

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)	LOS
B-ACD	16	4	461	0.034	16	0.0	0.0	8.083	A
A-B	12	3			12				
A-C	656	164			656				
A-D	10	2			10				
AB-CD	12	3	442	0.027	12	0.0	0.0	8.371	A
AB-C	667	167			667				
D-ABC	102	26	269	0.380	106	1.5	0.6	22.417	C
C-D	202	50			202				
C-A	734	184			734				
C-B	3	0.75			3				
CD-AB	5	1	487	0.010	5	0.0	0.0	7.472	A
CD-A	734	183			734				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 14 - The Fairway Lake Hill - Staggered Junction - Proposed - Option 1.j9
Path: X:\Projects\2012\A090000\A090129-99 - IoW Junction Assessment and Design\30 Technical\31 Modelling\2034 Proposed Junction\Junction 14
Report generation date: 03/01/2018 17:18:41

- »2017, AM
- »2017, PM
- »2034, AM
- »2034, PM

Summary of junction performance

	AM					PM				
	Q (PCU)	Delay (s)	RFC	LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Res Cap
2017										
Stream B-ACD	0.1	9.81	0.05	A	6 % [Stream D-C]	0.0	9.34	0.05	A	-3 % [Stream D-C]
Stream AB-CD	0.3	8.08	0.17	A		0.3	8.30	0.19	A	
Stream D-AB	0.2	11.00	0.17	B		0.2	13.91	0.19	B	
Stream D-C	1.0	28.06	0.51	D		1.4	41.92	0.59	E	
Stream CD-AB	0.0	7.70	0.01	A		0.0	8.08	0.01	A	
2034										
Stream B-ACD	0.1	12.20	0.08	B	-14 % [Stream D-C]	0.1	11.92	0.07	B	-21 % [Stream D-C]
Stream AB-CD	0.4	8.27	0.23	A		0.6	8.34	0.26	A	
Stream D-AB	1.8	80.72	0.69	F		8.9	396.16	1.21	F	
Stream D-C	4.7	112.09	0.88	F		15.7	369.22	1.19	F	
Stream CD-AB	0.0	8.26	0.01	A		0.0	8.78	0.02	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	21/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG/jack.smith
Description	

Units

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

Analysis Options

Calculate Q Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
✓	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2034	AM	ONE HOUR	07:45	09:15	15
D4	2034	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q 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 (s)	Junction LOS
1	The Fairway / Lake Hill / Denness Road Staggered Junction	Left-Right Stagger	Two-way	1.59	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream D-C

Arms

Arms

Arm	Name	Description	Arm type
A	Lake Hill (E)		Major
B	Denness Road		Minor
C	Lake Hill (W)		Major
D	The Fairway		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.00			80.0	✓	1.00
C	9.00			82.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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	3.80								42	20
D	One lane plus flare		10.00	8.00	4.00	3.00	3.00	✓	1.00	71	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for AB	Slope for AC	Slope for AD	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	620	-	-	-	-	-	0.209	0.209	0.209	-	-
1	B-A	541	0.086	0.217	0.217	-	-	0.136	0.310	-	0.136	0.310
1	B-CD	688	0.092	0.232	0.232	-	-	-	-	-	-	-
1	CD-B	621	0.209	0.209	0.209	-	-	-	-	-	-	-
1	D-AB	715	-	-	-	-	-	0.241	0.241	0.095	-	-
1	D-C	573	-	0.144	0.328	0.144	0.328	0.229	0.229	0.091	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	677	100.000
B		✓	19	100.000
C		✓	852	100.000
D		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	4	609	64	
	B	7	0	11	1	
	C	649	3	0	200	
	D	62	0	123	0	

