

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: Oyster Catcher Junction.j9

Path: P:\14-111 - Land West of Bilsham Road, Yapton\Trans\Picady\GLEESONS 250 UNITS\Oyster Catcher Junction

Report generation date: 23/10/2017 14:10:53

»2017 Observed, AM
»2022 Base, AM
»2022 Base + Dev, AM
»2017 Observed, PM
»2022 Base, PM
»2022 Base + Dev, PM
»2031 Base, AM
»2031 Base, PM
»2031 Base + 550 No Thru Link, AM
»2031 Base + 550 No Thru Link, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (min)	RFC	Queue (Veh)	Delay (min)	RFC
2017 Observed						
Stream B-CD	0.1	0.10	0.05	0.1	0.14	0.08
Stream B-A	0.1	0.22	0.08	0.2	0.59	0.19
Stream AB-D	1.1	0.27	0.54	1.2	0.26	0.54
Stream D-AB	0.7	0.18	0.41	2.5	0.39	0.73
Stream D-C	0.1	0.34	0.13	0.5	0.90	0.36
Stream CD-B	0.0	0.12	0.01	0.0	0.16	0.03
2022 Base						
Stream B-CD	0.1	0.11	0.06	0.2	0.23	0.13
Stream B-A	0.1	0.27	0.10	1.2	3.17	0.62
Stream AB-D	1.6	0.34	0.62	2.5	0.44	0.72
Stream D-AB	1.1	0.24	0.54	21.6	2.55	1.58
Stream D-C	0.2	0.45	0.18	3.7	5.37	0.99
Stream CD-B	0.0	0.13	0.01	0.0	0.18	0.03
2022 Base + Dev						
Stream B-CD	0.1	0.11	0.06	2.8	3.55	1.92
Stream B-A	0.1	0.28	0.11	2.2	4.94	5.87
Stream AB-D	1.6	0.35	0.63	2.5	0.44	0.73
Stream D-AB	1.3	0.26	0.58	28.8	3.22	1.13
Stream D-C	0.2	0.47	0.19	4.1	6.00	1.03
Stream CD-B	0.0	0.13	0.01	0.0	0.18	0.03
2031 Base						
Stream B-CD	0.1	0.12	0.07	22.1	26.65	999999999.00
Stream B-A	0.2	0.34	0.13	14.5	27.19	999999999.00
Stream AB-D	2.2	0.44	0.70	3.3	0.57	0.78
Stream D-AB	1.5	0.30	0.61	104.8	12.55	1.88
Stream D-C	0.3	0.62	0.25	10.2	15.06	1.74
Stream CD-B	0.0	0.14	0.02	0.0	0.19	0.03
2031 Base + 550 No Thru Link						
Stream B-CD	0.1	0.12	0.07	27.5	27.80	999999999.00
Stream B-A	0.2	0.36	0.14	18.1	30.97	999999999.00
Stream AB-D	2.4	0.47	0.72	4.8	0.77	0.85
Stream D-AB	2.1	0.37	0.69	157.5	40.75	3.11
Stream D-C	0.4	0.70	0.27	14.2	45.86	2.98
Stream CD-B	0.0	0.14	0.02	0.0	0.20	0.03

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

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

File summary

File Description

Title	Oyster Catcher Junction
Location	Yapton
Site number	
Date	25/02/2016
Version	
Status	Preliminary
Identifier	
Client	Gleeson Strategic
Jobnumber	14-110
Enumerator	tmoloney [W3559-ODYSSEY]
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	mph	Veh	Veh	perHour	min	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (min)	Queue threshold (PCU)
5.75	✓			0.85	0.60	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Observed	AM	AM 2016 Base	ONE HOUR	07:45	09:15	15	✓
D2	2022 Base	AM	AM 2026 Base + Com	ONE HOUR	07:45	09:15	15	✓
D3	2022 Base + Dev	AM	AM 2026 Base + Dev	ONE HOUR	07:45	09:15	15	✓
D4	2017 Observed	PM	PM 2016 Base	ONE HOUR	16:45	18:15	15	✓
D5	2022 Base	PM	PM 2026 Base + Com	ONE HOUR	16:45	18:15	15	✓
D6	2022 Base + Dev	PM	PM 2026 Base + Dev	ONE HOUR	16:45	18:15	15	✓
D7	2031 Base	AM	AM 2016 Base	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base	PM	PM 2016 Base	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + 550 No Thru Link	AM	AM 2016 Base	ONE HOUR	07:45	09:15	15	✓
D10	2031 Base + 550 No Thru Link	PM	PM 2016 Base	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

2017 Observed, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A259 Crookthorne Lane		Major
B	Climping Street		Minor
C	A259 Grevatts Street		Major
D	B2132 Yapton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	10.60		✓	3.20	120.0		-
C	11.00		✓	3.50	120.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	10.00	6.30	4.20	3.20	✓	2.00	240	240
D	One lane plus flare	10.00	10.00	8.10	5.30	4.20		3.00	240	139

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	713	-	-	-	-	-	0.221	0.221	0.221	-	-
1	B-A	770	0.110	0.277	0.277	-	-	0.174	0.396	-	0.174	0.396
1	B-CD	897	0.108	0.272	0.272	-	-	-	-	-	-	-
1	CD-B	734	0.223	0.223	0.223	-	-	-	-	-	-	-
1	D-AB	839	-	-	-	-	-	0.260	0.260	0.103	-	-
1	D-C	658	-	0.152	0.346	0.152	0.346	0.242	0.242	0.096	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017 Observed	AM	AM 2016 Base	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		ONE HOUR	✓	891	100.000
B		ONE HOUR	✓	51	100.000
C		ONE HOUR	✓	826	100.000
D		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	6	662	223
	B	21	0	18	12
	C	740	4	0	82
	D	208	2	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	5	6
	B	0	0	0	0
	C	0	4	0	11
	D	6	0	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.05	0.10	0.1	~1	A	28	41
B-A	0.08	0.22	0.1	~1	B	19	29
A-B						6	8
A-C						607	911
A-D						205	307
AB-C						624	936
AB-D	0.54	0.27	1.1	?	C	216	323
D-AB	0.41	0.18	0.7	~1	B	193	289
D-C	0.13	0.34	0.1	~1	C	22	33
C-D						75	113
C-A						679	1019
C-B						4	6
CD-A						870	1305
CD-B	0.01	0.12	0.0	~1	A	6	8

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 (min)	LOS
B-CD	23	6	699	0.032	22	0.0	0.0	0.089	A
B-A	16	4	447	0.035	16	0.0	0.0	0.139	A
A-B	5	1			5				
A-C	498	125			498				
A-D	168	42			168				
AB-C	512	128			512				
AB-D	177	44	544	0.325	175	0.0	0.5	0.162	A
D-AB	158	40	638	0.248	157	0.0	0.3	0.124	A
D-C	18	5	326	0.055	18	0.0	0.1	0.194	B
C-D	62	15			62				
C-A	557	139			557				
C-B	3	0.75			3				
CD-A	712	178			712				
CD-B	5	1	562	0.008	4	0.0	0.0	0.108	A

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 (min)	LOS
B-CD	27	7	660	0.041	27	0.0	0.0	0.095	A
B-A	19	5	384	0.049	19	0.0	0.1	0.164	A
A-B	5	1			5				
A-C	595	149			595				
A-D	200	50			200				
AB-C	611	153			611				
AB-D	211	53	518	0.408	210	0.5	0.7	0.195	B
D-AB	189	47	607	0.311	188	0.3	0.4	0.143	A
D-C	22	5	275	0.078	21	0.1	0.1	0.236	B
C-D	74	18			74				
C-A	665	166			665				
C-B	4	0.90			4				
CD-A	852	213			852				
CD-B	5	1	533	0.010	5	0.0	0.0	0.114	A

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 (min)	LOS
B-CD	33	8	605	0.055	33	0.0	0.1	0.105	A
B-A	23	6	297	0.078	23	0.1	0.1	0.219	B
A-B	7	2			7				
A-C	729	182			729				
A-D	246	61			246				
AB-C	749	187			749				
AB-D	259	65	483	0.536	257	0.7	1.1	0.264	C
D-AB	231	58	562	0.411	230	0.4	0.7	0.180	B
D-C	26	7	205	0.129	26	0.1	0.1	0.335	C
C-D	90	23			90				
C-A	815	204			815				
C-B	4	1			4				
CD-A	1043	261			1043				
CD-B	7	2	492	0.013	7	0.0	0.0	0.124	A

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 (min)	LOS
B-CD	33	8	605	0.055	33	0.1	0.1	0.105	A
B-A	23	6	297	0.078	23	0.1	0.1	0.219	B
A-B	7	2			7				
A-C	729	182			729				
A-D	246	61			246				
AB-C	749	187			749				
AB-D	259	65	483	0.536	259	1.1	1.1	0.268	C
D-AB	231	58	562	0.412	231	0.7	0.7	0.181	B
D-C	26	7	205	0.129	26	0.1	0.1	0.337	C
C-D	90	23			90				
C-A	815	204			815				
C-B	4	1			4				
CD-A	1044	261			1044				
CD-B	7	2	492	0.013	7	0.0	0.0	0.124	A

