

T22521

Plot 11 Dove Valley Park, Foston

Appendix K

Junctions 10 PICADY Output - A50 E/B Slip/Uttoxeter Road Priority Junction

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: T22521 - A511-UR - Plot 11.j10

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Report generation date: 14/11/2023 12:03:09

- »2022 Base, AM
- »2022 Base, PM
- »2028 + Com Dev, AM
- »2028 + Com Dev, PM
- »2028 + Com Dev + Dev, AM
- »2028 + Com Dev + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 Base									
Stream B-C	D1	0.2	9.17	0.15	A	D2	0.3	8.69	0.23	A
Stream B-A		0.3	12.61	0.22	B		0.5	12.64	0.35	B
Stream C-AB		0.4	8.34	0.29	A		0.3	8.32	0.18	A
	2028 + Com Dev									
Stream B-C	D3	0.3	10.23	0.19	B	D4	0.4	9.75	0.27	A
Stream B-A		0.5	16.17	0.28	C		0.8	17.80	0.44	C
Stream C-AB		0.5	9.42	0.33	A		0.4	9.07	0.23	A
	2028 + Com Dev + Dev									
Stream B-C	D5	0.4	10.60	0.21	B	D6	0.4	9.77	0.28	A
Stream B-A		0.5	17.28	0.30	C		0.8	17.79	0.44	C
Stream C-AB		0.6	9.68	0.34	A		0.4	9.05	0.23	A

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

File summary

File Description

Title	A511/Utttoxeter Rd
Location	DVP Foston
Site number	
Date	14/11/2023
Version	
Status	(new file)
Identifier	
Client	Dove Valley Park Ltd
Jobnumber	T22521
Enumerator	AzureAD\ConnorRead
Description	

Units

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

Analysis Options

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	38.00	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	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028 + Com Dev + Dev	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

2022 Base, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.66	A

Arms

Arms

Arm	Name	Description	Arm type
A	A511 (S)		Major
B	Uttoxeter Rd		Minor
C	A511 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.25		✓	4.00	75.0	✓	5.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	9.25	6.75	5.25	4.25	✓	3.00	125	83

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	618	0.106	0.269	0.169	0.384
B-C	729	0.106	0.267	-	-
C-B	738	0.271	0.271	-	-

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	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	279	100.000
B		ONE HOUR	✓	174	100.000
C		ONE HOUR	✓	264	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	4	275
	B	91	0	83
	C	92	172	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	100	8
	B	21	0	32
	C	30	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	9.17	0.2	A	76	114
B-A	0.22	12.61	0.3	B	84	125
C-AB	0.29	8.34	0.4	A	158	237
C-A					84	127
A-B					4	6
A-C					252	379

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	650	0.096	62	0.0	0.1	8.071	A
B-A	69	17	500	0.137	68	0.0	0.2	10.050	B
C-AB	129	32	682	0.190	128	0.0	0.3	7.017	A
C-A	69	17			69				
A-B	3	0.75			3				
A-C	207	52			207				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	634	0.118	74	0.1	0.2	8.498	A
B-A	82	20	477	0.171	82	0.2	0.2	10.999	B
C-AB	155	39	671	0.231	154	0.3	0.3	7.529	A
C-A	83	21			83				
A-B	4	0.90			4				
A-C	247	62			247				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	610	0.150	91	0.2	0.2	9.155	A
B-A	100	25	446	0.225	100	0.2	0.3	12.582	B
C-AB	189	47	666	0.289	189	0.3	0.4	8.325	A
C-A	101	25			101				
A-B	4	1			4				
A-C	303	76			303				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	610	0.150	91	0.2	0.2	9.167	A
B-A	100	25	446	0.225	100	0.3	0.3	12.613	B
C-AB	189	47	666	0.289	189	0.4	0.4	8.341	A
C-A	101	25			101				
A-B	4	1			4				
A-C	303	76			303				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	633	0.118	75	0.2	0.2	8.517	A
B-A	82	20	477	0.171	82	0.3	0.3	11.039	B
C-AB	155	39	671	0.231	155	0.4	0.3	7.547	A
C-A	83	21			83				
A-B	4	0.90			4				
A-C	247	62			247				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	650	0.096	63	0.2	0.1	8.099	A
B-A	69	17	500	0.137	69	0.3	0.2	10.104	B
C-AB	129	32	682	0.190	130	0.3	0.3	7.052	A
C-A	69	17			69				
A-B	3	0.75			3				
A-C	207	52			207				