Vehicle Mix

HV %s

		To				
		A	B	C	D	
From	A	0	0	3	0	
	B	0	0	0	0	
	C	2	0	0	1	
	D	0	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
B-ACD	0.05	9.81	0.1	0.5	A
A-B					
A-C					
A-D					
AB-CD	0.17	8.08	0.3	~1	A
AB-C					
D-AB	0.17	11.00	0.2	0.5	B
D-C	0.51	28.06	1.0	5.0	D
C-D					
C-A					
C-B					
CD-AB	0.01	7.70	0.0	~1	A
CD-A					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	14	468	0.031	14	0.0	7.938	A
A-B	3			3			
A-C	458			458			
A-D	48			48			
AB-CD	54	533	0.101	53	0.1	7.513	A
AB-C	462			462			
D-AB	47	537	0.087	46	0.1	7.329	A
D-C	93	363	0.255	91	0.3	13.194	B
C-D	151			151			
C-A	489			489			
C-B	2			2			
CD-AB	2	517	0.004	2	0.0	6.992	A
CD-A	535			535			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	17	435	0.039	17	0.0	8.615	A
A-B	4			4			
A-C	547			547			
A-D	58			58			
AB-CD	67	531	0.127	67	0.2	7.792	A
AB-C	548			548			
D-AB	56	490	0.114	56	0.1	8.292	A
D-C	111	321	0.344	110	0.5	16.966	C
C-D	180			180			
C-A	583			583			
C-B	3			3			
CD-AB	3	498	0.005	3	0.0	7.275	A
CD-A	639			639			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	21	388	0.054	21	0.1	9.803	A
A-B	4			4			
A-C	671			671			
A-D	70			70			
AB-CD	91	539	0.169	91	0.3	8.072	A
AB-C	663			663			
D-AB	68	399	0.171	68	0.2	10.872	B
D-C	135	263	0.514	133	1.0	27.287	D
C-D	220			220			
C-A	715			715			
C-B	3			3			
CD-AB	3	471	0.007	3	0.0	7.700	A
CD-A	782			782			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	21	388	0.054	21	0.1	9.806	A
A-B	4			4			
A-C	671			671			
A-D	70			70			
AB-CD	91	539	0.169	91	0.3	8.083	A
AB-C	663			663			
D-AB	68	395	0.173	68	0.2	11.001	B
D-C	135	263	0.514	135	1.0	28.062	D
C-D	220			220			
C-A	715			715			
C-B	3			3			
CD-AB	3	471	0.007	3	0.0	7.700	A
CD-A	783			783			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	17	435	0.039	17	0.0	8.620	A
A-B	4			4			
A-C	547			547			
A-D	58			58			
AB-CD	67	532	0.127	68	0.2	7.810	A
AB-C	548			548			
D-AB	56	487	0.114	56	0.1	8.361	A
D-C	111	321	0.344	113	0.5	17.411	C
C-D	180			180			
C-A	583			583			
C-B	3			3			
CD-AB	3	498	0.005	3	0.0	7.275	A
CD-A	639			639			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	14	468	0.031	14	0.0	7.945	A
A-B	3			3			
A-C	458			458			
A-D	48			48			
AB-CD	54	534	0.101	54	0.1	7.531	A
AB-C	462			462			
D-AB	47	536	0.087	47	0.1	7.366	A
D-C	93	363	0.255	93	0.3	13.412	B
C-D	151			151			
C-A	489			489			
C-B	2			2			
CD-AB	2	517	0.004	2	0.0	6.992	A
CD-A	535			535			

Q Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
AB-CD	0.12	~1	~1	~1	~1			N/A	N/A
D-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-C	0.34	0.00	0.00	0.34	0.34			N/A	N/A
CD-AB	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.17	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-C	0.51	0.51	1.00	1.40	1.45			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-AB	0.20	0.03	0.26	0.47	0.49			N/A	N/A
D-C	1.00	0.03	0.28	1.00	3.04			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
AB-CD	0.26	~1	~1	~1	~1			N/A	N/A
D-AB	0.21	0.03	0.26	0.47	0.50			N/A	N/A
D-C	1.03	0.03	0.30	1.57	5.04			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.17	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-C	0.54	0.05	0.45	1.32	1.44			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
AB-CD	0.12	~1	~1	~1	~1			N/A	N/A
D-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-C	0.35	0.03	0.33	1.10	1.32			N/A	N/A
CD-AB	0.00	~1	~1	~1	~1			N/A	N/A

