Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: PRINCIPAL STREET GHOST ISLAND ONE LANE.j9
Path: T:\Projects\4000 Series Project Numbers\4057ITB Ham Farm, Gillingham, Dorset\Tech\Assessments\Picady\Principal Street - New Road
Report generation date: 25/10/2018 13:49:25

»2021 + 1800DW M, AM
»2021 + 1800DW M, PM
»2031 + 1800DW LP, AM
»2031 + 1800DW LP, PM

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2021 + 1800DW M										
Stream B-AC	1.2	12.74	0.55	B	42 %	1.1	12.28	0.52	B	46 %
Stream C-AB	0.5	8.83	0.34	A	[Stream B-AC]	0.6	9.23	0.39	A	[Stream B-AC]
2031 + 1800DW LP										
Stream B-AC	2.9	25.10	0.75	D	7 %	1.5	16.28	0.61	C	24 %
Stream C-AB	0.7	10.53	0.40	B	[Stream B-AC]	1.0	11.82	0.51	B	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity 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	
Location	
Site number	
Date	24/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\Hotdesk
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue 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)
D3	2021 + 1800DW M	AM	ONE HOUR	07:45	09:15	15
D4	2021 + 1800DW M	PM	ONE HOUR	16:45	18:15	15
D5	2031 + 1800DW LP	AM	ONE HOUR	07:45	09:15	15
D6	2031 + 1800DW LP	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 + 1800DW M, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	PRINCIPAL STREET (S)		Major
B	NEW ROAD		Minor
C	PRINCIPAL STREET (N)		Major

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)
C - PRINCIPAL STREET (N)	7.30		✓	3.50	90.0	✓	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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - NEW ROAD	One lane	4.66	100	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	642	0.110	0.279	0.175	0.398
1	B-C	786	0.114	0.287	-	-
1	C-B	715	0.261	0.261	-	-

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)
D3	2021 + 1800DW M	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - PRINCIPAL STREET (S)		✓	214	100.000
B - NEW ROAD		✓	319	100.000
C - PRINCIPAL STREET (N)		✓	265	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	88	126
	B - NEW ROAD	64	0	255
	C - PRINCIPAL STREET (N)	73	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	5	5
	B - NEW ROAD	5	0	5
	C - PRINCIPAL STREET (N)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.55	12.74	1.2	B
C-AB	0.34	8.83	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	661	0.363	238	0.6	8.461	A
C-AB	145	639	0.226	143	0.3	7.255	A
C-A	55			55			
A-B	66			66			
A-C	95			95			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	650	0.441	286	0.8	9.872	A
C-AB	173	630	0.274	172	0.4	7.852	A
C-A	66			66			
A-B	79			79			
A-C	113			113			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	634	0.554	349	1.2	12.593	B
C-AB	211	619	0.341	211	0.5	8.803	A
C-A	80			80			
A-B	97			97			
A-C	139			139			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	633	0.554	351	1.2	12.741	B
C-AB	211	619	0.341	211	0.5	8.827	A
C-A	80			80			
A-B	97			97			
A-C	139			139			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	650	0.442	288	0.8	10.017	B
C-AB	173	630	0.274	173	0.4	7.883	A
C-A	66			66			
A-B	79			79			
A-C	113			113			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	661	0.363	241	0.6	8.593	A
C-AB	145	639	0.226	145	0.3	7.296	A
C-A	55			55			
A-B	66			66			
A-C	95			95			

2021 + 1800DW M, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.51	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	46	Stream B-AC

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	2021 + 1800DW M	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - PRINCIPAL STREET (S)		✓	135	100.000
B - NEW ROAD		✓	293	100.000
C - PRINCIPAL STREET (N)		✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	62	73
	B - NEW ROAD	87	0	206
	C - PRINCIPAL STREET (N)	104	229	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	5	5
	B - NEW ROAD	5	0	5
	C - PRINCIPAL STREET (N)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.52	12.28	1.1	B
C-AB	0.39	9.23	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	645	0.342	219	0.5	8.398	A
C-AB	172	654	0.264	171	0.4	7.431	A
C-A	78			78			
A-B	47			47			
A-C	55			55			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	633	0.416	263	0.7	9.701	A
C-AB	206	649	0.317	205	0.5	8.109	A
C-A	93			93			
A-B	56			56			
A-C	66			66			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	323	616	0.524	321	1.1	12.159	B
C-AB	252	642	0.393	252	0.6	9.196	A
C-A	114			114			
A-B	68			68			
A-C	80			80			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	323	615	0.524	323	1.1	12.283	B
C-AB	252	642	0.393	252	0.6	9.228	A
C-A	114			114			
A-B	68			68			
A-C	80			80			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	633	0.416	265	0.7	9.826	A
C-AB	206	649	0.317	207	0.5	8.148	A
C-A	93			93			
A-B	56			56			
A-C	66			66			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	645	0.342	221	0.5	8.517	A
C-AB	172	654	0.264	173	0.4	7.486	A
C-A	78			78			
A-B	47			47			
A-C	55			55			

