

Junctions 9											
ARCADY 9 - Roundabout Module											
Version: 9.5.1.7462											
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Report generation date: 20/02/2020 15:26:34

- »2020 Base, AM
- »2020 Base, PM
- »2026 Base + Elm Grove, AM
- »2026 Base + Elm Grove, PM
- »2026 Base + Elm Grove + Prop Dev, AM
- »2026 Base + Elm Grove + Prop Dev, PM
- »2026 Base + Elm Grove + Prop Dev + H2.2, AM
- »2026 Base + Elm Grove + Prop Dev + H2.2, PM
- »Sensitivity Test: 2026 Baseline, AM
- »Sensitivity Test: 2026 Baseline, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2020 Base											
Arm A	D1	0.5	4.05	0.32	A	61 % [Arm C]	D2	1.5	7.81	0.60	A	37 % [Arm A]
Arm B		0.3	3.98	0.22	A			0.5	5.68	0.31	A	
Arm C		1.4	5.41	0.59	A			1.7	6.03	0.63	A	
	2026 Base + Elm Grove											
Arm A	D3	0.5	4.26	0.35	A	59 % [Arm C]	D4	1.6	8.11	0.62	A	34 % [Arm A]
Arm B		0.3	4.09	0.22	A			0.5	5.77	0.32	A	
Arm C		1.4	5.52	0.59	A			1.9	6.55	0.66	A	
	2026 Base + Elm Grove + Prop Dev											
Arm A	D5	0.6	4.38	0.37	A	58 % [Arm C]	D6	1.7	8.34	0.63	A	33 % [Arm A]
Arm B		0.3	4.15	0.22	A			0.5	5.85	0.32	A	
Arm C		1.5	5.61	0.60	A			2.1	6.80	0.68	A	
	2026 Base + Elm Grove + Prop Dev + H2.2											
Arm A	D7	0.6	4.49	0.38	A	56 % [Arm C]	D8	1.7	8.51	0.63	A	32 % [Arm A]
Arm B		0.3	4.20	0.23	A			0.5	5.91	0.32	A	
Arm C		1.5	5.67	0.60	A			2.2	7.02	0.69	A	
	Sensitivity Test: 2026 Baseline											
Arm A	D9	0.5	4.07	0.35	A	18 % [Arm C]	D10	3.1	12.53	0.76	B	16 % [Arm A]
Arm B		1.0	6.07	0.49	A			0.5	5.90	0.31	A	
Arm C		3.9	11.30	0.80	B			2.0	6.71	0.67	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	Junction 2 Bradley Road/ Woodmarsh Roundabout
Location	
Site number	
Date	20/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-IQT85C8\beth1
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 segment length (min)	Run automatically
D1	2020 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2020 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base + Elm Grove	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base + Elm Grove	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + Elm Grove + Prop Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Base + Elm Grove + Prop Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Base + Elm Grove + Prop Dev + H2.2	AM	ONE HOUR	07:45	09:15	15	✓
D8	2026 Base + Elm Grove + Prop Dev + H2.2	PM	ONE HOUR	16:45	18:15	15	✓
D9	Sensitivity Test: 2026 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D10	Sensitivity Test: 2026 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2020 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	4.84	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	Arm C

Arms

Arms

Arm	Name	Description
A	A363 Bradley Rd East	
B	Woodmarsh	
C	A363 Bradley Road North	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	3.70	5.40	10.6	21.6	35.0	29.0	
B	3.70	6.30	21.7	8.2	35.0	52.0	
C	3.90	7.20	12.3	18.7	35.0	42.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.608	1472
B	0.554	1443
C	0.626	1642

The slope and intercept shown above include any corrections and adjustments.