2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q 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 (s)	Junction LOS
1	The Fairway / Lake Hill / Denness Road Staggered Junction	Left-Right Stagger	Two-way	1.72	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream D-C

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)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	791	100.000
B		✓	17	100.000
C		✓	1023	100.000
D		✓	167	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	13	715	63
	B	3	0	12	2
	C	800	3	0	220
	D	55	2	110	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	2	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
B-ACD	0.05	9.34	0.0	0.5	A
A-B					
A-C					
A-D					
AB-CD	0.19	8.30	0.3	~1	A
AB-C					
D-AB	0.19	13.91	0.2	0.9	B
D-C	0.59	41.92	1.4	7.0	E
C-D					
C-A					
C-B					
CD-AB	0.01	8.08	0.0	~1	A
CD-A					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	13	491	0.026	13	0.0	7.530	A
A-B	10			10			
A-C	538			538			
A-D	47			47			
AB-CD	55	518	0.107	55	0.1	7.768	A
AB-C	541			541			
D-AB	43	510	0.084	43	0.1	7.833	A
D-C	83	324	0.256	81	0.3	14.776	B
C-D	166			166			
C-A	602			602			
C-B	2			2			
CD-AB	4	502	0.008	4	0.0	7.230	A
CD-A	643			643			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	15	456	0.034	15	0.0	8.175	A
A-B	12			12			
A-C	643			643			
A-D	57			57			
AB-CD	71	517	0.136	70	0.2	8.055	A
AB-C	641			641			
D-AB	51	454	0.113	51	0.1	9.100	A
D-C	99	275	0.360	98	0.5	20.271	C
C-D	198			198			
C-A	719			719			
C-B	3			3			
CD-AB	5	480	0.010	5	0.0	7.573	A
CD-A	768			768			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	19	404	0.046	19	0.0	9.339	A
A-B	14			14			
A-C	787			787			
A-D	69			69			
AB-CD	99	534	0.186	99	0.3	8.280	A
AB-C	773			773			
D-AB	63	333	0.188	62	0.2	13.513	B
D-C	121	206	0.587	118	1.3	39.547	E
C-D	242			242			
C-A	881			881			
C-B	3			3			
CD-AB	6	451	0.013	6	0.0	8.085	A
CD-A	941			941			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	19	404	0.046	19	0.0	9.342	A
A-B	14			14			
A-C	787			787			
A-D	69			69			
AB-CD	99	534	0.186	99	0.3	8.298	A
AB-C	773			773			
D-AB	63	326	0.192	63	0.2	13.915	B
D-C	121	206	0.588	121	1.4	41.917	E
C-D	242			242			
C-A	881			881			
C-B	3			3			
CD-AB	6	451	0.013	6	0.0	8.085	A
CD-A	941			941			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	15	456	0.034	15	0.0	8.180	A
A-B	12			12			
A-C	643			643			
A-D	57			57			
AB-CD	71	517	0.137	71	0.2	8.081	A
AB-C	641			641			
D-AB	51	450	0.114	52	0.1	9.227	A
D-C	99	275	0.360	102	0.6	21.205	C
C-D	198			198			
C-A	719			719			
C-B	3			3			
CD-AB	5	480	0.010	5	0.0	7.576	A
CD-A	769			769			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	13	491	0.026	13	0.0	7.538	A
A-B	10			10			
A-C	538			538			
A-D	47			47			
AB-CD	55	518	0.107	55	0.1	7.793	A
AB-C	541			541			
D-AB	43	509	0.084	43	0.1	7.886	A
D-C	83	324	0.256	84	0.4	15.071	C
C-D	166			166			
C-A	602			602			
C-B	2			2			
CD-AB	4	502	0.008	4	0.0	7.230	A
CD-A	644			644			