2022 Base, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.35	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	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	312	100.000
B		ONE HOUR	✓	265	100.000
C		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	20	292
	B	142	0	123
	C	180	107	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	82	8
	B	4	0	7
	C	11	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	8.69	0.3	A	113	169
B-A	0.35	12.64	0.5	B	130	195
C-AB	0.18	8.32	0.3	A	98	147
C-A					165	248
A-B					18	28
A-C					268	402

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	93	23	629	0.147	92	0.0	0.2	7.161	A
B-A	107	27	506	0.211	106	0.0	0.3	9.321	A
C-AB	81	20	675	0.119	80	0.0	0.2	7.375	A
C-A	136	34			136				
A-B	15	4			15				
A-C	220	55			220				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	28	609	0.182	110	0.2	0.2	7.728	A
B-A	128	32	484	0.264	127	0.3	0.4	10.491	B
C-AB	96	24	663	0.145	96	0.2	0.2	7.750	A
C-A	162	40			162				
A-B	18	4			18				
A-C	263	66			263				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	135	34	579	0.234	135	0.2	0.3	8.672	A
B-A	156	39	453	0.345	156	0.4	0.5	12.590	B
C-AB	118	29	646	0.183	118	0.2	0.3	8.313	A
C-A	198	50			198				
A-B	22	6			22				
A-C	321	80			321				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	135	34	578	0.234	135	0.3	0.3	8.693	A
B-A	156	39	453	0.345	156	0.5	0.5	12.637	B
C-AB	118	29	646	0.183	118	0.3	0.3	8.321	A
C-A	198	50			198				
A-B	22	6			22				
A-C	321	80			321				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	28	608	0.182	111	0.3	0.2	7.755	A
B-A	128	32	484	0.264	128	0.5	0.4	10.550	B
C-AB	96	24	663	0.145	96	0.3	0.2	7.761	A
C-A	162	40			162				
A-B	18	4			18				
A-C	263	66			263				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	93	23	628	0.147	93	0.2	0.2	7.198	A
B-A	107	27	506	0.211	107	0.4	0.3	9.391	A
C-AB	81	20	675	0.119	81	0.2	0.2	7.396	A
C-A	136	34			136				
A-B	15	4			15				
A-C	220	55			220				

2028 + Com Dev, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.40	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	2028 + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	401	100.000
B		ONE HOUR	✓	197	100.000
C		ONE HOUR	✓	392	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	4	397
	B	96	0	101
	C	204	188	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	100	8
	B	21	0	32
	C	30	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.19	10.23	0.3	B	93	139
B-A	0.28	16.17	0.5	C	88	132
C-AB	0.33	9.42	0.5	A	173	259
C-A					187	280
A-B					4	6
A-C					364	546

