

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://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: J5 - B430-Unnamed Road.j9

Path: J:\39304 Heyford Park Tranche 2\Technical\Transport\Junction Assessments\PICADY\2022 Sensitivity Test\J5 - B430-Minor Road

Report generation date: 16/02/2018 14:39:49

»(Default Analysis Set) - 2022 Test Sensitivity, AM

»(Default Analysis Set) - 2022 Test Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A2 - 2022 Test Sensitivity								
Stream B-C	0.5	7.04	0.35	A	0.4	6.60	0.28	A
Stream B-A	0.0	9.86	0.02	A	0.0	8.79	0.02	A
Stream C-AB	0.6	8.46	0.37	A	0.5	7.85	0.31	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	B430 Ardley Road / Minor Road
Location	Upper Heyford
Site number	
Date	11/07/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ekeen
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 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	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - 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	B430 / Minor Raod	T-Junction	Two-way	2.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B430 Ardley Road (S)		Major
B	Minor Road		Minor
C	B430 Ardley Road (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 - B430 Ardley Road (N)	7.50		✓	3.50	250.0	✓	17.00

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 - Minor Road	One lane plus flare	10.00	10.00	9.20	6.45	4.80	✓	3.00	211	250

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	692	0.118	0.298	0.187	0.425
1	B-C	933	0.134	0.338	-	-
1	C-B	820	0.297	0.297	-	-

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 - B430 Ardley Road (S)		FLAT	✓	263	100.000
B - Minor Road		FLAT	✓	285	100.000
C - B430 Ardley Road (N)		FLAT	✓	835	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B430 Ardley Road (S)	B - Minor Road	C - B430 Ardley Road (N)
From	A - B430 Ardley Road (S)	0	4	259
	B - Minor Road	7	0	278
	C - B430 Ardley Road (N)	590	245	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B430 Ardley Road (S)	B - Minor Road	C - B430 Ardley Road (N)
From	A - B430 Ardley Road (S)	0	100	13
	B - Minor Road	0	0	5
	C - B430 Ardley Road (N)	4	9	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	0.35	7.04	0.5	A	278	278
B-A	0.02	9.86	0.0	A	7	7
C-AB	0.37	8.46	0.6	A	245	245
C-A					590	590
A-B					4	4
A-C					259	259

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	278	70	790	0.352	276	0.0	0.5	6.978	A
B-A	7	2	373	0.019	7	0.0	0.0	9.827	A
C-AB	245	61	671	0.365	243	0.0	0.6	8.368	A
C-A	590	147			590				
A-B	4	1			4				
A-C	259	65			259				

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	278	70	790	0.352	278	0.5	0.5	7.037	A
B-A	7	2	372	0.019	7	0.0	0.0	9.862	A
C-AB	245	61	671	0.365	245	0.6	0.6	8.455	A
C-A	590	147			590				
A-B	4	1			4				
A-C	259	65			259				

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	278	70	790	0.352	278	0.5	0.5	7.037	A
B-A	7	2	372	0.019	7	0.0	0.0	9.862	A
C-AB	245	61	671	0.365	245	0.6	0.6	8.455	A
C-A	590	147			590				
A-B	4	1			4				
A-C	259	65			259				

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	278	70	790	0.352	278	0.5	0.5	7.037	A
B-A	7	2	372	0.019	7	0.0	0.0	9.862	A
C-AB	245	61	671	0.365	245	0.6	0.6	8.455	A
C-A	590	147			590				
A-B	4	1			4				
A-C	259	65			259				

(Default Analysis Set) - 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	B430 / Minor Raod	T-Junction	Two-way	2.78	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 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 - B430 Ardley Road (S)		FLAT	✓	453	100.000
B - Minor Road		FLAT	✓	219	100.000
C - B430 Ardley Road (N)		FLAT	✓	446	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B430 Ardley Road (S)	B - Minor Road	C - B430 Ardley Road (N)
From	A - B430 Ardley Road (S)	0	4	449
	B - Minor Road	7	0	212
	C - B430 Ardley Road (N)	236	210	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B430 Ardley Road (S)	B - Minor Road	C - B430 Ardley Road (N)
From	A - B430 Ardley Road (S)	0	0	3
	B - Minor Road	0	0	2
	C - B430 Ardley Road (N)	1	2	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	0.28	6.60	0.4	A	212	212
B-A	0.02	8.79	0.0	A	7	7
C-AB	0.31	7.85	0.5	A	210	210
C-A					236	236
A-B					4	4
A-C					449	449

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	212	53	757	0.280	210	0.0	0.4	6.567	A
B-A	7	2	417	0.017	7	0.0	0.0	8.768	A
C-AB	210	53	668	0.314	208	0.0	0.5	7.794	A
C-A	236	59			236				
A-B	4	1			4				
A-C	449	112			449				

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	212	53	757	0.280	212	0.4	0.4	6.604	A
B-A	7	2	417	0.017	7	0.0	0.0	8.787	A
C-AB	210	53	668	0.314	210	0.5	0.5	7.854	A
C-A	236	59			236				
A-B	4	1			4				
A-C	449	112			449				

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	212	53	757	0.280	212	0.4	0.4	6.604	A
B-A	7	2	417	0.017	7	0.0	0.0	8.787	A
C-AB	210	53	668	0.314	210	0.5	0.5	7.854	A
C-A	236	59			236				
A-B	4	1			4				
A-C	449	112			449				

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	212	53	757	0.280	212	0.4	0.4	6.604	A
B-A	7	2	417	0.017	7	0.0	0.0	8.787	A
C-AB	210	53	668	0.314	210	0.5	0.5	7.854	A
C-A	236	59			236				
A-B	4	1			4				
A-C	449	112			449				