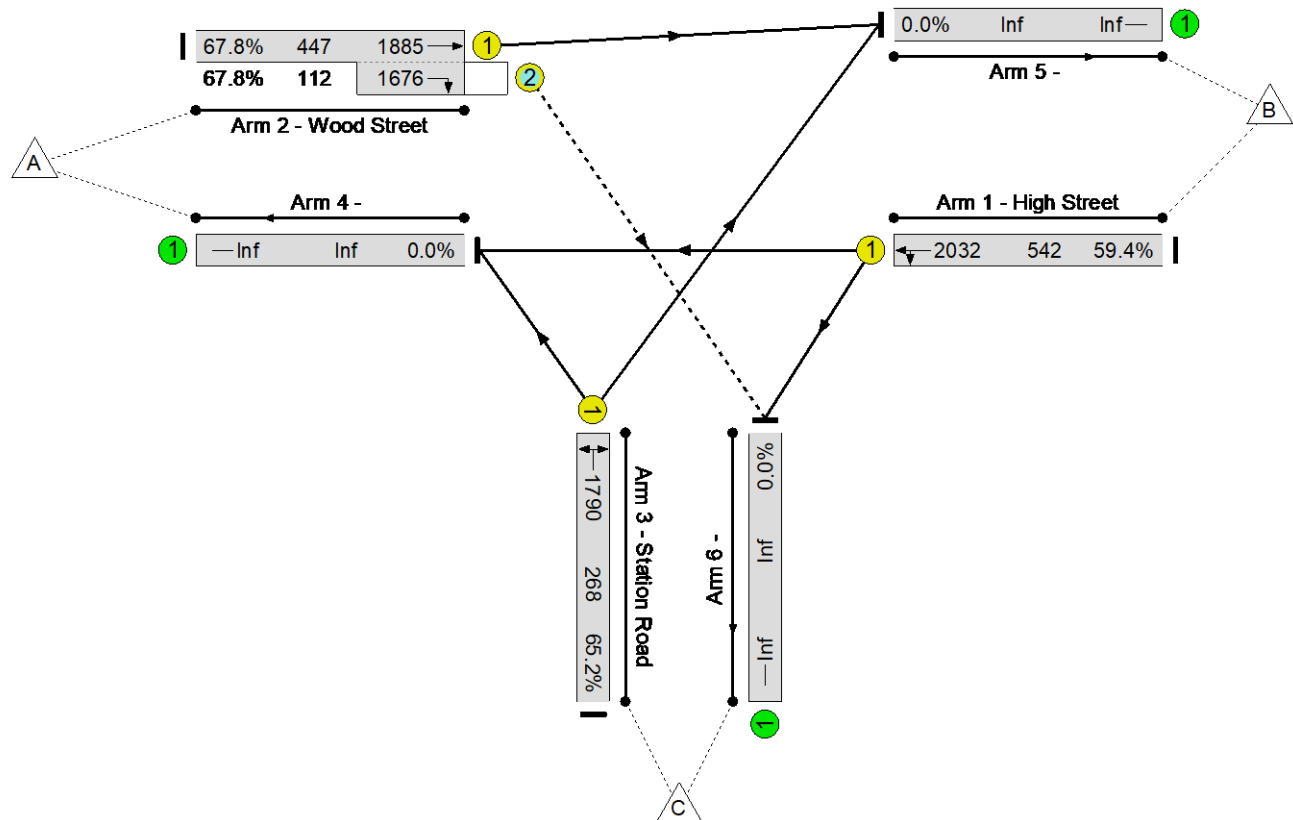
Network Results

Basic Results Summary

Scenario 3: '2036 DM AM' (FG3: '2036 DM AM Peak', Plan 1: 'Network Control Plan 1')

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
 PRC: 32.8 %
 Total Traffic Delay: 7.7 pcuHr

