2031 + 280 Dev No Connection, 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	untitled	Standard Roundabout		2, 3, 1	17.94	C

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
D10	2031 + 280 Dev No Connection	PM	ONE HOUR	16:00	17:30	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 (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1181	100.000
2 - James Towers Way		ONE HOUR	✓	1050	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1015	166
	2 - James Towers Way	1048	0	2
	3 - Garstang Road (A6) South	229	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	6	3
	2 - James Towers Way	9	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.89	21.64	7.4	C	1084	1626
2 - James Towers Way	0.83	16.03	5.0	C	963	1445
3 - Garstang Road (A6) South	0.35	7.64	0.5	A	211	317

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	889	222	0.75	1469	0.605	883	955	0.0	1.6	6.417	A
2 - James Towers Way	790	198	124	1432	0.552	785	759	0.0	1.3	6.015	A
3 - Garstang Road (A6) South	173	43	784	918	0.189	172	126	0.0	0.2	4.819	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1062	265	0.90	1469	0.723	1057	1144	1.6	2.7	9.137	A
2 - James Towers Way	944	236	149	1418	0.666	941	910	1.3	2.1	8.167	A
3 - Garstang Road (A6) South	207	52	939	837	0.247	206	150	0.2	0.3	5.706	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1300	325	1	1469	0.885	1283	1395	2.7	6.9	18.938	C
2 - James Towers Way	1156	289	180	1399	0.826	1146	1104	2.1	4.7	14.885	B
3 - Garstang Road (A6) South	253	63	1143	729	0.347	252	183	0.3	0.5	7.536	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1300	325	1	1469	0.885	1298	1405	6.9	7.4	21.642	C
2 - James Towers Way	1156	289	182	1398	0.827	1155	1117	4.7	5.0	16.030	C
3 - Garstang Road (A6) South	253	63	1153	724	0.350	253	185	0.5	0.5	7.641	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1062	265	0.90	1469	0.723	1080	1160	7.4	2.9	10.195	B
2 - James Towers Way	944	236	152	1416	0.667	955	929	5.0	2.2	8.698	A
3 - Garstang Road (A6) South	207	52	953	829	0.249	208	154	0.5	0.3	5.796	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	889	222	0.75	1469	0.605	894	965	2.9	1.6	6.661	A
2 - James Towers Way	790	198	126	1432	0.552	794	769	2.2	1.4	6.186	A
3 - Garstang Road (A6) South	173	43	792	914	0.190	174	127	0.3	0.2	4.865	A

2031 + 280 Dev 50% WL, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	13.03	B

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
D11	2031 + 280 Dev 50% WL	AM	ONE HOUR	07:00	08:30	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 (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1163	100.000
2 - James Towers Way		ONE HOUR	✓	758	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1030	133
	2 - James Towers Way	757	0	1
	3 - Garstang Road (A6) South	176	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	0	0
	2 - James Towers Way	0	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.87	18.72	6.4	C	1067	1601
2 - James Towers Way	0.59	6.16	1.4	A	696	1043
3 - Garstang Road (A6) South	0.22	5.18	0.3	A	164	246

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	870	699	0.0	1.5	5.959	A
2 - James Towers Way	571	143	99	1447	0.394	568	773	0.0	0.6	4.084	A
3 - Garstang Road (A6) South	135	34	567	1032	0.131	134	100	0.0	0.1	4.007	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1042	838	1.5	2.4	8.370	A
2 - James Towers Way	681	170	119	1435	0.475	680	925	0.6	0.9	4.762	A
3 - Garstang Road (A6) South	161	40	680	973	0.165	161	120	0.1	0.2	4.430	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1266	1025	2.4	6.0	16.774	C
2 - James Towers Way	835	209	145	1420	0.588	833	1125	0.9	1.4	6.106	A
3 - Garstang Road (A6) South	197	49	831	893	0.221	197	146	0.2	0.3	5.166	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1279	1027	6.0	6.4	18.721	C
2 - James Towers Way	835	209	146	1419	0.588	835	1136	1.4	1.4	6.156	A
3 - Garstang Road (A6) South	197	49	833	892	0.221	197	147	0.3	0.3	5.178	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1061	841	6.4	2.6	9.151	A
2 - James Towers Way	681	170	121	1434	0.475	683	942	1.4	0.9	4.809	A
3 - Garstang Road (A6) South	161	40	683	972	0.166	161	122	0.3	0.2	4.444	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	880	704	2.6	1.5	6.160	A
2 - James Towers Way	571	143	101	1446	0.395	572	781	0.9	0.7	4.121	A
3 - Garstang Road (A6) South	135	34	571	1030	0.131	135	101	0.2	0.2	4.022	A