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	19	633	0.120	75	0.0	0.2	8.504	A
B-A	72	18	449	0.161	71	0.0	0.2	11.509	B
C-AB	142	35	657	0.216	140	0.0	0.3	7.512	A
C-A	154	38			154				
A-B	3	0.75			3				
A-C	299	75			299				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	610	0.149	91	0.2	0.2	9.141	A
B-A	86	22	418	0.207	86	0.2	0.3	13.112	B
C-AB	169	42	641	0.264	169	0.3	0.4	8.224	A
C-A	183	46			183				
A-B	4	0.90			4				
A-C	357	89			357				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	28	576	0.193	111	0.2	0.3	10.206	B
B-A	106	26	375	0.282	106	0.3	0.5	16.099	C
C-AB	207	52	620	0.334	207	0.4	0.5	9.392	A
C-A	224	56			224				
A-B	4	1			4				
A-C	437	109			437				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	28	576	0.193	111	0.3	0.3	10.231	B
B-A	106	26	375	0.282	106	0.5	0.5	16.175	C
C-AB	207	52	620	0.334	207	0.5	0.5	9.420	A
C-A	224	56			224				
A-B	4	1			4				
A-C	437	109			437				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	609	0.149	91	0.3	0.2	9.176	A
B-A	86	22	418	0.207	87	0.5	0.3	13.192	B
C-AB	169	42	641	0.264	170	0.5	0.4	8.258	A
C-A	183	46			183				
A-B	4	0.90			4				
A-C	357	89			357				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	19	633	0.120	76	0.2	0.2	8.546	A
B-A	72	18	449	0.161	73	0.3	0.2	11.593	B
C-AB	142	35	657	0.216	142	0.4	0.3	7.556	A
C-A	154	38			154				
A-B	3	0.75			3				
A-C	299	75			299				

2028 + Com Dev, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.22	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	2028 + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	379	100.000
B		ONE HOUR	✓	285	100.000
C		ONE HOUR	✓	557	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	21	358
	B	149	0	136
	C	428	129	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	82	6
	B	4	0	7
	C	11	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.27	9.75	0.4	A	125	187
B-A	0.44	17.80	0.8	C	137	205
C-AB	0.23	9.07	0.4	A	118	178
C-A					393	589
A-B					19	29
A-C					329	493

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	102	26	614	0.167	102	0.0	0.2	7.501	A
B-A	112	28	452	0.248	111	0.0	0.3	10.938	B
C-AB	97	24	661	0.147	96	0.0	0.2	7.763	A
C-A	322	81			322				
A-B	16	4			16				
A-C	270	67			270				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	122	31	588	0.208	122	0.2	0.3	8.270	A
B-A	134	33	419	0.319	133	0.3	0.5	13.069	B
C-AB	116	29	647	0.179	116	0.2	0.3	8.272	A
C-A	385	96			385				
A-B	19	5			19				
A-C	322	80			322				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	150	37	546	0.274	149	0.3	0.4	9.705	A
B-A	164	41	374	0.438	163	0.5	0.8	17.609	C
C-AB	142	36	627	0.227	142	0.3	0.4	9.055	A
C-A	471	118			471				
A-B	23	6			23				
A-C	394	99			394				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	150	37	546	0.275	150	0.4	0.4	9.753	A
B-A	164	41	374	0.438	164	0.8	0.8	17.799	C
C-AB	142	36	627	0.227	142	0.4	0.4	9.067	A
C-A	471	118			471				
A-B	23	6			23				
A-C	394	99			394				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	122	31	586	0.209	123	0.4	0.3	8.319	A
B-A	134	33	419	0.319	135	0.8	0.5	13.224	B
C-AB	116	29	646	0.179	116	0.4	0.3	8.289	A
C-A	385	96			385				
A-B	19	5			19				
A-C	322	80			322				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	102	26	613	0.167	103	0.3	0.2	7.554	A
B-A	112	28	452	0.248	113	0.5	0.3	11.066	B
C-AB	97	24	661	0.147	97	0.3	0.2	7.792	A
C-A	322	81			322				
A-B	16	4			16				
A-C	270	67			270				

2028 + Com Dev + Dev, AM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.43	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	2028 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	435	100.000
B		ONE HOUR	✓	208	100.000
C		ONE HOUR	✓	410	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	4	431
	B	96	0	110
	C	221	189	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	100	8
	B	21	0	32
	C	30	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	10.60	0.4	B	101	151
B-A	0.30	17.28	0.5	C	88	132
C-AB	0.34	9.68	0.6	A	174	261
C-A					203	304
A-B					4	6
A-C					395	593

