

Do-Nothing - 2027 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1, D2, D3, D4, D5, D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		5.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	547	0.088	0.222	0.222	-	-	-	0.140	0.317	-	0.222	0.222	0.111
B-C	767	0.104	0.262	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	603	0.097	0.245	0.245	-	-	-	0.154	0.350	0.154	-	-	-
B-D, offside lane	547	0.088	0.222	0.222	-	-	-	0.140	0.317	0.140	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D2	2027 DN	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	320	100.000
B - Oak Drive (NW)		ONE HOUR	✓	233	100.000
C - N81 (NE)		ONE HOUR	✓	923	100.000
D - Maxol		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	102	214	4
	B - Oak Drive (NW)	70	0	157	6
	C - N81 (NE)	528	371	0	24
	D - Maxol	28	6	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.29	8.65	0.4	A	147	221
B-AD	0.30	19.83	0.4	C	66	100
A-BCD	0.01	9.28	0.0	A	4	6
D-ABC	0.09	8.45	0.1	A	35	52
C-ABD	0.65	10.34	2.9	B	495	742

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	121	30	677	0.178	120	0.0	0.2	6.826	A
B-AD	55	14	353	0.155	54	0.0	0.2	11.996	B
A-BCD	3	0.76	478	0.006	3	0.0	0.0	7.574	A
D-ABC	29	7	557	0.051	28	0.0	0.1	6.813	A
C-ABD	355	89	837	0.424	351	0.0	0.9	7.493	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	144	36	655	0.220	144	0.2	0.3	7.455	A
B-AD	65	16	315	0.207	65	0.2	0.3	14.387	B
A-BCD	4	0.90	442	0.008	4	0.0	0.0	8.207	A
D-ABC	34	9	521	0.066	34	0.1	0.1	7.389	A
C-ABD	466	116	904	0.515	464	0.9	1.4	8.325	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	177	44	619	0.286	177	0.3	0.4	8.607	A
B-AD	79	20	262	0.303	79	0.3	0.4	19.568	C
A-BCD	4	1	394	0.011	4	0.0	0.0	9.245	A
D-ABC	42	10	469	0.089	42	0.1	0.1	8.417	A
C-ABD	664	166	1025	0.647	658	1.4	2.8	10.045	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	177	44	618	0.287	177	0.4	0.4	8.647	A
B-AD	79	20	261	0.304	79	0.4	0.4	19.832	C
A-BCD	4	1	392	0.011	4	0.0	0.0	9.281	A
D-ABC	42	10	468	0.089	42	0.1	0.1	8.447	A
C-ABD	664	166	1026	0.647	663	2.8	2.9	10.340	B

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	144	36	654	0.221	145	0.4	0.3	7.494	A
B-AD	65	16	313	0.208	66	0.4	0.3	14.600	B
A-BCD	4	0.90	440	0.008	4	0.0	0.0	8.251	A
D-ABC	34	9	520	0.066	34	0.1	0.1	7.419	A
C-ABD	466	116	906	0.514	471	2.9	1.6	8.626	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	121	30	676	0.179	121	0.3	0.2	6.868	A
B-AD	55	14	352	0.155	55	0.3	0.2	12.144	B
A-BCD	3	0.76	476	0.006	3	0.0	0.0	7.606	A
D-ABC	29	7	555	0.052	29	0.1	0.1	6.837	A
C-ABD	355	89	838	0.423	357	1.6	1.0	7.682	A

Do-Nothing - 2032 DN, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1, D2, D3, D4, D5, D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		8.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	541	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
B-C	775	0.105	0.265	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	609	0.098	0.247	0.247	-	-	-	0.156	0.353	0.156	-	-	-
B-D, offside lane	541	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D3	2032 DN	AM	ONE HOUR	08:15	09:45	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 (%)
A - N81 (SW)		ONE HOUR	✓	576	100.000
B - Oak Drive (NW)		ONE HOUR	✓	448	100.000
C - N81 (NE)		ONE HOUR	✓	409	100.000
D - Maxol		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	90	470	16
	B - Oak Drive (NW)	68	0	365	15
	C - N81 (NE)	244	153	0	12
	D - Maxol	19	9	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.72	23.37	2.6	C	343	515
B-AD	0.30	19.40	0.4	C	68	102
A-BCD	0.03	6.62	0.0	A	15	23
D-ABC	0.14	10.62	0.2	B	47	70
C-ABD	0.30	8.07	0.5	A	156	233

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	281	70	642	0.438	278	0.0	0.8	10.393	B
B-AD	56	14	382	0.147	55	0.0	0.2	11.007	B
A-BCD	12	3	589	0.021	12	0.0	0.0	6.244	A
D-ABC	38	10	486	0.079	38	0.0	0.1	8.025	A
C-ABD	122	31	648	0.189	121	0.0	0.2	6.904	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	336	84	614	0.547	334	0.8	1.2	13.530	B
B-AD	67	17	343	0.195	66	0.2	0.2	13.024	B
A-BCD	15	4	577	0.026	15	0.0	0.0	6.404	A
D-ABC	46	11	449	0.102	46	0.1	0.1	8.915	A
C-ABD	150	38	644	0.233	150	0.2	0.3	7.368	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	412	103	574	0.718	407	1.2	2.5	22.158	C
B-AD	81	20	270	0.301	80	0.2	0.4	18.949	C
A-BCD	18	5	562	0.032	18	0.0	0.0	6.619	A
D-ABC	56	14	396	0.142	56	0.1	0.2	10.566	B
C-ABD	194	49	646	0.300	194	0.3	0.5	8.050	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	412	103	574	0.718	412	2.5	2.6	23.369	C
B-AD	81	20	267	0.304	81	0.4	0.4	19.404	C
A-BCD	18	5	562	0.032	18	0.0	0.0	6.624	A
D-ABC	56	14	395	0.142	56	0.2	0.2	10.617	B
C-ABD	194	49	647	0.300	194	0.5	0.5	8.072	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	336	84	614	0.548	341	2.6	1.3	14.230	B
B-AD	67	17	341	0.196	67	0.4	0.2	13.211	B
A-BCD	15	4	577	0.026	15	0.0	0.0	6.411	A
D-ABC	46	11	448	0.102	46	0.2	0.1	8.965	A
C-ABD	150	38	645	0.233	151	0.5	0.3	7.396	A

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	281	70	641	0.439	283	1.3	0.8	10.703	B
B-AD	56	14	381	0.147	56	0.2	0.2	11.104	B
A-BCD	12	3	588	0.021	12	0.0	0.0	6.249	A
D-ABC	38	10	485	0.079	39	0.1	0.1	8.064	A
C-ABD	122	31	648	0.188	123	0.3	0.3	6.940	A

Do-Nothing - 2032 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1, D2, D3, D4, D5, D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		6.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	548	0.088	0.223	0.223	-	-	-	0.140	0.318	-	0.223	0.223	0.111
B-C	766	0.104	0.262	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	602	0.097	0.245	0.245	-	-	-	0.154	0.349	0.154	-	-	-
B-D, offside lane	548	0.088	0.223	0.223	-	-	-	0.140	0.318	0.140	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D4	2032 DN	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	334	100.000
B - Oak Drive (NW)		ONE HOUR	✓	242	100.000
C - N81 (NE)		ONE HOUR	✓	961	100.000
D - Maxol		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	106	224	4
	B - Oak Drive (NW)	74	0	161	7
	C - N81 (NE)	553	383	0	25
	D - Maxol	30	7	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.30	9.07	0.5	A	152	228
B-AD	0.34	21.77	0.5	C	70	105
A-BCD	0.01	9.55	0.0	A	4	6
D-ABC	0.10	8.81	0.1	A	38	56
C-ABD	0.67	10.86	3.4	B	525	788

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	124	31	669	0.186	123	0.0	0.2	6.968	A
B-AD	58	14	346	0.167	57	0.0	0.2	12.424	B
A-BCD	3	0.76	471	0.006	3	0.0	0.0	7.692	A
D-ABC	31	8	548	0.056	31	0.0	0.1	6.957	A
C-ABD	373	93	849	0.439	369	0.0	1.0	7.582	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	645	0.230	148	0.2	0.3	7.667	A
B-AD	69	17	306	0.226	69	0.2	0.3	15.154	C
A-BCD	4	0.90	434	0.008	4	0.0	0.0	8.373	A
D-ABC	37	9	511	0.072	37	0.1	0.1	7.598	A
C-ABD	494	123	923	0.535	491	1.0	1.6	8.493	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	46	604	0.302	182	0.3	0.5	9.014	A
B-AD	84	21	251	0.335	83	0.3	0.5	21.390	C
A-BCD	4	1	383	0.012	4	0.0	0.0	9.505	A
D-ABC	45	11	455	0.099	45	0.1	0.1	8.769	A
C-ABD	710	177	1056	0.672	703	1.6	3.3	10.483	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	46	602	0.303	182	0.5	0.5	9.069	A
B-AD	84	21	249	0.337	84	0.5	0.5	21.766	C
A-BCD	4	1	381	0.012	4	0.0	0.0	9.550	A
D-ABC	45	11	454	0.099	45	0.1	0.1	8.809	A
C-ABD	710	177	1057	0.672	709	3.3	3.4	10.864	B

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	643	0.231	149	0.5	0.3	7.719	A
B-AD	69	17	304	0.227	70	0.5	0.3	15.434	C
A-BCD	4	0.90	431	0.008	4	0.0	0.0	8.425	A
D-ABC	37	9	508	0.072	37	0.1	0.1	7.636	A
C-ABD	494	123	925	0.533	500	3.4	1.7	8.865	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	124	31	668	0.186	125	0.3	0.2	7.017	A
B-AD	58	14	344	0.168	58	0.3	0.2	12.596	B
A-BCD	3	0.76	469	0.006	3	0.0	0.0	7.726	A
D-ABC	31	8	546	0.056	31	0.1	0.1	6.985	A
C-ABD	373	93	850	0.439	376	1.7	1.1	7.799	A

Do-Nothing - 2042 DN, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1, D2, D3, D4, D5, D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		9.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	541	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
B-C	775	0.105	0.265	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	609	0.098	0.247	0.247	-	-	-	0.156	0.353	0.156	-	-	-
B-D, offside lane	541	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D5	2042 DN	AM	ONE HOUR	08:15	09:45	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 (%)
A - N81 (SW)		ONE HOUR	✓	606	100.000
B - Oak Drive (NW)		ONE HOUR	✓	467	100.000
C - N81 (NE)		ONE HOUR	✓	429	100.000
D - Maxol		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	95	494	17
	B - Oak Drive (NW)	72	0	379	16
	C - N81 (NE)	257	159	0	13
	D - Maxol	20	9	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.76	28.24	3.2	D	357	535
B-AD	0.36	23.15	0.5	C	72	108
A-BCD	0.03	6.68	0.0	A	16	24
D-ABC	0.15	11.16	0.2	B	49	73
C-ABD	0.32	8.26	0.5	A	164	245

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	292	73	634	0.461	289	0.0	0.9	10.925	B
B-AD	59	15	373	0.159	59	0.0	0.2	11.420	B
A-BCD	13	3	586	0.022	13	0.0	0.0	6.282	A
D-ABC	40	10	478	0.083	40	0.0	0.1	8.196	A
C-ABD	128	32	646	0.198	127	0.0	0.3	7.001	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	349	87	605	0.577	347	0.9	1.4	14.665	B
B-AD	71	18	330	0.214	70	0.2	0.3	13.841	B
A-BCD	16	4	574	0.027	16	0.0	0.0	6.450	A
D-ABC	48	12	439	0.108	48	0.1	0.1	9.187	A
C-ABD	158	39	643	0.245	157	0.3	0.4	7.496	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	428	107	562	0.763	422	1.4	3.0	26.067	D
B-AD	86	21	246	0.349	85	0.3	0.5	22.194	C
A-BCD	20	5	559	0.035	19	0.0	0.0	6.673	A
D-ABC	58	15	383	0.152	58	0.1	0.2	11.084	B
C-ABD	205	51	648	0.317	204	0.4	0.5	8.228	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	428	107	561	0.764	428	3.0	3.2	28.243	D
B-AD	86	21	241	0.356	86	0.5	0.5	23.149	C
A-BCD	20	5	559	0.035	20	0.0	0.0	6.675	A
D-ABC	58	15	381	0.153	58	0.2	0.2	11.157	B
C-ABD	205	51	648	0.317	205	0.5	0.5	8.256	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	349	87	604	0.578	356	3.2	1.5	15.757	C
B-AD	71	18	327	0.216	72	0.5	0.3	14.143	B
A-BCD	16	4	574	0.027	16	0.0	0.0	6.455	A
D-ABC	48	12	437	0.109	48	0.2	0.1	9.254	A
C-ABD	158	39	644	0.245	158	0.5	0.4	7.528	A

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	292	73	634	0.461	295	1.5	0.9	11.316	B
B-AD	59	15	372	0.160	60	0.3	0.2	11.541	B
A-BCD	13	3	586	0.022	13	0.0	0.0	6.288	A
D-ABC	40	10	477	0.084	40	0.1	0.1	8.244	A
C-ABD	128	32	646	0.198	128	0.4	0.3	7.041	A

Do-Nothing - 2042 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1, D2, D3, D4, D5, D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		6.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	548	0.088	0.223	0.223	-	-	-	0.140	0.318	-	0.223	0.223	0.111
B-C	765	0.104	0.262	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	602	0.097	0.244	0.244	-	-	-	0.154	0.349	0.154	-	-	-
B-D, offside lane	548	0.088	0.223	0.223	-	-	-	0.140	0.318	0.140	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D6	2042 DN	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	352	100.000
B - Oak Drive (NW)		ONE HOUR	✓	249	100.000
C - N81 (NE)		ONE HOUR	✓	1005	100.000
D - Maxol		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	112	235	5
	B - Oak Drive (NW)	77	0	165	7
	C - N81 (NE)	581	397	0	27
	D - Maxol	31	7	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.32	9.45	0.5	A	155	233
B-AD	0.37	24.21	0.6	C	73	109
A-BCD	0.02	9.88	0.0	A	5	7
D-ABC	0.11	9.36	0.1	A	39	59
C-ABD	0.70	11.65	4.0	B	564	845

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	127	32	664	0.192	126	0.0	0.2	7.074	A
B-AD	60	15	337	0.178	59	0.0	0.2	12.908	B
A-BCD	4	0.95	463	0.008	4	0.0	0.0	7.838	A
D-ABC	32	8	535	0.061	32	0.0	0.1	7.161	A
C-ABD	395	99	864	0.458	391	0.0	1.1	7.698	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	152	38	638	0.239	152	0.2	0.3	7.840	A
B-AD	72	18	295	0.243	71	0.2	0.3	16.044	C
A-BCD	5	1	424	0.011	5	0.0	0.0	8.580	A
D-ABC	39	10	494	0.078	39	0.1	0.1	7.899	A
C-ABD	528	132	946	0.558	525	1.1	1.8	8.720	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	187	47	592	0.316	186	0.3	0.5	9.379	A
B-AD	87	22	237	0.367	86	0.3	0.6	23.653	C
A-BCD	6	1	372	0.015	6	0.0	0.0	9.824	A
D-ABC	47	12	434	0.109	47	0.1	0.1	9.306	A
C-ABD	768	192	1093	0.703	760	1.8	3.9	11.123	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	187	47	590	0.317	187	0.5	0.5	9.454	A
B-AD	87	22	236	0.370	87	0.6	0.6	24.212	C
A-BCD	6	1	370	0.015	6	0.0	0.0	9.883	A
D-ABC	47	12	432	0.110	47	0.1	0.1	9.361	A
C-ABD	768	192	1094	0.702	767	3.9	4.0	11.655	B

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	152	38	636	0.240	153	0.5	0.3	7.902	A
B-AD	72	18	293	0.245	73	0.6	0.3	16.423	C
A-BCD	5	1	421	0.011	5	0.0	0.0	8.646	A
D-ABC	39	10	492	0.079	39	0.1	0.1	7.952	A
C-ABD	528	132	948	0.556	536	4.0	2.0	9.207	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	127	32	663	0.192	128	0.3	0.3	7.130	A
B-AD	60	15	335	0.179	61	0.3	0.2	13.115	B
A-BCD	4	0.95	461	0.008	4	0.0	0.0	7.879	A
D-ABC	32	8	533	0.061	32	0.1	0.1	7.192	A
C-ABD	395	99	865	0.457	399	2.0	1.2	7.952	A

Do-Something - 2027 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		10.16	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	541	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
B-C	775	0.105	0.265	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	609	0.098	0.247	0.247	-	-	-	0.156	0.353	0.156	-	-	-
B-D, offside lane	541	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D7	2027 DS	AM	ONE HOUR	08:15	09:45	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 (%)
A - N81 (SW)		ONE HOUR	✓	552	100.000
B - Oak Drive (NW)		ONE HOUR	✓	478	100.000
C - N81 (NE)		ONE HOUR	✓	421	100.000
D - Maxol		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	86	450	16
	B - Oak Drive (NW)	65	0	398	15
	C - N81 (NE)	234	175	0	12
	D - Maxol	18	8	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.77	28.07	3.3	D	373	560
B-AD	0.32	21.81	0.5	C	65	98
A-BCD	0.03	6.70	0.0	A	15	23
D-ABC	0.14	10.76	0.2	B	44	66
C-ABD	0.34	8.38	0.6	A	179	269

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	306	76	647	0.473	302	0.0	0.9	10.942	B
B-AD	54	13	379	0.142	53	0.0	0.2	11.023	B
A-BCD	12	3	585	0.021	12	0.0	0.0	6.287	A
D-ABC	36	9	483	0.075	36	0.0	0.1	8.052	A
C-ABD	140	35	656	0.214	139	0.0	0.3	7.040	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	366	91	621	0.589	364	0.9	1.5	14.689	B
B-AD	64	16	335	0.191	64	0.2	0.2	13.236	B
A-BCD	15	4	572	0.026	15	0.0	0.0	6.460	A
D-ABC	43	11	444	0.097	43	0.1	0.1	8.969	A
C-ABD	173	43	654	0.264	173	0.3	0.4	7.560	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	448	112	582	0.770	442	1.5	3.2	25.893	D
B-AD	78	19	248	0.314	77	0.2	0.4	20.920	C
A-BCD	18	5	556	0.033	18	0.0	0.0	6.694	A
D-ABC	53	13	389	0.136	53	0.1	0.2	10.691	B
C-ABD	224	56	660	0.340	223	0.4	0.6	8.349	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	448	112	582	0.771	448	3.2	3.3	28.072	D
B-AD	78	19	243	0.321	78	0.4	0.5	21.808	C
A-BCD	18	5	556	0.033	18	0.0	0.0	6.699	A
D-ABC	53	13	387	0.136	53	0.2	0.2	10.759	B
C-ABD	224	56	660	0.340	224	0.6	0.6	8.379	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	366	91	620	0.590	373	3.3	1.6	15.815	C
B-AD	64	16	332	0.193	65	0.5	0.2	13.515	B
A-BCD	15	4	572	0.026	15	0.0	0.0	6.465	A
D-ABC	43	11	442	0.098	43	0.2	0.1	9.034	A
C-ABD	173	43	655	0.264	174	0.6	0.4	7.598	A