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	2020 Base	AM	ONE HOUR	07:45	09:15	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		ONE HOUR	✓	377	100.000
B		ONE HOUR	✓	227	100.000
C		ONE HOUR	✓	853	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	1	1	375
	B	14	0	213
	C	643	159	51

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	2
	B	0	0	2
	C	2	0	4

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.32	4.05	0.5	A	346	519
B	0.22	3.98	0.3	A	208	312
C	0.59	5.41	1.4	A	783	1174

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	284	71	157	1348	0.210	283	493	0.0	0.3	3.375	A
B	171	43	320	1238	0.138	170	120	0.0	0.2	3.370	A
C	642	161	11	1607	0.400	640	479	0.0	0.7	3.712	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	339	85	189	1330	0.255	339	591	0.3	0.3	3.632	A
B	204	51	384	1203	0.170	204	144	0.2	0.2	3.604	A
C	767	192	13	1606	0.478	766	574	0.7	0.9	4.280	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	415	104	231	1304	0.318	415	723	0.3	0.5	4.044	A
B	250	62	470	1155	0.216	250	176	0.2	0.3	3.976	A
C	939	235	16	1604	0.586	937	703	0.9	1.4	5.383	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	415	104	231	1304	0.318	415	724	0.5	0.5	4.049	A
B	250	62	470	1154	0.217	250	176	0.3	0.3	3.979	A
C	939	235	17	1604	0.586	939	704	1.4	1.4	5.415	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	339	85	189	1329	0.255	339	593	0.5	0.3	3.640	A
B	204	51	384	1202	0.170	204	144	0.3	0.2	3.611	A
C	767	192	14	1606	0.478	769	575	1.4	0.9	4.310	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	284	71	158	1348	0.211	284	496	0.3	0.3	3.386	A
B	171	43	322	1237	0.138	171	121	0.2	0.2	3.377	A
C	642	161	11	1607	0.400	643	482	0.9	0.7	3.740	A

2020 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	6.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	Arm A

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	2020 Base	PM	ONE HOUR	16:45	18:15	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		ONE HOUR	✓	629	100.000
B		ONE HOUR	✓	262	100.000
C		ONE HOUR	✓	940	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	7	622
	B	3	0	259
	C	464	245	231

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.60	7.81	1.5	A	577	866
B	0.31	5.68	0.5	A	240	361
C	0.63	6.03	1.7	A	863	1294

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	474	118	357	1255	0.377	471	350	0.0	0.6	4.578	A
B	197	49	639	1088	0.181	196	189	0.0	0.2	4.032	A
C	708	177	2	1633	0.433	705	833	0.0	0.8	3.866	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	565	141	427	1212	0.466	564	419	0.6	0.9	5.547	A
B	236	59	765	1018	0.231	235	226	0.2	0.3	4.595	A
C	845	211	3	1632	0.518	844	998	0.8	1.1	4.558	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	693	173	523	1154	0.600	690	513	0.9	1.5	7.715	A
B	288	72	936	924	0.312	288	277	0.3	0.5	5.658	A
C	1035	259	3	1632	0.634	1032	1221	1.1	1.7	5.974	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	693	173	524	1153	0.600	692	514	1.5	1.5	7.806	A
B	288	72	939	922	0.313	288	277	0.5	0.5	5.682	A
C	1035	259	3	1632	0.634	1035	1224	1.7	1.7	6.027	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	565	141	429	1211	0.467	568	421	1.5	0.9	5.616	A
B	236	59	770	1016	0.232	236	227	0.5	0.3	4.622	A
C	845	211	3	1632	0.518	848	1003	1.7	1.1	4.602	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	474	118	359	1254	0.378	475	352	0.9	0.6	4.628	A
B	197	49	644	1086	0.182	198	190	0.3	0.2	4.055	A
C	708	177	2	1633	0.433	709	839	1.1	0.8	3.901	A

2026 Base + Elm Grove, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	4.95	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	59	Arm C

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
D3	2026 Base + Elm Grove	AM	ONE HOUR	07:45	09:15	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		ONE HOUR	✓	417	100.000
B		ONE HOUR	✓	227	100.000
C		ONE HOUR	✓	864	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	1	1	415
	B	14	0	213
	C	654	159	51