2031 + 1800DW LP, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.22	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-AC

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)
D5	2031 + 1800DW LP	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - PRINCIPAL STREET (S)		✓	394	100.000
B - NEW ROAD		✓	391	100.000
C - PRINCIPAL STREET (N)		✓	282	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	97	297
	B - NEW ROAD	81	0	310
	C - PRINCIPAL STREET (N)	77	205	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	5	5
	B - NEW ROAD	5	0	5
	C - PRINCIPAL STREET (N)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.75	25.10	2.9	D
C-AB	0.40	10.53	0.7	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	294	620	0.475	291	0.9	10.835	B
C-AB	154	603	0.256	153	0.3	7.973	A
C-A	58			58			
A-B	73			73			
A-C	224			224			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	352	600	0.586	350	1.4	14.262	B
C-AB	184	588	0.313	184	0.5	8.894	A
C-A	69			69			
A-B	87			87			
A-C	267			267			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	430	572	0.752	425	2.8	23.565	C
C-AB	226	568	0.398	225	0.6	10.480	B
C-A	85			85			
A-B	107			107			
A-C	327			327			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	430	572	0.753	430	2.9	25.102	D
C-AB	226	568	0.398	226	0.7	10.528	B
C-A	85			85			
A-B	107			107			
A-C	327			327			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	352	600	0.586	357	1.5	15.164	C
C-AB	184	588	0.313	185	0.5	8.949	A
C-A	69			69			
A-B	87			87			
A-C	267			267			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	294	619	0.475	297	0.9	11.223	B
C-AB	154	603	0.256	155	0.3	8.038	A
C-A	58			58			
A-B	73			73			
A-C	224			224			

2031 + 1800DW LP, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream B-AC

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)
D6	2031 + 1800DW LP	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	Average Demand (Veh/hr)	Scaling Factor (%)
A - PRINCIPAL STREET (S)		✓	225	100.000
B - NEW ROAD		✓	307	100.000
C - PRINCIPAL STREET (N)		✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	70	155
	B - NEW ROAD	95	0	212
	C - PRINCIPAL STREET (N)	194	285	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - PRINCIPAL STREET (S)	B - NEW ROAD	C - PRINCIPAL STREET (N)
From	A - PRINCIPAL STREET (S)	0	5	5
	B - NEW ROAD	5	0	5
	C - PRINCIPAL STREET (N)	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.61	16.28	1.5	C
C-AB	0.51	11.82	1.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	609	0.380	229	0.6	9.421	A
C-AB	215	637	0.337	213	0.5	8.451	A
C-A	146			146			
A-B	53			53			
A-C	117			117			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	588	0.469	275	0.9	11.451	B
C-AB	257	629	0.408	256	0.7	9.635	A
C-A	174			174			
A-B	63			63			
A-C	139			139			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	338	559	0.605	336	1.5	15.942	C
C-AB	316	620	0.509	315	1.0	11.723	B
C-A	211			211			
A-B	77			77			
A-C	171			171			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	338	559	0.605	338	1.5	16.284	C
C-AB	316	620	0.509	316	1.0	11.823	B
C-A	211			211			
A-B	77			77			
A-C	171			171			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	588	0.470	278	0.9	11.724	B
C-AB	257	629	0.408	258	0.7	9.742	A
C-A	174			174			
A-B	63			63			
A-C	139			139			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	608	0.380	232	0.6	9.611	A
C-AB	215	637	0.337	215	0.5	8.560	A
C-A	146			146			
A-B	53			53			
A-C	117			117			