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	306	77	647	0.473	308	1.6	1.0	11.353	B
B-AD	54	13	378	0.143	54	0.2	0.2	11.136	B
A-BCD	12	3	584	0.021	12	0.0	0.0	6.295	A
D-ABC	36	9	481	0.075	36	0.1	0.1	8.097	A
C-ABD	140	35	656	0.214	141	0.4	0.3	7.082	A

Do-Something - 2027 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		7.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	544	0.087	0.221	0.221	-	-	-	0.139	0.316	-	0.221	0.221	0.110
B-C	771	0.104	0.264	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	606	0.097	0.246	0.246	-	-	-	0.155	0.352	0.155	-	-	-
B-D, offside lane	544	0.087	0.221	0.221	-	-	-	0.139	0.316	0.139	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D8	2027 DS	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	321	100.000
B - Oak Drive (NW)		ONE HOUR	✓	266	100.000
C - N81 (NE)		ONE HOUR	✓	973	100.000
D - Maxol		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	102	215	4
	B - Oak Drive (NW)	70	0	190	6
	C - N81 (NE)	529	420	0	24
	D - Maxol	28	6	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.35	9.46	0.6	A	178	267
B-AD	0.33	22.37	0.5	C	66	99
A-BCD	0.01	9.76	0.0	A	4	6
D-ABC	0.09	8.75	0.1	A	35	52
C-ABD	0.73	13.24	4.5	B	583	875

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	146	36	680	0.214	145	0.0	0.3	7.099	A
B-AD	55	14	339	0.161	54	0.0	0.2	12.573	B
A-BCD	3	0.76	466	0.006	3	0.0	0.0	7.772	A
D-ABC	29	7	550	0.052	28	0.0	0.1	6.901	A
C-ABD	413	103	860	0.480	408	0.0	1.2	8.047	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	174	44	657	0.265	174	0.3	0.4	7.884	A
B-AD	65	16	298	0.218	65	0.2	0.3	15.385	C
A-BCD	4	0.90	428	0.008	4	0.0	0.0	8.491	A
D-ABC	34	9	512	0.067	34	0.1	0.1	7.533	A
C-ABD	548	137	938	0.584	544	1.2	2.0	9.325	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	214	53	618	0.346	213	0.4	0.6	9.395	A
B-AD	79	20	242	0.328	79	0.3	0.5	21.891	C
A-BCD	4	1	376	0.012	4	0.0	0.0	9.695	A
D-ABC	42	10	455	0.092	42	0.1	0.1	8.701	A
C-ABD	790	198	1077	0.733	781	2.0	4.3	12.470	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	214	53	616	0.347	214	0.6	0.6	9.463	A
B-AD	79	20	240	0.330	79	0.5	0.5	22.372	C
A-BCD	4	1	373	0.012	4	0.0	0.0	9.762	A
D-ABC	42	10	453	0.092	42	0.1	0.1	8.754	A
C-ABD	790	198	1079	0.732	789	4.3	4.5	13.241	B

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	174	44	656	0.266	175	0.6	0.4	7.938	A
B-AD	65	16	295	0.220	66	0.5	0.3	15.737	C
A-BCD	4	0.90	424	0.009	4	0.0	0.0	8.565	A
D-ABC	34	9	509	0.067	34	0.1	0.1	7.587	A
C-ABD	548	137	940	0.582	557	4.5	2.1	9.964	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	146	36	679	0.214	146	0.4	0.3	7.155	A
B-AD	55	14	337	0.162	55	0.3	0.2	12.771	B
A-BCD	3	0.76	464	0.007	3	0.0	0.0	7.814	A
D-ABC	29	7	548	0.052	29	0.1	0.1	6.933	A
C-ABD	413	103	861	0.479	416	2.1	1.3	8.349	A

Do-Something - 2032 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		11.92	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	541	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
B-C	775	0.105	0.265	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	609	0.098	0.247	0.247	-	-	-	0.156	0.353	0.156	-	-	-
B-D, offside lane	541	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D9	2032 DS	AM	ONE HOUR	08:15	09:45	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 (%)
A - N81 (SW)		ONE HOUR	✓	577	100.000
B - Oak Drive (NW)		ONE HOUR	✓	494	100.000
C - N81 (NE)		ONE HOUR	✓	437	100.000
D - Maxol		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	90	471	16
	B - Oak Drive (NW)	68	0	411	15
	C - N81 (NE)	245	180	0	12
	D - Maxol	19	9	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.81	33.80	4.1	D	385	578
B-AD	0.38	26.57	0.6	D	68	102
A-BCD	0.03	6.74	0.0	A	15	23
D-ABC	0.15	11.27	0.2	B	47	70
C-ABD	0.35	8.55	0.6	A	186	279

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	316	79	641	0.492	312	0.0	1.0	11.433	B
B-AD	56	14	371	0.151	55	0.0	0.2	11.372	B
A-BCD	12	3	582	0.021	12	0.0	0.0	6.316	A
D-ABC	38	10	476	0.081	38	0.0	0.1	8.214	A
C-ABD	145	36	654	0.222	144	0.0	0.3	7.123	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	377	94	614	0.615	375	1.0	1.6	15.800	C
B-AD	67	17	324	0.206	66	0.2	0.3	13.980	B
A-BCD	15	4	569	0.026	15	0.0	0.0	6.496	A
D-ABC	46	11	436	0.105	46	0.1	0.1	9.229	A
C-ABD	179	45	654	0.275	179	0.3	0.4	7.674	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	463	116	573	0.808	454	1.6	3.8	30.112	D
B-AD	81	20	224	0.361	80	0.3	0.5	24.727	C
A-BCD	18	5	553	0.033	18	0.0	0.0	6.738	A
D-ABC	56	14	378	0.149	56	0.1	0.2	11.176	B
C-ABD	234	58	661	0.354	233	0.4	0.6	8.512	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	463	116	572	0.810	462	3.8	4.1	33.801	D
B-AD	81	20	216	0.375	81	0.5	0.6	26.571	D
A-BCD	18	5	553	0.033	18	0.0	0.0	6.744	A
D-ABC	56	14	376	0.150	56	0.2	0.2	11.270	B
C-ABD	234	58	662	0.353	234	0.6	0.6	8.547	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	377	94	613	0.616	387	4.1	1.8	17.505	C
B-AD	67	17	319	0.209	68	0.6	0.3	14.426	B
A-BCD	15	4	569	0.026	15	0.0	0.0	6.501	A
D-ABC	46	11	433	0.106	46	0.2	0.1	9.313	A
C-ABD	179	45	654	0.274	180	0.6	0.4	7.717	A

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	316	79	641	0.493	319	1.8	1.1	11.938	B
B-AD	56	14	370	0.152	56	0.3	0.2	11.510	B
A-BCD	12	3	582	0.021	12	0.0	0.0	6.325	A
D-ABC	38	10	474	0.081	39	0.1	0.1	8.271	A
C-ABD	145	36	655	0.222	146	0.4	0.3	7.172	A

Do-Something - 2032 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		8.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	544	0.087	0.221	0.221	-	-	-	0.139	0.316	-	0.221	0.221	0.111
B-C	770	0.104	0.263	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	605	0.097	0.246	0.246	-	-	-	0.155	0.351	0.155	-	-	-
B-D, offside lane	544	0.087	0.221	0.221	-	-	-	0.139	0.316	0.139	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D10	2032 DS	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	335	100.000
B - Oak Drive (NW)		ONE HOUR	✓	275	100.000
C - N81 (NE)		ONE HOUR	✓	1011	100.000
D - Maxol		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	106	225	4
	B - Oak Drive (NW)	74	0	194	7
	C - N81 (NE)	554	432	0	25
	D - Maxol	30	7	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.36	9.99	0.6	A	182	273
B-AD	0.37	24.96	0.6	C	70	105
A-BCD	0.01	10.07	0.0	B	4	6
D-ABC	0.10	9.16	0.1	A	38	56
C-ABD	0.76	14.36	5.3	B	618	927

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	673	0.222	148	0.0	0.3	7.242	A
B-AD	58	14	332	0.174	57	0.0	0.2	13.059	B
A-BCD	3	0.76	459	0.007	3	0.0	0.0	7.895	A
D-ABC	31	8	541	0.057	31	0.0	0.1	7.051	A
C-ABD	433	108	874	0.495	428	0.0	1.3	8.153	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	178	45	647	0.275	178	0.3	0.4	8.110	A
B-AD	69	17	289	0.238	69	0.2	0.3	16.291	C
A-BCD	4	0.90	419	0.009	4	0.0	0.0	8.669	A
D-ABC	37	9	501	0.074	37	0.1	0.1	7.753	A
C-ABD	578	145	959	0.603	575	1.3	2.2	9.572	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	219	55	602	0.363	218	0.4	0.6	9.894	A
B-AD	84	21	230	0.364	83	0.3	0.6	24.242	C
A-BCD	4	1	365	0.012	4	0.0	0.0	9.982	A
D-ABC	45	11	441	0.102	45	0.1	0.1	9.088	A
C-ABD	843	211	1111	0.759	831	2.2	5.0	13.308	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	219	55	600	0.365	219	0.6	0.6	9.993	A
B-AD	84	21	228	0.368	84	0.6	0.6	24.958	C
A-BCD	4	1	362	0.012	4	0.0	0.0	10.068	B
D-ABC	45	11	438	0.103	45	0.1	0.1	9.162	A
C-ABD	843	211	1112	0.758	842	5.0	5.3	14.356	B

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	178	45	645	0.276	179	0.6	0.4	8.187	A
B-AD	69	17	286	0.241	70	0.6	0.3	16.769	C
A-BCD	4	0.90	415	0.009	4	0.0	0.0	8.764	A
D-ABC	37	9	497	0.074	37	0.1	0.1	7.822	A
C-ABD	578	145	961	0.602	590	5.3	2.4	10.391	B

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	672	0.222	150	0.4	0.3	7.306	A
B-AD	58	14	329	0.176	58	0.3	0.2	13.299	B
A-BCD	3	0.76	456	0.007	3	0.0	0.0	7.944	A
D-ABC	31	8	539	0.057	31	0.1	0.1	7.088	A
C-ABD	433	108	875	0.495	437	2.4	1.4	8.508	A

Do-Something - 2042 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		15.24	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	541	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
B-C	775	0.105	0.265	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	609	0.098	0.247	0.247	-	-	-	0.156	0.353	0.156	-	-	-
B-D, offside lane	541	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D11	2042 DS	AM	ONE HOUR	08:15	09:45	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 (%)
A - N81 (SW)		ONE HOUR	✓	607	100.000
B - Oak Drive (NW)		ONE HOUR	✓	513	100.000
C - N81 (NE)		ONE HOUR	✓	456	100.000
D - Maxol		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	95	495	17
	B - Oak Drive (NW)	72	0	425	16
	C - N81 (NE)	258	185	0	13
	D - Maxol	20	9	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.86	44.24	5.5	E	399	598
B-AD	0.48	38.31	0.9	E	72	108
A-BCD	0.04	6.79	0.0	A	16	24
D-ABC	0.16	11.91	0.2	B	49	73
C-ABD	0.37	8.74	0.7	A	194	291

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	327	82	634	0.516	322	0.0	1.1	12.076	B
B-AD	59	15	362	0.164	59	0.0	0.2	11.832	B
A-BCD	13	3	580	0.022	13	0.0	0.0	6.353	A
D-ABC	40	10	468	0.085	40	0.0	0.1	8.401	A
C-ABD	150	38	653	0.230	149	0.0	0.3	7.211	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	391	98	604	0.646	388	1.1	1.8	17.348	C
B-AD	71	18	309	0.228	70	0.2	0.3	15.039	C
A-BCD	16	4	566	0.028	16	0.0	0.0	6.539	A
D-ABC	48	12	425	0.112	48	0.1	0.1	9.524	A
C-ABD	186	47	653	0.285	186	0.3	0.4	7.798	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	479	120	560	0.856	467	1.8	4.9	36.911	E
B-AD	86	21	193	0.444	84	0.3	0.8	32.462	D
A-BCD	20	5	550	0.036	20	0.0	0.0	6.788	A
D-ABC	58	15	364	0.160	58	0.1	0.2	11.769	B
C-ABD	245	61	663	0.369	244	0.4	0.7	8.697	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	479	120	558	0.858	477	4.9	5.5	44.237	E
B-AD	86	21	178	0.480	85	0.8	0.9	38.307	E
A-BCD	20	5	550	0.036	20	0.0	0.0	6.792	A
D-ABC	58	15	361	0.162	58	0.2	0.2	11.912	B
C-ABD	245	61	664	0.369	245	0.7	0.7	8.736	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	391	98	603	0.648	404	5.5	2.1	20.393	C
B-AD	70	18	301	0.234	73	0.9	0.3	15.919	C
A-BCD	16	4	566	0.028	16	0.0	0.0	6.548	A
D-ABC	48	12	421	0.113	48	0.2	0.1	9.647	A
C-ABD	186	47	654	0.285	187	0.7	0.5	7.849	A

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	327	82	633	0.516	330	2.1	1.2	12.729	B
B-AD	59	15	360	0.165	60	0.3	0.2	12.010	B
A-BCD	13	3	579	0.022	13	0.0	0.0	6.360	A
D-ABC	40	10	466	0.086	40	0.1	0.1	8.460	A
C-ABD	150	38	653	0.230	151	0.5	0.3	7.267	A

Do-Something - 2042 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7, D8, D9, D10, D11, D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	IRR Junction 7	Crossroads	Two-way		9.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	N81 (SW)		Major
B	Oak Drive (NW)		Minor
C	N81 (NE)		Major
D	Maxol		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - N81 (SW)	8.70			150.0	✓	1.00
C - N81 (NE)	8.70			250.0	✓	1.00

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	Lane width (m)	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 - Oak Drive (NW)	One lane plus flare		10.00	9.80	9.50	7.40	6.60	✓	3.00	40	34
D - Maxol	One lane	5.00								30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	661	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
B-A	545	0.088	0.221	0.221	-	-	-	0.139	0.316	-	0.221	0.221	0.111
B-C	770	0.104	0.263	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	605	0.097	0.246	0.246	-	-	-	0.155	0.351	0.155	-	-	-
B-D, offside lane	545	0.088	0.221	0.221	-	-	-	0.139	0.316	0.139	-	-	-
C-B	719	0.246	0.246	0.351	-	-	-	-	-	-	-	-	-
D-A	768	-	-	-	-	-	-	0.263	-	0.104	-	-	-
D-B, nearside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-B, offside lane	600	0.153	0.153	0.348	-	-	-	0.244	0.244	0.096	-	-	-
D-C	600	-	0.153	0.348	0.122	0.244	0.244	0.244	0.244	0.096	-	-	-

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 segment length (min)	Run automatically
D12	2042 DS	PM	ONE HOUR	17:00	18:30	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 (%)
A - N81 (SW)		ONE HOUR	✓	353	100.000
B - Oak Drive (NW)		ONE HOUR	✓	282	100.000
C - N81 (NE)		ONE HOUR	✓	1055	100.000
D - Maxol		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	112	236	5
	B - Oak Drive (NW)	77	0	198	7
	C - N81 (NE)	582	446	0	27
	D - Maxol	31	7	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - N81 (SW)	B - Oak Drive (NW)	C - N81 (NE)	D - Maxol
	A - N81 (SW)	0	1	2	0
	B - Oak Drive (NW)	0	0	6	0
	C - N81 (NE)	4	1	0	0
	D - Maxol	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.38	10.52	0.6	B	186	279
B-AD	0.41	28.32	0.7	D	73	109
A-BCD	0.02	10.45	0.0	B	5	7
D-ABC	0.11	9.82	0.1	A	39	59
C-ABD	0.79	16.15	6.5	C	661	992

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	152	38	668	0.228	151	0.0	0.3	7.356	A
B-AD	60	15	323	0.186	59	0.0	0.2	13.596	B
A-BCD	4	0.95	451	0.008	4	0.0	0.0	8.049	A
D-ABC	32	8	527	0.061	32	0.0	0.1	7.269	A
C-ABD	458	114	890	0.514	452	0.0	1.4	8.308	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	45	640	0.284	182	0.3	0.4	8.306	A
B-AD	72	18	278	0.257	71	0.2	0.3	17.328	C
A-BCD	5	1	409	0.011	5	0.0	0.0	8.890	A
D-ABC	39	10	484	0.080	39	0.1	0.1	8.084	A
C-ABD	617	154	984	0.627	612	1.4	2.5	9.912	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	223	56	589	0.379	222	0.4	0.6	10.375	B
B-AD	87	22	217	0.401	86	0.3	0.6	27.197	D
A-BCD	6	1	354	0.016	6	0.0	0.0	10.335	B
D-ABC	47	12	418	0.113	47	0.1	0.1	9.705	A
C-ABD	909	227	1151	0.790	895	2.5	6.1	14.562	B

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	223	56	586	0.382	223	0.6	0.6	10.519	B
B-AD	87	22	214	0.407	87	0.6	0.7	28.319	D
A-BCD	6	1	350	0.016	6	0.0	0.0	10.451	B
D-ABC	47	12	414	0.114	47	0.1	0.1	9.819	A
C-ABD	909	227	1153	0.789	908	6.1	6.5	16.155	C

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	45	637	0.286	183	0.6	0.4	8.405	A
B-AD	72	18	274	0.261	73	0.7	0.4	17.999	C
A-BCD	5	1	404	0.011	5	0.0	0.0	9.014	A
D-ABC	39	10	479	0.081	39	0.1	0.1	8.181	A
C-ABD	617	154	986	0.625	632	6.5	2.7	11.045	B

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	152	38	666	0.228	153	0.4	0.3	7.426	A
B-AD	60	15	320	0.188	61	0.4	0.2	13.885	B
A-BCD	4	0.95	448	0.008	4	0.0	0.0	8.107	A
D-ABC	32	8	525	0.062	32	0.1	0.1	7.314	A
C-ABD	458	114	891	0.514	463	2.7	1.5	8.726	A

Appendix D : ARCADY Outputs Files

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 1 Inner Relief Road _ Link Road.j9

Path: G:\2023\p230199\calcs\arcady

Report generation date: 09/08/2024 15:20:37

- »Do Nothing - 2027 DN, AM
- »Do Nothing - 2027 DN, PM
- »Do Nothing - 2032 DN, AM
- »Do Nothing - 2032 DN, PM
- »Do Nothing - 2042 DN, AM
- »Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
1 - Link Rd (SE)	D1	0.1	3.39	0.12	A	D2	0.2	4.29	0.18	A
2 - IRR (W)		1.2	5.66	0.53	A		0.4	3.55	0.26	A
3 - IRR (NE)		0.4	3.43	0.27	A		1.0	4.72	0.48	A
	Do Nothing - 2032 DN									
1 - Link Rd (SE)	D3	0.2	3.44	0.12	A	D4	0.3	4.41	0.19	A
2 - IRR (W)		1.4	5.99	0.56	A		0.4	3.60	0.27	A
3 - IRR (NE)		0.4	3.50	0.28	A		1.1	4.93	0.50	A
	Do Nothing - 2042 DN									
1 - Link Rd (SE)	D5	0.2	3.48	0.13	A	D6	0.3	4.56	0.20	A
2 - IRR (W)		1.5	6.39	0.59	A		0.2	3.09	0.15	A
3 - IRR (NE)		0.4	3.57	0.29	A		1.2	5.19	0.53	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

