

Junctions 9
PICADY 9 - Priority Intersection Module
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»2022 Test Sensitivity, AM

»2022 Test Sensitivity, 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
2022 Test Sensitivity										
Stream B-C	0.6	20.68	0.39	C	-5 % [Stream B-AD]	0.0	7.67	0.01	A	20 % [Stream D-BC]
Stream B-AD	2.1	47.42	0.68	E		0.7	17.95	0.40	C	
Stream A-BCD	0.0	2.98	0.02	A		0.0	4.80	0.00	A	
Stream D-A	0.0	18.09	0.01	C		0.0	8.92	0.00	A	
Stream D-BC	2.3	38.41	0.71	E		0.7	19.89	0.42	C	
Stream C-ABD	0.5	6.39	0.19	A		0.4	3.62	0.15	A	

*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	(untitled)
Location	
Site number	
Date	08/03/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PBA\sleake
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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 period length (min)	Time segment length (min)	Run automatically
D1	2022 Test Sensitivity	AM	FLAT	07:45	08:45	60	15	✓
D2	2022 Test Sensitivity	PM	FLAT	17:00	18:00	60	15	✓

### Analysis Set Details

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

# 2022 Test Sensitivity, 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	A4260 / B4027	Right-Left Stagger	Two-way	9.95	A

### Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-AD

## Arms

### Arms

Arm	Name	Description	Arm type
A	A4260 Banbury Road (N)		Major
B	B4027 (E)		Minor
C	A4260 Banbury Road (S)		Major
D	B4027 (W)		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 - A4260 Banbury Road (N)	8.85			250.0	✓	0.00
C - A4260 Banbury Road (S)	8.85			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	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 - B4027 (E)	One lane plus flare	10.00	7.68	4.93	3.62	2.92	✓	2.00	36	58
D - B4027 (W)	One lane plus flare	10.00	9.83	5.30	3.49	3.02	✓	2.00	43	42

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	719	-	-	-	0.244	0.244	0.244	-	0.244	-	-
1	B-AD	577	0.092	0.233	-	-	-	0.147	0.333	0.147	0.092	0.233
1	B-C	686	0.092	0.233	-	-	-	-	-	-	0.092	0.233
1	C-B	719	0.244	0.244	-	-	-	-	-	-	0.244	0.244
1	D-A	675	-	-	-	0.229	0.091	0.229	-	0.091	-	-
1	D-BC	579	0.147	0.147	0.334	0.234	0.092	0.234	-	0.092	-	-

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 period length (min)	Time segment length (min)	Run automatically
D1	2022 Test Sensitivity	AM	FLAT	07:45	08:45	60	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 - A4260 Banbury Road (N)		FLAT	✓	987	100.000
B - B4027 (E)		FLAT	✓	275	100.000
C - A4260 Banbury Road (S)		FLAT	✓	449	100.000
D - B4027 (W)		FLAT	✓	226	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	To			
	A - A4260 Banbury Road (N)	B - B4027 (E)	C - A4260 Banbury Road (S)	D - B4027 (W)
From				
A - A4260 Banbury Road (N)	0	143	840	4
B - B4027 (E)	22	0	113	140
C - A4260 Banbury Road (S)	327	55	0	67
D - B4027 (W)	2	189	35	0

## Vehicle Mix

### Heavy Vehicle Percentages

	To			
	A - A4260 Banbury Road (N)	B - B4027 (E)	C - A4260 Banbury Road (S)	D - B4027 (W)
From				
A - A4260 Banbury Road (N)	0	5	6	0
B - B4027 (E)	10	0	3	3
C - A4260 Banbury Road (S)	1	6	0	3
D - B4027 (W)	50	1	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-C	0.39	20.68	0.6	C	113	113
B-AD	0.68	47.42	2.1	E	162	162
A-BCD	0.02	2.98	0.0	A	20	20
A-B					141	141
A-C					826	826
D-A	0.01	18.09	0.0	C	2	2
D-BC	0.71	38.41	2.3	E	224	224
C-ABD	0.19	6.39	0.5	A	128	128
C-D					55	55
C-A					266	266

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	113	28	304	0.372	111	0.0	0.6	18.465	C
B-AD	162	40	239	0.678	155	0.0	1.8	39.994	E
A-BCD	20	5	1228	0.016	20	0.0	0.0	2.980	A
A-B	141	35			141				
A-C	826	207			826				
D-A	2	0.50	219	0.009	2	0.0	0.0	16.615	C
D-BC	224	56	318	0.704	216	0.0	2.1	32.886	D
C-ABD	127	32	695	0.183	125	0.0	0.5	6.324	A
C-D	55	14			55				
C-A	267	67			267				

#### 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-C	113	28	289	0.392	113	0.6	0.6	20.442	C
B-AD	162	40	237	0.683	161	1.8	2.0	46.623	E
A-BCD	20	5	1227	0.016	20	0.0	0.0	2.984	A
A-B	141	35			141				
A-C	826	207			826				
D-A	2	0.50	202	0.010	2	0.0	0.0	17.955	C
D-BC	224	56	317	0.706	223	2.1	2.2	37.883	E
C-ABD	129	32	694	0.185	128	0.5	0.5	6.388	A
C-D	54	14			54				
C-A	266	66			266				