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 (min)	LOS
B-CD	27	7	660	0.041	27	0.1	0.0	0.095	A
B-A	19	5	384	0.049	19	0.1	0.1	0.164	A
A-B	5	1			5				
A-C	595	149			595				
A-D	200	50			200				
AB-C	611	153			611				
AB-D	211	53	518	0.408	213	1.1	0.7	0.198	B
D-AB	189	47	607	0.311	190	0.7	0.5	0.144	A
D-C	22	5	275	0.079	22	0.1	0.1	0.238	B
C-D	74	18			74				
C-A	665	166			665				
C-B	4	0.90			4				
CD-A	853	213			853				
CD-B	5	1	533	0.010	5	0.0	0.0	0.114	A

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 (min)	LOS
B-CD	23	6	699	0.032	23	0.0	0.0	0.089	A
B-A	16	4	447	0.035	16	0.1	0.0	0.139	A
A-B	5	1			5				
A-C	498	125			498				
A-D	168	42			168				
AB-C	512	128			512				
AB-D	177	44	544	0.326	178	0.7	0.5	0.164	A
D-AB	158	40	638	0.248	159	0.5	0.3	0.125	A
D-C	18	5	325	0.056	18	0.1	0.1	0.195	B
C-D	62	15			62				
C-A	557	139			557				
C-B	3	0.75			3				
CD-A	714	179			714				
CD-B	5	1	562	0.008	5	0.0	0.0	0.108	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.47	~1	~1	~1	~1			N/A	N/A
D-AB	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	0.67	~1	~1	~1	~1			N/A	N/A
D-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A
D-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.50			N/A	N/A
AB-D	1.11	?	?	?	?			N/A	N/A
D-AB	0.69	0.03	0.26	0.69	0.69			N/A	N/A
D-C	0.14	0.03	0.26	0.47	0.50			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	1.13	?	?	?	?			N/A	N/A
D-AB	0.69	0.03	0.29	1.23	3.06			N/A	N/A
D-C	0.15	0.03	0.25	0.45	0.48			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.70	~1	~1	~1	~1			N/A	N/A
D-AB	0.46	0.04	0.36	1.16	1.33			N/A	N/A
D-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.49	~1	~1	~1	~1			N/A	N/A
D-AB	0.33	0.03	0.26	0.46	0.49			N/A	N/A
D-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

2022 Base, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base	AM	AM 2026 Base + Com	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		ONE HOUR	✓	980	100.000
B		ONE HOUR	✓	56	100.000
C		ONE HOUR	✓	900	100.000
D		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	7	722	251
	B	23	0	20	13
	C	807	4	0	89
	D	260	2	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	5	6
	B	0	0	0	0
	C	0	4	0	11
	D	6	0	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.06	0.11	0.1	~1	A	30	45
B-A	0.10	0.27	0.1	~1	C	21	32
A-B						6	10
A-C						663	994
A-D						230	345
AB-C						681	1021
AB-D	0.62	0.34	1.6	?	C	242	363
D-AB	0.54	0.24	1.1	?	B	240	361
D-C	0.18	0.45	0.2	~1	C	25	37
C-D						82	123
C-A						741	1111
C-B						4	6
CD-A						979	1468
CD-B	0.01	0.13	0.0	~1	A	6	8

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 (min)	LOS
B-CD	25	6	679	0.037	25	0.0	0.0	0.092	A
B-A	17	4	411	0.042	17	0.0	0.0	0.152	A
A-B	5	1			5				
A-C	544	136			544				
A-D	189	47			189				
AB-C	559	140			559				
AB-D	199	50	532	0.374	196	0.0	0.6	0.178	B
D-AB	197	49	624	0.316	195	0.0	0.5	0.139	A
D-C	20	5	300	0.068	20	0.0	0.1	0.214	B
C-D	67	17			67				
C-A	608	152			608				
C-B	3	0.75			3				
CD-A	801	200			801				
CD-B	5	1	547	0.008	4	0.0	0.0	0.111	A

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 (min)	LOS
B-CD	30	7	636	0.047	30	0.0	0.0	0.099	A
B-A	21	5	342	0.061	21	0.0	0.1	0.187	B
A-B	6	2			6				
A-C	649	162			649				
A-D	226	56			226				
AB-C	667	167			667				
AB-D	237	59	504	0.471	236	0.6	0.9	0.223	B
D-AB	236	59	589	0.400	235	0.5	0.7	0.169	B
D-C	24	6	244	0.100	24	0.1	0.1	0.273	C
C-D	80	20			80				
C-A	725	181			725				
C-B	4	0.90			4				
CD-A	958	240			958				
CD-B	5	1	514	0.010	5	0.0	0.0	0.118	A

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 (min)	LOS
B-CD	36	9	574	0.063	36	0.0	0.1	0.112	A
B-A	25	6	245	0.103	25	0.1	0.1	0.272	C
A-B	8	2			8				
A-C	795	199			795				
A-D	276	69			276				
AB-C	817	204			817				
AB-D	291	73	465	0.624	288	0.9	1.6	0.332	C
D-AB	288	72	537	0.537	287	0.7	1.1	0.238	B
D-C	30	7	164	0.181	29	0.1	0.2	0.444	D
C-D	98	24			98				
C-A	889	222			889				
C-B	4	1			4				
CD-A	1173	293			1173				
CD-B	7	2	469	0.014	7	0.0	0.0	0.130	A

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 (min)	LOS
B-CD	36	9	574	0.063	36	0.1	0.1	0.112	A
B-A	25	6	245	0.103	25	0.1	0.1	0.273	C
A-B	8	2			8				
A-C	795	199			795				
A-D	276	69			276				
AB-C	817	204			817				
AB-D	291	73	465	0.625	291	1.6	1.6	0.342	C
D-AB	288	72	537	0.538	288	1.1	1.1	0.241	B
D-C	30	7	163	0.182	30	0.2	0.2	0.450	D
C-D	98	24			98				
C-A	889	222			889				
C-B	4	1			4				
CD-A	1175	294			1175				
CD-B	7	2	469	0.014	7	0.0	0.0	0.130	A

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 (min)	LOS
B-CD	30	7	636	0.047	30	0.1	0.0	0.099	A
B-A	21	5	341	0.061	21	0.1	0.1	0.187	B
A-B	6	2			6				
A-C	649	162			649				
A-D	226	56			226				
AB-C	667	167			667				
AB-D	237	59	504	0.471	240	1.6	0.9	0.230	B
D-AB	236	59	589	0.400	237	1.1	0.7	0.172	B
D-C	24	6	242	0.100	25	0.2	0.1	0.276	C
C-D	80	20			80				
C-A	725	181			725				
C-B	4	0.90			4				
CD-A	961	240			961				
CD-B	5	1	514	0.011	5	0.0	0.0	0.118	A

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 (min)	LOS
B-CD	25	6	679	0.037	25	0.0	0.0	0.092	A
B-A	17	4	411	0.042	17	0.1	0.0	0.152	A
A-B	5	1			5				
A-C	544	136			544				
A-D	189	47			189				
AB-C	559	140			559				
AB-D	199	50	532	0.374	200	0.9	0.6	0.182	B
D-AB	197	49	624	0.316	198	0.7	0.5	0.141	A
D-C	20	5	299	0.068	20	0.1	0.1	0.216	B
C-D	67	17			67				
C-A	608	152			608				
C-B	3	0.75			3				
CD-A	804	201			804				
CD-B	5	1	547	0.008	5	0.0	0.0	0.111	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.59	~1	~1	~1	~1			N/A	N/A
D-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.46	0.48			N/A	N/A
AB-D	0.87	~1	~1	~1	~1			N/A	N/A
D-AB	0.65	0.14	0.89	1.38	1.44			N/A	N/A
D-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.11	0.03	0.26	0.47	0.50			N/A	N/A
AB-D	1.57	?	?	?	?			N/A	N/A
D-AB	1.12	0.03	0.27	1.12	1.45			N/A	N/A
D-C	0.21	0.03	0.26	0.48	0.71			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.11	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	1.62	?	?	?	?			N/A	N/A
D-AB	1.14	0.03	0.28	1.14	4.05			N/A	N/A
D-C	0.22	0.03	0.27	0.49	0.90			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-D	0.91	~1	~1	~1	~1			N/A	N/A
D-AB	0.68	0.07	0.71	1.39	1.48			N/A	N/A
D-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.61	~1	~1	~1	~1			N/A	N/A
D-AB	0.47	0.04	0.40	1.26	1.40			N/A	N/A
D-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