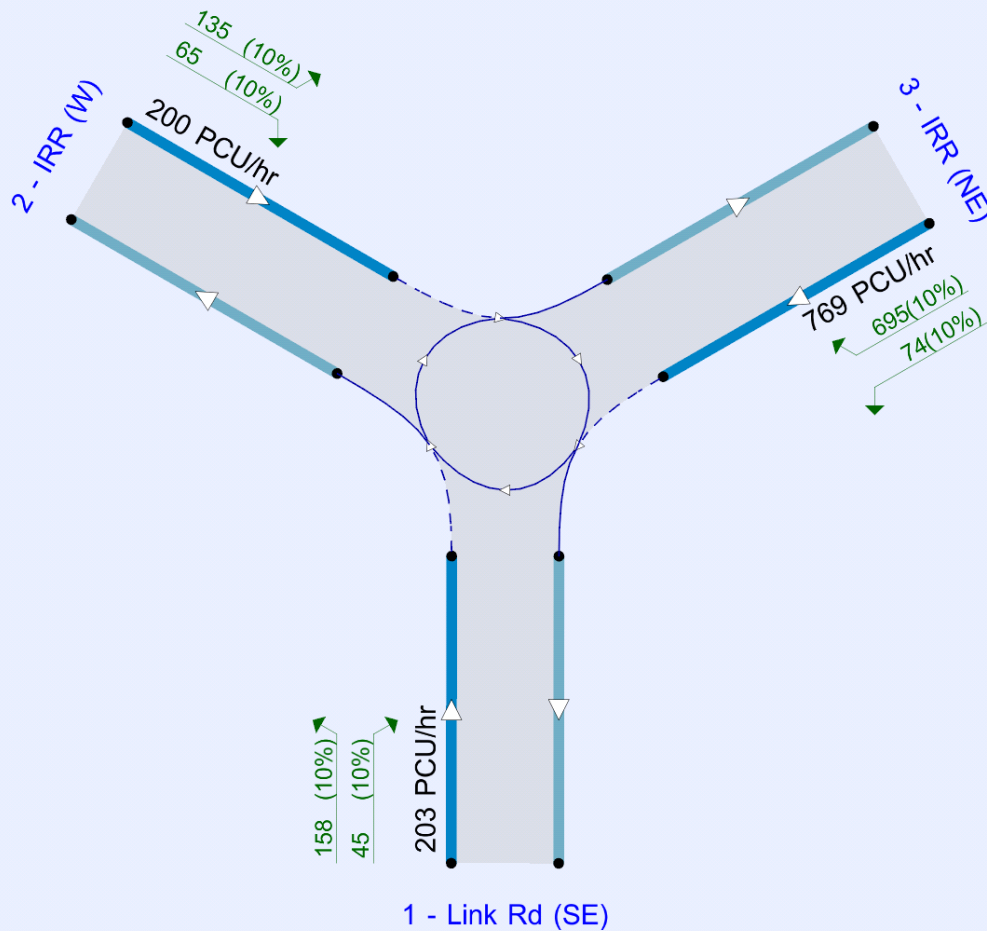
File summary

File Description

Title	Blessington LDR
Location	Blessington, Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company Limited
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

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	2027 DN	AM	ONE HOUR	08:15	09:45	15	✓
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15	✓
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15	✓
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15	✓
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15	✓
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Do Nothing - 2027 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	4.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Link Rd (SE)	
2	IRR (W)	
3	IRR (NE)	

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
1 - Link Rd (SE)	3.70	6.80	14.0	19.0	48.0	56.0	
2 - IRR (W)	3.70	7.00	15.0	18.0	48.0	59.0	
3 - IRR (NE)	3.80	7.30	19.0	13.0	48.0	49.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Link Rd (SE)	0.555	1516
2 - IRR (W)	0.553	1527
3 - IRR (NE)	0.581	1651

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	2027 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	139	100.000
2 - IRR (W)		ONE HOUR	✓	725	100.000
3 - IRR (NE)		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	0	91	48
	2 - IRR (W)	123	0	602
	3 - IRR (NE)	58	322	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.12	3.39	0.1	A	128	191
2 - IRR (W)	0.53	5.66	1.2	A	665	998
3 - IRR (NE)	0.27	3.43	0.4	A	349	523

Main Results for each time segment

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 - Link Rd (SE)	105	26	242	1382	0.076	104	136	0.0	0.1	3.099	A
2 - IRR (W)	546	136	36	1507	0.362	543	310	0.0	0.6	4.099	A
3 - IRR (NE)	286	72	92	1597	0.179	285	487	0.0	0.2	3.017	A

08:30 - 08:45

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 - Link Rd (SE)	125	31	289	1355	0.092	125	163	0.1	0.1	3.217	A
2 - IRR (W)	652	163	43	1503	0.434	651	371	0.6	0.8	4.643	A
3 - IRR (NE)	342	85	110	1587	0.215	341	584	0.2	0.3	3.179	A

08:45 - 09:00

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 - Link Rd (SE)	153	38	354	1319	0.116	153	199	0.1	0.1	3.394	A
2 - IRR (W)	798	200	53	1498	0.533	797	454	0.8	1.2	5.637	A
3 - IRR (NE)	418	105	135	1572	0.266	418	714	0.3	0.4	3.430	A

09:00 - 09:15

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 - Link Rd (SE)	153	38	355	1319	0.116	153	199	0.1	0.1	3.394	A
2 - IRR (W)	798	200	53	1498	0.533	798	455	1.2	1.2	5.662	A
3 - IRR (NE)	418	105	135	1572	0.266	418	716	0.4	0.4	3.431	A

09:15 - 09:30

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 - Link Rd (SE)	125	31	290	1355	0.092	125	163	0.1	0.1	3.219	A
2 - IRR (W)	652	163	43	1503	0.434	653	372	1.2	0.8	4.671	A
3 - IRR (NE)	342	85	111	1586	0.215	342	586	0.4	0.3	3.184	A

09:30 - 09:45

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 - Link Rd (SE)	105	26	243	1381	0.076	105	136	0.1	0.1	3.104	A
2 - IRR (W)	546	136	36	1507	0.362	547	311	0.8	0.6	4.129	A
3 - IRR (NE)	286	72	93	1597	0.179	286	490	0.3	0.2	3.023	A

Do Nothing - 2027 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	4.33	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 segment length (min)	Run automatically
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	186	100.000
2 - IRR (W)		ONE HOUR	✓	350	100.000
3 - IRR (NE)		ONE HOUR	✓	704	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	144	42
	2 - IRR (W)	59	0	291
	3 - IRR (NE)	69	635	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.18	4.29	0.2	A	171	256
2 - IRR (W)	0.26	3.55	0.4	A	321	482
3 - IRR (NE)	0.48	4.72	1.0	A	646	969

Main Results for each time segment

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 - Link Rd (SE)	140	35	476	1252	0.112	139	96	0.0	0.1	3.558	A
2 - IRR (W)	263	66	31	1509	0.175	263	584	0.0	0.2	3.175	A
3 - IRR (NE)	530	133	44	1625	0.326	528	250	0.0	0.5	3.603	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 - Link Rd (SE)	167	42	570	1200	0.139	167	115	0.1	0.2	3.834	A
2 - IRR (W)	315	79	38	1506	0.209	314	700	0.2	0.3	3.323	A
3 - IRR (NE)	633	158	53	1620	0.391	632	299	0.5	0.7	4.006	A

17:30 - 17:45

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 - Link Rd (SE)	205	51	698	1129	0.181	205	141	0.2	0.2	4.284	A
2 - IRR (W)	385	96	46	1501	0.257	385	856	0.3	0.4	3.547	A
3 - IRR (NE)	775	194	65	1613	0.481	774	366	0.7	1.0	4.712	A

17:45 - 18:00

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 - Link Rd (SE)	205	51	699	1128	0.182	205	141	0.2	0.2	4.288	A
2 - IRR (W)	385	96	46	1501	0.257	385	858	0.4	0.4	3.548	A
3 - IRR (NE)	775	194	65	1613	0.481	775	367	1.0	1.0	4.725	A

18:00 - 18:15

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 - Link Rd (SE)	167	42	572	1199	0.140	167	115	0.2	0.2	3.842	A
2 - IRR (W)	315	79	38	1506	0.209	315	702	0.4	0.3	3.328	A
3 - IRR (NE)	633	158	53	1620	0.391	634	300	1.0	0.7	4.022	A

18:15 - 18:30

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 - Link Rd (SE)	140	35	479	1250	0.112	140	96	0.2	0.1	3.569	A
2 - IRR (W)	263	66	32	1509	0.175	264	587	0.3	0.2	3.181	A
3 - IRR (NE)	530	133	44	1625	0.326	531	251	0.7	0.5	3.620	A

Do Nothing - 2032 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	4.95	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 segment length (min)	Run automatically
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	145	100.000
2 - IRR (W)		ONE HOUR	✓	759	100.000
3 - IRR (NE)		ONE HOUR	✓	396	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	95	50
	2 - IRR (W)	129	0	630
	3 - IRR (NE)	61	335	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.12	3.44	0.2	A	133	200
2 - IRR (W)	0.56	5.99	1.4	A	696	1045
3 - IRR (NE)	0.28	3.50	0.4	A	363	545

Main Results for each time segment

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 - Link Rd (SE)	109	27	251	1376	0.079	109	142	0.0	0.1	3.124	A
2 - IRR (W)	571	143	38	1506	0.379	569	323	0.0	0.7	4.213	A
3 - IRR (NE)	298	75	97	1595	0.187	297	510	0.0	0.3	3.052	A

08:30 - 08:45

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 - Link Rd (SE)	130	33	301	1349	0.097	130	171	0.1	0.1	3.248	A
2 - IRR (W)	682	171	45	1502	0.454	681	386	0.7	0.9	4.819	A
3 - IRR (NE)	356	89	116	1584	0.225	356	610	0.3	0.3	3.225	A

08:45 - 09:00

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 - Link Rd (SE)	160	40	368	1311	0.122	160	209	0.1	0.2	3.437	A
2 - IRR (W)	836	209	55	1496	0.558	834	473	0.9	1.4	5.960	A
3 - IRR (NE)	436	109	142	1569	0.278	436	747	0.3	0.4	3.495	A

09:00 - 09:15

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 - Link Rd (SE)	160	40	369	1311	0.122	160	209	0.2	0.2	3.437	A
2 - IRR (W)	836	209	55	1496	0.558	836	473	1.4	1.4	5.993	A
3 - IRR (NE)	436	109	142	1568	0.278	436	749	0.4	0.4	3.496	A

09:15 - 09:30

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 - Link Rd (SE)	130	33	302	1349	0.097	130	171	0.2	0.1	3.250	A
2 - IRR (W)	682	171	45	1502	0.454	684	387	1.4	0.9	4.853	A
3 - IRR (NE)	356	89	116	1583	0.225	356	613	0.4	0.3	3.227	A

09:30 - 09:45

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 - Link Rd (SE)	109	27	252	1376	0.079	109	143	0.1	0.1	3.126	A
2 - IRR (W)	571	143	38	1506	0.379	572	324	0.9	0.7	4.247	A
3 - IRR (NE)	298	75	97	1594	0.187	298	513	0.3	0.3	3.055	A

Do Nothing - 2032 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	4.48	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 segment length (min)	Run automatically
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	194	100.000
2 - IRR (W)		ONE HOUR	✓	364	100.000
3 - IRR (NE)		ONE HOUR	✓	734	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	151	43
	2 - IRR (W)	62	0	302
	3 - IRR (NE)	71	663	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.19	4.41	0.3	A	178	267
2 - IRR (W)	0.27	3.60	0.4	A	334	501
3 - IRR (NE)	0.50	4.93	1.1	A	674	1010

Main Results for each time segment

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 - Link Rd (SE)	146	37	497	1240	0.118	145	100	0.0	0.1	3.615	A
2 - IRR (W)	274	69	32	1509	0.182	273	610	0.0	0.2	3.199	A
3 - IRR (NE)	553	138	47	1624	0.340	550	259	0.0	0.6	3.681	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 - Link Rd (SE)	174	44	595	1186	0.147	174	119	0.1	0.2	3.915	A
2 - IRR (W)	327	82	39	1505	0.217	327	731	0.2	0.3	3.360	A
3 - IRR (NE)	660	165	56	1618	0.408	659	310	0.6	0.8	4.124	A

17:30 - 17:45

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 - Link Rd (SE)	214	53	729	1112	0.192	213	146	0.2	0.3	4.407	A
2 - IRR (W)	401	100	47	1501	0.267	400	895	0.3	0.4	3.599	A
3 - IRR (NE)	808	202	68	1611	0.502	807	379	0.8	1.1	4.915	A

17:45 - 18:00

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 - Link Rd (SE)	214	53	730	1111	0.192	214	146	0.3	0.3	4.412	A
2 - IRR (W)	401	100	47	1501	0.267	401	896	0.4	0.4	3.599	A
3 - IRR (NE)	808	202	68	1611	0.502	808	380	1.1	1.1	4.930	A

18:00 - 18:15

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 - Link Rd (SE)	174	44	597	1185	0.147	175	120	0.3	0.2	3.923	A
2 - IRR (W)	327	82	39	1505	0.217	328	733	0.4	0.3	3.365	A
3 - IRR (NE)	660	165	56	1618	0.408	661	311	1.1	0.8	4.144	A

18:15 - 18:30

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 - Link Rd (SE)	146	37	500	1239	0.118	146	100	0.2	0.1	3.624	A
2 - IRR (W)	274	69	32	1509	0.182	274	614	0.3	0.2	3.210	A
3 - IRR (NE)	553	138	47	1624	0.340	553	260	0.8	0.6	3.701	A

Do Nothing - 2042 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	5.21	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 segment length (min)	Run automatically
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	150	100.000
2 - IRR (W)		ONE HOUR	✓	796	100.000
3 - IRR (NE)		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	100	50
	2 - IRR (W)	135	0	661
	3 - IRR (NE)	63	350	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.13	3.48	0.2	A	138	206
2 - IRR (W)	0.59	6.39	1.5	A	730	1096
3 - IRR (NE)	0.29	3.57	0.4	A	379	568

Main Results for each time segment

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 - Link Rd (SE)	113	28	263	1370	0.082	113	148	0.0	0.1	3.148	A
2 - IRR (W)	599	150	38	1506	0.398	596	338	0.0	0.7	4.339	A
3 - IRR (NE)	311	78	101	1592	0.195	310	533	0.0	0.3	3.085	A

08:30 - 08:45

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 - Link Rd (SE)	135	34	314	1341	0.101	135	178	0.1	0.1	3.281	A
2 - IRR (W)	716	179	45	1502	0.476	715	404	0.7	1.0	5.021	A
3 - IRR (NE)	371	93	121	1580	0.235	371	638	0.3	0.3	3.274	A

08:45 - 09:00

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 - Link Rd (SE)	165	41	385	1302	0.127	165	218	0.1	0.2	3.481	A
2 - IRR (W)	876	219	55	1496	0.586	874	495	1.0	1.5	6.344	A
3 - IRR (NE)	455	114	148	1565	0.291	454	781	0.3	0.4	3.563	A

09:00 - 09:15

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 - Link Rd (SE)	165	41	385	1302	0.127	165	218	0.2	0.2	3.482	A
2 - IRR (W)	876	219	55	1496	0.586	876	495	1.5	1.5	6.387	A
3 - IRR (NE)	455	114	149	1565	0.291	455	783	0.4	0.4	3.567	A

09:15 - 09:30

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 - Link Rd (SE)	135	34	315	1341	0.101	135	178	0.2	0.1	3.285	A
2 - IRR (W)	716	179	45	1502	0.476	718	405	1.5	1.0	5.063	A
3 - IRR (NE)	371	93	122	1580	0.235	372	641	0.4	0.3	3.277	A

09:30 - 09:45

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 - Link Rd (SE)	113	28	264	1370	0.082	113	149	0.1	0.1	3.151	A
2 - IRR (W)	599	150	38	1506	0.398	600	339	1.0	0.7	4.378	A
3 - IRR (NE)	311	78	102	1592	0.195	311	536	0.3	0.3	3.094	A

Do Nothing - 2042 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	4.72	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 segment length (min)	Run automatically
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	203	100.000
2 - IRR (W)		ONE HOUR	✓	200	100.000
3 - IRR (NE)		ONE HOUR	✓	769	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	158	45
	2 - IRR (W)	65	0	135
	3 - IRR (NE)	74	695	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.20	4.56	0.3	A	186	279
2 - IRR (W)	0.15	3.09	0.2	A	184	275
3 - IRR (NE)	0.53	5.19	1.2	A	706	1058

Main Results for each time segment

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 - Link Rd (SE)	153	38	521	1227	0.125	152	104	0.0	0.2	3.683	A
2 - IRR (W)	151	38	34	1508	0.100	150	640	0.0	0.1	2.916	A
3 - IRR (NE)	579	145	49	1622	0.357	577	135	0.0	0.6	3.778	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 - Link Rd (SE)	182	46	624	1170	0.156	182	125	0.2	0.2	4.010	A
2 - IRR (W)	180	45	40	1504	0.120	180	766	0.1	0.1	2.988	A
3 - IRR (NE)	691	173	58	1617	0.428	690	162	0.6	0.8	4.271	A

17:30 - 17:45

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 - Link Rd (SE)	224	56	764	1092	0.205	223	153	0.2	0.3	4.556	A
2 - IRR (W)	220	55	49	1499	0.147	220	938	0.1	0.2	3.094	A
3 - IRR (NE)	847	212	72	1609	0.526	845	198	0.8	1.2	5.171	A

17:45 - 18:00

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 - Link Rd (SE)	224	56	765	1091	0.205	224	153	0.3	0.3	4.562	A
2 - IRR (W)	220	55	50	1499	0.147	220	939	0.2	0.2	3.095	A
3 - IRR (NE)	847	212	72	1609	0.526	847	198	1.2	1.2	5.192	A

18:00 - 18:15

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 - Link Rd (SE)	182	46	626	1169	0.156	183	125	0.3	0.2	4.019	A
2 - IRR (W)	180	45	41	1504	0.120	180	768	0.2	0.1	2.992	A
3 - IRR (NE)	691	173	58	1617	0.428	693	162	1.2	0.8	4.292	A

18:15 - 18:30

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 - Link Rd (SE)	153	38	524	1225	0.125	153	105	0.2	0.2	3.695	A
2 - IRR (W)	151	38	34	1508	0.100	151	643	0.1	0.1	2.917	A
3 - IRR (NE)	579	145	49	1622	0.357	580	136	0.8	0.6	3.800	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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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: Junction 1 Inner Relief Road _ Link Road (Roundabout upgrated).j9