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	83	21	632	0.131	82	0.0	0.2	8.622	A
B-A	72	18	435	0.166	71	0.0	0.2	11.942	B
C-AB	142	36	650	0.219	141	0.0	0.3	7.626	A
C-A	166	42			166				
A-B	3	0.75			3				
A-C	324	81			324				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	607	0.163	99	0.2	0.3	9.344	A
B-A	86	22	403	0.214	86	0.2	0.3	13.741	B
C-AB	170	43	633	0.269	170	0.3	0.4	8.385	A
C-A	199	50			199				
A-B	4	0.90			4				
A-C	387	97			387				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	570	0.212	121	0.3	0.4	10.568	B
B-A	106	26	358	0.296	105	0.3	0.5	17.191	C
C-AB	209	52	610	0.342	208	0.4	0.6	9.650	A
C-A	243	61			243				
A-B	4	1			4				
A-C	475	119			475				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	569	0.213	121	0.4	0.4	10.599	B
B-A	106	26	358	0.296	106	0.5	0.5	17.284	C
C-AB	209	52	610	0.342	209	0.6	0.6	9.680	A
C-A	243	61			243				
A-B	4	1			4				
A-C	475	119			475				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	606	0.163	99	0.4	0.3	9.383	A
B-A	86	22	402	0.214	87	0.5	0.3	13.833	B
C-AB	170	43	633	0.269	171	0.6	0.4	8.421	A
C-A	199	50			199				
A-B	4	0.90			4				
A-C	387	97			387				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	83	21	631	0.131	83	0.3	0.2	8.671	A
B-A	72	18	435	0.166	73	0.3	0.2	12.037	B
C-AB	142	36	650	0.219	143	0.4	0.3	7.673	A
C-A	166	42			166				
A-B	3	0.75			3				
A-C	324	81			324				

2028 + Com Dev + Dev, PM

Data Errors and Warnings

No errors or warnings

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	untitled	T-Junction	Two-way	Two-way	Two-way		4.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.22	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	2028 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	379	100.000
B		ONE HOUR	✓	286	100.000
C		ONE HOUR	✓	556	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	21	358
	B	149	0	137
	C	428	128	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	82	8
	B	4	0	7
	C	11	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.28	9.77	0.4	A	128	189
B-A	0.44	17.79	0.8	C	137	205
C-AB	0.23	9.05	0.4	A	118	176
C-A					393	589
A-B					19	29
A-C					329	493

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	103	26	615	0.168	102	0.0	0.2	7.504	A
B-A	112	28	452	0.248	111	0.0	0.3	10.942	B
C-AB	96	24	661	0.146	96	0.0	0.2	7.753	A
C-A	322	81			322				
A-B	16	4			16				
A-C	270	67			270				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	588	0.209	123	0.2	0.3	8.273	A
B-A	134	33	419	0.319	133	0.3	0.5	13.070	B
C-AB	115	29	647	0.178	115	0.2	0.3	8.258	A
C-A	385	96			385				
A-B	19	5			19				
A-C	322	80			322				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	546	0.276	150	0.3	0.4	9.719	A
B-A	164	41	374	0.438	163	0.5	0.8	17.610	C
C-AB	141	35	627	0.225	141	0.3	0.4	9.034	A
C-A	471	118			471				
A-B	23	6			23				
A-C	394	99			394				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	546	0.277	151	0.4	0.4	9.767	A
B-A	164	41	374	0.438	164	0.8	0.8	17.792	C
C-AB	141	35	627	0.225	141	0.4	0.4	9.047	A
C-A	471	118			471				
A-B	23	6			23				
A-C	394	99			394				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	587	0.210	124	0.4	0.3	8.324	A
B-A	134	33	419	0.319	135	0.8	0.5	13.228	B
C-AB	115	29	646	0.178	115	0.4	0.3	8.275	A
C-A	385	96			385				
A-B	19	5			19				
A-C	322	80			322				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	103	26	614	0.168	103	0.3	0.2	7.557	A
B-A	112	28	452	0.248	113	0.5	0.3	11.069	B
C-AB	96	24	661	0.146	97	0.3	0.2	7.782	A
C-A	322	81			322				
A-B	16	4			16				
A-C	270	67			270				