2022 Base + Dev, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Base + Dev	AM	AM 2026 Base + Dev	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		ONE HOUR	✓	986	100.000
B		ONE HOUR	✓	56	100.000
C		ONE HOUR	✓	904	100.000
D		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	7	727	252
	B	23	0	20	13
	C	811	4	0	89
	D	278	2	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	5	6
	B	0	0	0	0
	C	0	4	0	11
	D	6	0	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.06	0.11	0.1	~1	A	30	45
B-A	0.11	0.28	0.1	~1	C	21	32
A-B						6	10
A-C						667	1001
A-D						231	347
AB-C						685	1028
AB-D	0.63	0.35	1.6	?	C	243	365
D-AB	0.58	0.26	1.3	?	C	257	385
D-C	0.19	0.47	0.2	~1	C	25	37
C-D						82	123
C-A						744	1116
C-B						4	6
CD-A						999	1498
CD-B	0.01	0.13	0.0	~1	A	6	8

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 (min)	LOS
B-CD	25	6	678	0.037	25	0.0	0.0	0.092	A
B-A	17	4	407	0.043	17	0.0	0.0	0.154	A
A-B	5	1			5				
A-C	547	137			547				
A-D	190	47			190				
AB-C	562	141			562				
AB-D	199	50	531	0.376	197	0.0	0.6	0.178	B
D-AB	211	53	624	0.338	209	0.0	0.5	0.144	A
D-C	20	5	298	0.068	20	0.0	0.1	0.216	B
C-D	67	17			67				
C-A	611	153			611				
C-B	3	0.75			3				
CD-A	818	204			818				
CD-B	5	1	546	0.008	4	0.0	0.0	0.111	A

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 (min)	LOS
B-CD	30	7	634	0.047	30	0.0	0.0	0.099	A
B-A	21	5	336	0.061	21	0.0	0.1	0.190	B
A-B	6	2			6				
A-C	654	163			654				
A-D	227	57			227				
AB-C	672	168			672				
AB-D	238	60	503	0.473	237	0.6	0.9	0.225	B
D-AB	252	63	589	0.428	251	0.5	0.7	0.177	B
D-C	24	6	241	0.101	24	0.1	0.1	0.277	C
C-D	80	20			80				
C-A	729	182			729				
C-B	4	0.90			4				
CD-A	978	245			978				
CD-B	5	1	513	0.011	5	0.0	0.0	0.118	A

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 (min)	LOS
B-CD	36	9	572	0.064	36	0.0	0.1	0.112	A
B-A	25	6	239	0.106	25	0.1	0.1	0.281	C
A-B	8	2			8				
A-C	800	200			800				
A-D	277	69			277				
AB-C	822	206			822				
AB-D	292	73	464	0.628	289	0.9	1.6	0.336	C
D-AB	308	77	536	0.575	306	0.7	1.3	0.258	C
D-C	30	7	159	0.186	29	0.1	0.2	0.459	D
C-D	98	24			98				
C-A	893	223			893				
C-B	4	1			4				
CD-A	1197	299			1197				
CD-B	7	2	468	0.014	7	0.0	0.0	0.130	A

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 (min)	LOS
B-CD	36	9	571	0.064	36	0.1	0.1	0.112	A
B-A	25	6	238	0.106	25	0.1	0.1	0.282	C
A-B	8	2			8				
A-C	800	200			800				
A-D	277	69			277				
AB-C	822	206			822				
AB-D	292	73	464	0.628	292	1.6	1.6	0.346	C
D-AB	308	77	535	0.576	308	1.3	1.3	0.264	C
D-C	30	7	158	0.188	30	0.2	0.2	0.467	D
C-D	98	24			98				
C-A	893	223			893				
C-B	4	1			4				
CD-A	1199	300			1199				
CD-B	7	2	468	0.014	7	0.0	0.0	0.130	A

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 (min)	LOS
B-CD	30	7	634	0.047	30	0.1	0.0	0.099	A
B-A	21	5	336	0.062	21	0.1	0.1	0.191	B
A-B	6	2			6				
A-C	654	163			654				
A-D	227	57			227				
AB-C	672	168			672				
AB-D	238	60	503	0.474	241	1.6	0.9	0.231	B
D-AB	252	63	588	0.428	254	1.3	0.8	0.181	B
D-C	24	6	239	0.101	25	0.2	0.1	0.280	C
C-D	80	20			80				
C-A	729	182			729				
C-B	4	0.90			4				
CD-A	981	245			981				
CD-B	5	1	513	0.011	5	0.0	0.0	0.118	A

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 (min)	LOS
B-CD	25	6	678	0.037	25	0.0	0.0	0.092	A
B-A	17	4	407	0.043	17	0.1	0.0	0.154	A
A-B	5	1			5				
A-C	547	137			547				
A-D	190	47			190				
AB-C	562	141			562				
AB-D	200	50	531	0.376	201	0.9	0.6	0.182	B
D-AB	211	53	623	0.338	212	0.8	0.5	0.146	A
D-C	20	5	297	0.068	20	0.1	0.1	0.217	B
C-D	67	17			67				
C-A	611	153			611				
C-B	3	0.75			3				
CD-A	821	205			821				
CD-B	5	1	546	0.008	5	0.0	0.0	0.111	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.59	~1	~1	~1	~1			N/A	N/A
D-AB	0.50	0.50	1.00	1.40	1.45			N/A	N/A
D-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
AB-D	0.88	~1	~1	~1	~1			N/A	N/A
D-AB	0.73	0.14	0.89	1.39	1.45			N/A	N/A
D-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.12	0.03	0.26	0.47	0.50			N/A	N/A
AB-D	1.60	?	?	?	?			N/A	N/A
D-AB	1.30	0.03	0.28	1.30	3.11			N/A	N/A
D-C	0.22	0.03	0.26	0.48	0.76			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	1.64	?	?	?	?			N/A	N/A
D-AB	1.33	0.03	0.28	1.33	4.58			N/A	N/A
D-C	0.23	0.03	0.28	0.50	0.99			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-D	0.92	~1	~1	~1	~1			N/A	N/A
D-AB	0.76	0.06	0.72	1.01	1.58			N/A	N/A
D-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-D	0.61	~1	~1	~1	~1			N/A	N/A
D-AB	0.52	0.04	0.41	1.35	1.49			N/A	N/A
D-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

2017 Observed, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Observed	PM	PM 2016 Base	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		ONE HOUR	✓	1358	100.000
B		ONE HOUR	✓	56	100.000
C		ONE HOUR	✓	810	100.000
D		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From	A	B	C	D	
	A	0	9	1105	244
	B	22	0	26	8
	C	765	3	0	42
	D	363	7	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C	D	
	A	0	0	2	1
	B	0	0	0	0
	C	0	2	0	19
	D	0	0	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.08	0.14	0.1	~1	A	31	47
B-A	0.19	0.59	0.2	~1	E	20	30
A-B						8	12
A-C						1014	1521
A-D						224	336
AB-C						1038	1557
AB-D	0.54	0.26	1.2	?	C	231	347
D-AB	0.73	0.39	2.5	?	C	340	509
D-C	0.36	0.90	0.5	~1	F	31	47
C-D						39	58
C-A						702	1053
C-B						3	4
CD-A						1035	1552
CD-B	0.03	0.16	0.0	~1	A	9	14

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 (min)	LOS
B-CD	26	6	609	0.042	25	0.0	0.0	0.103	A
B-A	17	4	330	0.050	16	0.0	0.1	0.191	B
A-B	7	2			7				
A-C	832	208			832				
A-D	184	46			184				
AB-C	851	213			851				
AB-D	190	47	572	0.332	188	0.0	0.5	0.155	A
D-AB	279	70	667	0.418	276	0.0	0.7	0.152	A
D-C	26	6	242	0.106	25	0.0	0.1	0.276	C
C-D	32	8			32				
C-A	576	144			576				
C-B	2	0.56			2				
CD-A	846	212			846				
CD-B	7	2	500	0.015	7	0.0	0.0	0.122	A

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 (min)	LOS
B-CD	31	8	550	0.056	31	0.0	0.1	0.115	A
B-A	20	5	245	0.081	20	0.1	0.1	0.266	C
A-B	8	2			8				
A-C	993	248			993				
A-D	219	55			219				
AB-C	1017	254			1017				
AB-D	227	57	546	0.415	226	0.5	0.7	0.187	B
D-AB	333	83	628	0.530	331	0.7	1.1	0.201	B
D-C	31	8	186	0.164	30	0.1	0.2	0.383	C
C-D	38	9			38				
C-A	688	172			688				
C-B	3	0.67			3				
CD-A	1013	253			1013				
CD-B	9	2	455	0.020	9	0.0	0.0	0.135	A

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 (min)	LOS
B-CD	37	9	462	0.081	37	0.1	0.1	0.141	A
B-A	24	6	127	0.191	24	0.1	0.2	0.577	D
A-B	10	2			10				
A-C	1217	304			1217				
A-D	269	67			269				
AB-C	1245	311			1245				
AB-D	277	69	509	0.545	276	0.7	1.2	0.255	C
D-AB	407	102	562	0.725	402	1.1	2.4	0.363	C
D-C	37	9	105	0.356	36	0.2	0.5	0.866	F
C-D	46	12			46				
C-A	842	211			842				
C-B	3	0.83			3				
CD-A	1237	309			1237				
CD-B	11	3	393	0.028	11	0.0	0.0	0.157	A