Path: G:\2023\p230199\calcs\arcady

Report generation date: 09/08/2024 15:26:22

»Do Something - 2027 DS, AM

»Do Something - 2027 DS, PM

»Do Something - 2032 DS, AM

»Do Something - 2032 DS, PM

»Do Something - 2042 DS, AM

»Do Something - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Something - 2027 DS									
1 - Link Rd (SE)	D7	0.2	5.26	0.18	A	D8	0.4	7.33	0.28	A
2 - IRR (W)		3.7	16.77	0.78	C		0.7	6.17	0.39	A
3 - IRR (NE)		0.8	6.70	0.42	A		3.1	14.62	0.74	B
	Do Something - 2032 DS									
1 - Link Rd (SE)	D9	0.2	5.36	0.18	A	D10	0.5	7.66	0.30	A
2 - IRR (W)		4.5	19.71	0.81	C		0.7	6.33	0.40	A
3 - IRR (NE)		0.9	6.93	0.44	A		3.7	16.72	0.78	C
	Do Something - 2042 DS									
1 - Link Rd (SE)	D11	0.3	5.46	0.19	A	D12	0.5	8.08	0.32	A
2 - IRR (W)		5.8	24.56	0.85	C		0.8	6.53	0.42	A
3 - IRR (NE)		0.9	7.20	0.46	A		4.6	20.01	0.81	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

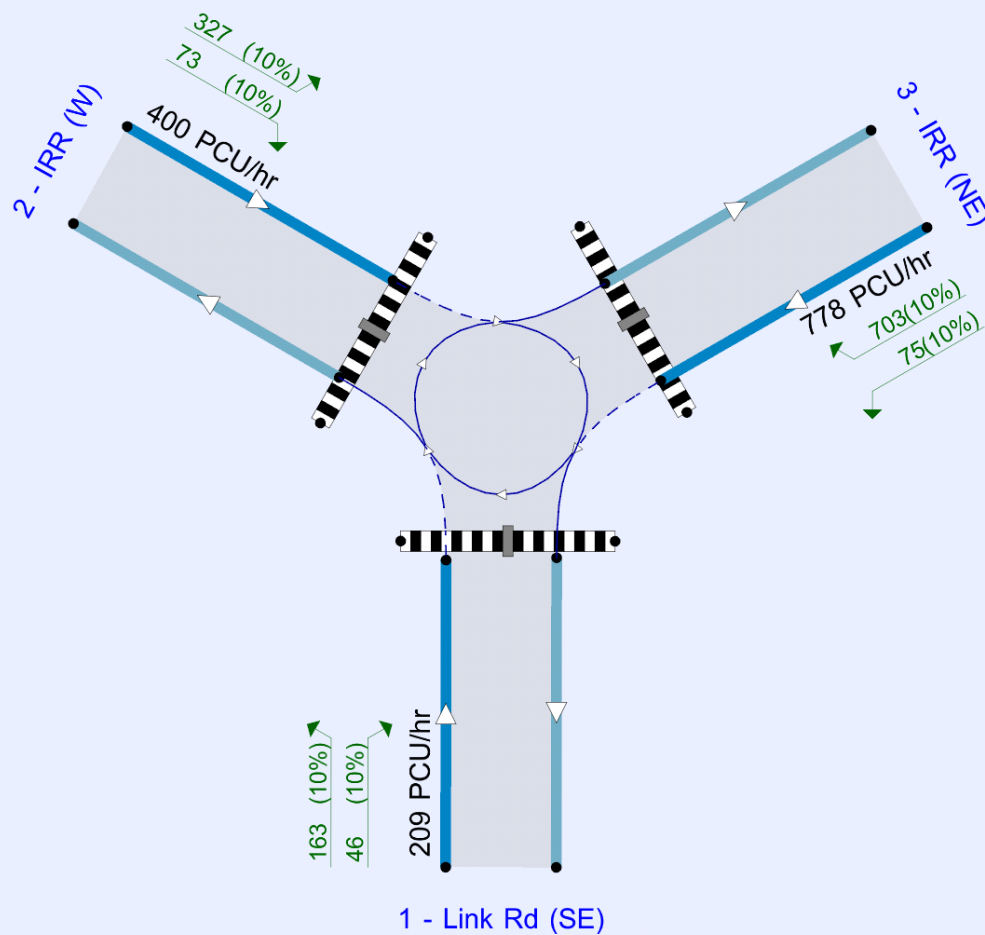
File summary

File Description

Title	Blessington LDR
Location	Blessington, Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

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
D7	2027 DS	AM	ONE HOUR	08:15	09:45	15	✓
D8	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓
D9	2032 DS	AM	ONE HOUR	08:15	09:45	15	✓
D10	2032 DS	PM	ONE HOUR	17:00	18:30	15	✓
D11	2042 DS	AM	ONE HOUR	08:15	09:45	15	✓
D12	2042 DS	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Do Something - 2027 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	12.35	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Link Rd (SE)	
2	IRR (W)	
3	IRR (NE)	

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
1 - Link Rd (SE)	3.50	4.00	14.0	19.0	48.0	56.0	
2 - IRR (W)	3.50	4.00	15.0	18.0	48.0	59.0	
3 - IRR (NE)	3.50	4.00	19.0	13.0	48.0	49.0	

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Link Rd (SE)	1.00	1.00	✓	Distance	6.00	4.29	6.00	4.29
2 - IRR (W)	1.00	1.00	✓	Distance	7.00	5.00	7.00	5.00
3 - IRR (NE)	1.00	1.00	✓	Distance	6.00	4.29	6.00	4.29

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Link Rd (SE)	0.472	1085
2 - IRR (W)	0.465	1070
3 - IRR (NE)	0.473	1089

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
D7	2027 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	146	100.000
2 - IRR (W)		ONE HOUR	✓	737	100.000
3 - IRR (NE)		ONE HOUR	✓	392	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	0	98	48
	2 - IRR (W)	128	0	609
	3 - IRR (NE)	60	332	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.18	5.26	0.2	A	134	201
2 - IRR (W)	0.78	16.77	3.7	C	676	1014
3 - IRR (NE)	0.42	6.70	0.8	A	360	540

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	110	27	248	0.00	968	0.114	109	140	0.0	0.1	4.608	A
2 - IRR (W)	555	139	36	0.00	1054	0.527	550	322	0.0	1.2	7.791	A
3 - IRR (NE)	295	74	96	0.00	1044	0.283	293	490	0.0	0.4	5.262	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	131	33	298	0.00	945	0.139	131	168	0.1	0.2	4.867	A
2 - IRR (W)	663	166	43	0.00	1050	0.631	660	386	1.2	1.8	10.079	B
3 - IRR (NE)	352	88	115	0.00	1035	0.340	352	589	0.4	0.6	5.789	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	161	40	365	0.00	913	0.176	161	206	0.2	0.2	5.259	A
2 - IRR (W)	811	203	53	0.00	1046	0.776	805	473	1.8	3.5	15.963	C
3 - IRR (NE)	432	108	140	0.00	1023	0.422	431	718	0.6	0.8	6.669	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	161	40	366	0.00	913	0.176	161	207	0.2	0.2	5.264	A
2 - IRR (W)	811	203	53	0.00	1046	0.776	811	473	3.5	3.7	16.766	C
3 - IRR (NE)	432	108	141	0.00	1023	0.422	432	723	0.8	0.8	6.696	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	131	33	299	0.00	944	0.139	131	170	0.2	0.2	4.873	A
2 - IRR (W)	663	166	43	0.00	1050	0.631	669	387	3.7	1.9	10.580	B
3 - IRR (NE)	352	88	116	0.00	1035	0.341	353	596	0.8	0.6	5.820	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	110	27	250	0.00	967	0.114	110	142	0.2	0.1	4.620	A
2 - IRR (W)	555	139	36	0.00	1054	0.527	558	324	1.9	1.2	8.028	A
3 - IRR (NE)	295	74	97	0.00	1044	0.283	296	497	0.6	0.4	5.299	A

Do Something - 2027 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	11.08	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
D8	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	192	100.000
2 - IRR (W)		ONE HOUR	✓	369	100.000
3 - IRR (NE)		ONE HOUR	✓	713	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	149	43
	2 - IRR (W)	67	0	302
	3 - IRR (NE)	70	642	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.28	7.33	0.4	A	176	264
2 - IRR (W)	0.39	6.17	0.7	A	339	508
3 - IRR (NE)	0.74	14.62	3.1	B	654	981

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	145	36	480	0.00	859	0.168	144	102	0.0	0.2	5.530	A
2 - IRR (W)	278	69	33	0.00	1055	0.263	276	591	0.0	0.4	5.074	A
3 - IRR (NE)	537	134	50	0.00	1066	0.504	532	259	0.0	1.1	7.365	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	576	0.00	814	0.212	172	123	0.2	0.3	6.173	A
2 - IRR (W)	332	83	39	0.00	1052	0.315	331	709	0.4	0.5	5.490	A
3 - IRR (NE)	641	160	60	0.00	1061	0.604	639	311	1.1	1.6	9.328	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	211	53	703	0.00	754	0.281	211	150	0.3	0.4	7.290	A
2 - IRR (W)	406	102	48	0.00	1048	0.388	406	866	0.5	0.7	6.156	A
3 - IRR (NE)	785	196	74	0.00	1055	0.744	779	380	1.6	3.0	14.102	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	211	53	708	0.00	751	0.281	211	151	0.4	0.4	7.331	A
2 - IRR (W)	406	102	48	0.00	1048	0.388	406	871	0.7	0.7	6.171	A
3 - IRR (NE)	785	196	74	0.00	1055	0.744	785	381	3.0	3.1	14.622	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	583	0.00	810	0.213	173	124	0.4	0.3	6.222	A
2 - IRR (W)	332	83	40	0.00	1052	0.315	332	716	0.7	0.5	5.508	A
3 - IRR (NE)	641	160	60	0.00	1061	0.604	647	312	3.1	1.7	9.678	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	145	36	486	0.00	856	0.169	145	103	0.3	0.2	5.570	A
2 - IRR (W)	278	69	33	0.00	1055	0.263	278	598	0.5	0.4	5.101	A
3 - IRR (NE)	537	134	51	0.00	1066	0.504	539	261	1.7	1.1	7.554	A

Do Something - 2032 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	14.14	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
D9	2032 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	152	100.000
2 - IRR (W)		ONE HOUR	✓	769	100.000
3 - IRR (NE)		ONE HOUR	✓	408	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	102	50
	2 - IRR (W)	133	0	636
	3 - IRR (NE)	62	346	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.18	5.36	0.2	A	139	209
2 - IRR (W)	0.81	19.71	4.5	C	706	1058
3 - IRR (NE)	0.44	6.93	0.9	A	374	562

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	114	29	259	0.00	963	0.119	114	146	0.0	0.1	4.659	A
2 - IRR (W)	579	145	37	0.00	1053	0.550	574	335	0.0	1.3	8.175	A
3 - IRR (NE)	307	77	99	0.00	1043	0.295	305	512	0.0	0.5	5.358	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	137	34	311	0.00	939	0.146	136	175	0.1	0.2	4.933	A
2 - IRR (W)	691	173	45	0.00	1050	0.659	688	402	1.3	2.1	10.873	B
3 - IRR (NE)	367	92	119	0.00	1033	0.355	366	614	0.5	0.6	5.932	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	167	42	380	0.00	906	0.185	167	213	0.2	0.2	5.358	A
2 - IRR (W)	847	212	55	0.00	1045	0.810	838	492	2.1	4.3	18.371	C
3 - IRR (NE)	449	112	145	0.00	1021	0.440	448	748	0.6	0.9	6.900	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	167	42	381	0.00	906	0.185	167	215	0.2	0.2	5.363	A
2 - IRR (W)	847	212	55	0.00	1045	0.810	846	493	4.3	4.5	19.706	C
3 - IRR (NE)	449	112	146	0.00	1020	0.440	449	755	0.9	0.9	6.933	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	137	34	312	0.00	938	0.146	137	177	0.2	0.2	4.944	A
2 - IRR (W)	691	173	45	0.00	1049	0.659	700	404	4.5	2.2	11.619	B
3 - IRR (NE)	367	92	121	0.00	1032	0.355	368	624	0.9	0.6	5.968	A

09:30 - 09:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	114	29	261	0.00	962	0.119	115	147	0.2	0.1	4.673	A
2 - IRR (W)	579	145	38	0.00	1053	0.550	582	338	2.2	1.4	8.474	A
3 - IRR (NE)	307	77	101	0.00	1042	0.295	308	519	0.6	0.5	5.398	A

Do Something - 2032 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	12.35	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
D10	2032 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	200	100.000
2 - IRR (W)		ONE HOUR	✓	384	100.000
3 - IRR (NE)		ONE HOUR	✓	743	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	156	44
	2 - IRR (W)	70	0	314
	3 - IRR (NE)	72	671	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.30	7.66	0.5	A	184	275
2 - IRR (W)	0.40	6.33	0.7	A	352	529
3 - IRR (NE)	0.78	16.72	3.7	C	682	1023

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	151	38	501	0.00	849	0.177	150	106	0.0	0.2	5.655	A
2 - IRR (W)	289	72	33	0.00	1055	0.274	287	618	0.0	0.4	5.149	A
3 - IRR (NE)	559	140	52	0.00	1065	0.525	555	268	0.0	1.2	7.693	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	180	45	601	0.00	802	0.224	179	127	0.2	0.3	6.360	A
2 - IRR (W)	345	86	39	0.00	1052	0.328	345	741	0.4	0.5	5.595	A
3 - IRR (NE)	668	167	63	0.00	1060	0.630	665	321	1.2	1.8	9.975	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	220	55	733	0.00	740	0.298	220	156	0.3	0.5	7.606	A
2 - IRR (W)	423	106	48	0.00	1048	0.403	422	904	0.5	0.7	6.319	A
3 - IRR (NE)	818	205	77	0.00	1053	0.777	811	393	1.8	3.6	15.910	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	220	55	738	0.00	737	0.299	220	156	0.5	0.5	7.662	A
2 - IRR (W)	423	106	48	0.00	1048	0.403	423	910	0.7	0.7	6.334	A
3 - IRR (NE)	818	205	77	0.00	1053	0.777	818	394	3.6	3.7	16.719	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	180	45	610	0.00	798	0.225	180	128	0.5	0.3	6.419	A
2 - IRR (W)	345	86	40	0.00	1052	0.328	346	750	0.7	0.5	5.615	A
3 - IRR (NE)	668	167	63	0.00	1060	0.630	675	323	3.7	1.9	10.472	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	151	38	508	0.00	846	0.178	151	107	0.3	0.2	5.702	A
2 - IRR (W)	289	72	33	0.00	1055	0.274	290	625	0.5	0.4	5.176	A
3 - IRR (NE)	559	140	53	0.00	1065	0.525	562	270	1.9	1.2	7.926	A

Do Something - 2042 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	17.09	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
D11	2042 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	157	100.000
2 - IRR (W)		ONE HOUR	✓	807	100.000
3 - IRR (NE)		ONE HOUR	✓	424	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	107	50
	2 - IRR (W)	140	0	667
	3 - IRR (NE)	64	360	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.19	5.46	0.3	A	144	216
2 - IRR (W)	0.85	24.56	5.8	C	741	1111
3 - IRR (NE)	0.46	7.20	0.9	A	389	584

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	118	30	269	0.00	958	0.123	118	152	0.0	0.2	4.707	A
2 - IRR (W)	608	152	37	0.00	1053	0.577	602	350	0.0	1.5	8.667	A
3 - IRR (NE)	319	80	104	0.00	1040	0.307	317	535	0.0	0.5	5.464	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	141	35	323	0.00	933	0.151	141	183	0.2	0.2	4.998	A
2 - IRR (W)	725	181	45	0.00	1050	0.691	722	419	1.5	2.4	11.950	B
3 - IRR (NE)	381	95	125	0.00	1030	0.370	381	642	0.5	0.6	6.088	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	395	0.00	899	0.192	173	222	0.2	0.3	5.452	A
2 - IRR (W)	889	222	55	0.00	1045	0.850	876	513	2.4	5.4	22.034	C
3 - IRR (NE)	467	117	152	0.00	1018	0.459	466	779	0.6	0.9	7.161	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	396	0.00	898	0.192	173	224	0.3	0.3	5.457	A
2 - IRR (W)	889	222	55	0.00	1045	0.850	887	514	5.4	5.8	24.556	C
3 - IRR (NE)	467	117	154	0.00	1017	0.459	467	788	0.9	0.9	7.200	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	141	35	325	0.00	932	0.151	141	186	0.3	0.2	5.010	A
2 - IRR (W)	725	181	45	0.00	1049	0.691	738	421	5.8	2.6	13.204	B
3 - IRR (NE)	381	95	128	0.00	1029	0.370	382	655	0.9	0.7	6.133	A

09:30 - 09:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	118	30	272	0.00	957	0.123	118	154	0.2	0.2	4.721	A
2 - IRR (W)	608	152	38	0.00	1053	0.577	612	352	2.6	1.5	9.059	A
3 - IRR (NE)	319	80	106	0.00	1039	0.307	320	543	0.7	0.5	5.508	A

Do Something - 2042 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	14.32	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
D12	2042 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	209	100.000
2 - IRR (W)		ONE HOUR	✓	400	100.000
3 - IRR (NE)		ONE HOUR	✓	778	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	163	46
	2 - IRR (W)	73	0	327
	3 - IRR (NE)	75	703	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.32	8.08	0.5	A	192	288
2 - IRR (W)	0.42	6.53	0.8	A	367	551
3 - IRR (NE)	0.81	20.01	4.6	C	714	1071

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	157	39	524	0.00	838	0.188	156	111	0.0	0.3	5.802	A
2 - IRR (W)	301	75	34	0.00	1054	0.286	299	646	0.0	0.4	5.234	A
3 - IRR (NE)	586	146	55	0.00	1064	0.551	580	279	0.0	1.3	8.110	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	188	47	629	0.00	788	0.238	188	133	0.3	0.3	6.585	A
2 - IRR (W)	360	90	41	0.00	1051	0.342	359	776	0.4	0.6	5.718	A
3 - IRR (NE)	699	175	66	0.00	1059	0.661	696	335	1.3	2.1	10.844	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	230	58	766	0.00	724	0.318	229	162	0.3	0.5	7.997	A
2 - IRR (W)	440	110	51	0.00	1047	0.421	440	945	0.6	0.8	6.510	A
3 - IRR (NE)	857	214	80	0.00	1052	0.815	847	410	2.1	4.4	18.588	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	230	58	773	0.00	720	0.319	230	163	0.5	0.5	8.075	A
2 - IRR (W)	440	110	51	0.00	1047	0.421	440	953	0.8	0.8	6.529	A
3 - IRR (NE)	857	214	80	0.00	1051	0.815	856	411	4.4	4.6	20.008	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	188	47	641	0.00	783	0.240	189	134	0.5	0.4	6.666	A
2 - IRR (W)	360	90	41	0.00	1051	0.342	360	788	0.8	0.6	5.740	A
3 - IRR (NE)	699	175	66	0.00	1058	0.661	709	336	4.6	2.2	11.617	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	157	39	532	0.00	834	0.189	158	112	0.4	0.3	5.858	A
2 - IRR (W)	301	75	35	0.00	1054	0.286	302	655	0.6	0.4	5.265	A
3 - IRR (NE)	586	146	55	0.00	1063	0.551	589	281	2.2	1.4	8.407	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 3 Oak Drive _ Inner Relief Road Roundabout DN.j9