T22521

Plot 11 Dove Valley Park, Foston

Appendix L

Junctions 10 PICADY Output – A50 W/B Slip/Watery Lane Priority Junction

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.1.0.1820									
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Filename: T22521 - FI-WL - Plot 11.j10

Path: C:\Users\ConnorRead\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T22521 Dove Valley Park, Foston\Junction Assessments\!PLOT 11

Report generation date: 14/11/2023 12:03:29

- » 2022 Base, AM
- » 2022 Base, PM
- » 2028 + Com Dev, AM
- » 2028 + Com Dev, PM
- » 2028 + Com Dev + Dev, AM
- » 2028 + Com Dev + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 Base									
Stream B-C	D1	0.1	6.98	0.07	A	D2	0.1	5.91	0.05	A
Stream B-A		0.1	10.27	0.11	B		0.1	8.54	0.07	A
Stream C-AB		0.1	6.76	0.05	A		0.1	5.96	0.05	A
	2028 + Com Dev									
Stream B-C	D3	0.1	7.29	0.07	A	D4	0.1	6.24	0.06	A
Stream B-A		0.2	12.03	0.14	B		0.1	9.57	0.09	A
Stream C-AB		0.1	6.99	0.05	A		0.1	6.30	0.06	A
	2028 + Com Dev + Dev									
Stream B-C	D5	0.1	7.33	0.07	A	D6	0.1	6.34	0.06	A
Stream B-A		0.2	12.79	0.15	B		0.1	9.89	0.09	A
Stream C-AB		0.1	7.01	0.05	A		0.1	6.40	0.06	A

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

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

File summary

File Description

Title	Foston Interchange/Watery Lane
Location	DVP Foston
Site number	
Date	14/11/2023
Version	
Status	(new file)
Identifier	
Client	Dove Valley Park Ltd
Jobnumber	T22521
Enumerator	AzureAD\ConnorRead
Description	

Units

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

Analysis Options

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	38.00	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	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028 + Com Dev + Dev	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

2022 Base, AM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		1.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.35	A

Arms

Arms

Arm	Name	Description	Arm type
A	Foston Interchange (S)		Major
B	Watery Lane		Minor
C	Foston Interchange (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50		✓	3.75	80.0	✓	6.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	10.00	7.00	5.00	4.50	✓	3.00	80	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	613	0.104	0.264	0.166	0.377
B-C	730	0.105	0.264	-	-
C-B	725	0.263	0.263	-	-

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	2022 Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	338	100.000
B		ONE HOUR	✓	85	100.000
C		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	29
	B	48	0
	C	247	28

Vehicle Mix

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

Heavy Vehicle %

	To		
	A	B	C
From	A	0	21
	B	17	0
	C	11	12

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	6.98	0.1	A	34	51
B-A	0.11	10.27	0.1	B	44	66
C-AB	0.05	6.76	0.1	A	26	39
C-A					227	340
A-B					27	40
A-C					284	425

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	654	0.043	28	0.0	0.0	6.431	A
B-A	36	9	510	0.071	36	0.0	0.1	8.870	A
C-AB	21	5	658	0.032	21	0.0	0.0	6.326	A
C-A	186	46			186				
A-B	22	5			22				
A-C	233	58			233				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	639	0.052	33	0.0	0.1	6.652	A
B-A	43	11	490	0.088	43	0.1	0.1	9.412	A
C-AB	25	6	645	0.039	25	0.0	0.0	6.502	A
C-A	222	56			222				
A-B	26	7			26				
A-C	278	69			278				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	618	0.066	41	0.1	0.1	6.980	A
B-A	53	13	463	0.114	53	0.1	0.1	10.263	B
C-AB	31	8	627	0.049	31	0.0	0.1	6.759	A
C-A	272	68			272				
A-B	32	8			32				
A-C	340	85			340				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	618	0.066	41	0.1	0.1	6.981	A
B-A	53	13	463	0.114	53	0.1	0.1	10.268	B
C-AB	31	8	627	0.049	31	0.1	0.1	6.759	A
C-A	272	68			272				
A-B	32	8			32				
A-C	340	85			340				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	639	0.052	33	0.1	0.1	6.656	A
B-A	43	11	491	0.088	43	0.1	0.1	9.422	A
C-AB	25	6	645	0.039	25	0.1	0.0	6.503	A
C-A	222	56			222				
A-B	26	7			26				
A-C	278	69			278				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	654	0.043	28	0.1	0.1	6.438	A
B-A	36	9	510	0.071	36	0.1	0.1	8.884	A
C-AB	21	5	658	0.032	21	0.0	0.0	6.331	A
C-A	186	46			186				
A-B	22	5			22				
A-C	233	58			233				