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 (min)	LOS
B-CD	37	9	461	0.081	37	0.1	0.1	0.142	A
B-A	24	6	126	0.192	24	0.2	0.2	0.588	E
A-B	10	2			10				
A-C	1217	304			1217				
A-D	269	67			269				
AB-C	1245	311			1245				
AB-D	277	69	509	0.545	277	1.2	1.2	0.258	C
D-AB	407	102	560	0.728	407	2.4	2.5	0.389	C
D-C	37	9	104	0.362	37	0.5	0.5	0.893	F
C-D	46	12			46				
C-A	842	211			842				
C-B	3	0.83			3				
CD-A	1241	310			1241				
CD-B	11	3	393	0.028	11	0.0	0.0	0.157	A

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 (min)	LOS
B-CD	31	8	549	0.056	31	0.1	0.1	0.116	A
B-A	20	5	244	0.081	20	0.2	0.1	0.269	C
A-B	8	2			8				
A-C	993	248			993				
A-D	219	55			219				
AB-C	1017	254			1017				
AB-D	227	57	546	0.415	228	1.2	0.7	0.190	B
D-AB	333	83	626	0.531	338	2.5	1.2	0.212	B
D-C	31	8	185	0.165	32	0.5	0.2	0.395	C
C-D	38	9			38				
C-A	688	172			688				
C-B	3	0.67			3				
CD-A	1019	255			1019				
CD-B	9	2	455	0.020	9	0.0	0.0	0.135	A

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 (min)	LOS
B-CD	26	6	609	0.042	26	0.1	0.0	0.103	A
B-A	17	4	329	0.050	17	0.1	0.1	0.192	B
A-B	7	2			7				
A-C	832	208			832				
A-D	184	46			184				
AB-C	852	213			852				
AB-D	190	47	572	0.332	191	0.7	0.5	0.158	A
D-AB	279	70	666	0.418	280	1.2	0.7	0.156	A
D-C	26	6	241	0.106	26	0.2	0.1	0.279	C
C-D	32	8			32				
C-A	576	144			576				
C-B	2	0.56			2				
CD-A	851	213			851				
CD-B	8	2	500	0.015	8	0.0	0.0	0.122	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.49	~1	~1	~1	~1			N/A	N/A
D-AB	0.71	0.55	1.00	1.40	1.45			N/A	N/A
D-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-D	0.70	~1	~1	~1	~1			N/A	N/A
D-AB	1.10	0.08	0.95	1.89	2.56			N/A	N/A
D-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.09	0.03	0.26	0.47	0.50			N/A	N/A
B-A	0.23	0.03	0.27	0.48	1.04			N/A	N/A
AB-D	1.15	?	?	?	?			N/A	N/A
D-AB	2.42	0.03	0.32	4.18	12.58			N/A	N/A
D-C	0.51	0.03	0.27	0.51	1.57			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.23	0.03	0.27	0.49	0.87			N/A	N/A
AB-D	1.17	?	?	?	?			N/A	N/A
D-AB	2.54	0.03	0.30	2.54	10.89			N/A	N/A
D-C	0.54	0.04	0.35	1.07	1.90			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-D	0.72	~1	~1	~1	~1			N/A	N/A
D-AB	1.16	0.05	0.49	2.76	4.15			N/A	N/A
D-C	0.20	0.03	0.25	0.45	0.48			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.50	~1	~1	~1	~1			N/A	N/A
D-AB	0.73	0.04	0.36	1.72	2.97			N/A	N/A
D-C	0.12	0.03	0.25	0.45	0.48			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

2022 Base, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.27	○

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2022 Base	PM	PM 2026 Base + Com	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		ONE HOUR	✓	1535	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	891	100.000
D		ONE HOUR	✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	10	1209	316
	B	24	0	28	9
	C	837	3	0	51
	D	420	8	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	2	1
	B	0	0	0	0
	C	0	2	0	19
	D	0	0	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.13	0.23	0.2	~1	B	34	51
B-A	0.62	3.17	1.2	?	F	22	33
A-B						9	14
A-C						1109	1664
A-D						286	429
AB-C						1135	1703
AB-D	0.72	0.44	2.5	?	D	295	442
D-AB	1.08	2.56	21.8	?	F	390	585
D-C	0.99	5.37	3.7	?	F	35	52
C-D						47	70
C-A						768	1152
C-B						3	4
CD-A						1150	1725
CD-B	0.03	0.18	0.0	~1	B	10	15

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 (min)	LOS
B-CD	28	7	571	0.049	28	0.0	0.1	0.110	A
B-A	18	5	276	0.066	18	0.0	0.1	0.233	B
A-B	8	2			8				
A-C	910	228			910				
A-D	238	59			238				
AB-C	931	233			931				
AB-D	245	61	558	0.438	242	0.0	0.8	0.188	B
D-AB	322	81	647	0.498	318	0.0	1.0	0.181	B
D-C	29	7	204	0.140	28	0.0	0.2	0.339	C
C-D	38	10			38				
C-A	630	158			630				
C-B	2	0.56			2				
CD-A	943	236			943				
CD-B	8	2	470	0.017	8	0.0	0.0	0.130	A

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 (min)	LOS
B-CD	33	8	502	0.066	33	0.1	0.1	0.128	A
B-A	22	5	179	0.120	21	0.1	0.1	0.379	C
A-B	9	2			9				
A-C	1087	272			1087				
A-D	284	71			284				
AB-C	1112	278			1112				
AB-D	292	73	529	0.552	290	0.8	1.2	0.249	B
D-AB	385	96	599	0.642	382	1.0	1.7	0.272	C
D-C	34	9	138	0.247	34	0.2	0.3	0.569	C
C-D	46	11			46				
C-A	752	188			752				
C-B	3	0.67			3				
CD-A	1127	282			1127				
CD-B	10	2	419	0.023	10	0.0	0.0	0.146	A

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 (min)	LOS
B-CD	41	10	337	0.121	40	0.1	0.1	0.202	B
B-A	26	7	47	0.563	23	0.1	0.9	2.313	F
A-B	11	3			11				
A-C	1331	333			1331				
A-D	348	87			348				
AB-C	1362	340			1362				
AB-D	358	89	489	0.731	353	1.2	2.5	0.423	D
D-AB	471	118	463	1.017	432	1.7	11.6	1.259	F
D-C	42	10	42	1.002	32	0.3	2.8	4.324	F
C-D	56	14			56				
C-A	922	230			922				
C-B	3	0.83			3				
CD-A	1345	336			1345				
CD-B	11	3	349	0.033	11	0.0	0.0	0.177	B

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 (min)	LOS
B-CD	41	10	254	0.161	41	0.1	0.2	0.281	C
B-A	26	7	40	0.659	25	0.9	1.3	3.529	F
A-B	11	3			11				
A-C	1331	333			1331				
A-D	348	87			348				
AB-C	1362	340			1362				
AB-D	358	89	489	0.731	357	2.5	2.6	0.450	D
D-AB	471	118	430	1.088	423	11.6	23.7	2.738	F
D-C	42	10	44	0.948	38	2.8	3.8	6.542	F
C-D	56	14			56				
C-A	922	230			922				
C-B	3	0.83			3				
CD-A	1337	334			1337				
CD-B	11	3	349	0.032	11	0.0	0.0	0.177	B

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 (min)	LOS
B-CD	33	8	492	0.068	34	0.2	0.1	0.131	A
B-A	22	5	165	0.131	26	1.3	0.2	0.447	D
A-B	9	2			9				
A-C	1087	272			1087				
A-D	284	71			284				
AB-C	1112	278			1112				
AB-D	292	73	529	0.552	297	2.6	1.3	0.264	C
D-AB	385	96	579	0.664	471	23.7	2.2	0.895	F
D-C	34	9	112	0.305	48	3.8	0.5	1.084	F
C-D	46	11			46				
C-A	752	188			752				
C-B	3	0.67			3				
CD-A	1214	304			1214				
CD-B	11	3	420	0.027	12	0.0	0.0	0.147	A