Path: G:\2023\p230199\calcs\arcady

Report generation date: 09/08/2024 15:29:41

»Do Nothing - 2027 DN, AM

»Do Nothing - 2027 DN, PM

»Do Nothing - 2032 DN, AM

»Do Nothing - 2032 DN, PM

»Do Nothing - 2042 DN, AM

»Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
1 - Oak Drive	D1	0.1	3.33	0.12	A	D2	0.3	4.29	0.20	A
2 - Inner Relief Road (S)		0.9	4.20	0.46	A		0.3	2.98	0.22	A
3 - School Link Road		0.3	4.17	0.21	A		0.1	3.13	0.11	A
4 - Inner Relief Road Extension (N)		0.3	3.18	0.19	A		0.8	4.28	0.43	A
	Do Nothing - 2032 DN									
1 - Oak Drive	D3	0.2	3.37	0.12	A	D4	0.3	4.41	0.21	A
2 - Inner Relief Road (S)		1.0	4.37	0.48	A		0.3	3.02	0.23	A
3 - School Link Road		0.3	4.27	0.22	A		0.1	3.15	0.11	A
4 - Inner Relief Road Extension (N)		0.3	3.22	0.20	A		0.9	4.42	0.45	A
	Do Nothing - 2042 DN									
1 - Oak Drive	D5	0.2	3.43	0.13	A	D6	0.3	4.56	0.22	A
2 - Inner Relief Road (S)		1.1	4.59	0.50	A		0.4	3.06	0.24	A
3 - School Link Road		0.3	4.39	0.22	A		0.1	3.18	0.11	A
4 - Inner Relief Road Extension (N)		0.3	3.27	0.21	A		1.0	4.61	0.47	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

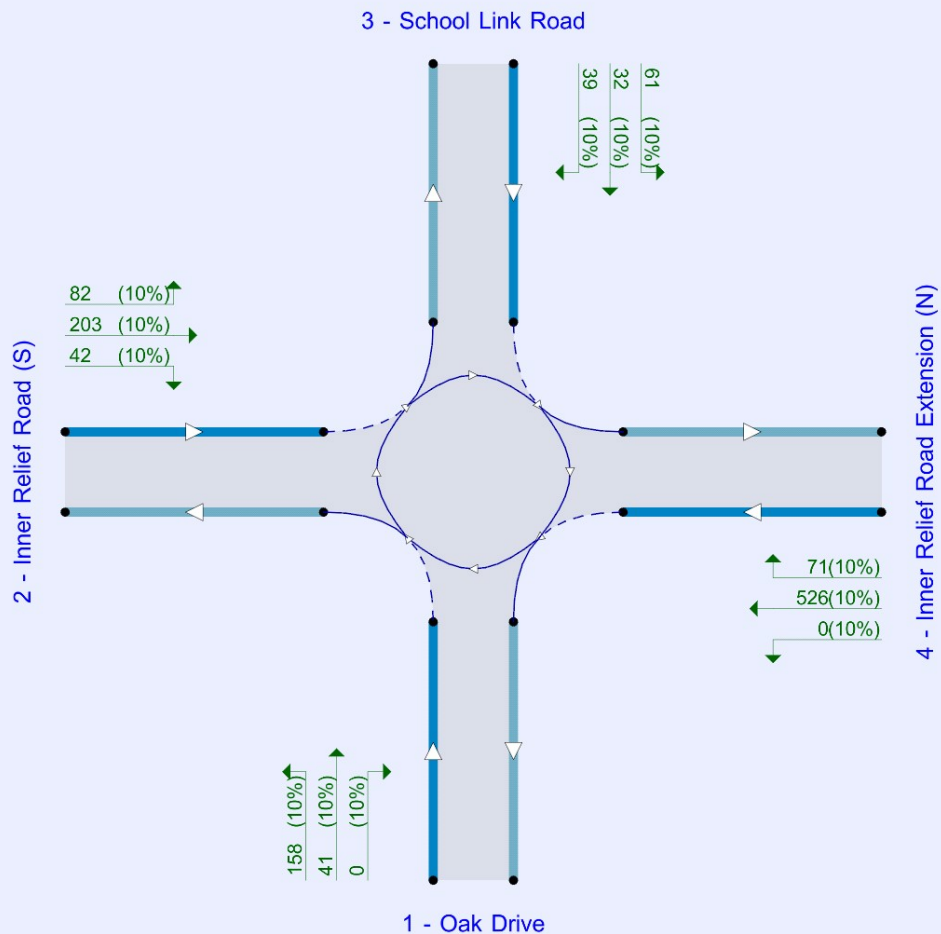
File summary

File Description

Title	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Nothing	100.000

Do Nothing - 2027 DN, 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, 4	3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Oak Drive	
2	Inner Relief Road (S)	
3	School Link Road	
4	Inner Relief Road Extension (N)	

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
1 - Oak Drive	3.73	6.22	22.8	16.8	49.9	47.0	
2 - Inner Relief Road (S)	4.39	6.21	25.4	31.5	49.9	33.0	
3 - School Link Road	3.67	6.38	22.4	22.6	49.9	52.0	
4 - Inner Relief Road Extension (N)	3.50	6.90	28.5	18.5	49.9	46.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Oak Drive	0.565	1574
2 - Inner Relief Road (S)	0.629	1792
3 - School Link Road	0.567	1583
4 - Inner Relief Road Extension (N)	0.592	1699

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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	133	100.000
2 - Inner Relief Road (S)		✓	657	100.000
3 - School Link Road		✓	207	100.000
4 - Inner Relief Road Extension (N)		✓	244	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	100	33	0
	2 - Inner Relief Road (S)	97	0	100	460
	3 - School Link Road	38	84	0	85
	4 - Inner Relief Road Extension (N)	0	205	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.12	3.33	0.1	A
2 - Inner Relief Road (S)	0.46	4.20	0.9	A
3 - School Link Road	0.21	4.17	0.3	A
4 - Inner Relief Road Extension (N)	0.19	3.18	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	110	271	1421	0.078	110	0.1	3.020	A
2 - Inner Relief Road (S)	544	59	1755	0.310	542	0.5	3.259	A
3 - School Link Road	171	460	1323	0.130	171	0.2	3.435	A
4 - Inner Relief Road Extension (N)	202	181	1592	0.127	201	0.2	2.845	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	132	324	1391	0.095	131	0.1	3.144	A
2 - Inner Relief Road (S)	650	71	1747	0.372	649	0.6	3.603	A
3 - School Link Road	205	550	1272	0.161	205	0.2	3.710	A
4 - Inner Relief Road Extension (N)	241	216	1571	0.154	241	0.2	2.977	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	161	397	1349	0.119	161	0.1	3.331	A
2 - Inner Relief Road (S)	796	87	1737	0.458	795	0.9	4.194	A
3 - School Link Road	251	674	1202	0.209	250	0.3	4.161	A
4 - Inner Relief Road Extension (N)	296	265	1542	0.192	295	0.3	3.175	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	161	397	1349	0.119	161	0.1	3.332	A
2 - Inner Relief Road (S)	796	87	1737	0.458	796	0.9	4.205	A
3 - School Link Road	251	675	1201	0.209	251	0.3	4.165	A
4 - Inner Relief Road Extension (N)	296	265	1542	0.192	296	0.3	3.175	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	132	325	1390	0.095	132	0.1	3.146	A
2 - Inner Relief Road (S)	650	71	1747	0.372	651	0.7	3.616	A
3 - School Link Road	205	552	1271	0.161	205	0.2	3.718	A
4 - Inner Relief Road Extension (N)	241	217	1571	0.154	242	0.2	2.979	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	110	272	1420	0.078	110	0.1	3.022	A
2 - Inner Relief Road (S)	544	60	1755	0.310	545	0.5	3.273	A
3 - School Link Road	171	462	1322	0.130	172	0.2	3.445	A
4 - Inner Relief Road Extension (N)	202	182	1592	0.127	202	0.2	2.852	A

Do Nothing - 2027 DN, 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, 4	3.82	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 segment length (min)
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	191	100.000
2 - Inner Relief Road (S)		✓	314	100.000
3 - School Link Road		✓	129	100.000
4 - Inner Relief Road Extension (N)		✓	574	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	151	40	0
	2 - Inner Relief Road (S)	40	0	80	194
	3 - School Link Road	31	38	0	60
	4 - Inner Relief Road Extension (N)	0	503	71	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.20	4.29	0.3	A
2 - Inner Relief Road (S)	0.22	2.98	0.3	A
3 - School Link Road	0.11	3.13	0.1	A
4 - Inner Relief Road Extension (N)	0.43	4.28	0.8	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	158	505	1288	0.123	158	0.2	3.500	A
2 - Inner Relief Road (S)	260	92	1735	0.150	259	0.2	2.682	A
3 - School Link Road	107	193	1474	0.072	106	0.1	2.895	A
4 - Inner Relief Road Extension (N)	475	90	1646	0.289	474	0.4	3.374	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	189	605	1232	0.153	189	0.2	3.795	A
2 - Inner Relief Road (S)	311	110	1723	0.180	310	0.2	2.802	A
3 - School Link Road	128	231	1452	0.088	127	0.1	2.988	A
4 - Inner Relief Road Extension (N)	568	108	1635	0.347	567	0.6	3.704	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	231	740	1155	0.200	231	0.3	4.284	A
2 - Inner Relief Road (S)	380	134	1708	0.223	380	0.3	2.982	A
3 - School Link Road	156	283	1423	0.110	156	0.1	3.125	A
4 - Inner Relief Road Extension (N)	695	132	1621	0.429	694	0.8	4.268	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	231	741	1155	0.200	231	0.3	4.288	A
2 - Inner Relief Road (S)	380	134	1708	0.223	380	0.3	2.982	A
3 - School Link Road	156	283	1423	0.110	156	0.1	3.125	A
4 - Inner Relief Road Extension (N)	695	132	1621	0.429	695	0.8	4.277	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	189	606	1231	0.153	189	0.2	3.800	A
2 - Inner Relief Road (S)	311	110	1723	0.180	311	0.2	2.806	A
3 - School Link Road	128	232	1452	0.088	128	0.1	2.991	A
4 - Inner Relief Road Extension (N)	568	108	1635	0.347	569	0.6	3.717	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	158	507	1287	0.123	158	0.2	3.511	A
2 - Inner Relief Road (S)	260	92	1734	0.150	260	0.2	2.688	A
3 - School Link Road	107	194	1474	0.073	107	0.1	2.899	A
4 - Inner Relief Road Extension (N)	475	90	1646	0.289	476	0.4	3.388	A

Do Nothing - 2032 DN, 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, 4	4.02	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 segment length (min)
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	138	100.000
2 - Inner Relief Road (S)		✓	686	100.000
3 - School Link Road		✓	212	100.000
4 - Inner Relief Road Extension (N)		✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	104	34	0
	2 - Inner Relief Road (S)	101	0	104	481
	3 - School Link Road	39	86	0	87
	4 - Inner Relief Road Extension (N)	0	214	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.12	3.37	0.2	A
2 - Inner Relief Road (S)	0.48	4.37	1.0	A
3 - School Link Road	0.22	4.27	0.3	A
4 - Inner Relief Road Extension (N)	0.20	3.22	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	114	281	1415	0.081	114	0.1	3.043	A
2 - Inner Relief Road (S)	568	61	1754	0.324	566	0.5	3.328	A
3 - School Link Road	176	480	1311	0.134	175	0.2	3.482	A
4 - Inner Relief Road Extension (N)	210	186	1589	0.132	210	0.2	2.869	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	136	336	1384	0.099	136	0.1	3.173	A
2 - Inner Relief Road (S)	678	73	1746	0.388	678	0.7	3.704	A
3 - School Link Road	210	575	1258	0.167	209	0.2	3.777	A
4 - Inner Relief Road Extension (N)	251	223	1567	0.160	251	0.2	3.008	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	167	411	1341	0.125	167	0.2	3.372	A
2 - Inner Relief Road (S)	831	90	1736	0.479	830	1.0	4.364	A
3 - School Link Road	257	704	1185	0.217	256	0.3	4.265	A
4 - Inner Relief Road Extension (N)	308	273	1537	0.200	307	0.3	3.219	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	167	412	1341	0.125	167	0.2	3.372	A
2 - Inner Relief Road (S)	831	90	1736	0.479	831	1.0	4.375	A
3 - School Link Road	257	705	1184	0.217	257	0.3	4.270	A
4 - Inner Relief Road Extension (N)	308	274	1537	0.200	308	0.3	3.220	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	136	337	1383	0.099	137	0.1	3.175	A
2 - Inner Relief Road (S)	678	73	1746	0.389	680	0.7	3.719	A
3 - School Link Road	210	577	1257	0.167	210	0.2	3.786	A
4 - Inner Relief Road Extension (N)	251	224	1567	0.160	251	0.2	3.013	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	114	282	1414	0.081	114	0.1	3.045	A
2 - Inner Relief Road (S)	568	61	1754	0.324	569	0.5	3.346	A
3 - School Link Road	176	483	1310	0.134	176	0.2	3.491	A
4 - Inner Relief Road Extension (N)	210	187	1588	0.132	211	0.2	2.874	A

Do Nothing - 2032 DN, 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, 4	3.92	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 segment length (min)
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	199	100.000
2 - Inner Relief Road (S)		✓	327	100.000
3 - School Link Road		✓	132	100.000
4 - Inner Relief Road Extension (N)		✓	597	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	158	41	0
	2 - Inner Relief Road (S)	42	0	82	203
	3 - School Link Road	32	39	0	61
	4 - Inner Relief Road Extension (N)	0	526	71	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.21	4.41	0.3	A
2 - Inner Relief Road (S)	0.23	3.02	0.3	A
3 - School Link Road	0.11	3.15	0.1	A
4 - Inner Relief Road Extension (N)	0.45	4.42	0.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	165	525	1277	0.129	164	0.2	3.556	A
2 - Inner Relief Road (S)	271	92	1734	0.156	270	0.2	2.703	A
3 - School Link Road	109	202	1469	0.074	109	0.1	2.912	A
4 - Inner Relief Road Extension (N)	494	93	1644	0.301	493	0.5	3.433	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	197	628	1219	0.161	197	0.2	3.875	A
2 - Inner Relief Road (S)	323	111	1723	0.188	323	0.3	2.829	A
3 - School Link Road	131	242	1446	0.090	130	0.1	3.009	A
4 - Inner Relief Road Extension (N)	590	112	1633	0.362	590	0.6	3.794	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	241	769	1139	0.212	241	0.3	4.408	A
2 - Inner Relief Road (S)	396	135	1707	0.232	396	0.3	3.020	A
3 - School Link Road	160	296	1415	0.113	160	0.1	3.153	A
4 - Inner Relief Road Extension (N)	723	137	1618	0.447	722	0.9	4.413	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	241	770	1138	0.212	241	0.3	4.413	A
2 - Inner Relief Road (S)	396	136	1707	0.232	396	0.3	3.020	A
3 - School Link Road	160	297	1415	0.113	160	0.1	3.153	A
4 - Inner Relief Road Extension (N)	723	137	1618	0.447	723	0.9	4.423	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	197	630	1218	0.162	197	0.2	3.883	A
2 - Inner Relief Road (S)	323	111	1722	0.188	324	0.3	2.833	A
3 - School Link Road	131	243	1446	0.090	131	0.1	3.012	A
4 - Inner Relief Road Extension (N)	590	112	1633	0.362	591	0.6	3.807	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	165	527	1276	0.129	165	0.2	3.568	A
2 - Inner Relief Road (S)	271	93	1734	0.156	271	0.2	2.707	A
3 - School Link Road	109	203	1468	0.074	109	0.1	2.913	A
4 - Inner Relief Road Extension (N)	494	94	1644	0.301	495	0.5	3.448	A

Do Nothing - 2042 DN, 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, 4	4.17	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 segment length (min)
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	145	100.000
2 - Inner Relief Road (S)		✓	719	100.000
3 - School Link Road		✓	216	100.000
4 - Inner Relief Road Extension (N)		✓	266	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	110	35	0
	2 - Inner Relief Road (S)	106	0	108	505
	3 - School Link Road	39	89	0	88
	4 - Inner Relief Road Extension (N)	0	225	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.13	3.43	0.2	A
2 - Inner Relief Road (S)	0.50	4.59	1.1	A
3 - School Link Road	0.22	4.39	0.3	A
4 - Inner Relief Road Extension (N)	0.21	3.27	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	120	293	1408	0.085	120	0.1	3.073	A
2 - Inner Relief Road (S)	595	63	1753	0.340	593	0.6	3.410	A
3 - School Link Road	179	504	1298	0.138	178	0.2	3.535	A
4 - Inner Relief Road Extension (N)	220	193	1585	0.139	220	0.2	2.899	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	143	351	1375	0.104	143	0.1	3.213	A
2 - Inner Relief Road (S)	711	75	1745	0.407	710	0.8	3.826	A
3 - School Link Road	214	604	1241	0.172	213	0.2	3.850	A
4 - Inner Relief Road Extension (N)	263	231	1562	0.168	263	0.2	3.047	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	176	430	1331	0.132	175	0.2	3.426	A
2 - Inner Relief Road (S)	871	92	1734	0.502	869	1.1	4.571	A
3 - School Link Road	262	739	1165	0.225	261	0.3	4.379	A
4 - Inner Relief Road Extension (N)	322	283	1532	0.210	322	0.3	3.273	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	176	430	1331	0.132	176	0.2	3.427	A
2 - Inner Relief Road (S)	871	92	1734	0.502	871	1.1	4.585	A
3 - School Link Road	262	740	1164	0.225	262	0.3	4.387	A
4 - Inner Relief Road Extension (N)	322	283	1531	0.210	322	0.3	3.274	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	143	351	1375	0.104	144	0.1	3.215	A
2 - Inner Relief Road (S)	711	75	1745	0.407	712	0.8	3.841	A
3 - School Link Road	214	605	1240	0.172	214	0.2	3.860	A
4 - Inner Relief Road Extension (N)	263	232	1562	0.168	263	0.2	3.049	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	120	294	1407	0.085	120	0.1	3.075	A
2 - Inner Relief Road (S)	595	63	1753	0.340	596	0.6	3.426	A
3 - School Link Road	179	507	1296	0.138	179	0.2	3.546	A
4 - Inner Relief Road Extension (N)	220	194	1584	0.139	220	0.2	2.905	A