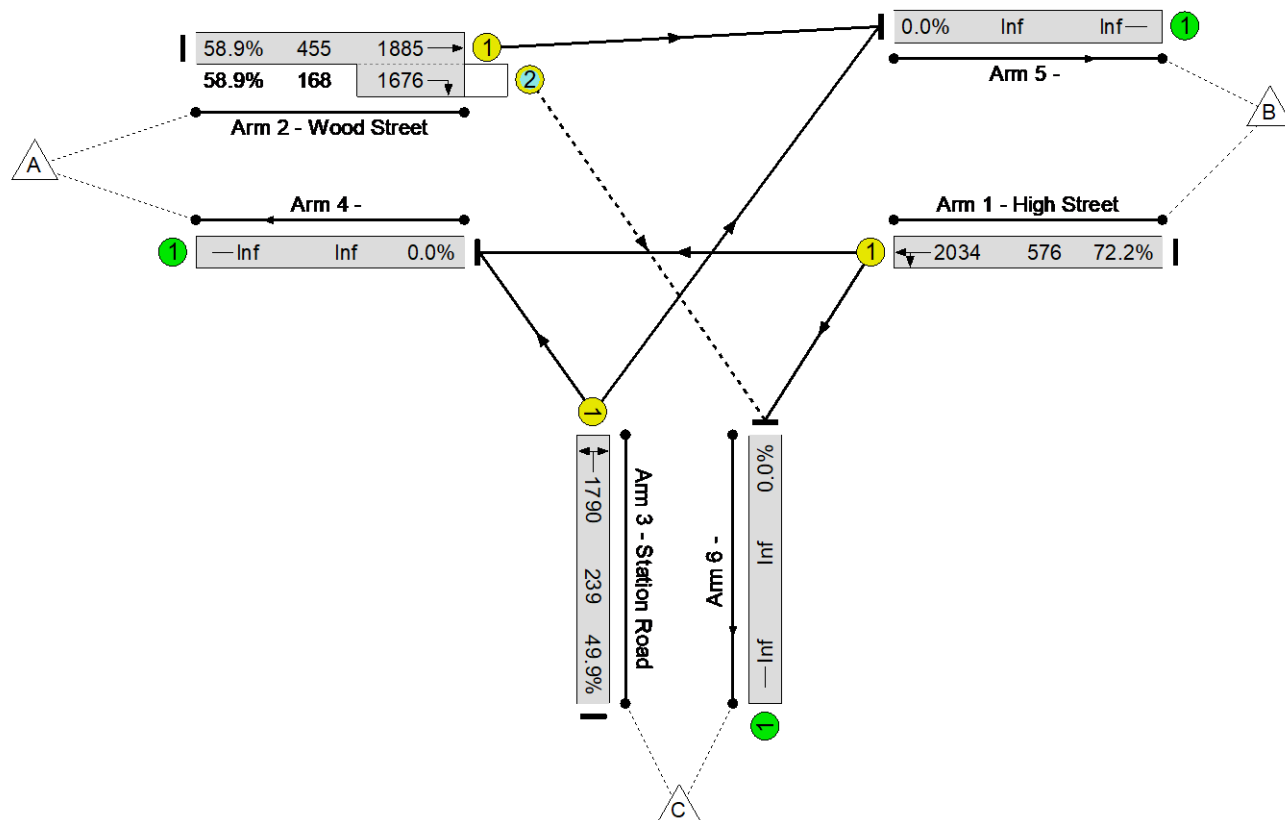


Network Results

Network Results																	
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	67.8%	76	0	0	7.7	-	-
Station Road / The Hollow, Earl Shilton	-	-	-		-	-	-	-	-	-	67.8%	76	0	0	7.7	-	-
1/1	High Street Ahead Left	U	B		1	15	-	322	2032	542	59.4%	-	-	-	2.4	27.3	5.4
2/1+2/2	Wood Street Ahead Right	U+O	A		1	15	-	379	1885:1676	447+112	67.8 : 67.8%	76	0	0	3.2	30.2	5.4
3/1	Station Road Left Right	U	C		1	8	-	175	1790	268	65.2%	-	-	-	2.1	42.9	3.6
C1 PRC for Signalled Lanes (%): 32.8 PRC Over All Lanes (%): 32.8 Total Delay for Signalled Lanes (pcuHr): 7.71 Total Delay Over All Lanes(pcuHr): 7.71 Cycle Time (s): 60																	

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
PRC: 24.7 %
Total Traffic Delay: 7.6 pcuHr