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 (min)	LOS
B-CD	28	7	570	0.049	28	0.1	0.1	0.111	A
B-A	18	5	274	0.066	18	0.2	0.1	0.235	B
A-B	8	2			8				
A-C	910	228			910				
A-D	238	59			238				
AB-C	931	233			931				
AB-D	245	61	558	0.438	247	1.3	0.8	0.194	B
D-AB	322	81	645	0.500	327	2.2	1.0	0.191	B
D-C	29	7	202	0.141	30	0.5	0.2	0.350	C
C-D	38	10			38				
C-A	630	158			630				
C-B	2	0.56			2				
CD-A	951	238			951				
CD-B	8	2	470	0.018	8	0.0	0.0	0.130	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-D	0.76	~1	~1	~1	~1			N/A	N/A
D-AB	0.97	0.50	1.01	1.21	1.21			N/A	N/A
D-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
AB-D	1.19	?	?	?	?			N/A	N/A
D-AB	1.71	0.05	0.50	4.45	6.92			N/A	N/A
D-C	0.31	0.03	0.31	1.03	1.29			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.14	0.03	0.26	0.47	0.50			N/A	N/A
B-A	0.94	0.03	0.31	1.72	4.71			N/A	N/A
AB-D	2.47	?	?	?	?			N/A	N/A
D-AB	11.58	0.67	7.70	25.86	33.62			N/A	N/A
D-C	2.84	0.11	1.26	6.55	8.93			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.19	0.03	0.25	0.45	0.48			N/A	N/A
B-A	1.34	0.06	0.84	2.93	4.19			N/A	N/A
AB-D	2.58	?	?	?	?			N/A	N/A
D-AB	23.66	2.92	18.77	47.25	58.51			N/A	N/A
D-C	3.82	0.12	1.67	9.24	12.81			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.16	0.03	0.27	0.48	0.74			N/A	N/A
AB-D	1.28	?	?	?	?			N/A	N/A
D-AB	2.17	0.04	0.36	5.34	11.39			N/A	N/A
D-C	0.48	0.03	0.29	1.23	2.14			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.03	0.26	0.46	0.49			N/A	N/A
AB-D	0.80	~1	~1	~1	~1			N/A	N/A
D-AB	1.02	0.03	0.28	1.02	3.77			N/A	N/A
D-C	0.17	0.03	0.26	0.47	0.49			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

2022 Base + Dev, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.35	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2022 Base + Dev	PM	PM 2026 Base + Dev	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		ONE HOUR	✓	1558	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	891	100.000
D		ONE HOUR	✓	472	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	10	1232	316
	B	24	0	28	9
	C	837	3	0	51
	D	426	8	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A	B	C	D	
	A	0	0	2	1	
	B	0	0	0	0	
	C	0	2	0	19	
	D	0	0	29	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	1.02	3.55	2.8	?	F	34	51
B-A	0.87	4.94	2.2	?	F	22	33
A-B						9	14
A-C						1131	1696
A-D						290	435
AB-C						1156	1734
AB-D	0.73	0.44	2.5	?	D	298	447
D-AB	1.13	3.22	28.8	?	F	398	597
D-C	1.03	8.00	4.1	?	F	35	52
C-D						47	70
C-A						768	1152
C-B						3	4
CD-A						1158	1737
CD-B	0.03	0.18	0.0	~1	B	10	15

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 (min)	LOS
B-CD	28	7	566	0.049	28	0.0	0.1	0.112	A
B-A	18	5	270	0.067	18	0.0	0.1	0.238	B
A-B	8	2			8				
A-C	928	232			928				
A-D	238	59			238				
AB-C	948	237			948				
AB-D	245	61	558	0.438	242	0.0	0.8	0.188	B
D-AB	327	82	647	0.505	323	0.0	1.0	0.183	B
D-C	29	7	202	0.142	28	0.0	0.2	0.344	C
C-D	38	10			38				
C-A	630	158			630				
C-B	2	0.56			2				
CD-A	947	237			947				
CD-B	8	2	466	0.018	8	0.0	0.0	0.131	A

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 (min)	LOS
B-CD	33	8	496	0.067	33	0.1	0.1	0.130	A
B-A	22	5	173	0.125	21	0.1	0.1	0.396	C
A-B	9	2			9				
A-C	1108	277			1108				
A-D	284	71			284				
AB-C	1133	283			1133				
AB-D	292	73	529	0.552	290	0.8	1.2	0.249	B
D-AB	390	98	599	0.652	387	1.0	1.8	0.279	C
D-C	34	9	135	0.253	34	0.2	0.3	0.587	E
C-D	46	11			46				
C-A	752	188			752				
C-B	3	0.67			3				
CD-A	1132	283			1132				
CD-B	10	2	415	0.024	10	0.0	0.0	0.148	A

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 (min)	LOS
B-CD	41	10	280	0.145	40	0.1	0.2	0.250	B
B-A	26	7	39	0.684	22	0.1	1.3	3.129	F
A-B	11	3			11				
A-C	1356	339			1356				
A-D	348	87			348				
AB-C	1387	347			1387				
AB-D	358	89	489	0.731	353	1.2	2.5	0.423	D
D-AB	478	119	457	1.046	431	1.8	13.5	1.416	F
D-C	42	10	41	1.029	31	0.3	3.0	4.546	F
C-D	56	14			56				
C-A	922	230			922				
C-B	3	0.83			3				
CD-A	1344	336			1344				
CD-B	11	3	344	0.033	11	0.0	0.0	0.180	B

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 (min)	LOS
B-CD	41	10	40	1.019	30	0.2	2.8	3.587	F
B-A	26	7	30	0.870	23	1.3	2.2	4.954	F
A-B	11	3			11				
A-C	1356	339			1356				
A-D	348	87			348				
AB-C	1379	345			1379				
AB-D	355	89	489	0.726	355	2.5	2.5	0.443	D
D-AB	478	119	422	1.131	418	13.5	28.8	3.217	F
D-C	42	10	43	0.981	37	3.0	4.1	6.905	F
C-D	56	14			56				
C-A	922	230			922				
C-B	3	0.83			3				
CD-A	1331	333			1331				
CD-B	11	3	344	0.032	11	0.0	0.0	0.180	B

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 (min)	LOS
B-CD	33	8	486	0.068	44	2.8	0.1	0.139	A
B-A	22	5	153	0.141	30	2.2	0.2	0.513	D
A-B	9	2			9				
A-C	1108	277			1108				
A-D	284	71			284				
AB-C	1141	285			1141				
AB-D	295	74	529	0.557	300	2.5	1.3	0.267	C
D-AB	390	98	575	0.678	495	26.6	2.4	1.284	F
D-C	34	9	97	0.351	48	4.1	0.6	1.460	F
C-D	46	11			46				
C-A	752	188			752				
C-B	3	0.67			3				
CD-A	1238	310			1238				
CD-B	12	3	415	0.028	12	0.0	0.0	0.149	A

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 (min)	LOS
B-CD	28	7	565	0.049	28	0.1	0.1	0.112	A
B-A	18	5	269	0.067	18	0.2	0.1	0.240	B
A-B	8	2			8				
A-C	928	232			928				
A-D	238	59			238				
AB-C	949	237			949				
AB-D	245	61	558	0.438	247	1.3	0.8	0.194	B
D-AB	327	82	644	0.507	332	2.4	1.1	0.195	B
D-C	29	7	200	0.143	30	0.6	0.2	0.357	C
C-D	38	10			38				
C-A	630	158			630				
C-B	2	0.56			2				
CD-A	956	239			956				
CD-B	8	2	466	0.018	8	0.0	0.0	0.131	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-D	0.76	~1	~1	~1	~1			N/A	N/A
D-AB	1.00	0.33	1.02	1.07	1.54			N/A	N/A
D-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
AB-D	1.19	?	?	?	?			N/A	N/A
D-AB	1.78	0.05	0.49	4.69	7.43			N/A	N/A
D-C	0.32	0.03	0.32	1.07	1.32			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.17	0.03	0.26	0.47	0.51			N/A	N/A
B-A	1.26	0.04	0.35	3.08	6.18			N/A	N/A
AB-D	2.47	?	?	?	?			N/A	N/A
D-AB	13.55	1.37	9.96	28.35	35.86			N/A	N/A
D-C	2.97	0.13	1.43	6.72	9.08			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	2.84	2.05	2.50	2.90	2.95			N/A	N/A
B-A	2.16	0.11	1.43	4.70	6.35			N/A	N/A
AB-D	2.54	?	?	?	?			N/A	N/A
D-AB	28.63	5.87	24.32	52.75	63.48			N/A	N/A
D-C	4.13	0.14	1.97	9.78	13.37			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.17	0.03	0.28	0.50	1.06			N/A	N/A
AB-D	1.30	?	?	?	?			N/A	N/A
D-AB	2.38	0.04	0.36	5.89	12.55			N/A	N/A
D-C	0.60	0.03	0.31	1.15	2.81			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
AB-D	0.80	~1	~1	~1	~1			N/A	N/A
D-AB	1.05	0.03	0.28	1.05	3.50			N/A	N/A
D-C	0.17	0.03	0.26	0.46	0.49			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