Do Nothing - 2042 DN, 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, 4	4.05	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 segment length (min)
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	207	100.000
2 - Inner Relief Road (S)		✓	341	100.000
3 - School Link Road		✓	133	100.000
4 - Inner Relief Road Extension (N)		✓	625	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	166	41	0
	2 - Inner Relief Road (S)	44	0	84	213
	3 - School Link Road	32	39	0	62
	4 - Inner Relief Road Extension (N)	0	553	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.22	4.56	0.3	A
2 - Inner Relief Road (S)	0.24	3.06	0.4	A
3 - School Link Road	0.11	3.18	0.1	A
4 - Inner Relief Road Extension (N)	0.47	4.61	1.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	171	548	1264	0.136	171	0.2	3.620	A
2 - Inner Relief Road (S)	282	93	1734	0.163	282	0.2	2.726	A
3 - School Link Road	110	212	1463	0.075	110	0.1	2.926	A
4 - Inner Relief Road Extension (N)	518	95	1643	0.315	516	0.5	3.507	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	205	656	1203	0.170	204	0.2	3.965	A
2 - Inner Relief Road (S)	337	112	1722	0.196	337	0.3	2.859	A
3 - School Link Road	132	254	1440	0.091	131	0.1	3.026	A
4 - Inner Relief Road Extension (N)	618	114	1632	0.379	617	0.7	3.901	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	251	803	1120	0.224	250	0.3	4.552	A
2 - Inner Relief Road (S)	413	137	1706	0.242	413	0.3	3.061	A
3 - School Link Road	161	311	1407	0.114	161	0.1	3.177	A
4 - Inner Relief Road Extension (N)	757	139	1617	0.468	756	1.0	4.592	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	251	804	1119	0.224	251	0.3	4.559	A
2 - Inner Relief Road (S)	413	137	1706	0.242	413	0.4	3.061	A
3 - School Link Road	161	311	1407	0.114	161	0.1	3.177	A
4 - Inner Relief Road Extension (N)	757	139	1617	0.468	757	1.0	4.605	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	205	658	1202	0.170	205	0.2	3.973	A
2 - Inner Relief Road (S)	337	112	1722	0.196	338	0.3	2.863	A
3 - School Link Road	132	254	1439	0.091	132	0.1	3.027	A
4 - Inner Relief Road Extension (N)	618	114	1632	0.379	619	0.7	3.915	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	171	551	1262	0.136	172	0.2	3.629	A
2 - Inner Relief Road (S)	282	94	1733	0.163	283	0.2	2.729	A
3 - School Link Road	110	213	1463	0.075	110	0.1	2.929	A
4 - Inner Relief Road Extension (N)	518	95	1643	0.315	518	0.5	3.522	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 3 Oak Drive _ Inner Relief Road Roundabout DS.j9

Path: G:\2023\p230199\calcs\arcady

Report generation date: 09/08/2024 15:31:33

»Do Somethig - 2027 DS, AM

»Do Somethig - 2027 DS, PM

»Do Somethig - 2032 DS, AM

»Do Somethig - 2032 DS, PM

»Do Somethig - 2042 DS, AM

»Do Somethig - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Somethig - 2027 DS									
1 - Oak Drive	D1	0.2	3.40	0.13	A	D2	0.3	4.51	0.23	A
2 - Inner Relief Road (S)		1.0	4.46	0.49	A		0.4	3.07	0.25	A
3 - School Link Road		0.3	4.31	0.21	A		0.1	3.18	0.11	A
4 - Inner Relief Road Extension (N)		0.3	3.26	0.21	A		0.9	4.50	0.45	A
	Do Somethig - 2032 DS									
1 - Oak Drive	D3	0.2	3.44	0.14	A	D4	0.3	4.64	0.24	A
2 - Inner Relief Road (S)		1.1	4.66	0.51	A		0.4	3.11	0.26	A
3 - School Link Road		0.3	4.42	0.22	A		0.1	3.21	0.11	A
4 - Inner Relief Road Extension (N)		0.3	3.31	0.21	A		1.0	4.66	0.47	A
	Do Somethig - 2042 DS									
1 - Oak Drive	D5	0.2	3.50	0.14	A	D6	0.4	4.80	0.25	A
2 - Inner Relief Road (S)		1.3	4.90	0.53	A		0.4	3.16	0.27	A
3 - School Link Road		0.3	4.55	0.23	A		0.1	3.24	0.12	A
4 - Inner Relief Road Extension (N)		0.3	3.36	0.22	A		1.1	4.86	0.49	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

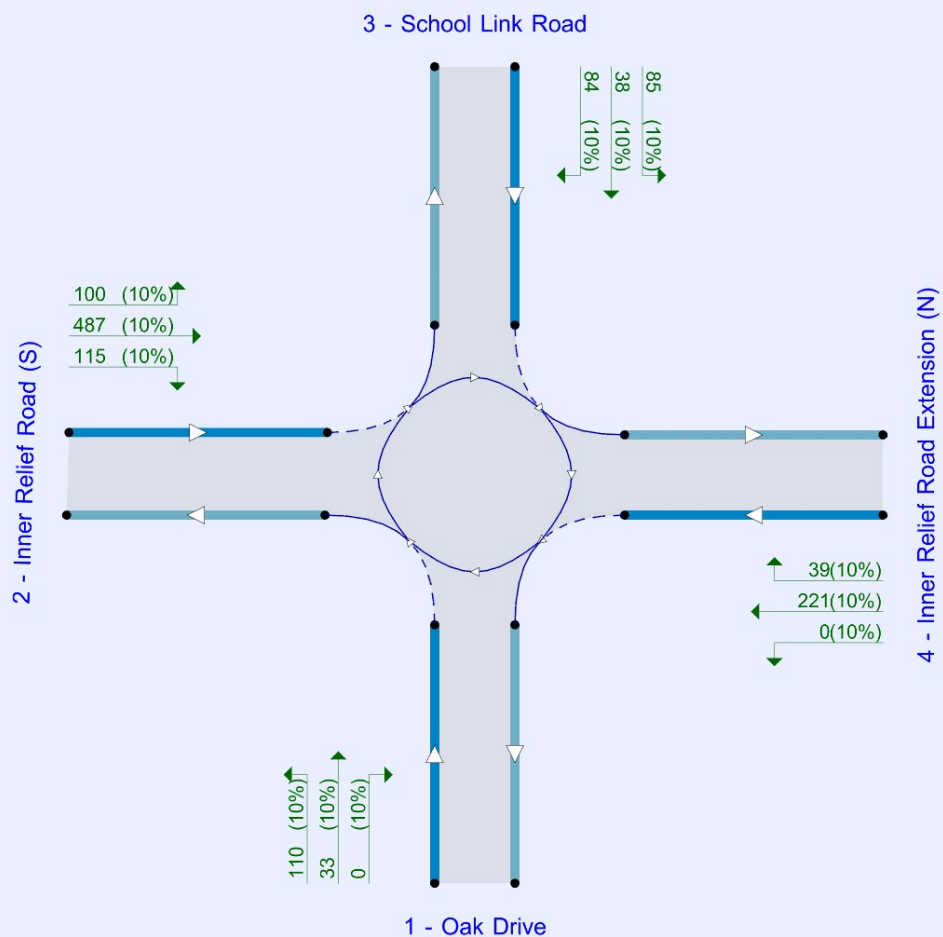
File summary

File Description

Title	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Somethig - 2027 DS, 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, 4	4.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Oak Drive	
2	Inner Relief Road (S)	
3	School Link Road	
4	Inner Relief Road Extension (N)	

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
1 - Oak Drive	3.73	6.22	22.8	16.8	49.9	47.0	
2 - Inner Relief Road (S)	4.39	6.21	25.4	31.5	49.9	33.0	
3 - School Link Road	3.67	6.38	22.4	22.6	49.9	52.0	
4 - Inner Relief Road Extension (N)	3.50	6.90	28.5	18.5	49.9	46.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Oak Drive	0.565	1574
2 - Inner Relief Road (S)	0.629	1792
3 - School Link Road	0.567	1583
4 - Inner Relief Road Extension (N)	0.592	1699

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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	143	100.000
2 - Inner Relief Road (S)		✓	702	100.000
3 - School Link Road		✓	207	100.000
4 - Inner Relief Road Extension (N)		✓	260	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	110	33	0
	2 - Inner Relief Road (S)	115	0	100	487
	3 - School Link Road	38	84	0	85
	4 - Inner Relief Road Extension (N)	0	221	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.13	3.40	0.2	A
2 - Inner Relief Road (S)	0.49	4.46	1.0	A
3 - School Link Road	0.21	4.31	0.3	A
4 - Inner Relief Road Extension (N)	0.21	3.26	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	118	284	1413	0.084	118	0.1	3.057	A
2 - Inner Relief Road (S)	581	59	1755	0.331	579	0.5	3.363	A
3 - School Link Road	171	497	1302	0.132	171	0.2	3.498	A
4 - Inner Relief Road Extension (N)	215	196	1583	0.136	215	0.2	2.891	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	141	340	1382	0.102	141	0.1	3.192	A
2 - Inner Relief Road (S)	694	71	1747	0.397	693	0.7	3.755	A
3 - School Link Road	205	595	1246	0.164	205	0.2	3.800	A
4 - Inner Relief Road Extension (N)	257	234	1561	0.165	257	0.2	3.037	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	173	416	1338	0.129	173	0.2	3.397	A
2 - Inner Relief Road (S)	850	87	1737	0.489	849	1.0	4.451	A
3 - School Link Road	251	728	1171	0.214	250	0.3	4.301	A
4 - Inner Relief Road Extension (N)	315	287	1529	0.206	315	0.3	3.259	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	173	417	1338	0.129	173	0.2	3.398	A
2 - Inner Relief Road (S)	850	87	1737	0.489	850	1.0	4.463	A
3 - School Link Road	251	729	1170	0.214	251	0.3	4.305	A
4 - Inner Relief Road Extension (N)	315	287	1529	0.206	315	0.3	3.260	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	141	341	1381	0.102	142	0.1	3.193	A
2 - Inner Relief Road (S)	694	71	1747	0.397	695	0.7	3.771	A
3 - School Link Road	205	596	1246	0.164	205	0.2	3.806	A
4 - Inner Relief Road Extension (N)	257	235	1560	0.165	257	0.2	3.039	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	118	285	1413	0.084	119	0.1	3.062	A
2 - Inner Relief Road (S)	581	60	1755	0.331	582	0.5	3.381	A
3 - School Link Road	171	499	1301	0.132	172	0.2	3.510	A
4 - Inner Relief Road Extension (N)	215	197	1583	0.136	215	0.2	2.898	A

Do Somethig - 2027 DS, 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, 4	3.99	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 segment length (min)
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	211	100.000
2 - Inner Relief Road (S)		✓	347	100.000
3 - School Link Road		✓	129	100.000
4 - Inner Relief Road Extension (N)		✓	604	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	171	40	0
	2 - Inner Relief Road (S)	53	0	80	214
	3 - School Link Road	31	38	0	60
	4 - Inner Relief Road Extension (N)	0	533	71	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.23	4.51	0.3	A
2 - Inner Relief Road (S)	0.25	3.07	0.4	A
3 - School Link Road	0.11	3.18	0.1	A
4 - Inner Relief Road Extension (N)	0.45	4.50	0.9	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	175	530	1274	0.137	174	0.2	3.597	A
2 - Inner Relief Road (S)	287	92	1735	0.166	286	0.2	2.733	A
3 - School Link Road	107	220	1459	0.073	106	0.1	2.928	A
4 - Inner Relief Road Extension (N)	500	101	1640	0.305	498	0.5	3.464	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	209	634	1215	0.172	208	0.2	3.932	A
2 - Inner Relief Road (S)	343	110	1723	0.199	343	0.3	2.868	A
3 - School Link Road	128	264	1434	0.089	127	0.1	3.030	A
4 - Inner Relief Road Extension (N)	597	121	1628	0.367	597	0.6	3.838	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	256	776	1135	0.225	255	0.3	4.499	A
2 - Inner Relief Road (S)	420	134	1708	0.246	420	0.4	3.075	A
3 - School Link Road	156	323	1400	0.112	156	0.1	3.182	A
4 - Inner Relief Road Extension (N)	732	148	1612	0.454	730	0.9	4.487	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	256	778	1134	0.225	256	0.3	4.506	A
2 - Inner Relief Road (S)	420	134	1708	0.246	420	0.4	3.075	A
3 - School Link Road	156	323	1400	0.112	156	0.1	3.182	A
4 - Inner Relief Road Extension (N)	732	148	1612	0.454	732	0.9	4.498	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	209	636	1214	0.172	209	0.2	3.940	A
2 - Inner Relief Road (S)	343	110	1723	0.199	343	0.3	2.872	A
3 - School Link Road	128	264	1434	0.089	128	0.1	3.034	A
4 - Inner Relief Road Extension (N)	597	121	1628	0.367	598	0.6	3.851	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	175	532	1273	0.137	175	0.2	3.606	A
2 - Inner Relief Road (S)	287	92	1734	0.166	288	0.2	2.737	A
3 - School Link Road	107	221	1458	0.073	107	0.1	2.930	A
4 - Inner Relief Road Extension (N)	500	101	1639	0.305	501	0.5	3.482	A

Do Somethig - 2032 DS, 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, 4	4.22	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 segment length (min)
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	149	100.000
2 - Inner Relief Road (S)		✓	732	100.000
3 - School Link Road		✓	212	100.000
4 - Inner Relief Road Extension (N)		✓	270	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	115	34	0
	2 - Inner Relief Road (S)	119	0	104	509
	3 - School Link Road	39	86	0	87
	4 - Inner Relief Road Extension (N)	0	230	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.14	3.44	0.2	A
2 - Inner Relief Road (S)	0.51	4.66	1.1	A
3 - School Link Road	0.22	4.42	0.3	A
4 - Inner Relief Road Extension (N)	0.21	3.31	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	123	294	1408	0.088	123	0.1	3.082	A
2 - Inner Relief Road (S)	606	61	1754	0.346	604	0.6	3.436	A
3 - School Link Road	176	518	1290	0.136	175	0.2	3.550	A
4 - Inner Relief Road Extension (N)	224	201	1580	0.142	223	0.2	2.916	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	147	352	1375	0.107	147	0.1	3.225	A
2 - Inner Relief Road (S)	724	73	1746	0.415	723	0.8	3.868	A
3 - School Link Road	210	620	1232	0.170	209	0.2	3.871	A
4 - Inner Relief Road Extension (N)	267	241	1556	0.172	267	0.2	3.070	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	180	431	1330	0.136	180	0.2	3.443	A
2 - Inner Relief Road (S)	887	90	1736	0.511	885	1.1	4.647	A
3 - School Link Road	257	759	1153	0.223	256	0.3	4.412	A
4 - Inner Relief Road Extension (N)	327	295	1524	0.215	327	0.3	3.306	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	180	431	1330	0.136	180	0.2	3.443	A
2 - Inner Relief Road (S)	887	90	1736	0.511	887	1.1	4.662	A
3 - School Link Road	257	761	1152	0.223	257	0.3	4.420	A
4 - Inner Relief Road Extension (N)	327	296	1524	0.215	327	0.3	3.306	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	147	352	1375	0.107	148	0.1	3.229	A
2 - Inner Relief Road (S)	724	73	1746	0.415	725	0.8	3.884	A
3 - School Link Road	210	622	1231	0.170	210	0.2	3.881	A
4 - Inner Relief Road Extension (N)	267	242	1556	0.172	267	0.2	3.072	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	123	295	1407	0.088	123	0.1	3.084	A
2 - Inner Relief Road (S)	606	61	1754	0.346	607	0.6	3.455	A
3 - School Link Road	176	521	1288	0.136	176	0.2	3.561	A
4 - Inner Relief Road Extension (N)	224	202	1579	0.142	224	0.2	2.920	A

Do Somethig - 2032 DS, 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, 4	4.10	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 segment length (min)
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	219	100.000
2 - Inner Relief Road (S)		✓	360	100.000
3 - School Link Road		✓	132	100.000
4 - Inner Relief Road Extension (N)		✓	627	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	178	41	0
	2 - Inner Relief Road (S)	55	0	82	223
	3 - School Link Road	32	39	0	61
	4 - Inner Relief Road Extension (N)	0	556	71	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.24	4.64	0.3	A
2 - Inner Relief Road (S)	0.26	3.11	0.4	A
3 - School Link Road	0.11	3.21	0.1	A
4 - Inner Relief Road Extension (N)	0.47	4.66	1.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	181	549	1263	0.144	181	0.2	3.656	A
2 - Inner Relief Road (S)	298	92	1734	0.172	297	0.2	2.755	A
3 - School Link Road	109	230	1453	0.075	109	0.1	2.945	A
4 - Inner Relief Road Extension (N)	519	104	1638	0.317	517	0.5	3.529	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	217	658	1202	0.180	216	0.2	4.017	A
2 - Inner Relief Road (S)	356	111	1723	0.207	356	0.3	2.897	A
3 - School Link Road	131	275	1428	0.091	130	0.1	3.051	A
4 - Inner Relief Road Extension (N)	620	125	1625	0.381	619	0.7	3.933	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	265	805	1118	0.237	265	0.3	4.637	A
2 - Inner Relief Road (S)	436	135	1707	0.255	436	0.4	3.114	A
3 - School Link Road	160	336	1393	0.115	160	0.1	3.211	A
4 - Inner Relief Road Extension (N)	759	152	1609	0.472	758	1.0	4.648	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	265	807	1118	0.237	265	0.3	4.644	A
2 - Inner Relief Road (S)	436	136	1707	0.255	436	0.4	3.115	A
3 - School Link Road	160	337	1393	0.115	160	0.1	3.211	A
4 - Inner Relief Road Extension (N)	759	153	1609	0.472	759	1.0	4.661	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	217	660	1201	0.180	217	0.2	4.028	A
2 - Inner Relief Road (S)	356	111	1722	0.207	356	0.3	2.899	A
3 - School Link Road	131	275	1428	0.091	131	0.1	3.055	A
4 - Inner Relief Road Extension (N)	620	125	1625	0.381	621	0.7	3.949	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	181	552	1262	0.144	182	0.2	3.666	A
2 - Inner Relief Road (S)	298	93	1734	0.172	298	0.2	2.758	A
3 - School Link Road	109	230	1453	0.075	109	0.1	2.947	A
4 - Inner Relief Road Extension (N)	519	104	1637	0.317	520	0.5	3.548	A