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	2
	B	0	0	2
	C	2	0	4

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.35	4.26	0.5	A	383	574
B	0.22	4.09	0.3	A	208	312
C	0.59	5.52	1.4	A	793	1189

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	314	78	157	1348	0.233	313	502	0.0	0.3	3.473	A
B	171	43	350	1221	0.140	170	120	0.0	0.2	3.424	A
C	650	163	11	1607	0.405	648	509	0.0	0.7	3.741	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	375	94	189	1330	0.282	375	601	0.3	0.4	3.769	A
B	204	51	419	1183	0.173	204	144	0.2	0.2	3.677	A
C	777	194	13	1606	0.484	776	610	0.7	0.9	4.332	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	459	115	231	1304	0.352	459	735	0.4	0.5	4.253	A
B	250	62	513	1130	0.221	250	176	0.2	0.3	4.086	A
C	951	238	16	1604	0.593	949	747	0.9	1.4	5.481	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	459	115	231	1304	0.352	459	737	0.5	0.5	4.260	A
B	250	62	514	1130	0.221	250	176	0.3	0.3	4.090	A
C	951	238	17	1604	0.593	951	748	1.4	1.4	5.516	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	375	94	189	1329	0.282	375	603	0.5	0.4	3.775	A
B	204	51	421	1182	0.173	204	144	0.3	0.2	3.685	A
C	777	194	14	1606	0.484	779	611	1.4	0.9	4.365	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	314	78	158	1348	0.233	314	504	0.4	0.3	3.486	A
B	171	43	352	1220	0.140	171	121	0.2	0.2	3.431	A
C	650	163	11	1607	0.405	652	512	0.9	0.7	3.770	A

2026 Base + Elm Grove, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	6.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Arm A

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
D4	2026 Base + Elm Grove	PM	ONE HOUR	16:45	18:15	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		ONE HOUR	✓	645	100.000
B		ONE HOUR	✓	262	100.000
C		ONE HOUR	✓	983	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	7	638
	B	3	0	259
	C	507	245	231

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.62	8.11	1.6	A	592	888
B	0.32	5.77	0.5	A	240	361
C	0.66	6.55	1.9	A	902	1353

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	486	121	357	1255	0.387	483	382	0.0	0.6	4.648	A
B	197	49	651	1082	0.182	196	189	0.0	0.2	4.062	A
C	740	185	2	1632	0.453	737	845	0.0	0.8	4.005	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	580	145	427	1212	0.478	579	458	0.6	0.9	5.671	A
B	236	59	780	1010	0.233	235	226	0.2	0.3	4.642	A
C	884	221	3	1632	0.541	882	1012	0.8	1.2	4.792	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	710	178	523	1154	0.615	708	560	0.9	1.6	8.008	A
B	288	72	953	914	0.316	288	277	0.3	0.5	5.743	A
C	1082	271	3	1632	0.663	1079	1238	1.2	1.9	6.479	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	710	178	524	1154	0.616	710	561	1.6	1.6	8.115	A
B	288	72	957	912	0.316	288	277	0.5	0.5	5.770	A
C	1082	271	3	1632	0.663	1082	1242	1.9	1.9	6.548	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	580	145	429	1211	0.479	582	460	1.6	0.9	5.750	A
B	236	59	785	1008	0.234	236	227	0.5	0.3	4.669	A
C	884	221	3	1632	0.541	887	1018	1.9	1.2	4.848	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	486	121	359	1254	0.387	487	385	0.9	0.6	4.700	A
B	197	49	656	1079	0.183	198	190	0.3	0.2	4.086	A
C	740	185	2	1632	0.453	741	851	1.2	0.8	4.046	A

2026 Base + Elm Grove + Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	5.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	58	Arm C

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
D5	2026 Base + Elm Grove + Prop Dev	AM	ONE HOUR	07:45	09:15	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		ONE HOUR	✓	438	100.000
B		ONE HOUR	✓	228	100.000
C		ONE HOUR	✓	873	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	1	4	433
	B	15	0	213
	C	663	159	51