2031 + 280 Dev 50% WL, 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	untitled	Standard Roundabout		2, 3, 1	18.02	C

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
D12	2031 + 280 Dev 50% WL	PM	ONE HOUR	16:00	17:30	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 (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1182	100.000
2 - James Towers Way		ONE HOUR	✓	1050	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1015	167
	2 - James Towers Way	1048	0	2
	3 - Garstang Road (A6) South	229	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	6	3
	2 - James Towers Way	9	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.89	21.77	7.5	C	1085	1627
2 - James Towers Way	0.83	16.07	5.0	C	963	1445
3 - Garstang Road (A6) South	0.35	7.64	0.5	A	211	317

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	884	955	0.0	1.6	6.422	A
2 - James Towers Way	790	198	125	1432	0.552	785	759	0.0	1.3	6.019	A
3 - Garstang Road (A6) South	173	43	784	918	0.189	172	126	0.0	0.2	4.819	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1058	1144	1.6	2.7	9.155	A
2 - James Towers Way	944	236	150	1417	0.666	941	910	1.3	2.1	8.176	A
3 - Garstang Road (A6) South	207	52	939	837	0.247	206	151	0.2	0.3	5.706	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1284	1395	2.7	6.9	19.022	C
2 - James Towers Way	1156	289	181	1398	0.827	1146	1104	2.1	4.8	14.919	B
3 - Garstang Road (A6) South	253	63	1143	729	0.347	252	184	0.3	0.5	7.535	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1299	1405	6.9	7.5	21.766	C
2 - James Towers Way	1156	289	184	1397	0.827	1155	1117	4.8	5.0	16.071	C
3 - Garstang Road (A6) South	253	63	1153	724	0.350	253	186	0.5	0.5	7.641	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1081	1160	7.5	2.9	10.227	B
2 - James Towers Way	944	236	153	1415	0.667	955	929	5.0	2.2	8.710	A
3 - Garstang Road (A6) South	207	52	953	829	0.249	208	155	0.5	0.3	5.796	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	895	965	2.9	1.7	6.673	A
2 - James Towers Way	790	198	126	1431	0.552	794	769	2.2	1.4	6.190	A
3 - Garstang Road (A6) South	173	43	792	914	0.190	174	128	0.3	0.2	4.865	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: James Towers Way - D'Urton Lane.j9
Path: Z:\Job Library\2020\200590 - Keyfold Farm Residential Development\Traffic Data\Junction Models\Future Neighbourhood Plan Development Junction Models
Report generation date: 23/12/2021 10:48:44

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 + Committed							
1 - James Towers Way North	7.6	13.28	0.89	B	4.2	7.77	0.81	A
2 - D'Urton Lane	0.2	11.05	0.12	B	0.1	8.05	0.08	A
3 - James Towers Way South	1.5	4.14	0.59	A	7.4	13.82	0.88	B
	2031 + 330 Dev No Connection							
1 - James Towers Way North	10.4	17.72	0.92	C	4.6	8.44	0.82	A
2 - D'Urton Lane	0.2	12.49	0.14	B	0.1	8.43	0.08	A
3 - James Towers Way South	1.6	4.25	0.60	A	10.0	18.41	0.91	C
	2031 + 330 Dev 50% WL							
1 - James Towers Way North	9.8	16.76	0.91	C	4.5	8.32	0.82	A
2 - D'Urton Lane	0.2	12.21	0.13	B	0.1	8.36	0.08	A
3 - James Towers Way South	1.6	4.23	0.59	A	9.5	17.48	0.91	C
	2031 + 280 Dev No Connection							
1 - James Towers Way North	9.5	16.33	0.91	C	4.5	8.26	0.82	A
2 - D'Urton Lane	0.2	12.08	0.13	B	0.1	8.33	0.08	A
3 - James Towers Way South	1.6	4.22	0.59	A	9.2	17.01	0.91	C
	2031 + 280 Dev 50% WL							
1 - James Towers Way North	9.4	16.12	0.91	C	4.5	8.22	0.82	A
2 - D'Urton Lane	0.2	12.02	0.13	B	0.1	8.31	0.08	A
3 - James Towers Way South	1.6	4.21	0.59	A	9.1	16.78	0.90	C