#### 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-C	113	28	287	0.393	113	0.6	0.6	20.624	C
B-AD	162	40	237	0.683	162	2.0	2.0	47.210	E
A-BCD	20	5	1227	0.016	20	0.0	0.0	2.982	A
A-B	141	35			141				
A-C	826	207			826				
D-A	2	0.50	201	0.010	2	0.0	0.0	18.057	C
D-BC	224	56	317	0.706	224	2.2	2.3	38.263	E
C-ABD	129	32	694	0.185	129	0.5	0.5	6.387	A
C-D	54	14			54				
C-A	266	66			266				

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-C	113	28	287	0.394	113	0.6	0.6	20.684	C
B-AD	162	40	237	0.683	162	2.0	2.1	47.425	E
A-BCD	20	5	1227	0.016	20	0.0	0.0	2.985	A
A-B	141	35			141				
A-C	826	207			826				
D-A	2	0.50	201	0.010	2	0.0	0.0	18.095	C
D-BC	224	56	317	0.707	224	2.3	2.3	38.406	E
C-ABD	129	32	694	0.185	129	0.5	0.5	6.390	A
C-D	54	14			54				
C-A	266	66			266				

# 2022 Test Sensitivity, 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	A4260 / B4027	Right-Left Stagger	Two-way	3.68	A

### Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	Stream D-BC

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2022 Test Sensitivity	PM	FLAT	17:00	18:00	60	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 - A4260 Banbury Road (N)		FLAT	✓	377	100.000
B - B4027 (E)		FLAT	✓	137	100.000
C - A4260 Banbury Road (S)		FLAT	✓	898	100.000
D - B4027 (W)		FLAT	✓	133	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		A - A4260 Banbury Road (N)	B - B4027 (E)	C - A4260 Banbury Road (S)	D - B4027 (W)
From	A - A4260 Banbury Road (N)	0	31	345	1
	B - B4027 (E)	64	0	5	68
	C - A4260 Banbury Road (S)	769	45	0	84
	D - B4027 (W)	1	101	31	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To			
		A - A4260 Banbury Road (N)	B - B4027 (E)	C - A4260 Banbury Road (S)	D - B4027 (W)
From	A - A4260 Banbury Road (N)	0	7	1	0
	B - B4027 (E)	2	0	0	2
	C - A4260 Banbury Road (S)	0	0	0	1
	D - B4027 (W)	0	0	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-C	0.01	7.67	0.0	A	5	5
B-AD	0.40	17.95	0.7	C	132	132
ABCD	0.00	4.80	0.0	A	2	2
A-B					31	31
A-C					344	344
D-A	0.00	8.92	0.0	A	1	1
D-BC	0.42	19.89	0.7	C	132	132
C-ABD	0.15	3.62	0.4	A	169	169
C-D					72	72
C-A					657	657

### 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-C	5	1	477	0.010	5	0.0	0.0	7.633	A
B-AD	132	33	333	0.396	129	0.0	0.6	17.465	C
ABCD	2	0.50	752	0.003	2	0.0	0.0	4.797	A
A-B	31	8			31				
A-C	344	86			344				
D-A	1	0.25	407	0.002	0.99	0.0	0.0	8.857	A
D-BC	132	33	314	0.421	129	0.0	0.7	19.249	C
C-ABD	168	42	1165	0.144	167	0.0	0.4	3.607	A
C-D	72	18			72				
C-A	658	165			658				

#### 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-C	5	1	474	0.011	5	0.0	0.0	7.673	A
B-AD	132	33	333	0.397	132	0.6	0.6	17.935	C
ABCD	2	0.50	752	0.003	2	0.0	0.0	4.803	A
A-B	31	8			31				
A-C	344	86			344				
D-A	1	0.25	404	0.002	1.00	0.0	0.0	8.922	A
D-BC	132	33	313	0.422	132	0.7	0.7	19.872	C
C-ABD	169	42	1165	0.145	169	0.4	0.4	3.622	A
C-D	72	18			72				
C-A	657	164			657				



**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-C	5	1	474	0.011	5	0.0	0.0	7.673	A
B-AD	132	33	333	0.397	132	0.6	0.7	17.943	C
ABCD	2	0.50	752	0.003	2	0.0	0.0	4.804	A
AB	31	8			31				
AC	344	86			344				
D-A	1	0.25	404	0.002	1	0.0	0.0	8.923	A
D-BC	132	33	313	0.422	132	0.7	0.7	19.888	C
C-ABD	169	42	1165	0.145	169	0.4	0.4	3.620	A
C-D	72	18			72				
C-A	657	164			657				

**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-C	5	1	474	0.011	5	0.0	0.0	7.674	A
B-AD	132	33	333	0.397	132	0.7	0.7	17.947	C
ABCD	2	0.50	752	0.003	2	0.0	0.0	4.804	A
AB	31	8			31				
AC	344	86			344				
D-A	1	0.25	404	0.002	1	0.0	0.0	8.924	A
D-BC	132	33	313	0.422	132	0.7	0.7	19.894	C
C-ABD	169	42	1165	0.145	169	0.4	0.4	3.623	A
C-D	72	18			72				
C-A	657	164			657				