Q Variation Results for each time segment

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
AB-CD	0.13	~1	~1	~1	~1			N/A	N/A
D-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-C	0.34	0.00	0.00	0.34	0.34			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-C	0.54	0.07	0.71	1.34	1.42			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.03	0.26	0.46	0.48			N/A	N/A
AB-CD	0.31	~1	~1	~1	~1			N/A	N/A
D-AB	0.23	0.03	0.26	0.48	0.50			N/A	N/A
D-C	1.29	0.03	0.30	1.85	6.34			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-CD	0.31	~1	~1	~1	~1			N/A	N/A
D-AB	0.24	0.03	0.28	0.50	0.95			N/A	N/A
D-C	1.35	0.03	0.32	2.69	6.96			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-C	0.58	0.04	0.43	1.45	1.50			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-C	0.35	0.03	0.32	1.19	1.46			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

2034, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q 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 (s)	Junction LOS
1	The Fairway / Lake Hill / Denness Road Staggered Junction	Left-Right Stagger	Two-way	6.30	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-14	Stream D-C

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)
D3	2034	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	828	100.000
B		✓	23	100.000
C		✓	1043	100.000
D		✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	5	745	78
	B	9	0	13	1
	C	794	4	0	245
	D	76	0	150	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	0	0	0	0
	C	2	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
B-ACD	0.08	12.20	0.1	0.5	B
A-B					
A-C					
A-D					
AB-CD	0.23	8.27	0.4	~1	A
AB-C					
D-AB	0.69	80.72	1.8	5.3	F
D-C	0.88	112.09	4.7	21.4	F
C-D					
C-A					
C-B					
CD-AB	0.01	8.26	0.0	~1	A
CD-A					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	17	424	0.041	17	0.0	8.833	A
A-B	4			4			
A-C	561			561			
A-D	59			59			
AB-CD	69	531	0.130	68	0.2	7.813	A
AB-C	561			561			
D-AB	57	483	0.118	57	0.1	8.430	A
D-C	113	315	0.358	111	0.5	17.417	C
C-D	184			184			
C-A	598			598			
C-B	3			3			
CD-AB	3	495	0.006	3	0.0	7.317	A
CD-A	654			654			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	21	383	0.054	21	0.1	9.946	A
A-B	4			4			
A-C	670			670			
A-D	70			70			
AB-CD	90	538	0.168	90	0.2	8.076	A
AB-C	662			662			
D-AB	68	400	0.171	68	0.2	10.836	B
D-C	135	264	0.511	133	1.0	27.132	D
C-D	220			220			
C-A	714			714			
C-B	4			4			
CD-AB	4	472	0.008	4	0.0	7.692	A
CD-A	782			782			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	25	321	0.079	25	0.1	12.178	B
A-B	5			5			
A-C	820			820			
A-D	86			86			
AB-CD	131	570	0.229	130	0.4	8.244	A
AB-C	791			791			
D-AB	84	169	0.495	81	0.9	39.760	E
D-C	165	190	0.868	154	3.8	81.987	F
C-D	270			270			
C-A	874			874			
C-B	4			4			
CD-AB	5	440	0.010	4	0.0	8.261	A
CD-A	955			955			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	25	320	0.079	25	0.1	12.196	B
A-B	5			5			
A-C	820			820			
A-D	86			86			
AB-CD	131	571	0.229	131	0.4	8.270	A
AB-C	791			791			
D-AB	84	122	0.688	80	1.8	80.715	F
D-C	165	189	0.875	162	4.7	112.088	F
C-D	270			270			
C-A	874			874			
C-B	4			4			
CD-AB	5	440	0.010	5	0.0	8.262	A
CD-A	954			954			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	21	382	0.054	21	0.1	9.975	A
A-B	4			4			
A-C	670			670			
A-D	70			70			
AB-CD	90	540	0.167	91	0.3	8.112	A
AB-C	662			662			
D-AB	68	371	0.184	74	0.2	12.390	B
D-C	135	263	0.514	149	1.1	35.085	E
C-D	220			220			
C-A	714			714			
C-B	4			4			
CD-AB	4	472	0.008	4	0.0	7.692	A
CD-A	788			788			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	17	424	0.041	17	0.0	8.845	A
A-B	4			4			
A-C	561			561			
A-D	59			59			
AB-CD	69	531	0.130	70	0.2	7.849	A
AB-C	561			561			
D-AB	57	479	0.120	58	0.1	8.556	A
D-C	113	315	0.359	115	0.6	18.202	C
C-D	184			184			
C-A	598			598			
C-B	3			3			
CD-AB	3	495	0.006	3	0.0	7.317	A
CD-A	655			655			