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	2
	B	0	0	2
	C	2	0	4

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.37	4.38	0.6	A	402	603
B	0.22	4.15	0.3	A	209	314
C	0.60	5.61	1.5	A	801	1202

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	330	82	157	1349	0.245	328	509	0.0	0.3	3.524	A
B	172	43	364	1214	0.141	171	122	0.0	0.2	3.450	A
C	657	164	12	1607	0.409	654	523	0.0	0.7	3.770	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	394	98	189	1330	0.296	393	610	0.3	0.4	3.842	A
B	205	51	436	1174	0.175	205	146	0.2	0.2	3.714	A
C	785	196	14	1605	0.489	784	626	0.7	0.9	4.377	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	482	121	231	1305	0.370	482	746	0.4	0.6	4.370	A
B	251	63	533	1120	0.224	251	179	0.2	0.3	4.143	A
C	961	240	18	1603	0.600	959	766	0.9	1.5	5.572	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	482	121	231	1304	0.370	482	748	0.6	0.6	4.379	A
B	251	63	534	1119	0.224	251	179	0.3	0.3	4.146	A
C	961	240	18	1603	0.600	961	767	1.5	1.5	5.607	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	394	98	189	1329	0.296	394	612	0.6	0.4	3.852	A
B	205	51	437	1173	0.175	205	147	0.3	0.2	3.719	A
C	785	196	14	1605	0.489	787	628	1.5	1.0	4.412	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	330	82	158	1348	0.245	330	512	0.4	0.3	3.537	A
B	172	43	366	1213	0.142	172	123	0.2	0.2	3.458	A
C	657	164	12	1607	0.409	658	525	1.0	0.7	3.799	A

2026 Base + Elm Grove + Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	7.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	Arm A

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
D6	2026 Base + Elm Grove + Prop Dev	PM	ONE HOUR	16:45	18:15	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		ONE HOUR	✓	656	100.000
B		ONE HOUR	✓	264	100.000
C		ONE HOUR	✓	1000	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	8	648
	B	5	0	259
	C	524	245	231

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.63	8.34	1.7	A	602	903
B	0.32	5.85	0.5	A	242	363
C	0.68	6.80	2.1	A	918	1376

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	494	123	357	1255	0.393	491	396	0.0	0.6	4.697	A
B	199	50	658	1078	0.184	198	190	0.0	0.2	4.088	A
C	753	188	4	1631	0.461	749	853	0.0	0.8	4.067	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	590	147	427	1212	0.486	589	475	0.6	0.9	5.761	A
B	237	59	789	1005	0.236	237	227	0.2	0.3	4.683	A
C	899	225	4	1631	0.551	898	1021	0.8	1.2	4.898	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	722	181	523	1154	0.626	719	581	0.9	1.6	8.224	A
B	291	73	964	908	0.320	290	278	0.3	0.5	5.819	A
C	1101	275	5	1630	0.675	1098	1249	1.2	2.0	6.718	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	722	181	524	1154	0.626	722	582	1.6	1.7	8.342	A
B	291	73	968	906	0.321	291	279	0.5	0.5	5.848	A
C	1101	275	6	1630	0.675	1101	1253	2.0	2.1	6.798	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	590	147	429	1211	0.487	593	477	1.7	1.0	5.848	A
B	237	59	794	1003	0.237	238	228	0.5	0.3	4.713	A
C	899	225	5	1631	0.551	902	1027	2.1	1.2	4.964	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	494	123	359	1254	0.394	495	399	1.0	0.7	4.754	A
B	199	50	663	1075	0.185	199	191	0.3	0.2	4.113	A
C	753	188	4	1631	0.461	754	859	1.2	0.9	4.113	A

2026 Base + Elm Grove + Prop Dev + H2.2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	5.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	56	Arm C

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
D7	2026 Base + Elm Grove + Prop Dev + H2.2	AM	ONE HOUR	07:45	09:15	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		ONE HOUR	✓	456	100.000
B		ONE HOUR	✓	229	100.000
C		ONE HOUR	✓	879	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	1	6	449
	B	16	0	213
	C	669	159	51