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	15/05/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\sam.chapman
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	PCU	PCU	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	2031 + Committed	AM	ONE HOUR	07:00	08:30	15	✓
D2	2031 + Committed	PM	ONE HOUR	16:00	17:30	15	✓
D3	2031 + 330 Dev No Connection	AM	ONE HOUR	07:00	08:30	15	✓
D4	2031 + 330 Dev No Connection	PM	ONE HOUR	16:00	17:30	15	✓
D5	2031 + 330 Dev 50% WL	AM	ONE HOUR	07:00	08:30	15	✓
D6	2031 + 330 Dev 50% WL	PM	ONE HOUR	16:00	17:30	15	✓
D7	2031 + 280 Dev No Connection	AM	ONE HOUR	07:00	08:30	15	✓
D8	2031 + 280 Dev No Connection	PM	ONE HOUR	16:00	17:30	15	✓
D9	2031 + 280 Dev 50% WL	AM	ONE HOUR	07:00	08:30	15	✓
D10	2031 + 280 Dev 50% WL	PM	ONE HOUR	16:00	17:30	15	✓

Analysis Set Details

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

2031 + Committed, 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	untitled	Standard Roundabout		1, 2, 3	9.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	James Towers Way North	
2	D'Urton Lane	
3	James Towers Way South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - James Towers Way North	7.00	9.50	13.0	30.0	55.0	49.0	
2 - D'Urton Lane	3.80	7.00	11.0	28.0	55.0	46.0	
3 - James Towers Way South	7.00	9.50	4.5	27.5	55.0	48.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - James Towers Way North	0.709	2461
2 - D'Urton Lane	0.552	1585
3 - James Towers Way South	0.676	2276

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	2031 + Committed	AM	ONE HOUR	07:00	08:30	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 (PCU/hr)	Scaling Factor (%)
1 - James Towers Way North		ONE HOUR	✓	1951	100.000
2 - D'Urton Lane		ONE HOUR	✓	45	100.000
3 - James Towers Way South		ONE HOUR	✓	1204	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	8	1943
	2 - D'Urton Lane	14	0	31
	3 - James Towers Way South	1157	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	13	4
	2 - D'Urton Lane	7	0	10
	3 - James Towers Way South	8	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - James Towers Way North	0.89	13.28	7.6	B	1790	2685
2 - D'Urton Lane	0.12	11.05	0.2	B	41	62
3 - James Towers Way South	0.59	4.14	1.5	A	1105	1657

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1469	367	35	2436	0.603	1463	879	0.0	1.6	3.822	A
2 - D'Urton Lane	34	8	1457	781	0.043	34	41	0.0	0.0	5.252	A
3 - James Towers Way South	906	227	10	2269	0.399	904	1480	0.0	0.7	2.842	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1754	438	42	2431	0.721	1750	1052	1.6	2.6	5.457	A
2 - D'Urton Lane	40	10	1742	623	0.065	40	49	0.0	0.1	6.737	A
3 - James Towers Way South	1082	271	13	2268	0.477	1081	1770	0.7	1.0	3.275	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	2148	537	52	2425	0.886	2130	1287	2.6	7.2	12.007	B
2 - D'Urton Lane	50	12	2121	414	0.120	49	60	0.1	0.1	10.759	B
3 - James Towers Way South	1326	331	15	2266	0.585	1324	2155	1.0	1.5	4.118	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	2148	537	52	2425	0.886	2147	1289	7.2	7.6	13.282	B
2 - D'Urton Lane	50	12	2138	405	0.122	50	61	0.1	0.2	11.048	B
3 - James Towers Way South	1326	331	15	2266	0.585	1326	2172	1.5	1.5	4.137	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1754	438	42	2431	0.721	1773	1055	7.6	2.8	5.854	A
2 - D'Urton Lane	40	10	1766	610	0.066	41	50	0.2	0.1	6.901	A
3 - James Towers Way South	1082	271	13	2268	0.477	1084	1794	1.5	1.0	3.292	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1469	367	35	2436	0.603	1473	883	2.8	1.6	3.908	A
2 - D'Urton Lane	34	8	1467	775	0.044	34	41	0.1	0.1	5.300	A
3 - James Towers Way South	906	227	11	2269	0.399	908	1491	1.0	0.7	2.858	A

2031 + Committed, 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	untitled	Standard Roundabout		1, 2, 3	10.79	B

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	2031 + Committed	PM	ONE HOUR	16:00	17:30	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 (PCU/hr)	Scaling Factor (%)
1 - James Towers Way North		ONE HOUR	✓	1794	100.000
2 - D'Urton Lane		ONE HOUR	✓	35	100.000
3 - James Towers Way South		ONE HOUR	✓	1816	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	8	1786
	2 - D'Urton Lane	8	0	27
	3 - James Towers Way South	1803	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	0	3
	2 - D'Urton Lane	0	0	4
	3 - James Towers Way South	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - James Towers Way North	0.81	7.77	4.2	A	1646	2469
2 - D'Urton Lane	0.08	8.05	0.1	A	32	48
3 - James Towers Way South	0.88	13.82	7.4	B	1666	2500