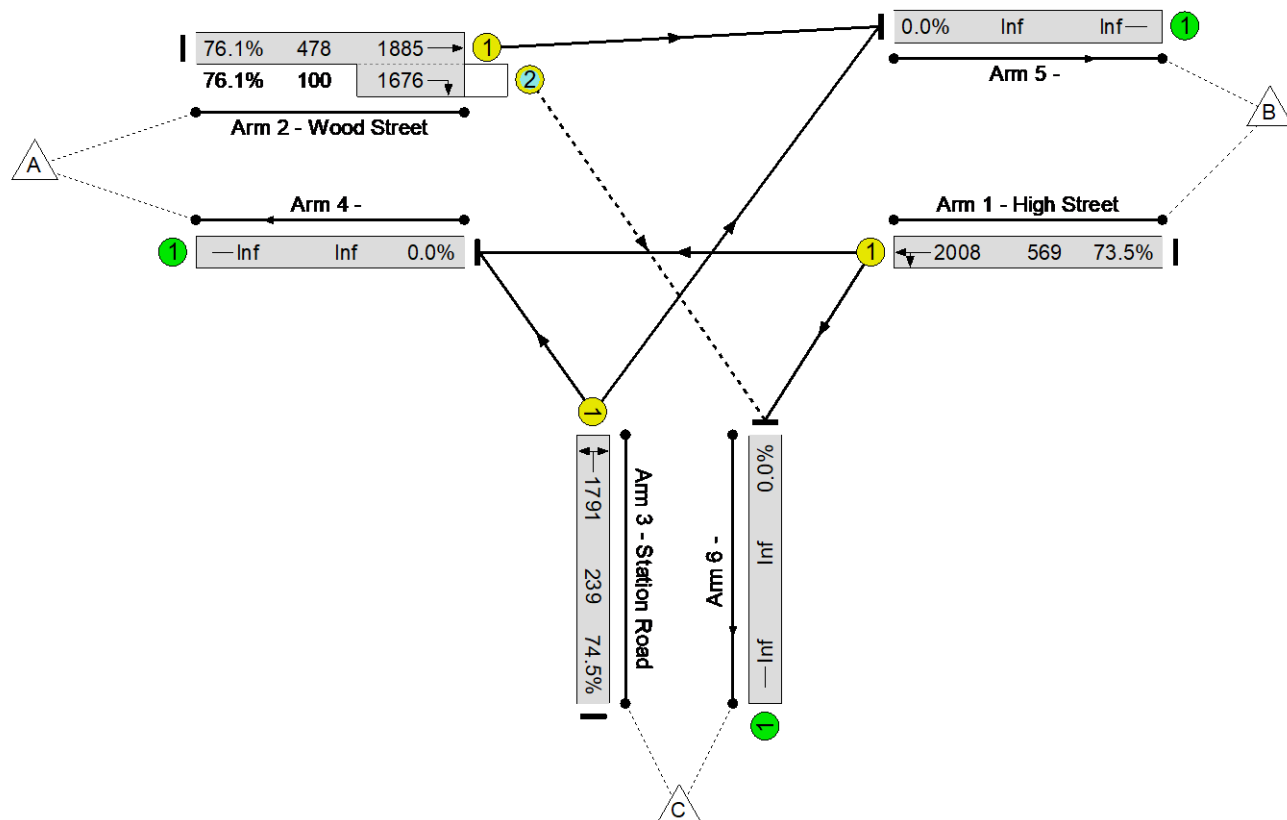
Network Results

Basic Results Summary

Scenario 5: '2036 DS AM' (FG5: '2036 DS AM Peak', Plan 1: 'Network Control Plan 1')

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
PRC: 18.2 %
Total Traffic Delay: 10.3 pcuHr



Network Results

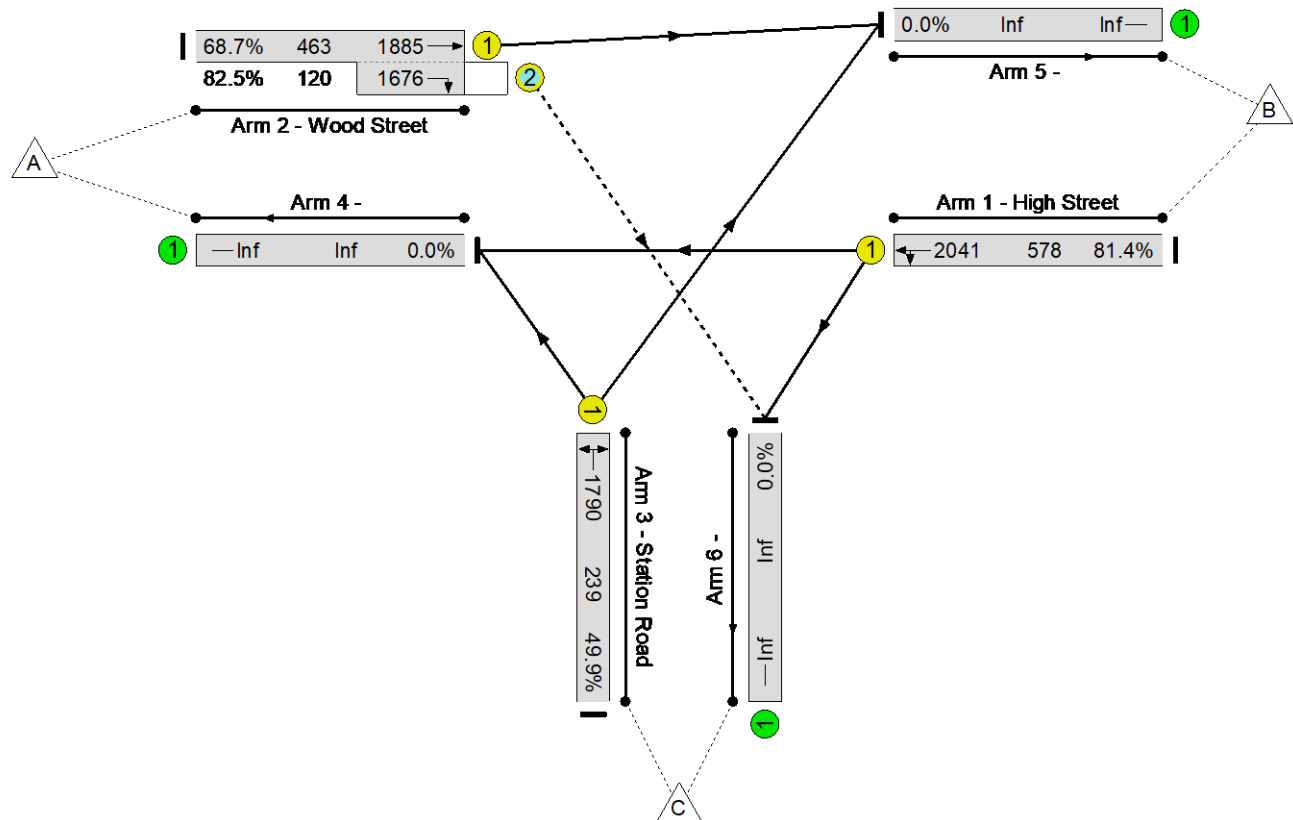
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	76.1%	76	0	0	10.3	-	-
Station Road / The Hollow, Earl Shilton	-	-	-		-	-	-	-	-	-	76.1%	76	0	0	10.3	-	-
1/1	High Street Ahead Left	U	B		1	16	-	418	2008	569	73.5%	-	-	-	3.6	31.2	7.6
2/1+2/2	Wood Street Ahead Right	U+O	A		1	16	-	440	1885:1676	478+100	76.1 : 76.1%	76	0	0	4.1	33.3	7.2
3/1	Station Road Left Right	U	C		1	7	-	178	1791	239	74.5%	-	-	-	2.6	53.3	4.2
C1 PRC for Signalled Lanes (%): 18.2 Total Delay for Signalled Lanes (pcuHr): 10.32 Cycle Time (s): 60 PRC Over All Lanes (%): 18.2 Total Delay Over All Lanes(pcuHr): 10.32																	

