Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Site 2.j9
Path: W:\2020\P20-114\junction9 modeling
Report generation date: 09/11/2020 13:33:06

Summary of junction performance

	12hrs			
	Queue (Veh)	Delay (s)	RFC	LOS
	Site 2 (Quarry Access) - Base year			
Stream B-C	0.0	0.00	0.00	A
Stream B-A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
	Site 2 (Quarry Access) - Opening year			
Stream B-C	0.0	0.00	0.00	A
Stream B-A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
	Site 2 (Quarry Access) - +5			
Stream B-C	0.0	0.00	0.00	A
Stream B-A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
	Site 2 (Quarry Access) - +15			
Stream B-C	0.0	0.00	0.00	A
Stream B-A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A
	Site 2 (Quarry Access) - Opening year+QT			
Stream B-C	0.0	11.89	0.01	B
Stream B-A	0.0	13.89	0.05	B
Stream C-AB	0.0	11.28	0.00	B
	Site 2 (Quarry Access) - +5+QT			
Stream B-C	0.0	11.90	0.01	B
Stream B-A	0.0	13.91	0.05	B
Stream C-AB	0.0	11.28	0.00	B
	Site 2 (Quarry Access) - +15+QT			
Stream B-C	0.0	11.91	0.01	B
Stream B-A	0.0	13.93	0.05	B
Stream C-AB	0.0	11.28	0.00	B

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	P20-114
Location	Aghamore, Co. Sligo
Site number	2
Date	02/10/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PMCE\papadakisa
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	perTimeSegment	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

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Site 2 (Quarry Access)	✓	100.000	100.000

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)
D5	Quarry Traffic	12hrs	DIRECT	07:00	19:00	720	60

Site 2 (Quarry Access) - Quarry Traffic, 12hrs

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	Site 2	T-Junction	Two-way		6.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	L3603 (E)		Major
B	Quarry Access		Minor
C	L3603 (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 - L3603 (W)	6.00			110.0	✓	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 - Quarry Access	One lane plus flare	10.00	7.65	4.55	3.65	3.50	✓	1.00	5	5

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/TS)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	538.148	0.098	0.248	0.156	0.354
1	B-C	616.924	0.095	0.239	-	-
1	C-B	637.665	0.247	0.247	-	-

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

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - L3603 (E)		DIRECT	✓	100.000
B - Quarry Access		DIRECT	✓	100.000
C - L3603 (W)		DIRECT	✓	100.000

Origin-Destination Data

07:00 - 08:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	7.57	0.00
	B - Quarry Access	3.78	0.00	0.89
	C - L3603 (W)	0.00	0.48	0.00

08:00 - 09:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	20.12	0.00
	B - Quarry Access	3.99	0.00	0.94
	C - L3603 (W)	0.00	1.28	0.00

09:00 - 10:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	6.23	0.00
	B - Quarry Access	4.51	0.00	1.06
	C - L3603 (W)	0.00	0.40	0.00

10:00 - 11:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	3.94	0.00
	B - Quarry Access	3.69	0.00	0.87
	C - L3603 (W)	0.00	0.25	0.00

11:00 - 12:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	4.09	0.00
	B - Quarry Access	3.31	0.00	0.78
	C - L3603 (W)	0.00	0.26	0.00

12:00 - 13:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	3.04	0.00
	B - Quarry Access	3.31	0.00	0.78
	C - L3603 (W)	0.00	0.19	0.00

13:00 - 14:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	4.98	0.00
	B - Quarry Access	4.59	0.00	1.08
	C - L3603 (W)	0.00	0.32	0.00

14:00 - 15:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	5.53	0.00
	B - Quarry Access	4.89	0.00	1.15
	C - L3603 (W)	0.00	0.35	0.00

15:00 - 16:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	4.43	0.00
	B - Quarry Access	3.22	0.00	0.76
	C - L3603 (W)	0.00	0.28	0.00

16:00 - 17:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	3.44	0.00
	B - Quarry Access	3.01	0.00	0.70
	C - L3603 (W)	0.00	0.22	0.00

17:00 - 18:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	1.20	0.00
	B - Quarry Access	3.61	0.00	0.85
	C - L3603 (W)	0.00	0.08	0.00

18:00 - 19:00

Demand (Veh/TS)

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0.00	2.49	0.00
	B - Quarry Access	13.99	0.00	3.28
	C - L3603 (W)	0.00	0.16	0.00

Vehicle Mix

07:00 - 08:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

08:00 - 09:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	77	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	77	0

09:00 - 10:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

10:00 - 11:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

11:00 - 12:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

12:00 - 13:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

13:00 - 14:00

Heavy Vehicle Percentages

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

Heavy Vehicle Percentages

14:00 - 15:00

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

Heavy Vehicle Percentages

15:00 - 16:00

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

Heavy Vehicle Percentages

16:00 - 17:00

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

Heavy Vehicle Percentages

17:00 - 18:00

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	100	0	100
	C - L3603 (W)	0	100	0

Heavy Vehicle Percentages

18:00 - 19:00

		To		
		A - L3603 (E)	B - Quarry Access	C - L3603 (W)
From	A - L3603 (E)	0	100	0
	B - Quarry Access	75	0	75
	C - L3603 (W)	0	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-C	0.01	11.81	0.0	B	1.09	13.11
B-A	0.05	13.69	0.0	B	4.66	55.89
C-AB	0.00	11.37	0.0	B	0.36	4.28
C-A					0.00	0.00
A-B					5.59	67.05
A-C					0.00	0.00