2031 Base, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base	AM	AM 2016 Base	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		ONE HOUR	✓	1054	100.000
B		ONE HOUR	✓	60	100.000
C		ONE HOUR	✓	968	100.000
D		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	7	776	271
	B	25	0	21	14
	C	867	5	0	96
	D	281	2	29	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	5	6
	B	0	0	0	0
	C	0	4	0	11
	D	6	0	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	0.12	0.1	~1	A	32	48
B-A	0.13	0.34	0.2	~1	C	23	34
A-B						6	10
A-C						712	1068
A-D						249	373
AB-C						731	1097
AB-D	0.70	0.44	2.2	?	D	262	392
D-AB	0.61	0.30	1.5	?	C	260	390
D-C	0.25	0.62	0.3	~1	E	27	40
C-D						88	132
C-A						796	1193
C-B						5	7
CD-A						1053	1580
CD-B	0.02	0.14	0.0	~1	A	6	10

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 (min)	LOS
B-CD	26	7	662	0.040	26	0.0	0.0	0.094	A
B-A	19	5	384	0.049	19	0.0	0.1	0.164	A
A-B	5	1			5				
A-C	584	146			584				
A-D	204	51			204				
AB-C	600	150			600				
AB-D	214	54	521	0.412	212	0.0	0.7	0.192	B
D-AB	213	53	611	0.349	211	0.0	0.5	0.149	A
D-C	22	5	278	0.078	21	0.0	0.1	0.233	B
C-D	72	18			72				
C-A	653	163			653				
C-B	4	0.94			4				
CD-A	862	216			862				
CD-B	5	1	533	0.010	5	0.0	0.0	0.114	A

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 (min)	LOS
B-CD	31	8	615	0.051	31	0.0	0.1	0.103	A
B-A	22	6	309	0.073	22	0.1	0.1	0.209	B
A-B	6	2			6				
A-C	698	174			698				
A-D	244	61			244				
AB-C	716	179			716				
AB-D	256	64	491	0.522	255	0.7	1.1	0.252	C
D-AB	254	64	573	0.444	253	0.5	0.8	0.187	B
D-C	26	7	217	0.120	26	0.1	0.1	0.314	C
C-D	86	22			86				
C-A	779	195			779				
C-B	4	1			4				
CD-A	1031	258			1031				
CD-B	6	2	498	0.013	6	0.0	0.0	0.122	A

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 (min)	LOS
B-CD	39	10	546	0.071	38	0.1	0.1	0.118	A
B-A	28	7	205	0.134	27	0.1	0.2	0.336	C
A-B	8	2			8				
A-C	854	214			854				
A-D	298	75			298				
AB-C	877	219			877				
AB-D	314	78	450	0.698	309	1.1	2.1	0.416	C
D-AB	312	78	512	0.608	309	0.8	1.5	0.291	C
D-C	32	8	130	0.245	31	0.1	0.3	0.602	E
C-D	106	26			106				
C-A	955	239			955				
C-B	6	1			6				
CD-A	1261	315			1261				
CD-B	8	2	450	0.017	8	0.0	0.0	0.136	A

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 (min)	LOS
B-CD	39	10	546	0.071	39	0.1	0.1	0.118	A
B-A	28	7	205	0.134	28	0.2	0.2	0.338	C
A-B	8	2			8				
A-C	854	214			854				
A-D	298	75			298				
AB-C	878	219			878				
AB-D	314	78	450	0.698	313	2.1	2.2	0.438	C
D-AB	312	78	511	0.610	311	1.5	1.5	0.300	C
D-C	32	8	128	0.249	32	0.3	0.3	0.620	E
C-D	106	26			106				
C-A	955	239			955				
C-B	6	1			6				
CD-A	1264	316			1264				
CD-B	8	2	450	0.017	8	0.0	0.0	0.136	A

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 (min)	LOS
B-CD	31	8	614	0.051	32	0.1	0.1	0.103	A
B-A	22	6	309	0.073	23	0.2	0.1	0.210	B
A-B	6	2			6				
A-C	698	174			698				
A-D	244	61			244				
AB-C	717	179			717				
AB-D	256	64	491	0.522	261	2.2	1.1	0.265	C
D-AB	254	64	572	0.445	257	1.5	0.8	0.192	B
D-C	26	7	215	0.121	27	0.3	0.1	0.320	C
C-D	86	22			86				
C-A	779	195			779				
C-B	4	1			4				
CD-A	1035	259			1035				
CD-B	6	2	498	0.013	6	0.0	0.0	0.122	A

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 (min)	LOS
B-CD	26	7	661	0.040	26	0.1	0.0	0.095	A
B-A	19	5	384	0.049	19	0.1	0.1	0.164	A
A-B	5	1			5				
A-C	584	146			584				
A-D	204	51			204				
AB-C	600	150			600				
AB-D	215	54	521	0.412	216	1.1	0.7	0.198	B
D-AB	213	53	611	0.349	214	0.8	0.5	0.152	A
D-C	22	5	277	0.079	22	0.1	0.1	0.236	B
C-D	72	18			72				
C-A	653	163			653				
C-B	4	0.94			4				
CD-A	865	216			865				
CD-B	5	1	533	0.010	5	0.0	0.0	0.114	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.69	~1	~1	~1	~1			N/A	N/A
D-AB	0.53	0.53	1.00	1.40	1.45			N/A	N/A
D-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-D	1.06	?	?	?	?			N/A	N/A
D-AB	0.78	0.12	0.89	1.41	1.48			N/A	N/A
D-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.15	0.03	0.26	0.47	0.57			N/A	N/A
AB-D	2.12	?	?	?	?			N/A	N/A
D-AB	1.48	0.03	0.28	1.48	5.10			N/A	N/A
D-C	0.31	0.03	0.27	0.48	1.12			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	2.21	?	?	?	?			N/A	N/A
D-AB	1.52	0.03	0.28	1.52	5.60			N/A	N/A
D-C	0.32	0.03	0.32	1.09	1.34			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-D	1.13	?	?	?	?			N/A	N/A
D-AB	0.82	0.06	0.69	1.43	1.87			N/A	N/A
D-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.72	~1	~1	~1	~1			N/A	N/A
D-AB	0.54	0.04	0.40	1.43	1.48			N/A	N/A
D-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

2031 Base, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	1.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base	PM	PM 2016 Base	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		ONE HOUR	✓	1647	100.000
B		ONE HOUR	✓	66	100.000
C		ONE HOUR	✓	958	100.000
D		ONE HOUR	✓	499	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	11	1300	336
	B	26	0	31	9
	C	900	4	0	54
	D	450	8	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	2	1
	B	0	0	0	0
	C	0	2	0	19
	D	0	0	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.055	28.85	22.1	?	F	37	55
B-A	0.082	27.10	14.5	?	F	24	36
A-B						10	15
A-C						1193	1789
A-D						308	462
AB-C						1221	1832
AB-D	0.78	0.57	3.3	?	D	317	475
D-AB	1.88	12.66	104.8	?	F	420	630
D-C	1.74	15.05	10.2	?	F	38	56
C-D						50	74
C-A						826	1239
C-B						4	6
CD-A						1223	1835
CD-B	0.03	0.19	0.0	~1	B	11	16

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 (min)	LOS
B-CD	30	8	545	0.055	30	0.0	0.1	0.116	A
B-A	20	5	240	0.082	19	0.0	0.1	0.272	C
A-B	8	2			8				
A-C	979	245			979				
A-D	253	63			253				
AB-C	1002	250			1002				
AB-D	260	65	547	0.475	256	0.0	0.9	0.204	B
D-AB	345	86	630	0.548	340	0.0	1.2	0.204	B
D-C	31	8	181	0.171	30	0.0	0.2	0.396	C
C-D	41	10			41				
C-A	678	169			678				
C-B	3	0.75			3				
CD-A	1012	253			1012				
CD-B	9	2	450	0.020	9	0.0	0.0	0.136	A

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 (min)	LOS
B-CD	36	9	468	0.077	36	0.1	0.1	0.139	A
B-A	23	6	136	0.172	23	0.1	0.2	0.527	C
A-B	10	2			10				
A-C	1169	292			1169				
A-D	302	76			302				
AB-C	1196	299			1196				
AB-D	310	78	516	0.601	308	0.9	1.4	0.285	D
D-AB	412	103	572	0.720	407	1.2	2.4	0.353	C
D-C	37	9	108	0.342	36	0.2	0.5	0.820	E
C-D	49	12			49				
C-A	809	202			809				
C-B	4	0.90			4				
CD-A	1209	302			1209				
CD-B	11	3	396	0.027	11	0.0	0.0	0.156	A

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 (min)	LOS
B-CD	44	11	0	999999999.000	0	0.1	11.1	28.881	F
B-A	29	7	0	999999999.000	0	0.2	7.4	27.142	F
A-B	12	3			12				
A-C	1431	358			1431				
A-D	370	92			370				
AB-C	1431	358			1431				
AB-D	370	92	473	0.782	363	1.4	3.1	0.517	D
D-AB	504	126	331	1.622	328	2.4	46.5	5.188	F
D-C	45	11	30	1.487	26	0.5	5.2	8.868	F
C-D	59	15			59				
C-A	991	248			991				
C-B	4	1			4				
CD-A	1313	328			1313				
CD-B	10	3	321	0.032	10	0.0	0.0	0.193	S