Basic Results Summary

Scenario 6: '2036 DS PM' (FG6: '2036 DS PM Peak', Plan 1: 'Network Control Plan 1')

Validated to match timings taken from latest inspection dated 13/06/2023

Station Road / The Hollow, Earl Shilton
PRC: 9.1 %
Total Traffic Delay: 9.7 pcuHr



Network Results

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.0.1.1519									
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For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: M.Mill Lane_Alexander Avenue.j10

Path: C:\Users\NCS04445\WSP 0365\Ayyapusetty, Jayakrishna - 46_Earl Shilton - Junction modelling\03 WIP\TP\02 CAD BIM Models\Junction Models

Report generation date: 10/01/2024 17:27:14

»Base 2023, AM
»Base 2023, PM
»2036 DM, AM
»2036 DM, PM
»2036 DS, AM
»2036 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Base 2023									
Stream B-C	D1	0.1	5.62	0.06	A	D2	0.0	5.71	0.03	A
Stream B-A		0.0	8.21	0.01	A		0.0	7.70	0.03	A
Stream C-AB		0.1	6.12	0.07	A		0.0	5.96	0.05	A
	2036 DM									
Stream B-C	D3	0.1	5.65	0.06	A	D4	0.0	5.73	0.03	A
Stream B-A		0.0	8.17	0.01	A		0.0	7.69	0.03	A
Stream C-AB		0.1	6.13	0.07	A		0.1	5.97	0.05	A
	2036 DS									
Stream B-C	D5	0.1	5.81	0.07	A	D6	0.1	5.75	0.05	A
Stream B-A		0.0	8.67	0.01	A		0.0	8.16	0.04	A
Stream C-AB		0.1	6.00	0.08	A		0.0	5.66	0.02	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.