Main Results for each time segment

07:00 - 08:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.89	0.89	306.65	0.003	0.88	0.0	0.0	11.772	B
B-A	3.78	3.78	268.16	0.014	3.76	0.0	0.0	13.615	B
C-AB	0.48	0.48	316.96	0.002	0.48	0.0	0.0	11.374	B
C-A	0.00	0.00			0.00				
A-B	7.57	7.57			7.57				
A-C	0.00	0.00			0.00				

08:00 - 09:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.94	0.94	305.62	0.003	0.94	0.0	0.0	11.815	B
B-A	3.99	3.99	266.93	0.015	3.99	0.0	0.0	13.690	B
C-AB	1.28	1.28	355.34	0.004	1.28	0.0	0.0	10.529	B
C-A	0.00	0.00			0.00				
A-B	20.12	20.12			20.12				
A-C	0.00	0.00			0.00				

09:00 - 10:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.06	1.06	306.56	0.003	1.06	0.0	0.0	11.783	B
B-A	4.51	4.51	268.32	0.017	4.51	0.0	0.0	13.645	B
C-AB	0.40	0.40	317.64	0.001	0.40	0.0	0.0	10.358	B
C-A	0.00	0.00			0.00				
A-B	6.23	6.23			6.23				
A-C	0.00	0.00			0.00				

10:00 - 11:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.87	0.87	307.01	0.003	0.87	0.0	0.0	11.760	B
B-A	3.69	3.69	268.60	0.014	3.69	0.0	0.0	13.591	B
C-AB	0.25	0.25	317.86	0.001	0.25	0.0	0.0	11.334	B
C-A	0.00	0.00			0.00				
A-B	3.94	3.94			3.94				
A-C	0.00	0.00			0.00				

11:00 - 12:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.78	0.78	307.11	0.003	0.78	0.0	0.0	11.753	B
B-A	3.31	3.31	268.58	0.012	3.31	0.0	0.0	13.572	B
C-AB	0.26	0.26	317.82	0.001	0.26	0.0	0.0	11.335	B
C-A	0.00	0.00			0.00				
A-B	4.09	4.09			4.09				
A-C	0.00	0.00			0.00				

12:00 - 13:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.78	0.78	307.21	0.003	0.78	0.0	0.0	11.747	B
B-A	3.31	3.31	268.71	0.012	3.31	0.0	0.0	13.563	B
C-AB	0.19	0.19	318.08	0.001	0.19	0.0	0.0	11.326	B
C-A	0.00	0.00			0.00				
A-B	3.04	3.04			3.04				
A-C	0.00	0.00			0.00				

13:00 - 14:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.08	1.08	306.66	0.004	1.08	0.0	0.0	11.780	B
B-A	4.59	4.59	268.47	0.017	4.59	0.0	0.0	13.641	B
C-AB	0.32	0.32	317.60	0.001	0.32	0.0	0.0	11.345	B
C-A	0.00	0.00			0.00				
A-B	4.98	4.98			4.98				
A-C	0.00	0.00			0.00				

14:00 - 15:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.15	1.15	306.51	0.004	1.15	0.0	0.0	11.788	B
B-A	4.89	4.89	268.41	0.018	4.89	0.0	0.0	13.660	B
C-AB	0.35	0.35	317.47	0.001	0.35	0.0	0.0	11.351	B
C-A	0.00	0.00			0.00				
A-B	5.53	5.53			5.53				
A-C	0.00	0.00			0.00				

15:00 - 16:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.76	0.76	307.10	0.002	0.76	0.0	0.0	11.750	B
B-A	3.22	3.22	268.54	0.012	3.23	0.0	0.0	13.570	B
C-AB	0.28	0.28	317.74	0.001	0.28	0.0	0.0	11.341	B
C-A	0.00	0.00			0.00				
A-B	4.43	4.43			4.43				
A-C	0.00	0.00			0.00				

16:00 - 17:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.70	0.70	307.26	0.002	0.71	0.0	0.0	11.744	B
B-A	3.01	3.01	268.66	0.011	3.01	0.0	0.0	13.550	B
C-AB	0.22	0.22	317.98	0.001	0.22	0.0	0.0	11.328	B
C-A	0.00	0.00			0.00				
A-B	3.44	3.44			3.44				
A-C	0.00	0.00			0.00				

17:00 - 18:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.85	0.85	307.30	0.003	0.85	0.0	0.0	11.746	B
B-A	3.61	3.61	268.93	0.013	3.60	0.0	0.0	13.567	B
C-AB	0.08	0.08	318.54	0.000	0.08	0.0	0.0	11.303	B
C-A	0.00	0.00			0.00				
A-B	1.20	1.20			1.20				
A-C	0.00	0.00			0.00				

18:00 - 19:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3.28	3.28	347.10	0.009	3.27	0.0	0.0	10.771	B
B-A	13.99	13.99	306.27	0.046	13.95	0.0	0.0	12.682	B
C-AB	0.16	0.16	318.22	0.000	0.16	0.0	0.0	11.318	B
C-A	0.00	0.00			0.00				
A-B	2.49	2.49			2.49				
A-C	0.00	0.00			0.00				