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 (min)	LOS
B-CD	44	11	0	999999999.000	0	11.1	22.1	-54.565	?
B-A	29	7	0	999999999.000	0	7.4	14.5	-62.475	?
A-B	12	3			12				
A-C	1431	358			1431				
A-D	370	92			370				
AB-C	1431	358			1431				
AB-D	370	92	473	0.782	369	3.1	3.3	0.567	D
D-AB	504	126	271	1.859	271	46.5	104.3	12.549	F
D-C	45	11	26	1.743	25	5.2	10.2	15.048	F
C-D	59	15			59				
C-A	991	248			991				
C-B	4	1			4				
CD-A	1257	314			1257				
CD-B	9	2	320	0.029	9	0.0	0.0	0.193	S

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 (min)	LOS
B-CD	36	9	94	0.381	90	22.1	8.5	8.084	F
B-A	23	6	62	0.379	58	14.5	5.9	13.810	F
A-B	10	2			10				
A-C	1169	292			1169				
A-D	302	76			302				
AB-C	1239	310			1239				
AB-D	322	81	516	0.625	329	3.3	1.7	0.330	C
D-AB	412	103	499	0.825	494	104.3	64.2	10.837	F
D-C	37	9	47	0.792	42	10.2	8.8	12.457	F
C-D	49	12			49				
C-A	809	202			809				
C-B	4	0.90			4				
CD-A	1295	324			1295				
CD-B	12	3	397	0.031	12	0.0	0.0	0.156	A

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 (min)	LOS
B-CD	30	8	521	0.058	64	8.5	0.1	0.141	A
B-A	20	5	180	0.109	43	5.9	0.1	0.512	D
A-B	8	2			8				
A-C	979	245			979				
A-D	253	63			253				
AB-C	1028	257			1028				
AB-D	267	67	547	0.489	270	1.7	1.0	0.219	B
D-AB	345	86	592	0.582	585	84.2	24.1	5.634	F
D-C	31	8	57	0.538	52	8.8	3.6	7.783	F
C-D	41	10			41				
C-A	678	169			678				
C-B	3	0.75			3				
CD-A	1253	313			1253				
CD-B	13	3	451	0.029	13	0.0	0.0	0.137	A

Queue Variation Results for each time segment

18:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-D	0.88	~1	~1	~1	~1			N/A	N/A
D-AB	1.17	0.04	0.35	2.87	5.71			N/A	N/A
D-C	0.20	0.03	0.28	0.61	1.24			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
AB-D	1.44	?	?	?	?			N/A	N/A
D-AB	2.38	0.03	0.34	5.34	12.65			N/A	N/A
D-C	0.48	0.03	0.29	1.15	2.14			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	11.09	0.00	0.00	11.09	11.09			N/A	N/A
B-A	7.36	0.00	0.00	7.36	7.36			N/A	N/A
AB-D	3.12	?	?	?	?			N/A	N/A
D-AB	46.53	24.39	44.44	65.99	73.16			N/A	N/A
D-C	5.19	0.65	3.68	10.16	12.75			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	22.10	0.00	0.00	22.10	22.10			N/A	N/A
B-A	14.51	0.00	0.00	14.51	14.51			N/A	N/A
AB-D	3.32	?	?	?	?			N/A	N/A
D-AB	104.79	71.88	102.85	132.36	141.63			N/A	N/A
D-C	10.17	1.77	8.35	18.36	22.12			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	8.54	0.00	0.00	8.54	8.54			N/A	N/A
B-A	5.92	0.00	0.00	5.92	5.92			N/A	N/A
AB-D	1.75	?	?	?	?			N/A	N/A
D-AB	84.21	51.65	81.88	112.28	122.08			N/A	N/A
D-C	8.79	1.03	6.49	17.73	22.24			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
AB-D	0.98	~1	~1	~1	~1			N/A	N/A
D-AB	24.09	4.95	20.44	44.16	53.10			N/A	N/A
D-C	3.63	0.07	1.35	9.72	14.50			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

2031 Base + 550 No Thru Link, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2031 Base + 550 No Thru Link	AM	AM 2016 Base	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		ONE HOUR	✓	1067	100.000
B		ONE HOUR	✓	60	100.000
C		ONE HOUR	✓	968	100.000
D		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A	B	C	D
	A	0	7	781	279
	B	25	0	21	14
	C	867	5	0	96
	D	317	2	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		A	B	C	D	
	A	0	0	5	6	
	B	0	0	0	0	
	C	0	4	0	11	
	D	6	0	13	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	0.12	0.1	~1	A	32	48
B-A	0.14	0.36	0.2	~1	C	23	34
A-B						6	10
A-C						717	1075
A-D						256	384
AB-C						736	1104
AB-D	0.72	0.47	2.4	?	D	269	403
D-AB	0.69	0.37	2.1	?	C	293	439
D-C	0.27	0.70	0.4	~1	E	27	40
C-D						88	132
C-A						796	1193
C-B						5	7
CD-A						1086	1629
CD-B	0.02	0.14	0.0	~1	A	6	10

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 (min)	LOS
B-CD	26	7	659	0.040	26	0.0	0.0	0.095	A
B-A	19	5	377	0.050	19	0.0	0.1	0.168	B
A-B	5	1			5				
A-C	588	147			588				
A-D	210	53			210				
AB-C	604	151			604				
AB-D	221	55	521	0.423	218	0.0	0.7	0.196	B
D-AB	240	60	611	0.393	238	0.0	0.6	0.159	A
D-C	22	5	275	0.080	21	0.0	0.1	0.237	B
C-D	72	18			72				
C-A	653	163			653				
C-B	4	0.94			4				
CD-A	889	222			889				
CD-B	5	1	531	0.010	5	0.0	0.0	0.114	A

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 (min)	LOS
B-CD	31	8	611	0.052	31	0.0	0.1	0.104	A
B-A	22	6	300	0.075	22	0.1	0.1	0.216	B
A-B	6	2			6				
A-C	702	176			702				
A-D	251	63			251				
AB-C	721	180			721				
AB-D	263	66	491	0.537	262	0.7	1.1	0.260	C
D-AB	287	72	573	0.501	285	0.6	1.0	0.208	B
D-C	26	7	211	0.124	26	0.1	0.1	0.324	C
C-D	86	22			86				
C-A	779	195			779				
C-B	4	1			4				
CD-A	1063	266			1063				
CD-B	6	2	496	0.013	6	0.0	0.0	0.123	A

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 (min)	LOS
B-CD	39	10	541	0.071	38	0.1	0.1	0.119	A
B-A	28	7	194	0.142	27	0.1	0.2	0.360	C
A-B	8	2			8				
A-C	860	215			860				
A-D	307	77			307				
AB-C	883	221			883				
AB-D	323	81	450	0.718	318	1.1	2.3	0.440	B
D-AB	351	88	512	0.687	347	1.0	2.0	0.355	C
D-C	32	8	119	0.268	31	0.1	0.3	0.675	E
C-D	106	26			106				
C-A	955	239			955				
C-B	6	1			6				
CD-A	1299	325			1299				
CD-B	8	2	446	0.017	8	0.0	0.0	0.137	A

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 (min)	LOS
B-CD	39	10	540	0.071	39	0.1	0.1	0.120	A
B-A	28	7	193	0.143	28	0.2	0.2	0.363	C
A-B	8	2			8				
A-C	860	215			860				
A-D	307	77			307				
AB-C	883	221			883				
AB-D	323	81	450	0.718	322	2.3	2.4	0.467	D
D-AB	351	88	510	0.688	351	2.0	2.1	0.375	C
D-C	32	8	117	0.273	32	0.3	0.4	0.705	E
C-D	106	26			106				
C-A	955	239			955				
C-B	6	1			6				
CD-A	1303	326			1303				
CD-B	8	2	446	0.017	8	0.0	0.0	0.137	A

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 (min)	LOS
B-CD	31	8	610	0.052	32	0.1	0.1	0.104	A
B-A	22	6	299	0.075	23	0.2	0.1	0.218	B
A-B	6	2			6				
A-C	702	176			702				
A-D	251	63			251				
AB-C	721	180			721				
AB-D	263	66	491	0.537	268	2.4	1.2	0.275	C
D-AB	287	72	572	0.502	291	2.1	1.0	0.217	B
D-C	26	7	208	0.125	27	0.4	0.1	0.333	C
C-D	86	22			86				
C-A	779	195			779				
C-B	4	1			4				
CD-A	1069	267			1069				
CD-B	6	2	496	0.013	6	0.0	0.0	0.123	A