10/01/2024 17:27:14

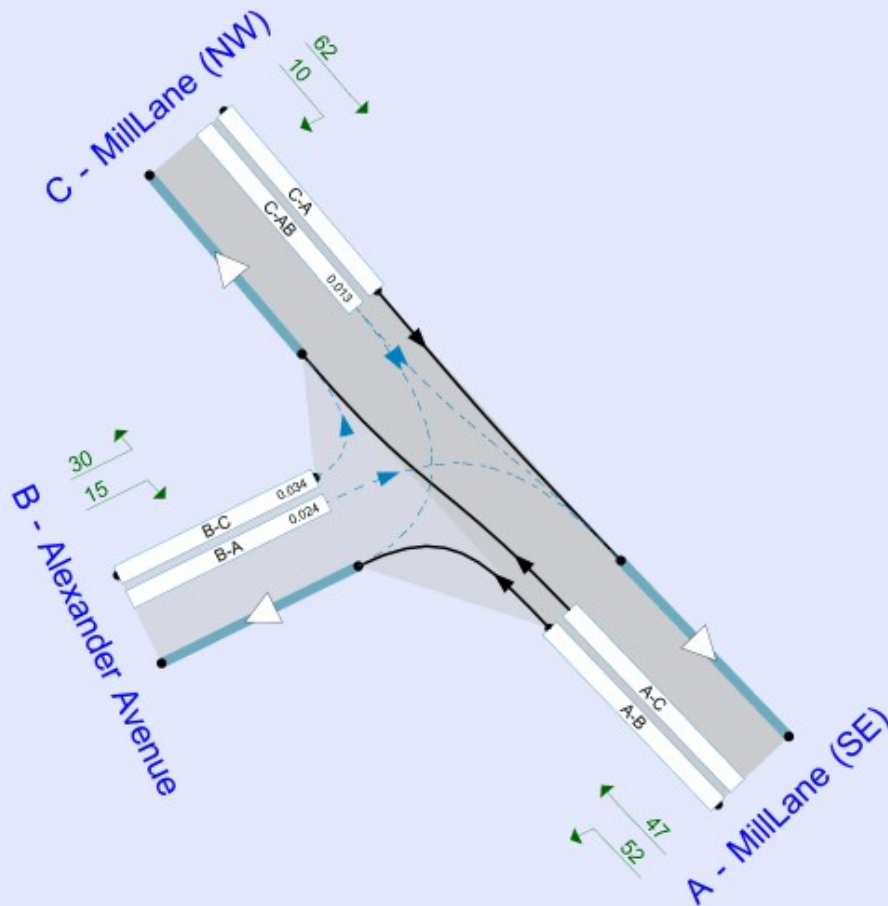
File summary

File Description

Title	Earl Shilton JunctionN modelling
Location	52.577497, -1.300028
Site number	
Date	29/11/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJA05275
Description	Assessment of Existing Junction layout

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	Veh	Veh	perHour	s	-Min	perMin



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

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 2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2036 DM	AM	ONE HOUR	07:45	09:15	15	✓
D4	2036 DM	PM	ONE HOUR	16:45	18:15	15	✓
D5	2036 DS	AM	ONE HOUR	07:45	09:15	15	✓
D6	2036 DS	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Alexander Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Mill Lane/Alexander Avenue	T-Junction	Two-way	Two-way	Two-way		4.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.83	A

Arms

Arms

Arm	Name	Description	Arm type
A	Mill Lane (SE)		Major
B	Alexander Avenue		Minor
C	Mill Lane (NW)		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 - Mill Lane (NW)	6.30			100.7	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Alexander Avenue	One lane plus flare	8.99	4.69	3.73	3.65	3.65	✓	1.00	37	20

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	458	0.082	0.208	0.131	0.298
B-C	705	0.108	0.269	-	-
C-B	632	0.242	0.242	-	-

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 2023	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - MillLane (SE)		ONE HOUR	✓	13	100.000
B - Alexander Avenue		ONE HOUR	✓	39	100.000
C - MillLane (NW)		ONE HOUR	✓	44	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	0	4	9
	B - Alexander Avenue	3	0	36
	C - MillLane (NW)	5	39	0

Proportions

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	0.00	0.31	0.69
	B - Alexander Avenue	0.08	0.00	0.92
	C - MillLane (NW)	0.11	0.89	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	0	0	11
	B - Alexander Avenue	0	0	3
	C - MillLane (NW)	0	0	0

Average PCU Per Veh

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	1.000	1.000	1.110
	B - Alexander Avenue	1.000	1.000	1.030
	C - MillLane (NW)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Mill Lane (SE)	07:45-08:00	10	11
	08:00-08:15	12	13
	08:15-08:30	14	15
	08:30-08:45	14	15
	08:45-09:00	12	13
	09:00-09:15	10	11
B - Alexander Avenue	07:45-08:00	29	30
	08:00-08:15	35	36
	08:15-08:30	43	44
	08:30-08:45	43	44
	08:45-09:00	35	36
	09:00-09:15	29	30
C - Mill Lane (NW)	07:45-08:00	33	33
	08:00-08:15	40	40
	08:15-08:30	48	48
	08:30-08:45	48	48
	08:45-09:00	40	40
	09:00-09:15	33	33

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	5.62	0.1	A	33	50
B-A	0.01	8.21	0.0	A	3	4
C-AB	0.07	6.12	0.1	A	36	54
C-A					4	6
A-B					4	6
A-C					8	12

Main Results for each time segment

07:45 - 08:00

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-C	27	7	681	0.040	27	0.0	0.0	5.500	A
B-A	2	0.56	447	0.005	2	0.0	0.0	8.097	A
C-AB	30	7	632	0.047	29	0.0	0.0	5.970	A
C-A	4	0.90			4				
A-B	3	0.75			3				
A-C	7	2			7				

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-C	32	8	681	0.048	32	0.0	0.0	5.553	A
B-A	3	0.67	445	0.006	3	0.0	0.0	8.146	A
C-AB	35	9	632	0.056	35	0.0	0.1	6.030	A
C-A	4	1			4				
A-B	4	0.90			4				
A-C	8	2			8				