2022 Base, PM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		1.18	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.18	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	316	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	36	280
	B	32	0	30
	C	120	29	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	9	7
	B	7	0	0
	C	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	5.91	0.1	A	28	41
B-A	0.07	8.54	0.1	A	29	44
C-AB	0.05	5.98	0.1	A	27	40
C-A					110	185
A-B					33	50
A-C					257	385

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	8	674	0.034	22	0.0	0.0	5.524	A
B-A	24	8	523	0.046	24	0.0	0.1	7.710	A
C-AB	22	5	662	0.033	22	0.0	0.0	5.616	A
C-A	90	23			90				
A-B	27	7			27				
A-C	211	53			211				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	661	0.041	27	0.0	0.0	5.680	A
B-A	29	7	508	0.057	29	0.1	0.1	8.041	A
C-AB	26	7	650	0.040	26	0.0	0.0	5.768	A
C-A	108	27			108				
A-B	32	8			32				
A-C	252	63			252				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	642	0.051	33	0.0	0.1	5.908	A
B-A	35	9	486	0.072	35	0.1	0.1	8.541	A
C-AB	32	8	634	0.050	32	0.0	0.1	5.982	A
C-A	132	33			132				
A-B	40	10			40				
A-C	308	77			308				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	642	0.051	33	0.1	0.1	5.909	A
B-A	35	9	486	0.072	35	0.1	0.1	8.543	A
C-AB	32	8	634	0.050	32	0.1	0.1	5.982	A
C-A	132	33			132				
A-B	40	10			40				
A-C	308	77			308				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	660	0.041	27	0.1	0.0	5.685	A
B-A	29	7	508	0.057	29	0.1	0.1	8.044	A
C-AB	26	7	650	0.040	26	0.1	0.0	5.769	A
C-A	108	27			108				
A-B	32	8			32				
A-C	252	63			252				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	674	0.034	23	0.0	0.0	5.528	A
B-A	24	6	523	0.046	24	0.1	0.1	7.718	A
C-AB	22	5	662	0.033	22	0.0	0.0	5.621	A
C-A	90	23			90				
A-B	27	7			27				
A-C	211	53			211				

2028 + Com Dev, AM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		1.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.13	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	2028 + Com Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	403	100.000
B		ONE HOUR	✓	90	100.000
C		ONE HOUR	✓	485	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	31	372
	B	51	0	39
	C	456	29	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	21	8
	B	17	0	12
	C	11	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.29	0.1	A	36	54
B-A	0.14	12.03	0.2	B	47	70
C-AB	0.05	6.99	0.1	A	27	40
C-A					418	628
A-B					28	43
A-C					341	512