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 (min)	LOS
B-CD	26	7	658	0.040	26	0.1	0.0	0.095	A
B-A	19	5	376	0.050	19	0.1	0.1	0.168	B
A-B	5	1			5				
A-C	588	147			588				
A-D	210	53			210				
AB-C	604	151			604				
AB-D	221	55	521	0.424	222	1.2	0.8	0.202	B
D-AB	240	60	611	0.393	242	1.0	0.7	0.163	A
D-C	22	5	273	0.080	22	0.1	0.1	0.240	B
C-D	72	18			72				
C-A	653	163			653				
C-B	4	0.94			4				
CD-A	893	223			893				
CD-B	5	1	531	0.010	5	0.0	0.0	0.114	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.72	~1	~1	~1	~1			N/A	N/A
D-AB	0.64	0.55	1.00	1.40	1.45			N/A	N/A
D-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-D	1.12	?	?	?	?			N/A	N/A
D-AB	0.98	0.10	0.94	1.55	1.88			N/A	N/A
D-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.16	0.03	0.26	0.48	0.63			N/A	N/A
AB-D	2.31	?	?	?	?			N/A	N/A
D-AB	2.04	0.03	0.31	2.77	9.97			N/A	N/A
D-C	0.35	0.03	0.27	0.48	1.29			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.16	0.03	0.25	0.45	0.48			N/A	N/A
AB-D	2.41	?	?	?	?			N/A	N/A
D-AB	2.12	0.03	0.29	2.12	8.74			N/A	N/A
D-C	0.36	0.03	0.33	1.18	1.42			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-D	1.20	?	?	?	?			N/A	N/A
D-AB	1.03	0.05	0.54	2.27	3.33			N/A	N/A
D-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-D	0.75	~1	~1	~1	~1			N/A	N/A
D-AB	0.66	0.04	0.37	1.50	2.47			N/A	N/A
D-C	0.09	0.03	0.25	0.45	0.48			N/A	N/A
CD-B	0.01	~1	~1	~1	~1	)		N/A	N/A

2031 Base + 550 No Thru Link, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (min)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	3.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2031 Base + 550 No Thru Link	PM	PM 2016 Base	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		ONE HOUR	✓	1699	100.000
B		ONE HOUR	✓	66	100.000
C		ONE HOUR	✓	958	100.000
D		ONE HOUR	✓	516	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From	A	B	C	D	
	A	0	11	1324	364
	B	26	0	31	9
	C	900	4	0	54
	D	467	8	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From	A	B	C	D	
	A	0	0	2	1
	B	0	0	0	0
	C	0	2	0	19
	D	0	0	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (min)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.0000000000.00	27.80	27.5	?	F	37	55
B-A	0.0000000000.00	30.97	18.1	?	F	24	36
A-B						10	15
A-C						1215	1822
A-D						334	501
AB-C						1243	1865
AB-D	0.85	0.77	4.8	?	E	342	513
D-AB	3.11	40.76	157.5	?	F	436	654
D-C	2.98	45.86	14.2	?	F	38	56
C-D						50	74
C-A						826	1239
C-B						4	6
CD-A						1190	1785
CD-B	0.03	0.20	0.0	~1	E	10	15

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 (min)	LOS
B-CD	30	8	534	0.056	30	0.0	0.1	0.119	A
B-A	20	5	226	0.086	19	0.0	0.1	0.289	C
A-B	8	2			8				
A-C	997	249			997				
A-D	274	69			274				
AB-C	1020	255			1020				
AB-D	281	70	547	0.513	277	0.0	1.0	0.219	B
D-AB	358	89	629	0.569	353	0.0	1.3	0.214	B
D-C	31	8	172	0.180	30	0.0	0.2	0.421	D
C-D	41	10			41				
C-A	678	169			678				
C-B	3	0.75			3				
CD-A	1024	256			1024				
CD-B	9	2	442	0.020	9	0.0	0.0	0.139	A

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 (min)	LOS
B-CD	36	9	453	0.079	36	0.1	0.1	0.144	A
B-A	23	6	120	0.194	23	0.1	0.2	0.511	E
A-B	10	2			10				
A-C	1190	298			1190				
A-D	327	82			327				
AB-C	1218	305			1218				
AB-D	335	84	516	0.650	332	1.0	1.8	0.322	C
D-AB	427	107	567	0.753	421	1.3	2.8	0.395	C
D-C	37	9	96	0.384	35	0.2	0.6	0.989	F
C-D	49	12			49				
C-A	809	202			809				
C-B	4	0.90			4				
CD-A	1223	306			1223				
CD-B	11	3	386	0.028	11	0.0	0.0	0.160	A

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 (min)	LOS
B-CD	44	11	0	999999999.000	0	0.1	11.1	27.810	F
B-A	29	7	0	999999999.000	0	0.2	7.4	30.974	F
A-B	12	3			12				
A-C	1458	364			1458				
A-D	401	100			401				
AB-C	1458	364			1458				
AB-D	401	100	473	0.847	390	1.8	4.3	0.855	E
D-AB	523	131	260	2.011	259	2.8	66.8	10.298	F
D-C	45	11	23	1.956	21	0.6	6.7	14.339	F
C-D	59	15			59				
C-A	991	248			991				
C-B	4	1			4				
CD-A	1245	311			1245				
CD-B	9	2	307	0.028	9	0.0	0.0	0.200	S

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 (min)	LOS
B-CD	44	11	0	999999999.000	0	11.1	22.1	15.043	F
B-A	29	7	0	999999999.000	0	7.4	14.5	18.375	F
A-B	12	3			12				
A-C	1458	364			1458				
A-D	401	100			401				
AB-C	1458	364			1458				
AB-D	401	100	473	0.847	399	4.3	4.8	0.769	E
D-AB	523	131	168	3.105	168	68.9	157.5	40.749	F
D-C	45	11	15	2.983	15	6.7	14.2	45.880	F
C-D	59	15			59				
C-A	991	248			991				
C-B	4	1			4				
CD-A	1156	289			1156				
CD-B	7	2	307	0.024	7	0.0	0.0	0.200	S

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 (min)	LOS
B-CD	36	9	14	2.518	14	22.1	27.5	19.077	F
B-A	23	6	9	2.494	9	14.5	18.1	22.772	F
A-B	10	2			10				
A-C	1190	298			1190				
A-D	327	82			327				
AB-C	1201	300			1201				
AB-D	330	83	516	0.641	342	4.8	1.9	0.366	C
D-AB	427	107	462	0.925	459	157.5	149.5	19.155	F
D-C	37	9	41	0.901	38	14.2	13.8	20.685	F
C-D	49	12			49				
C-A	809	202			809				
C-B	4	0.90			4				
CD-A	1260	315			1260				
CD-B	11	3	386	0.029	11	0.0	0.0	0.161	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
B-CD	30	8	333	0.090	140	27.5	0.1	0.594	E
B-A	20	5	118	0.166	91	18.1	0.2	4.321	F
A-B	8	2			8				
A-C	997	249			997				
A-D	274	69			274				
AB-C	1105	276			1105				
AB-D	306	76	547	0.558	308	1.9	1.3	0.253	C
D-AB	358	89	565	0.633	561	149.8	88.7	13.361	F
D-C	31	8	51	0.606	48	13.8	9.7	15.152	F
C-D	41	10			41				
C-A	678	169			678				
C-B	3	0.75			3				
CD-A	1229	307			1229				
CD-B	12	3	442	0.028	12	0.0	0.0	0.140	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-D	1.02	?	?	?	?			N/A	N/A
D-AB	1.28	0.03	0.27	1.28	1.28			N/A	N/A
D-C	0.21	0.03	0.26	0.46	0.48			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-D	1.75	?	?	?	?			N/A	N/A
D-AB	2.76	0.03	0.29	2.76	9.31			N/A	N/A
D-C	0.57	0.03	0.27	0.57	0.92			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	11.10	0.00	0.00	11.10	11.10			N/A	N/A
B-A	7.39	0.00	0.00	7.39	7.39			N/A	N/A
AB-D	4.34	?	?	?	?			N/A	N/A
D-AB	68.88	37.02	66.13	97.24	107.54			N/A	N/A
D-C	6.65	0.46	4.35	14.38	18.62			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	22.11	0.00	0.00	22.11	22.11			N/A	N/A
B-A	14.54	0.00	0.00	14.54	14.54			N/A	N/A
AB-D	4.80	?	?	?	?			N/A	N/A
D-AB	157.52	157.05	157.50	157.90	157.95			N/A	N/A
D-C	14.20	3.57	12.27	24.35	28.77			N/A	N/A
CD-B	0.02	~1	~1	~1	~1	)		N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	27.53	0.00	0.00	27.53	27.53			N/A	N/A
B-A	18.06	0.00	0.00	18.06	18.06			N/A	N/A
AB-D	1.88	?	?	?	?			N/A	N/A
D-AB	149.55	>199	>199	>199	>199			N/A	N/A
D-C	13.83	2.36	11.39	25.59	30.96			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-D	1.31	?	?	?	?			N/A	N/A
D-AB	98.68	53.84	95.06	138.87	153.35			N/A	N/A
D-C	9.67	0.52	6.27	21.73	28.41			N/A	N/A
CD-B	0.03	~1	~1	~1	~1	)		N/A	N/A