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-C	40	10	680	0.058	40	0.0	0.1	5.623	A
B-A	3	0.83	442	0.007	3	0.0	0.0	8.213	A
C-AB	43	11	632	0.069	43	0.1	0.1	6.113	A
C-A	5	1			5				
A-B	4	1			4				
A-C	10	2			10				

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-C	40	10	680	0.058	40	0.1	0.1	5.623	A
B-A	3	0.83	442	0.007	3	0.0	0.0	8.213	A
C-AB	43	11	632	0.069	43	0.1	0.1	6.115	A
C-A	5	1			5				
A-B	4	1			4				
A-C	10	2			10				

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-C	32	8	681	0.048	32	0.1	0.1	5.553	A
B-A	3	0.67	445	0.006	3	0.0	0.0	8.146	A
C-AB	35	9	632	0.056	35	0.1	0.1	6.032	A
C-A	4	1			4				
A-B	4	0.90			4				
A-C	8	2			8				

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-C	27	7	681	0.040	27	0.1	0.0	5.503	A
B-A	2	0.56	447	0.005	2	0.0	0.0	8.098	A
C-AB	30	7	632	0.047	30	0.1	0.0	5.973	A
C-A	4	0.90			4				
A-B	3	0.75			3				
A-C	7	2			7				

Base 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Alexander Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Mill Lane/Alexander Avenue	T-Junction	Two-way	Two-way	Two-way		4.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.63	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 2023	PM	ONE HOUR	16:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - MillLane (SE)		ONE HOUR	✓	15	100.000
B - Alexander Avenue		ONE HOUR	✓	34	100.000
C - MillLane (NW)		ONE HOUR	✓	33	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0	7	8
B - Alexander Avenue		14	0	20
C - MillLane (NW)		7	26	0

Proportions

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0.00	0.47	0.53
B - Alexander Avenue		0.41	0.00	0.59
C - MillLane (NW)		0.21	0.79	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	0	0	0
	B - Alexander Avenue	0	0	5
	C - MillLane (NW)	0	0	0

Average PCU Per Veh

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	1.000	1.000	1.000
	B - Alexander Avenue	1.000	1.000	1.050
	C - MillLane (NW)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - MillLane (SE)	16:45-17:00	11	11
	17:00-17:15	13	13
	17:15-17:30	17	17
	17:30-17:45	17	17
	17:45-18:00	13	13
	18:00-18:15	11	11
B - Alexander Avenue	16:45-17:00	26	26
	17:00-17:15	31	31
	17:15-17:30	37	39
	17:30-17:45	37	39
	17:45-18:00	31	31
	18:00-18:15	26	26
C - MillLane (NW)	16:45-17:00	25	25
	17:00-17:15	30	30
	17:15-17:30	36	36
	17:30-17:45	36	36
	17:45-18:00	30	30
	18:00-18:15	25	25

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	5.71	0.0	A	18	28
B-A	0.03	7.70	0.0	A	13	19
C-AB	0.05	5.96	0.0	A	24	36
C-A					6	9
A-B					6	10
A-C					7	11

Main Results for each time segment

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-C	15	4	656	0.023	15	0.0	0.0	5.619	A
B-A	11	3	487	0.022	10	0.0	0.0	7.553	A
C-AB	20	5	633	0.031	20	0.0	0.0	5.887	A
C-A	5	1			5				
A-B	5	1			5				
A-C	6	2			6				

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-C	18	4	654	0.027	18	0.0	0.0	5.656	A
B-A	13	3	485	0.026	13	0.0	0.0	7.613	A
C-AB	24	6	633	0.037	24	0.0	0.0	5.905	A
C-A	6	2			6				
A-B	6	2			6				
A-C	7	2			7				

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-C	22	6	653	0.034	22	0.0	0.0	5.706	A
B-A	15	4	483	0.032	15	0.0	0.0	7.699	A
C-AB	29	7	633	0.046	29	0.0	0.0	5.956	A
C-A	7	2			7				
A-B	8	2			8				
A-C	9	2			9				

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-C	22	6	653	0.034	22	0.0	0.0	5.706	A
B-A	15	4	483	0.032	15	0.0	0.0	7.699	A
C-AB	29	7	633	0.046	29	0.0	0.0	5.956	A
C-A	7	2			7				
A-B	8	2			8				
A-C	9	2			9				

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-C	18	4	654	0.027	18	0.0	0.0	5.659	A
B-A	13	3	485	0.026	13	0.0	0.0	7.614	A
C-AB	24	6	633	0.037	24	0.0	0.0	5.906	A
C-A	6	2			6				
A-B	6	2			6				
A-C	7	2			7				

18:00 - 18:15

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-C	15	4	655	0.023	15	0.0	0.0	5.623	A
B-A	11	3	487	0.022	11	0.0	0.0	7.553	A
C-AB	20	5	633	0.031	20	0.0	0.0	5.872	A
C-A	5	1			5				
A-B	5	1			5				
A-C	6	2			6				