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	640	0.046	29	0.0	0.1	6.601	A
B-A	38	10	472	0.081	38	0.0	0.1	9.706	A
C-AB	22	5	645	0.034	22	0.0	0.0	6.464	A
C-A	343	86			343				
A-B	23	6			23				
A-C	280	70			280				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	622	0.056	35	0.1	0.1	6.873	A
B-A	46	11	444	0.103	46	0.1	0.1	10.569	B
C-AB	26	7	630	0.041	26	0.0	0.0	6.677	A
C-A	410	102			410				
A-B	28	7			28				
A-C	334	84			334				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	11	596	0.072	43	0.1	0.1	7.288	A
B-A	56	14	406	0.138	56	0.1	0.2	12.020	B
C-AB	32	8	608	0.052	32	0.0	0.1	6.992	A
C-A	502	126			502				
A-B	34	9			34				
A-C	410	102			410				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	11	596	0.072	43	0.1	0.1	7.290	A
B-A	56	14	406	0.138	56	0.2	0.2	12.033	B
C-AB	32	8	608	0.052	32	0.1	0.1	6.992	A
C-A	502	126			502				
A-B	34	9			34				
A-C	410	102			410				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	621	0.056	35	0.1	0.1	6.881	A
B-A	46	11	444	0.103	46	0.2	0.1	10.585	B
C-AB	26	7	630	0.041	26	0.1	0.0	6.678	A
C-A	410	102			410				
A-B	28	7			28				
A-C	334	84			334				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	639	0.046	29	0.1	0.1	6.612	A
B-A	38	10	472	0.081	39	0.1	0.1	9.728	A
C-AB	22	5	645	0.034	22	0.0	0.0	6.467	A
C-A	343	86			343				
A-B	23	6			23				
A-C	280	70			280				

2028 + Com Dev, PM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		0.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 + Com Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	414	100.000
B		ONE HOUR	✓	66	100.000
C		ONE HOUR	✓	249	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	38	378
	B	34	0	32
	C	218	31	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	9	7
	B	7	0	0
	C	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	6.24	0.1	A	29	44
B-A	0.09	9.57	0.1	A	31	47
C-AB	0.06	6.30	0.1	A	28	43
C-A					200	300
A-B					35	52
A-C					345	518

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	654	0.037	24	0.0	0.0	5.713	A
B-A	26	6	492	0.052	25	0.0	0.1	8.258	A
C-AB	23	6	643	0.036	23	0.0	0.0	5.805	A
C-A	164	41			164				
A-B	29	7			29				
A-C	283	71			283				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	636	0.045	29	0.0	0.0	5.924	A
B-A	31	8	470	0.065	31	0.1	0.1	8.766	A
C-AB	28	7	627	0.044	28	0.0	0.0	6.005	A
C-A	196	49			196				
A-B	34	9			34				
A-C	338	85			338				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	612	0.058	35	0.0	0.1	6.237	A
B-A	37	9	440	0.085	37	0.1	0.1	9.568	A
C-AB	34	9	605	0.056	34	0.0	0.1	6.302	A
C-A	240	60			240				
A-B	42	10			42				
A-C	414	103			414				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	612	0.058	35	0.1	0.1	6.238	A
B-A	37	9	440	0.085	37	0.1	0.1	9.572	A
C-AB	34	9	605	0.056	34	0.1	0.1	6.302	A
C-A	240	60			240				
A-B	42	10			42				
A-C	414	103			414				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	636	0.045	29	0.1	0.0	5.929	A
B-A	31	8	470	0.065	31	0.1	0.1	8.772	A
C-AB	28	7	627	0.044	28	0.1	0.0	6.006	A
C-A	196	49			196				
A-B	34	9			34				
A-C	338	85			338				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	654	0.037	24	0.0	0.0	5.721	A
B-A	26	6	492	0.052	26	0.1	0.1	8.267	A
C-AB	23	6	643	0.036	23	0.0	0.0	5.811	A
C-A	164	41			164				
A-B	29	7			29				
A-C	283	71			283				

2028 + Com Dev + Dev, AM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		1.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.05	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	2028 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	408	100.000
B		ONE HOUR	✓	90	100.000
C		ONE HOUR	✓	591	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	31	377
	B	51	0	39
	C	562	29	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	21	8
	B	17	0	12
	C	11	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.33	0.1	A	36	54
B-A	0.15	12.79	0.2	B	47	70
C-AB	0.05	7.01	0.1	A	27	40
C-A					516	774
A-B					28	43
A-C					346	519

