

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Camp_road_sa3.j9
Path: J:\39304 Heyford Park Tranche 2\Technical\Transport\Junction Assessments\PICADY\2022 Sensitivity Test\SA 3
Report generation date: 23/02/2018 14:54:38

- »2022 Sensitivity Test, AM
- »2022 Sensitivity Test, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2022 Sensitivity Test								
Stream B-AC	0.2	9.75	0.17	A	0.1	8.57	0.07	A
Stream C-AB	0.0	4.93	0.02	A	0.0	4.62	0.04	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	(untitled)
Location	
Site number	
Date	09/02/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PBA\jhorwood
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				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)	Run automatically
D1	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Sensitivity Test	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2022 Sensitivity Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Camp Rd (E)		Major
B	SA3		Minor
C	Camp Rd (W)		Major

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)
C - Camp Rd (W)	6.05			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - SA3	One lane	3.49	86	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for AB	Slope for AC	Slope for C-A	Slope for C-B
1	B-A	564	0.103	0.259	0.163	0.370
1	B-C	697	0.107	0.270	-	-
1	C-B	719	0.278	0.278	-	-

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)	Run automatically
D1	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Rd (E)		ONE HOUR	✓	357	100.000
B - SA3		ONE HOUR	✓	70	100.000
C - Camp Rd (W)		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Camp Rd (E)	B - SA3	C - Camp Rd (W)
From	A - Camp Rd (E)	0	15	342
	B - SA3	48	0	22
	C - Camp Rd (W)	251	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Camp Rd (E)	B - SA3	C - Camp Rd (W)
From	A - Camp Rd (E)	0	3	6
	B - SA3	1	0	1
	C - Camp Rd (W)	9	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	9.75	0.2	A	64	96
C-AB	0.02	4.93	0.0	A	9	14
C-A					227	341
A-B					14	21
A-C					314	471

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	53	13	494	0.107	52	0.0	0.1	8.147	A
C-AB	7	2	739	0.010	7	0.0	0.0	4.918	A
C-A	187	47			187				
A-B	11	3			11				
A-C	257	64			257				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	474	0.133	63	0.1	0.2	8.755	A
C-AB	9	2	749	0.012	9	0.0	0.0	4.859	A
C-A	223	56			223				
A-B	13	3			13				
A-C	307	77			307				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	77	19	446	0.173	77	0.2	0.2	9.739	A
C-AB	12	3	764	0.016	12	0.0	0.0	4.781	A
C-A	272	68			272				
A-B	17	4			17				
A-C	377	94			377				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	77	19	446	0.173	77	0.2	0.2	9.751	A
C-AB	12	3	764	0.016	12	0.0	0.0	4.788	A
C-A	272	68			272				
A-B	17	4			17				
A-C	377	94			377				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	474	0.133	63	0.2	0.2	8.770	A
C-AB	9	2	749	0.012	9	0.0	0.0	4.877	A
C-A	223	56			223				
A-B	13	3			13				
A-C	307	77			307				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	53	13	494	0.107	53	0.2	0.1	8.168	A
C-AB	7	2	739	0.010	7	0.0	0.0	4.928	A
C-A	187	47			187				
A-B	11	3			11				
A-C	257	64			257				

2022 Sensitivity Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

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 Sensitivity Test	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Rd (E)		ONE HOUR	✓	336	100.000
B - SA3		ONE HOUR	✓	29	100.000
C - Camp Rd (W)		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Camp Rd (E)	B - SA3	C - Camp Rd (W)
From	A - Camp Rd (E)	0	36	300
	B - SA3	20	0	9
	C - Camp Rd (W)	319	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Camp Rd (E)	B - SA3	C - Camp Rd (W)
From	A - Camp Rd (E)	0	0	3
	B - SA3	0	0	0
	C - Camp Rd (W)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	8.57	0.1	A	27	40
C-AB	0.04	4.62	0.0	A	23	35
C-A					284	426
A-B					33	50
A-C					275	413

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	5	500	0.044	22	0.0	0.0	7.531	A
C-AB	17	4	798	0.022	17	0.0	0.0	4.611	A
C-A	235	59			235				
A-B	27	7			27				
A-C	226	56			226				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	480	0.054	26	0.0	0.1	7.934	A
C-AB	22	6	816	0.027	22	0.0	0.0	4.534	A
C-A	279	70			279				
A-B	32	8			32				
A-C	270	67			270				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	452	0.071	32	0.1	0.1	8.566	A
C-AB	30	8	841	0.036	30	0.0	0.0	4.435	A
C-A	339	85			339				
A-B	40	10			40				
A-C	330	83			330				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	452	0.071	32	0.1	0.1	8.568	A
C-AB	30	8	841	0.036	30	0.0	0.0	4.439	A
C-A	339	85			339				
A-B	40	10			40				
A-C	330	83			330				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	480	0.054	26	0.1	0.1	7.938	A
C-AB	22	6	816	0.027	22	0.0	0.0	4.543	A
C-A	279	70			279				
A-B	32	8			32				
A-C	270	67			270				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	5	500	0.044	22	0.1	0.0	7.536	A
C-AB	17	4	798	0.022	17	0.0	0.0	4.617	A
C-A	235	59			235				
A-B	27	7			27				
A-C	226	56			226				