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	2
	B	0	0	2
	C	2	0	4

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.38	4.49	0.6	A	418	628
B	0.23	4.20	0.3	A	210	315
C	0.60	5.67	1.5	A	807	1210

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	343	86	157	1349	0.255	342	514	0.0	0.3	3.571	A
B	172	43	376	1207	0.143	172	124	0.0	0.2	3.475	A
C	662	165	13	1606	0.412	659	535	0.0	0.7	3.790	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	410	102	189	1330	0.308	410	616	0.3	0.4	3.909	A
B	206	51	450	1166	0.177	206	148	0.2	0.2	3.748	A
C	790	198	15	1605	0.492	789	640	0.7	1.0	4.410	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	502	126	231	1305	0.385	501	754	0.4	0.6	4.478	A
B	252	63	551	1110	0.227	252	181	0.2	0.3	4.195	A
C	968	242	19	1602	0.604	966	784	1.0	1.5	5.634	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	502	126	231	1304	0.385	502	755	0.6	0.6	4.486	A
B	252	63	552	1109	0.227	252	182	0.3	0.3	4.199	A
C	968	242	19	1602	0.604	968	785	1.5	1.5	5.672	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	410	102	189	1330	0.308	411	618	0.6	0.4	3.921	A
B	206	51	451	1165	0.177	206	149	0.3	0.2	3.756	A
C	790	198	15	1605	0.492	792	642	1.5	1.0	4.445	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	343	86	158	1348	0.255	344	517	0.4	0.3	3.587	A
B	172	43	378	1206	0.143	173	124	0.2	0.2	3.482	A
C	662	165	13	1606	0.412	663	537	1.0	0.7	3.820	A

2026 Base + Elm Grove + Prop Dev + H2.2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	7.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	Arm A

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
D8	2026 Base + Elm Grove + Prop Dev + H2.2	PM	ONE HOUR	16:45	18:15	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		ONE HOUR	✓	664	100.000
B		ONE HOUR	✓	266	100.000
C		ONE HOUR	✓	1014	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	9	655
	B	7	0	259
	C	538	245	231

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.63	8.51	1.7	A	609	914
B	0.32	5.91	0.5	A	244	366
C	0.69	7.02	2.2	A	930	1396

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	125	357	1255	0.398	497	408	0.0	0.7	4.734	A
B	200	50	664	1075	0.186	199	190	0.0	0.2	4.108	A
C	763	191	5	1630	0.468	760	858	0.0	0.9	4.119	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	597	149	427	1212	0.492	596	489	0.7	1.0	5.826	A
B	239	60	795	1002	0.239	239	228	0.2	0.3	4.715	A
C	912	228	6	1630	0.559	910	1027	0.9	1.3	4.993	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	731	183	522	1154	0.633	728	598	1.0	1.7	8.387	A
B	293	73	972	904	0.324	292	279	0.3	0.5	5.880	A
C	1116	279	8	1629	0.685	1113	1256	1.3	2.1	6.932	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	731	183	524	1154	0.634	731	600	1.7	1.7	8.515	A
B	293	73	975	902	0.325	293	280	0.5	0.5	5.910	A
C	1116	279	8	1629	0.685	1116	1261	2.1	2.2	7.022	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	597	149	430	1211	0.493	600	492	1.7	1.0	5.920	A
B	239	60	800	999	0.239	240	229	0.5	0.3	4.747	A
C	912	228	6	1630	0.559	915	1034	2.2	1.3	5.063	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	500	125	359	1254	0.399	501	411	1.0	0.7	4.793	A
B	200	50	669	1072	0.187	201	192	0.3	0.2	4.134	A
C	763	191	5	1630	0.468	765	864	1.3	0.9	4.167	A

Sensitivity Test: 2026 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	8.55	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	Arm C