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	638	0.046	29	0.0	0.1	6.616	A
B-A	38	10	457	0.084	38	0.0	0.1	10.034	B
C-AB	22	5	644	0.034	22	0.0	0.0	6.474	A
C-A	423	106			423				
A-B	23	6			23				
A-C	284	71			284				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	620	0.057	35	0.1	0.1	6.895	A
B-A	46	11	427	0.107	46	0.1	0.1	11.040	B
C-AB	26	7	629	0.041	26	0.0	0.0	6.690	A
C-A	505	126			505				
A-B	28	7			28				
A-C	339	85			339				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	11	593	0.072	43	0.1	0.1	7.323	A
B-A	56	14	385	0.146	56	0.1	0.2	12.778	B
C-AB	32	8	607	0.053	32	0.0	0.1	7.010	A
C-A	619	155			619				
A-B	34	9			34				
A-C	415	104			415				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	43	11	593	0.072	43	0.1	0.1	7.325	A
B-A	56	14	385	0.146	56	0.2	0.2	12.794	B
C-AB	32	8	607	0.053	32	0.1	0.1	7.010	A
C-A	619	155			619				
A-B	34	9			34				
A-C	415	104			415				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	619	0.057	35	0.1	0.1	6.904	A
B-A	46	11	427	0.107	46	0.2	0.1	11.056	B
C-AB	26	7	629	0.041	26	0.1	0.0	6.694	A
C-A	505	126			505				
A-B	28	7			28				
A-C	339	85			339				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	638	0.046	29	0.1	0.1	6.625	A
B-A	38	10	457	0.084	39	0.1	0.1	10.057	B
C-AB	22	5	644	0.034	22	0.0	0.0	6.480	A
C-A	423	106			423				
A-B	23	6			23				
A-C	284	71			284				

2028 + Com Dev + Dev, PM

Data Errors and Warnings

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

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	untitled	T-Junction	Two-way	Two-way	Two-way		0.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.94	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
D6	2028 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	444	100.000
B		ONE HOUR	✓	66	100.000
C		ONE HOUR	✓	274	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	38	406
	B	34	0	32
	C	243	31	0

Vehicle Mix

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

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	9	7
	B	7	0	0
	C	28	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	6.34	0.1	A	29	44
B-A	0.09	9.89	0.1	A	31	47
C-AB	0.06	6.40	0.1	A	28	43
C-A					223	334
A-B					35	52
A-C					373	559

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	648	0.037	24	0.0	0.0	5.770	A
B-A	26	6	483	0.053	25	0.0	0.1	8.419	A
C-AB	23	6	637	0.037	23	0.0	0.0	5.861	A
C-A	183	46			183				
A-B	29	7			29				
A-C	306	76			306				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	629	0.046	29	0.0	0.0	5.996	A
B-A	31	8	459	0.067	31	0.1	0.1	8.964	A
C-AB	28	7	620	0.045	28	0.0	0.0	6.077	A
C-A	218	55			218				
A-B	34	9			34				
A-C	365	91			365				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	603	0.058	35	0.0	0.1	6.337	A
B-A	37	9	427	0.088	37	0.1	0.1	9.890	A
C-AB	34	9	597	0.057	34	0.0	0.1	6.399	A
C-A	268	67			268				
A-B	42	10			42				
A-C	447	112			447				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	603	0.058	35	0.1	0.1	6.338	A
B-A	37	9	427	0.088	37	0.1	0.1	9.893	A
C-AB	34	9	597	0.057	34	0.1	0.1	6.399	A
C-A	268	67			268				
A-B	42	10			42				
A-C	447	112			447				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	7	629	0.046	29	0.1	0.0	5.999	A
B-A	31	8	459	0.067	31	0.1	0.1	8.989	A
C-AB	28	7	620	0.045	28	0.1	0.0	6.081	A
C-A	218	55			218				
A-B	34	9			34				
A-C	365	91			365				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	647	0.037	24	0.0	0.0	5.778	A
B-A	26	6	483	0.053	26	0.1	0.1	8.429	A
C-AB	23	6	637	0.037	23	0.0	0.0	5.867	A
C-A	183	46			183				
A-B	29	7			29				
A-C	306	76			306				