2036 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Alexander Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Mill Lane/Alexander Avenue	T-Junction	Two-way	Two-way	Two-way		4.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.92	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
D3	2036 DM	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - MillLane (SE)		ONE HOUR	✓	13	100.000
B - Alexander Avenue		ONE HOUR	✓	41	100.000
C - MillLane (NW)		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	0	4	9
	B - Alexander Avenue	5	0	38
	C - MillLane (NW)	5	40	0

Proportions

	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
From	A - MillLane (SE)	0.00	0.31	0.69
	B - Alexander Avenue	0.12	0.00	0.88
	C - MillLane (NW)	0.11	0.89	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0	0	11
B - Alexander Avenue		0	0	3
C - MillLane (NW)		0	0	0

Average PCU Per Veh

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		1.000	1.000	1.110
B - Alexander Avenue		1.000	1.000	1.030
C - MillLane (NW)		1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - MillLane (SE)	07:45-08:00	10	11
	08:00-08:15	12	13
	08:15-08:30	14	15
	08:30-08:45	14	15
	08:45-09:00	12	13
	09:00-09:15	10	11
B - Alexander Avenue	07:45-08:00	31	32
	08:00-08:15	37	38
	08:15-08:30	45	46
	08:30-08:45	45	46
	08:45-09:00	37	38
	09:00-09:15	31	32
C - MillLane (NW)	07:45-08:00	34	34
	08:00-08:15	40	40
	08:15-08:30	50	50
	08:30-08:45	50	50
	08:45-09:00	40	40
	09:00-09:15	34	34

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	5.65	0.1	A	33	50
B-A	0.01	8.17	0.0	A	5	7
C-AB	0.07	6.13	0.1	A	37	55
C-A					4	6
A-B					4	6
A-C					8	12

Main Results for each time segment

07:45 - 08:00

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-C	27	7	678	0.040	27	0.0	0.0	5.527	A
B-A	4	0.94	452	0.008	4	0.0	0.0	8.038	A
C-AB	30	8	632	0.048	30	0.0	0.1	5.978	A
C-A	4	0.90			4				
A-B	3	0.75			3				
A-C	7	2			7				

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-C	32	8	677	0.048	32	0.0	0.0	5.580	A
B-A	4	1	449	0.010	4	0.0	0.0	8.092	A
C-AB	36	9	632	0.057	36	0.1	0.1	6.040	A
C-A	4	1			4				
A-B	4	0.90			4				
A-C	8	2			8				

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-C	40	10	676	0.059	40	0.0	0.1	5.653	A
B-A	6	1	446	0.012	5	0.0	0.0	8.168	A
C-AB	44	11	632	0.070	44	0.1	0.1	6.124	A
C-A	5	1			5				
A-B	4	1			4				
A-C	10	2			10				

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-C	40	10	676	0.059	40	0.1	0.1	5.653	A
B-A	6	1	446	0.012	6	0.0	0.0	8.168	A
C-AB	44	11	632	0.070	44	0.1	0.1	6.127	A
C-A	5	1			5				
A-B	4	1			4				
A-C	10	2			10				

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-C	32	8	677	0.048	32	0.1	0.1	5.581	A
B-A	4	1	449	0.010	5	0.0	0.0	8.092	A
C-AB	36	9	632	0.057	36	0.1	0.1	6.043	A
C-A	4	1			4				
A-B	4	0.90			4				
A-C	8	2			8				

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-C	27	7	678	0.040	27	0.1	0.0	5.532	A
B-A	4	0.94	452	0.008	4	0.0	0.0	8.039	A
C-AB	30	8	632	0.048	30	0.1	0.1	5.981	A
C-A	4	0.90			4				
A-B	3	0.75			3				
A-C	7	2			7				

2036 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Alexander Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Mill Lane/Alexander Avenue	T-Junction	Two-way	Two-way	Two-way		4.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.69	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	2036 DM	PM	ONE HOUR	18:45	18:15	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 (Veh/hr)	Scaling Factor (%)
A - MillLane (SE)		ONE HOUR	✓	15	100.000
B - Alexander Avenue		ONE HOUR	✓	35	100.000
C - MillLane (NW)		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0	7	8
B - Alexander Avenue		15	0	20
C - MillLane (NW)		7	27	0

Proportions

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0.00	0.47	0.53
B - Alexander Avenue		0.43	0.00	0.57
C - MillLane (NW)		0.21	0.79	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	0	0	0
	B - Alexander Avenue	0	0	5
	C - MillLane (NW)	0	0	0