Do Somethig - 2042 DS, 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, 4	4.39	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 segment length (min)
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	155	100.000
2 - Inner Relief Road (S)		✓	765	100.000
3 - School Link Road		✓	216	100.000
4 - Inner Relief Road Extension (N)		✓	282	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	120	35	0
	2 - Inner Relief Road (S)	124	0	108	533
	3 - School Link Road	39	89	0	88
	4 - Inner Relief Road Extension (N)	0	241	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.14	3.50	0.2	A
2 - Inner Relief Road (S)	0.53	4.90	1.3	A
3 - School Link Road	0.23	4.55	0.3	A
4 - Inner Relief Road Extension (N)	0.22	3.36	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	128	306	1401	0.092	128	0.1	3.111	A
2 - Inner Relief Road (S)	634	63	1753	0.361	631	0.6	3.523	A
3 - School Link Road	179	542	1276	0.140	178	0.2	3.604	A
4 - Inner Relief Road Extension (N)	234	208	1576	0.148	233	0.2	2.946	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	153	367	1367	0.112	153	0.1	3.263	A
2 - Inner Relief Road (S)	756	75	1745	0.434	756	0.8	3.999	A
3 - School Link Road	214	649	1216	0.176	213	0.2	3.949	A
4 - Inner Relief Road Extension (N)	279	249	1552	0.180	279	0.2	3.110	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	188	449	1320	0.142	188	0.2	3.496	A
2 - Inner Relief Road (S)	927	92	1734	0.534	925	1.2	4.882	A
3 - School Link Road	262	794	1133	0.231	261	0.3	4.538	A
4 - Inner Relief Road Extension (N)	342	305	1519	0.225	341	0.3	3.362	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	188	449	1320	0.142	188	0.2	3.497	A
2 - Inner Relief Road (S)	927	92	1734	0.534	926	1.3	4.901	A
3 - School Link Road	262	796	1133	0.231	262	0.3	4.546	A
4 - Inner Relief Road Extension (N)	342	305	1518	0.225	342	0.3	3.363	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	153	367	1366	0.112	153	0.1	3.265	A
2 - Inner Relief Road (S)	756	75	1745	0.434	758	0.8	4.019	A
3 - School Link Road	214	651	1215	0.176	214	0.2	3.960	A
4 - Inner Relief Road Extension (N)	279	250	1551	0.180	279	0.2	3.115	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	128	308	1400	0.092	128	0.1	3.116	A
2 - Inner Relief Road (S)	634	63	1753	0.361	634	0.6	3.546	A
3 - School Link Road	179	545	1275	0.140	179	0.2	3.614	A
4 - Inner Relief Road Extension (N)	234	209	1575	0.148	234	0.2	2.951	A

Do Somethig - 2042 DS, 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, 4	4.23	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 segment length (min)
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	227	100.000
2 - Inner Relief Road (S)		✓	374	100.000
3 - School Link Road		✓	133	100.000
4 - Inner Relief Road Extension (N)		✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	0	186	41	0
	2 - Inner Relief Road (S)	57	0	84	233
	3 - School Link Road	32	39	0	62
	4 - Inner Relief Road Extension (N)	0	582	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road	4 - Inner Relief Road Extension (N)
From	1 - Oak Drive	10	10	10	10
	2 - Inner Relief Road (S)	10	10	10	10
	3 - School Link Road	10	10	10	10
	4 - Inner Relief Road Extension (N)	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.25	4.80	0.4	A
2 - Inner Relief Road (S)	0.27	3.16	0.4	A
3 - School Link Road	0.12	3.24	0.1	A
4 - Inner Relief Road Extension (N)	0.49	4.86	1.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	188	572	1251	0.150	187	0.2	3.722	A
2 - Inner Relief Road (S)	310	93	1734	0.179	309	0.2	2.778	A
3 - School Link Road	110	239	1448	0.076	110	0.1	2.959	A
4 - Inner Relief Road Extension (N)	542	106	1637	0.331	539	0.5	3.601	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	224	685	1187	0.189	224	0.3	4.113	A
2 - Inner Relief Road (S)	370	112	1722	0.215	370	0.3	2.928	A
3 - School Link Road	132	287	1421	0.093	131	0.1	3.070	A
4 - Inner Relief Road Extension (N)	647	126	1624	0.398	646	0.7	4.045	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	275	838	1100	0.250	274	0.4	4.795	A
2 - Inner Relief Road (S)	453	137	1706	0.265	453	0.4	3.158	A
3 - School Link Road	161	351	1385	0.116	161	0.1	3.235	A
4 - Inner Relief Road Extension (N)	792	155	1607	0.493	791	1.1	4.841	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	275	839	1099	0.250	275	0.4	4.803	A
2 - Inner Relief Road (S)	453	137	1706	0.265	453	0.4	3.159	A
3 - School Link Road	161	351	1384	0.116	161	0.1	3.236	A
4 - Inner Relief Road Extension (N)	792	155	1607	0.493	792	1.1	4.856	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	224	687	1186	0.189	225	0.3	4.125	A
2 - Inner Relief Road (S)	370	112	1722	0.215	370	0.3	2.930	A
3 - School Link Road	132	287	1421	0.093	132	0.1	3.073	A
4 - Inner Relief Road Extension (N)	647	127	1624	0.398	648	0.7	4.062	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	188	575	1249	0.151	188	0.2	3.733	A
2 - Inner Relief Road (S)	310	94	1733	0.179	310	0.2	2.782	A
3 - School Link Road	110	240	1447	0.076	110	0.1	2.961	A
4 - Inner Relief Road Extension (N)	542	106	1636	0.331	542	0.5	3.624	A

Junctions 9									
ARCADY 9 - Roundabout Module									
Version: 9.5.2.1013									
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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: Junction 4 R410 Nass Road DN.j9
 Path: G:\2023\p230199\calcs\arcady
 Report generation date: 09/08/2024 15:34:52

»Do Nothing - 2027 DN, AM
 »Do Nothing - 2027 DN, PM
 »Do Nothing - 2032 DN, AM
 »Do Nothing - 2032 DN, PM
 »Do Nothing - 2042 DN, AM
 »Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
Arm 1	D1	1.4	6.26	0.58	A	D2	0.4	3.78	0.29	A
Arm 2		0.3	5.00	0.23	A		0.5	4.73	0.33	A
Arm 3		0.3	3.27	0.25	A		1.0	5.06	0.50	A
	Do Nothing - 2032 DN									
Arm 1	D3	1.5	6.70	0.61	A	D4	0.4	3.85	0.30	A
Arm 2		0.3	5.15	0.24	A		0.5	4.83	0.34	A
Arm 3		0.3	3.32	0.26	A		1.1	5.32	0.52	A
	Do Nothing - 2042 DN									
Arm 1	D5	1.8	7.25	0.64	A	D6	0.5	3.94	0.31	A
Arm 2		0.3	5.34	0.26	A		0.6	4.98	0.36	A
Arm 3		0.4	3.38	0.27	A		1.2	5.67	0.55	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\santosl
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Nothing	100.000

Do Nothing - 2027 DN, 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		1, 2, 3	5.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R410 Nass Rd (SE)	
2	R410 Nass Rd (NW)	
3	Blessington Inner Relief Road (NE)	

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
1	4.01	5.84	5.5	20.0	60.0	49.0	
2	3.97	5.38	6.2	10.0	60.0	62.0	
3	4.15	5.80	14.9	15.0	60.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.485	1386
2	0.432	1218
3	0.517	1544

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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	726	100.000
2		✓	195	100.000
3		✓	327	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	130	596
	2	145	0	50
	3	306	21	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.58	6.26	1.4	A
2	0.23	5.00	0.3	A
3	0.25	3.27	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	547	16	1378	0.397	544	0.7	4.303	A
2	147	447	1026	0.143	146	0.2	4.091	A
3	246	109	1487	0.166	245	0.2	2.897	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	653	19	1377	0.474	652	0.9	4.960	A
2	175	535	987	0.178	175	0.2	4.431	A
3	294	130	1476	0.199	294	0.2	3.043	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	799	23	1375	0.582	797	1.4	6.216	A
2	215	655	936	0.229	214	0.3	4.988	A
3	360	159	1461	0.246	360	0.3	3.268	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	799	23	1375	0.582	799	1.4	6.257	A
2	215	656	935	0.230	215	0.3	4.997	A
3	360	160	1461	0.246	360	0.3	3.268	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	653	19	1377	0.474	655	0.9	5.000	A
2	175	537	986	0.178	176	0.2	4.443	A
3	294	131	1476	0.199	294	0.2	3.048	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	547	16	1378	0.397	548	0.7	4.341	A
2	147	450	1024	0.143	147	0.2	4.104	A
3	246	109	1487	0.166	246	0.2	2.903	A

Do Nothing - 2027 DN, PM

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		1, 2, 3	4.64	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 segment length (min)
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	350	100.000
2		✓	337	100.000
3		✓	640	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	167	183
	2	225	0	112
	3	548	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.29	3.78	0.4	A
2	0.33	4.73	0.5	A
3	0.50	5.06	1.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	263	69	1352	0.195	263	0.2	3.300	A
2	254	137	1159	0.219	253	0.3	3.967	A
3	482	169	1457	0.331	480	0.5	3.678	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	315	83	1346	0.234	314	0.3	3.490	A
2	303	164	1147	0.264	303	0.4	4.261	A
3	575	202	1439	0.400	575	0.7	4.160	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	385	101	1337	0.288	385	0.4	3.780	A
2	371	201	1131	0.328	371	0.5	4.728	A
3	705	247	1416	0.498	703	1.0	5.043	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	385	101	1337	0.288	385	0.4	3.783	A
2	371	201	1131	0.328	371	0.5	4.734	A
3	705	248	1416	0.498	705	1.0	5.062	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	315	83	1346	0.234	315	0.3	3.493	A
2	303	165	1147	0.264	303	0.4	4.269	A
3	575	203	1439	0.400	577	0.7	4.181	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	263	69	1352	0.195	264	0.2	3.310	A
2	254	138	1159	0.219	254	0.3	3.981	A
3	482	170	1456	0.331	483	0.5	3.699	A

Do Nothing - 2032 DN, 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		1, 2, 3	5.57	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 segment length (min)
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	760	100.000
2		✓	201	100.000
3		✓	340	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	134	626
	2	149	0	52
	3	318	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	6.70	1.5	A
2	0.24	5.15	0.3	A
3	0.26	3.32	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	572	17	1378	0.415	569	0.7	4.438	A
2	151	469	1016	0.149	151	0.2	4.157	A
3	256	112	1486	0.172	255	0.2	2.923	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	683	20	1376	0.496	682	1.0	5.178	A
2	181	562	976	0.185	180	0.2	4.525	A
3	306	134	1475	0.207	305	0.3	3.079	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	837	24	1374	0.609	835	1.5	6.645	A
2	221	687	922	0.240	221	0.3	5.136	A
3	374	164	1459	0.257	374	0.3	3.318	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	837	24	1374	0.609	837	1.5	6.697	A
2	221	689	921	0.240	221	0.3	5.146	A
3	374	164	1459	0.257	374	0.3	3.318	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	683	20	1376	0.496	685	1.0	5.229	A
2	181	565	975	0.185	181	0.2	4.540	A
3	306	134	1474	0.207	306	0.3	3.083	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	572	17	1378	0.415	573	0.7	4.481	A
2	151	472	1014	0.149	152	0.2	4.172	A
3	256	112	1486	0.172	256	0.2	2.928	A

Do Nothing - 2032 DN, PM

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		1, 2, 3	4.81	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 segment length (min)
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	364	100.000
2		✓	347	100.000
3		✓	668	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	172	192
	2	232	0	115
	3	574	94	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.85	0.4	A
2	0.34	4.83	0.5	A
3	0.52	5.32	1.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	274	70	1352	0.203	273	0.3	3.334	A
2	261	144	1156	0.226	260	0.3	4.013	A
3	503	174	1454	0.346	501	0.5	3.770	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	327	84	1345	0.243	327	0.3	3.536	A
2	312	172	1144	0.273	312	0.4	4.323	A
3	601	208	1436	0.418	600	0.7	4.301	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	401	103	1336	0.300	400	0.4	3.847	A
2	382	211	1127	0.339	382	0.5	4.825	A
3	735	255	1412	0.521	734	1.1	5.298	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	401	103	1336	0.300	401	0.4	3.850	A
2	382	211	1127	0.339	382	0.5	4.832	A
3	735	255	1412	0.521	735	1.1	5.323	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	327	85	1345	0.243	328	0.3	3.543	A
2	312	173	1144	0.273	312	0.4	4.335	A
3	601	209	1436	0.418	602	0.7	4.324	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	274	71	1351	0.203	274	0.3	3.345	A
2	261	145	1156	0.226	262	0.3	4.028	A
3	503	175	1453	0.346	504	0.5	3.793	A

Do Nothing - 2042 DN, 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		1, 2, 3	5.95	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 segment length (min)
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	797	100.000
2		✓	211	100.000
3		✓	355	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	141	656
	2	157	0	54
	3	332	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.64	7.25	1.8	A
2	0.26	5.34	0.3	A
3	0.27	3.38	0.4	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	600	17	1377	0.436	597	0.8	4.596	A
2	159	491	1006	0.158	158	0.2	4.241	A
3	267	118	1483	0.180	266	0.2	2.958	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	716	21	1376	0.521	715	1.1	5.440	A
2	190	589	964	0.197	189	0.2	4.646	A
3	319	141	1471	0.217	319	0.3	3.125	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	878	25	1373	0.639	875	1.7	7.180	A
2	232	720	907	0.256	232	0.3	5.325	A
3	391	173	1454	0.269	391	0.4	3.383	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	878	25	1373	0.639	877	1.8	7.254	A
2	232	722	907	0.256	232	0.3	5.338	A
3	391	173	1454	0.269	391	0.4	3.384	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	716	21	1376	0.521	719	1.1	5.503	A
2	190	592	963	0.197	190	0.2	4.660	A
3	319	141	1471	0.217	319	0.3	3.130	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	600	17	1377	0.436	601	0.8	4.648	A
2	159	495	1005	0.158	159	0.2	4.258	A
3	267	118	1482	0.180	267	0.2	2.965	A

Do Nothing - 2042 DN, PM

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		1, 2, 3	5.04	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 segment length (min)
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	380	100.000
2		✓	364	100.000
3		✓	700	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	181	199
	2	243	0	121
	3	601	99	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.31	3.94	0.5	A
2	0.36	4.98	0.6	A
3	0.55	5.67	1.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	286	74	1350	0.212	285	0.3	3.378	A
2	274	149	1154	0.238	273	0.3	4.080	A
3	527	182	1450	0.364	525	0.6	3.883	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	89	1343	0.254	341	0.3	3.595	A
2	327	179	1141	0.287	327	0.4	4.419	A
3	629	218	1431	0.440	628	0.8	4.481	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	418	109	1333	0.314	418	0.5	3.932	A
2	401	219	1124	0.357	400	0.5	4.970	A
3	771	267	1406	0.548	769	1.2	5.640	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	418	109	1333	0.314	418	0.5	3.936	A
2	401	219	1124	0.357	401	0.6	4.979	A
3	771	268	1405	0.548	771	1.2	5.671	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	342	89	1342	0.254	342	0.3	3.599	A
2	327	179	1141	0.287	328	0.4	4.432	A
3	629	219	1431	0.440	631	0.8	4.510	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	286	75	1350	0.212	286	0.3	3.386	A
2	274	150	1154	0.238	274	0.3	4.098	A
3	527	183	1449	0.364	528	0.6	3.911	A

Junctions 9									
ARCADY 9 - Roundabout Module									
Version: 9.5.2.1013 © Copyright TRL Limited, 2019									
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Filename: Junction 4 R410 Nass Road DS.j9
Path: G:\2023\p230199\calcs\arcady
Report generation date: 09/08/2024 15:38:10

- »Do Something - 2027 DS, AM
- »Do Something - 2027 DS, PM
- »Do Something - 2032 DS, AM
- »Do Something - 2032 DS, PM
- »Do Something - 2042 DS, AM
- »Do Something - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Something - 2027 DS									
Arm 1	D1	1.4	6.39	0.59	A	D2	0.4	3.87	0.30	A
Arm 2		0.3	5.03	0.23	A		0.5	4.79	0.33	A
Arm 3		0.3	3.32	0.26	A		1.0	5.16	0.51	A
	Do Something - 2032 DS									
Arm 1	D3	1.6	6.84	0.62	A	D4	0.5	3.94	0.32	A
Arm 2		0.3	5.18	0.24	A		0.5	4.89	0.34	A
Arm 3		0.4	3.38	0.27	A		1.1	5.43	0.53	A
	Do Something - 2042 DS									
Arm 1	D5	1.8	7.44	0.65	A	D6	0.5	4.03	0.33	A
Arm 2		0.3	5.38	0.26	A		0.6	5.04	0.36	A
Arm 3		0.4	3.44	0.28	A		1.3	5.79	0.56	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\santosl
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Something - 2027 DS, 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		1, 2, 3	5.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R410 Nass Rd (SE)	
2	R410 Nass Rd (NW)	
3	Blessington Inner Relief Road (NE)	

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
1	4.01	5.84	5.5	20.0	60.0	49.0	
2	3.97	5.38	6.2	10.0	60.0	62.0	
3	4.15	5.80	14.9	15.0	60.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.485	1386
2	0.432	1218
3	0.517	1544

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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	737	100.000
2		✓	195	100.000
3		✓	343	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	130	607
	2	145	0	50
	3	322	21	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.59	6.39	1.4	A
2	0.23	5.03	0.3	A
3	0.26	3.32	0.3	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	555	16	1378	0.403	552	0.7	4.345	A
2	147	455	1022	0.144	146	0.2	4.108	A
3	258	109	1488	0.174	257	0.2	2.925	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	663	19	1377	0.481	662	0.9	5.027	A
2	175	545	983	0.178	175	0.2	4.454	A
3	308	130	1476	0.209	308	0.3	3.081	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	811	23	1375	0.590	809	1.4	6.347	A
2	215	667	931	0.231	214	0.3	5.024	A
3	378	159	1461	0.258	377	0.3	3.321	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	811	23	1375	0.590	811	1.4	6.392	A
2	215	668	930	0.231	215	0.3	5.033	A
3	378	160	1461	0.258	378	0.3	3.321	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	663	19	1377	0.481	665	0.9	5.070	A
2	175	547	982	0.179	176	0.2	4.465	A
3	308	131	1476	0.209	309	0.3	3.086	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	555	16	1378	0.403	556	0.7	4.383	A
2	147	458	1021	0.144	147	0.2	4.122	A
3	258	109	1487	0.174	258	0.2	2.929	A

Do Something - 2027 DS, PM

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		1, 2, 3	4.72	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 segment length (min)
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	369	100.000
2		✓	337	100.000
3		✓	652	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	167	202
	2	225	0	112
	3	560	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.87	0.4	A
2	0.33	4.79	0.5	A
3	0.51	5.16	1.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	278	69	1352	0.205	277	0.3	3.344	A
2	254	152	1153	0.220	253	0.3	3.994	A
3	491	169	1457	0.337	489	0.5	3.712	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	332	83	1346	0.247	331	0.3	3.549	A
2	303	181	1140	0.266	303	0.4	4.300	A
3	586	202	1439	0.407	585	0.7	4.212	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	406	101	1337	0.304	406	0.4	3.865	A
2	371	222	1122	0.331	371	0.5	4.785	A
3	718	247	1416	0.507	717	1.0	5.139	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	406	101	1337	0.304	406	0.4	3.869	A
2	371	222	1122	0.331	371	0.5	4.791	A
3	718	248	1416	0.507	718	1.0	5.158	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	332	83	1346	0.247	332	0.3	3.555	A
2	303	182	1140	0.266	303	0.4	4.306	A
3	586	203	1439	0.407	587	0.7	4.235	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	278	69	1352	0.205	278	0.3	3.354	A
2	254	152	1153	0.220	254	0.3	4.007	A
3	491	170	1456	0.337	492	0.5	3.734	A