Q Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.17	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-C	0.54	0.54	1.00	1.40	1.45			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A
D-C	0.99	0.07	0.85	1.74	2.26			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.08	0.03	0.26	0.47	0.50			N/A	N/A
AB-CD	0.43	~1	~1	~1	~1			N/A	N/A
D-AB	0.90	0.03	0.28	0.90	2.65			N/A	N/A
D-C	3.81	0.08	1.46	10.13	14.98			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.09	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.44	~1	~1	~1	~1			N/A	N/A
D-AB	1.76	0.08	1.16	3.84	5.30			N/A	N/A
D-C	4.70	0.06	1.03	13.36	21.40			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
AB-CD	0.26	~1	~1	~1	~1			N/A	N/A
D-AB	0.23	0.03	0.26	0.46	0.49			N/A	N/A
D-C	1.13	0.04	0.36	2.78	5.38			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-AB	0.14	0.03	0.25	0.45	0.48			N/A	N/A
D-C	0.58	0.03	0.29	1.12	2.55			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

2034, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q 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 (s)	Junction LOS
1	The Fairway / Lake Hill / Denness Road Staggered Junction	Left-Right Stagger	Two-way	17.56	C

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream D-C

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)
D4	2034	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		✓	964	100.000
B		✓	21	100.000
C		✓	1247	100.000
D		✓	203	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	16	871	77
	B	4	0	15	2
	C	975	4	0	268
	D	67	2	134	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	2	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS
B-ACD	0.07	11.92	0.1	0.5	B
A-B					
A-C					
A-D					
AB-CD	0.26	8.34	0.6	~1	A
AB-C					
D-AB	1.21	396.16	8.9	25.3	F
D-C	1.19	369.22	15.7	34.2	F
C-D					
C-A					
C-B					
CD-AB	0.02	8.78	0.0	~1	A
CD-A					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	16	446	0.035	16	0.0	8.357	A
A-B	12			12			
A-C	656			656			
A-D	58			58			
AB-CD	72	517	0.140	72	0.2	8.066	A
AB-C	654			654			
D-AB	52	448	0.116	51	0.1	9.250	A
D-C	101	269	0.375	99	0.6	20.883	C
C-D	202			202			
C-A	734			734			
C-B	3			3			
CD-AB	5	477	0.010	5	0.0	7.619	A
CD-A	784			784			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	19	400	0.047	19	0.0	9.441	A
A-B	14			14			
A-C	783			783			
A-D	69			69			
AB-CD	98	532	0.183	97	0.3	8.280	A
AB-C	770			770			
D-AB	62	338	0.184	62	0.2	13.276	B
D-C	120	208	0.578	118	1.3	38.690	E
C-D	241			241			
C-A	877			877			
C-B	4			4			
CD-AB	6	451	0.012	6	0.0	8.072	A
CD-A	936			936			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	23	328	0.071	23	0.1	11.812	B
A-B	17			17			
A-C	959			959			
A-D	85			85			
AB-CD	153	587	0.260	152	0.6	8.278	A
AB-C	910			910			
D-AB	76	63	1.206	54	5.7	260.398	F
D-C	148	125	1.181	116	9.2	208.610	F
C-D	295			295			
C-A	1073			1073			
C-B	4			4			
CD-AB	6	416	0.015	6	0.0	8.783	A
CD-A	1126			1126			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	23	325	0.071	23	0.1	11.924	B
A-B	17			17			
A-C	959			959			
A-D	85			85			
AB-CD	153	587	0.260	153	0.6	8.321	A
AB-C	910			910			
D-AB	76	67	1.142	63	8.9	396.159	F
D-C	148	124	1.188	122	15.7	369.218	F
C-D	295			295			
C-A	1073			1073			
C-B	4			4			
CD-AB	7	417	0.016	7	0.0	8.770	A
CD-A	1135			1135			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	19	397	0.048	19	0.1	9.522	A
A-B	14			14			
A-C	783			783			
A-D	69			69			
AB-CD	98	532	0.183	99	0.3	8.339	A
AB-C	770			770			
D-AB	62	156	0.398	94	0.7	83.837	F
D-C	120	199	0.605	175	2.0	171.375	F
C-D	241			241			
C-A	877			877			
C-B	4			4			
CD-AB	7	454	0.014	7	0.0	8.048	A
CD-A	968			968			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	16	446	0.035	16	0.0	8.369	A
A-B	12			12			
A-C	656			656			
A-D	58			58			
AB-CD	72	517	0.140	73	0.2	8.110	A
AB-C	654			654			
D-AB	52	438	0.119	54	0.1	9.619	A
D-C	101	268	0.376	106	0.6	22.926	C
C-D	202			202			
C-A	734			734			
C-B	3			3			
CD-AB	5	477	0.010	5	0.0	7.618	A
CD-A	787			787			