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
D9	Sensitivity Test: 2026 Baseline	AM	ONE HOUR	07:45	09:15	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		ONE HOUR	✓	427	100.000
B		ONE HOUR	✓	518	100.000
C		ONE HOUR	✓	1166	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	26	401
	B	18	0	500
	C	1030	124	12

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	2
	B	0	0	2
	C	2	0	4

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.35	4.07	0.5	A	392	588
B	0.49	6.07	1.0	A	475	713
C	0.80	11.30	3.9	B	1070	1605

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	321	80	102	1384	0.232	320	785	0.0	0.3	3.382	A
B	390	97	310	1243	0.314	388	112	0.0	0.5	4.201	A
C	878	219	13	1605	0.547	873	684	0.0	1.2	4.889	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	384	96	122	1372	0.280	384	940	0.3	0.4	3.643	A
B	466	116	371	1209	0.385	465	135	0.5	0.6	4.832	A
C	1048	262	16	1603	0.654	1046	820	1.2	1.9	6.425	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	470	118	149	1356	0.347	470	1147	0.4	0.5	4.060	A
B	570	143	454	1163	0.490	569	164	0.6	0.9	6.045	A
C	1284	321	20	1601	0.802	1276	1003	1.9	3.8	10.816	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	470	118	150	1355	0.347	470	1153	0.5	0.5	4.067	A
B	570	143	455	1163	0.490	570	165	0.9	1.0	6.075	A
C	1284	321	20	1601	0.802	1283	1005	3.8	3.9	11.296	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	384	96	123	1371	0.280	384	949	0.5	0.4	3.652	A
B	466	116	372	1209	0.385	467	136	1.0	0.6	4.860	A
C	1048	262	16	1603	0.654	1056	823	3.9	1.9	6.677	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	321	80	103	1383	0.232	322	792	0.4	0.3	3.394	A
B	390	97	311	1242	0.314	391	113	0.6	0.5	4.229	A
C	878	219	14	1605	0.547	881	688	1.9	1.2	4.990	A

Sensitivity Test: 2026 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Bradley Rd/ Woodmarsh Rbt	Standard Roundabout		A, B, C	8.94	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	Arm A

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
D10	Sensitivity Test: 2026 Baseline	PM	ONE HOUR	16:45	18:15	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		ONE HOUR	✓	828	100.000
B		ONE HOUR	✓	251	100.000
C		ONE HOUR	✓	983	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	34	794
	B	21	0	230
	C	573	292	118

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A	0.76	12.53	3.1	B	760	1140
B	0.31	5.90	0.5	A	230	345
C	0.67	6.71	2.0	A	902	1353

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	623	156	307	1285	0.485	620	445	0.0	0.9	5.379	A
B	189	47	683	1064	0.178	188	244	0.0	0.2	4.106	A
C	740	185	16	1623	0.456	737	855	0.0	0.8	4.048	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	744	186	368	1248	0.596	742	533	0.9	1.4	7.084	A
B	226	56	818	989	0.228	225	293	0.2	0.3	4.710	A
C	884	221	19	1621	0.545	882	1024	0.8	1.2	4.865	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	912	228	450	1198	0.761	905	652	1.4	3.0	12.032	B
B	276	69	998	889	0.311	276	358	0.3	0.4	5.859	A
C	1082	271	23	1618	0.669	1079	1250	1.2	2.0	6.636	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	912	228	451	1198	0.761	911	654	3.0	3.1	12.532	B
B	276	69	1004	886	0.312	276	359	0.4	0.5	5.903	A
C	1082	271	23	1618	0.669	1082	1257	2.0	2.0	6.712	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	744	186	370	1247	0.597	751	536	3.1	1.5	7.343	A
B	226	56	826	984	0.229	226	294	0.5	0.3	4.751	A
C	884	221	19	1621	0.545	887	1034	2.0	1.2	4.924	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A	623	156	309	1284	0.485	626	448	1.5	1.0	5.485	A
B	189	47	689	1061	0.178	189	246	0.3	0.2	4.132	A
C	740	185	16	1623	0.456	742	862	1.2	0.8	4.091	A