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1351	338	10	2454	0.550	1346	1357	0.0	1.2	3.328	A
2 - D'Urton Lane	26	7	1340	845	0.031	26	16	0.0	0.0	4.529	A
3 - James Towers Way South	1367	342	6	2272	0.602	1361	1360	0.0	1.6	4.158	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1613	403	12	2453	0.657	1610	1624	1.2	1.9	4.382	A
2 - D'Urton Lane	31	8	1603	700	0.045	31	19	0.0	0.0	5.547	A
3 - James Towers Way South	1633	408	7	2271	0.719	1628	1627	1.6	2.6	5.891	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1975	494	14	2451	0.806	1967	1977	1.9	4.1	7.517	A
2 - D'Urton Lane	39	10	1958	504	0.076	38	23	0.0	0.1	7.962	A
3 - James Towers Way South	1999	500	9	2270	0.881	1982	1987	2.6	7.0	12.536	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1975	494	14	2451	0.806	1975	1993	4.1	4.2	7.768	A
2 - D'Urton Lane	39	10	1966	500	0.077	39	23	0.1	0.1	8.046	A
3 - James Towers Way South	1999	500	9	2270	0.881	1998	1996	7.0	7.4	13.825	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1613	403	12	2453	0.657	1621	1646	4.2	2.0	4.505	A
2 - D'Urton Lane	31	8	1614	694	0.045	32	19	0.1	0.0	5.605	A
3 - James Towers Way South	1633	408	7	2271	0.719	1651	1639	7.4	2.8	6.323	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1351	338	10	2454	0.550	1354	1368	2.0	1.3	3.375	A
2 - D'Urton Lane	26	7	1348	841	0.031	26	16	0.0	0.0	4.555	A
3 - James Towers Way South	1367	342	6	2272	0.602	1372	1368	2.8	1.6	4.259	A

2031 + 330 Dev No Connection, 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	untitled	Standard Roundabout		1, 2, 3	12.63	B

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
D3	2031 + 330 Dev No Connection	AM	ONE HOUR	07:00	08:30	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 (PCU/hr)	Scaling Factor (%)
1 - James Towers Way North		ONE HOUR	✓	2020	100.000
2 - D'Urton Lane		ONE HOUR	✓	45	100.000
3 - James Towers Way South		ONE HOUR	✓	1226	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	8	2012
	2 - D'Urton Lane	14	0	31
	3 - James Towers Way South	1179	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - James Towers Way North	2 - D'Urton Lane	3 - James Towers Way South
From	1 - James Towers Way North	0	13	4
	2 - D'Urton Lane	7	0	10
	3 - James Towers Way South	8	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - James Towers Way North	0.92	17.72	10.4	C	1854	2780
2 - D'Urton Lane	0.14	12.49	0.2	B	41	62
3 - James Towers Way South	0.60	4.25	1.6	A	1125	1687

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1521	380	35	2436	0.624	1514	895	0.0	1.7	4.030	A
2 - D'Urton Lane	34	8	1508	753	0.045	34	41	0.0	0.1	5.460	A
3 - James Towers Way South	923	231	10	2269	0.407	920	1531	0.0	0.7	2.877	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1816	454	42	2431	0.747	1811	1071	1.7	3.0	5.984	A
2 - D'Urton Lane	40	10	1804	589	0.069	40	49	0.1	0.1	7.149	A
3 - James Towers Way South	1102	276	13	2268	0.486	1101	1831	0.7	1.0	3.331	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	2224	556	52	2425	0.917	2198	1311	3.0	9.6	15.019	C
2 - D'Urton Lane	50	12	2189	377	0.132	49	60	0.1	0.2	11.981	B
3 - James Towers Way South	1350	337	15	2266	0.596	1348	2223	1.0	1.6	4.226	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	2224	556	52	2425	0.917	2221	1313	9.6	10.4	17.723	C
2 - D'Urton Lane	50	12	2212	364	0.136	50	61	0.2	0.2	12.486	B
3 - James Towers Way South	1350	337	15	2266	0.596	1350	2246	1.6	1.6	4.246	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1816	454	42	2431	0.747	1845	1075	10.4	3.2	6.686	A
2 - D'Urton Lane	40	10	1838	571	0.071	41	50	0.2	0.1	7.416	A
3 - James Towers Way South	1102	276	13	2268	0.486	1104	1866	1.6	1.0	3.351	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - James Towers Way North	1521	380	35	2436	0.624	1526	899	3.2	1.7	4.142	A
2 - D'Urton Lane	34	8	1520	746	0.045	34	41	0.1	0.1	5.518	A
3 - James Towers Way South	923	231	11	2269	0.407	924	1544	1.0	0.7	2.896	A