Q Variation Results for each time segment
16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-AB	0.13	0.03	0.25	0.46	0.48			N/A	N/A
D-C	0.58	0.06	0.59	1.33	1.42			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.30	~1	~1	~1	~1			N/A	N/A
D-AB	0.23	0.03	0.28	0.51	1.35			N/A	N/A
D-C	1.25	0.05	0.49	2.97	4.58			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
AB-CD	0.58	~1	~1	~1	~1			N/A	N/A
D-AB	5.71	0.32	3.53	12.56	16.43			N/A	N/A
D-C	9.25	1.30	7.40	17.12	20.85			N/A	N/A
CD-AB	0.02	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-AB	8.85	0.56	5.84	19.49	25.31			N/A	N/A
D-C	15.71	3.13	13.21	28.48	34.21			N/A	N/A
CD-AB	0.02	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
AB-CD	0.32	~1	~1	~1	~1			N/A	N/A
D-AB	0.74	0.03	0.31	1.32	3.62			N/A	N/A
D-C	1.99	0.04	0.36	4.93	10.37			N/A	N/A
CD-AB	0.02	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
AB-CD	0.20	~1	~1	~1	~1			N/A	N/A
D-AB	0.14	0.03	0.26	0.46	0.49			N/A	N/A
D-C	0.63	0.03	0.27	0.63	0.94			N/A	N/A
CD-AB	0.01	~1	~1	~1	~1			N/A	N/A

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 14 - The Fairway Lake Hill - Staggered Junction - Proposed - Option 2.j9
Path: X:\Projects\2012\A090000\A090129-99 - IoW Junction Assessment and Design\30 Technical\31 Modelling\2034 Proposed Junction\Junction 14
Report generation date: 03/01/2018 17:20:31

- »2017, AM
- »2017, PM
- »2034, AM
- »2034, PM

Summary of junction performance

	AM					PM				
	Q (PCU)	Delay (s)	RFC	LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Res Cap
2017										
Stream B-ACD	0.1	9.81	0.05	A	9 % [Stream D-C]	0.0	9.34	0.05	A	-1 % [Stream D-C]
Stream AB-CD	0.3	8.09	0.17	A		0.3	8.30	0.19	A	
Stream D-AB	0.2	10.98	0.17	B		0.2	13.16	0.18	B	
Stream D-C	0.9	25.47	0.49	D		1.2	37.47	0.56	E	
Stream CD-AB	0.0	7.70	0.01	A		0.0	8.08	0.01	A	
2034										
Stream B-ACD	0.1	12.19	0.08	B	-11 % [Stream D-C]	0.1	11.91	0.07	B	-19 % [Stream D-C]
Stream AB-CD	0.4	8.27	0.23	A		0.6	8.34	0.26	A	
Stream D-AB	0.7	31.42	0.42	D		7.4	325.76	1.13	F	
Stream D-C	3.5	82.85	0.81	F		12.8	302.00	1.12	F	
Stream CD-AB	0.0	8.26	0.01	A		0.0	8.78	0.02	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.