Average PCU Per Veh

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	1.000	1.000	1.000
	B - Alexander Avenue	1.000	1.000	1.050
	C - MillLane (NW)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - MillLane (SE)	16:45-17:00	11	11
	17:00-17:15	13	13
	17:15-17:30	17	17
	17:30-17:45	17	17
	17:45-18:00	13	13
	18:00-18:15	11	11
B - Alexander Avenue	16:45-17:00	28	27
	17:00-17:15	31	32
	17:15-17:30	39	40
	17:30-17:45	39	40
	17:45-18:00	31	32
	18:00-18:15	28	27
C - MillLane (NW)	16:45-17:00	28	28
	17:00-17:15	31	31
	17:15-17:30	37	37
	17:30-17:45	37	37
	17:45-18:00	31	31
	18:00-18:15	28	28

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	5.73	0.0	A	18	28
B-A	0.03	7.69	0.0	A	14	21
C-AB	0.05	5.97	0.1	A	25	38
C-A					6	9
A-B					6	10
A-C					7	11

Report generated by Junctions 10 v10.0.1.1519 on 10/01/2024 17:27:38

Main Results for each time segment

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-C	15	4	653	0.023	15	0.0	0.0	5.642	A
B-A	11	3	489	0.023	11	0.0	0.0	7.538	A
C-AB	20	5	633	0.032	20	0.0	0.0	5.874	A
C-A	5	1			5				
A-B	5	1			5				
A-C	6	2			6				

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-C	18	4	652	0.028	18	0.0	0.0	5.679	A
B-A	13	3	487	0.028	13	0.0	0.0	7.601	A
C-AB	25	6	633	0.039	24	0.0	0.0	5.914	A
C-A	6	2			6				
A-B	6	2			6				
A-C	7	2			7				

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-C	22	6	650	0.034	22	0.0	0.0	5.730	A
B-A	17	4	485	0.034	16	0.0	0.0	7.692	A
C-AB	30	8	633	0.048	30	0.0	0.1	5.967	A
C-A	7	2			7				
A-B	8	2			8				
A-C	9	2			9				

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-C	22	6	650	0.034	22	0.0	0.0	5.731	A
B-A	17	4	485	0.034	17	0.0	0.0	7.692	A
C-AB	30	8	633	0.048	30	0.1	0.1	5.969	A
C-A	7	2			7				
A-B	8	2			8				
A-C	9	2			9				

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-C	18	4	652	0.028	18	0.0	0.0	5.680	A
B-A	13	3	487	0.028	14	0.0	0.0	7.605	A
C-AB	25	6	633	0.039	25	0.1	0.0	5.915	A
C-A	6	2			6				
A-B	6	2			6				
A-C	7	2			7				

18:00 - 18:15

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-C	15	4	653	0.023	15	0.0	0.0	5.646	A
B-A	11	3	489	0.023	11	0.0	0.0	7.541	A
C-AB	20	5	633	0.032	21	0.0	0.0	5.877	A
C-A	5	1			5				
A-B	5	1			5				
A-C	6	2			6				

2036 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Alexander Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

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	Mill Lane/Alexander Avenue	T-Junction	Two-way	Two-way	Two-way		2.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.32	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
D5	2036 DS	AM	ONE HOUR	07:45	09:15	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 (Veh/hr)	Scaling Factor (%)
A - MillLane (SE)		ONE HOUR	✓	90	100.000
B - Alexander Avenue		ONE HOUR	✓	47	100.000
C - MillLane (NW)		ONE HOUR	✓	97	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0	26	64
B - Alexander Avenue		4	0	43
C - MillLane (NW)		57	40	0

Proportions

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
A - MillLane (SE)		0.00	0.29	0.71
B - Alexander Avenue		0.09	0.00	0.91
C - MillLane (NW)		0.59	0.41	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	0	0	3
	B - Alexander Avenue	0	0	2
	C - MillLane (NW)	2	0	0

Average PCU Per Veh

From	To			
		A - MillLane (SE)	B - Alexander Avenue	C - MillLane (NW)
	A - MillLane (SE)	1.000	1.000	1.030
	B - Alexander Avenue	1.000	1.000	1.020
	C - MillLane (NW)	1.020	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - MillLane (SE)	07:45-08:00	68	69
	08:00-08:15	81	83
	08:15-08:30	99	101
	08:30-08:45	99	101
	08:45-09:00	81	83
	09:00-09:15	68	69
B - Alexander Avenue	07:45-08:00	35	36
	08:00-08:15	42	43
	08:15-08:30	52	53
	08:30-08:45	52	53
	08:45-09:00	42	43
	09:00-09:15	35	36
C - MillLane (NW)	07:45-08:00	73	74
	08:00-08:15	87	88
	08:15-08:30	107	108
	08:30-08:45	107	108
	08:45-09:00	87	88
	09:00-09:15	73	74

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	5.81	0.1	A	39	59
B-A	0.01	8.67	0.0	A	4	6
C-AB	0.08	6.00	0.1	A	40	60
C-A					49	73
A-B					24	36
A-C					59	88

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