Do Something - 2032 DS, 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		1, 2, 3	5.66	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 segment length (min)
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	770	100.000
2		✓	201	100.000
3		✓	357	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	134	636
	2	149	0	52
	3	335	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	6.84	1.6	A
2	0.24	5.18	0.3	A
3	0.27	3.38	0.4	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	580	17	1378	0.421	577	0.7	4.478	A
2	151	476	1013	0.149	151	0.2	4.172	A
3	269	112	1486	0.181	268	0.2	2.954	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	692	20	1376	0.503	691	1.0	5.246	A
2	181	571	972	0.186	180	0.2	4.547	A
3	321	134	1475	0.218	321	0.3	3.119	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	848	24	1374	0.617	845	1.6	6.781	A
2	221	698	917	0.241	221	0.3	5.171	A
3	393	164	1459	0.269	393	0.4	3.376	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	848	24	1374	0.617	848	1.6	6.837	A
2	221	700	916	0.242	221	0.3	5.181	A
3	393	164	1459	0.269	393	0.4	3.376	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	692	20	1376	0.503	695	1.0	5.300	A
2	181	574	971	0.186	181	0.2	4.562	A
3	321	134	1474	0.218	321	0.3	3.124	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	580	17	1378	0.421	581	0.7	4.525	A
2	151	480	1011	0.150	152	0.2	4.190	A
3	269	112	1486	0.181	269	0.2	2.961	A

Do Something - 2032 DS, PM

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		1, 2, 3	4.89	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 segment length (min)
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	383	100.000
2		✓	347	100.000
3		✓	680	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	172	211
	2	232	0	115
	3	586	94	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.32	3.94	0.5	A
2	0.34	4.89	0.5	A
3	0.53	5.43	1.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	70	1352	0.213	287	0.3	3.379	A
2	261	158	1150	0.227	260	0.3	4.041	A
3	512	174	1454	0.352	510	0.5	3.806	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	84	1345	0.256	344	0.3	3.597	A
2	312	190	1136	0.274	312	0.4	4.362	A
3	611	208	1436	0.426	611	0.7	4.358	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	422	103	1336	0.316	421	0.5	3.935	A
2	382	232	1118	0.342	381	0.5	4.884	A
3	749	255	1412	0.530	747	1.1	5.404	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	422	103	1336	0.316	422	0.5	3.939	A
2	382	232	1118	0.342	382	0.5	4.891	A
3	749	255	1412	0.530	749	1.1	5.429	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	85	1345	0.256	345	0.3	3.603	A
2	312	190	1136	0.275	312	0.4	4.374	A
3	611	209	1436	0.426	613	0.7	4.382	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	71	1351	0.213	289	0.3	3.390	A
2	261	159	1150	0.227	262	0.3	4.056	A
3	512	175	1453	0.352	513	0.5	3.832	A

Do Something - 2042 DS, 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		1, 2, 3	6.06	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 segment length (min)
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	808	100.000
2		✓	211	100.000
3		✓	372	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		1	2	3
	1	0	141	667
	2	157	0	54
	3	349	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.65	7.44	1.8	A
2	0.26	5.38	0.3	A
3	0.28	3.44	0.4	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	608	17	1377	0.442	605	0.8	4.643	A
2	159	500	1003	0.158	158	0.2	4.259	A
3	280	118	1483	0.189	279	0.2	2.990	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	726	21	1376	0.528	725	1.1	5.521	A
2	190	599	960	0.198	189	0.2	4.671	A
3	334	141	1471	0.227	334	0.3	3.167	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	890	25	1373	0.648	887	1.8	7.354	A
2	232	732	902	0.257	232	0.3	5.366	A
3	410	173	1454	0.282	409	0.4	3.444	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	890	25	1373	0.648	890	1.8	7.436	A
2	232	734	901	0.258	232	0.3	5.380	A
3	410	173	1454	0.282	410	0.4	3.444	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	726	21	1376	0.528	729	1.1	5.592	A
2	190	602	958	0.198	190	0.2	4.687	A
3	334	141	1471	0.227	335	0.3	3.169	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	608	17	1377	0.442	610	0.8	4.698	A
2	159	503	1001	0.159	159	0.2	4.276	A
3	280	118	1482	0.189	280	0.2	2.994	A

Do Something - 2042 DS, PM

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		1, 2, 3	5.13	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 segment length (min)
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	399	100.000
2		✓	364	100.000
3		✓	712	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		1	2	3
	1	0	181	218
	2	243	0	121
	3	613	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1	2	3
	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.33	4.03	0.5	A
2	0.36	5.04	0.6	A
3	0.56	5.79	1.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	74	1350	0.223	299	0.3	3.424	A
2	274	163	1148	0.239	273	0.3	4.109	A
3	536	182	1450	0.370	534	0.6	3.922	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	359	89	1343	0.267	358	0.4	3.657	A
2	327	196	1134	0.289	327	0.4	4.459	A
3	640	218	1431	0.447	639	0.8	4.542	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	439	109	1333	0.330	439	0.5	4.024	A
2	401	240	1115	0.360	400	0.6	5.033	A
3	784	267	1406	0.558	782	1.2	5.758	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	439	109	1333	0.330	439	0.5	4.028	A
2	401	240	1115	0.360	401	0.6	5.042	A
3	784	268	1405	0.558	784	1.3	5.791	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	359	89	1342	0.267	359	0.4	3.665	A
2	327	196	1134	0.289	328	0.4	4.471	A
3	640	219	1431	0.447	642	0.8	4.573	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	75	1350	0.223	301	0.3	3.435	A
2	274	164	1147	0.239	274	0.3	4.125	A
3	536	183	1449	0.370	537	0.6	3.950	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 1 Inner Relief Road _ Link Road.j9
Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis
Report generation date: 09/08/2024 16:33:13

»Do Nothing - 2027 DN, AM
 »Do Nothing - 2027 DN, PM
 »Do Nothing - 2032 DN, AM
 »Do Nothing - 2032 DN, PM
 »Do Nothing - 2042 DN, AM
 »Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
1 - Link Rd (SE)	D1	0.1	3.16	0.11	A	D2	0.2	3.55	0.16	A
2 - IRR (W)		0.6	4.20	0.37	A		0.2	3.15	0.16	A
3 - IRR (NE)		0.2	3.03	0.17	A		0.4	3.34	0.26	A
	Do Nothing - 2032 DN									
1 - Link Rd (SE)	D3	0.1	3.19	0.11	A	D4	0.2	3.60	0.16	A
2 - IRR (W)		0.7	4.32	0.39	A		0.2	3.18	0.17	A
3 - IRR (NE)		0.2	3.06	0.18	A		0.4	3.39	0.28	A
	Do Nothing - 2042 DN									
1 - Link Rd (SE)	D5	0.1	3.22	0.12	A	D6	0.2	3.67	0.17	A
2 - IRR (W)		0.7	4.45	0.41	A		0.2	3.20	0.18	A
3 - IRR (NE)		0.2	3.10	0.18	A		0.4	3.46	0.29	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

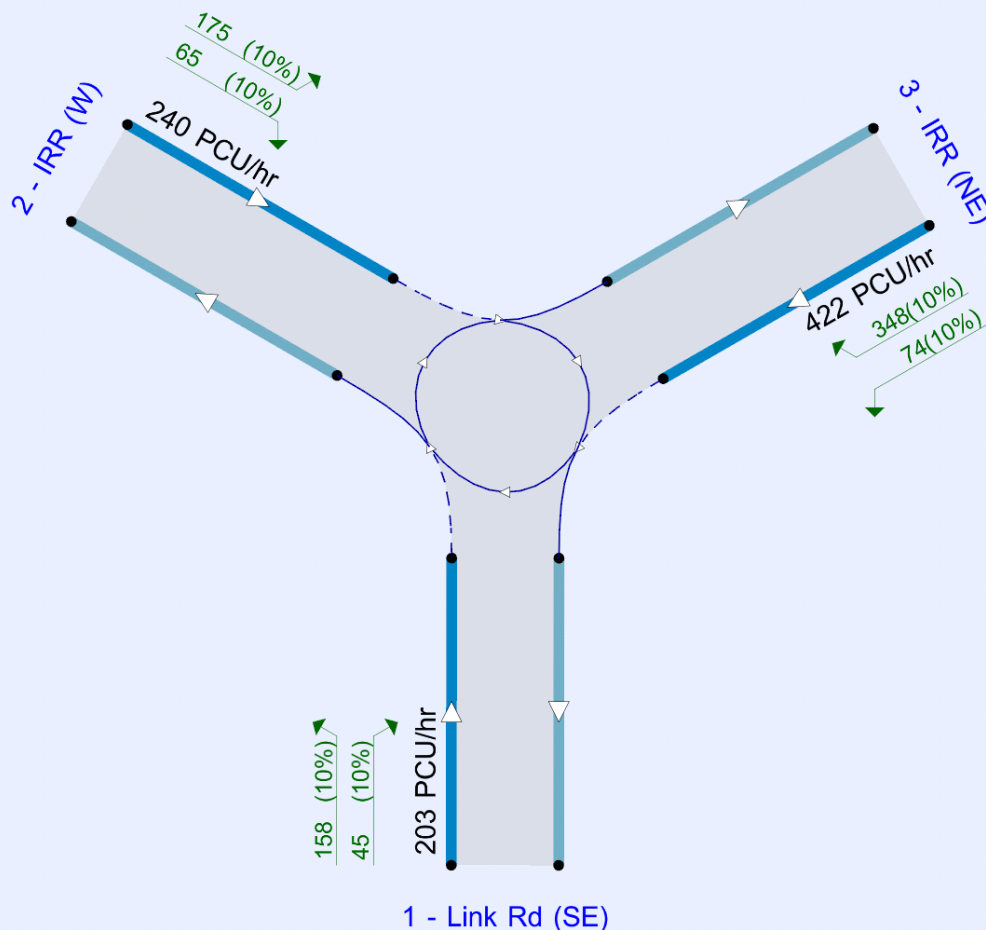
File summary

File Description

Title	Blessington LDR
Location	Blessington, Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Wicklow County Council
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

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	2027 DN	AM	ONE HOUR	08:15	09:45	15	✓
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15	✓
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15	✓
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15	✓
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15	✓
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Do Nothing - 2027 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Link Rd (SE)	
2	IRR (W)	
3	IRR (NE)	

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
1 - Link Rd (SE)	3.70	6.80	14.0	19.0	48.0	56.0	
2 - IRR (W)	3.70	7.00	15.0	18.0	48.0	59.0	
3 - IRR (NE)	3.80	7.30	19.0	13.0	48.0	49.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Link Rd (SE)	0.555	1516
2 - IRR (W)	0.553	1527
3 - IRR (NE)	0.581	1651

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	2027 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	139	100.000
2 - IRR (W)		ONE HOUR	✓	503	100.000
3 - IRR (NE)		ONE HOUR	✓	241	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	91	48
	2 - IRR (W)	123	0	380
	3 - IRR (NE)	58	183	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.11	3.16	0.1	A	128	191
2 - IRR (W)	0.37	4.20	0.6	A	462	692
3 - IRR (NE)	0.17	3.03	0.2	A	221	332

Main Results for each time segment

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 - Link Rd (SE)	105	26	137	1440	0.073	104	136	0.0	0.1	2.965	A
2 - IRR (W)	379	95	36	1507	0.251	377	206	0.0	0.4	3.501	A
3 - IRR (NE)	181	45	92	1597	0.114	181	321	0.0	0.1	2.794	A

08:30 - 08:45

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 - Link Rd (SE)	125	31	164	1425	0.088	125	163	0.1	0.1	3.046	A
2 - IRR (W)	452	113	43	1503	0.301	452	246	0.4	0.5	3.764	A
3 - IRR (NE)	217	54	110	1587	0.137	217	384	0.1	0.2	2.889	A

08:45 - 09:00

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 - Link Rd (SE)	153	38	201	1404	0.109	153	199	0.1	0.1	3.164	A
2 - IRR (W)	554	138	53	1498	0.370	553	301	0.5	0.6	4.190	A
3 - IRR (NE)	265	66	135	1572	0.169	265	471	0.2	0.2	3.029	A

09:00 - 09:15

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 - Link Rd (SE)	153	38	201	1404	0.109	153	199	0.1	0.1	3.164	A
2 - IRR (W)	554	138	53	1498	0.370	554	302	0.6	0.6	4.195	A
3 - IRR (NE)	265	66	135	1572	0.169	265	471	0.2	0.2	3.029	A

09:15 - 09:30

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 - Link Rd (SE)	125	31	165	1424	0.088	125	163	0.1	0.1	3.049	A
2 - IRR (W)	452	113	43	1503	0.301	453	247	0.6	0.5	3.772	A
3 - IRR (NE)	217	54	111	1587	0.137	217	385	0.2	0.2	2.890	A

09:30 - 09:45

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 - Link Rd (SE)	105	26	138	1439	0.073	105	136	0.1	0.1	2.968	A
2 - IRR (W)	379	95	36	1507	0.251	379	206	0.5	0.4	3.514	A
3 - IRR (NE)	181	45	93	1597	0.114	182	323	0.2	0.1	2.799	A

Do Nothing - 2027 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.33	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 segment length (min)	Run automatically
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	186	100.000
2 - IRR (W)		ONE HOUR	✓	222	100.000
3 - IRR (NE)		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	144	42
	2 - IRR (W)	59	0	163
	3 - IRR (NE)	69	319	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.16	3.55	0.2	A	171	256
2 - IRR (W)	0.16	3.15	0.2	A	204	306
3 - IRR (NE)	0.26	3.34	0.4	A	356	534

Main Results for each time segment

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 - Link Rd (SE)	140	35	239	1383	0.101	140	96	0.0	0.1	3.182	A
2 - IRR (W)	167	42	32	1509	0.111	167	347	0.0	0.1	2.947	A
3 - IRR (NE)	292	73	44	1625	0.180	291	154	0.0	0.2	2.967	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 - Link Rd (SE)	167	42	287	1357	0.123	167	115	0.1	0.2	3.327	A
2 - IRR (W)	200	50	38	1506	0.133	199	416	0.1	0.2	3.030	A
3 - IRR (NE)	349	87	53	1620	0.215	349	184	0.2	0.3	3.114	A

17:30 - 17:45

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 - Link Rd (SE)	205	51	351	1321	0.155	205	141	0.2	0.2	3.546	A
2 - IRR (W)	244	61	46	1501	0.163	244	509	0.2	0.2	3.150	A
3 - IRR (NE)	427	107	65	1613	0.265	427	226	0.3	0.4	3.338	A

17:45 - 18:00

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 - Link Rd (SE)	205	51	351	1321	0.155	205	141	0.2	0.2	3.546	A
2 - IRR (W)	244	61	46	1501	0.163	244	510	0.2	0.2	3.150	A
3 - IRR (NE)	427	107	65	1613	0.265	427	226	0.4	0.4	3.338	A

18:00 - 18:15

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 - Link Rd (SE)	167	42	287	1357	0.123	167	115	0.2	0.2	3.332	A
2 - IRR (W)	200	50	38	1506	0.133	200	417	0.2	0.2	3.031	A
3 - IRR (NE)	349	87	53	1620	0.215	349	184	0.4	0.3	3.118	A

18:15 - 18:30

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 - Link Rd (SE)	140	35	240	1383	0.101	140	96	0.2	0.1	3.189	A
2 - IRR (W)	167	42	32	1509	0.111	167	349	0.2	0.1	2.950	A
3 - IRR (NE)	292	73	44	1625	0.180	292	154	0.3	0.2	2.973	A

Do Nothing - 2032 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.80	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 segment length (min)	Run automatically
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	145	100.000
2 - IRR (W)		ONE HOUR	✓	526	100.000
3 - IRR (NE)		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	95	50
	2 - IRR (W)	129	0	397
	3 - IRR (NE)	61	189	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.11	3.19	0.1	A	133	200
2 - IRR (W)	0.39	4.32	0.7	A	483	724
3 - IRR (NE)	0.18	3.06	0.2	A	229	344

Main Results for each time segment

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 - Link Rd (SE)	109	27	142	1437	0.076	109	143	0.0	0.1	2.981	A
2 - IRR (W)	396	99	38	1506	0.263	394	213	0.0	0.4	3.558	A
3 - IRR (NE)	188	47	97	1595	0.118	188	335	0.0	0.1	2.812	A

08:30 - 08:45

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 - Link Rd (SE)	130	33	170	1422	0.092	130	171	0.1	0.1	3.066	A
2 - IRR (W)	473	118	45	1502	0.315	472	255	0.4	0.5	3.844	A
3 - IRR (NE)	225	56	116	1584	0.142	225	401	0.1	0.2	2.913	A

08:45 - 09:00

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 - Link Rd (SE)	160	40	208	1400	0.114	160	209	0.1	0.1	3.190	A
2 - IRR (W)	579	145	55	1496	0.387	578	312	0.5	0.7	4.310	A
3 - IRR (NE)	275	69	142	1568	0.175	275	492	0.2	0.2	3.061	A

09:00 - 09:15

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 - Link Rd (SE)	160	40	208	1400	0.114	160	209	0.1	0.1	3.190	A
2 - IRR (W)	579	145	55	1496	0.387	579	313	0.7	0.7	4.317	A
3 - IRR (NE)	275	69	142	1568	0.176	275	492	0.2	0.2	3.061	A

09:15 - 09:30

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 - Link Rd (SE)	130	33	170	1422	0.092	130	171	0.1	0.1	3.069	A
2 - IRR (W)	473	118	45	1502	0.315	474	256	0.7	0.5	3.855	A
3 - IRR (NE)	225	56	116	1583	0.142	225	402	0.2	0.2	2.917	A

09:30 - 09:45

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 - Link Rd (SE)	109	27	142	1437	0.076	109	143	0.1	0.1	2.982	A
2 - IRR (W)	396	99	38	1506	0.263	396	214	0.5	0.4	3.569	A
3 - IRR (NE)	188	47	97	1594	0.118	188	337	0.2	0.1	2.816	A

Do Nothing - 2032 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.38	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 segment length (min)	Run automatically
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	194	100.000
2 - IRR (W)		ONE HOUR	✓	231	100.000
3 - IRR (NE)		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	151	43
	2 - IRR (W)	62	0	169
	3 - IRR (NE)	71	333	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.16	3.60	0.2	A	178	267
2 - IRR (W)	0.17	3.18	0.2	A	212	318
3 - IRR (NE)	0.28	3.39	0.4	A	371	556

Main Results for each time segment

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 - Link Rd (SE)	146	37	250	1377	0.106	146	100	0.0	0.1	3.213	A
2 - IRR (W)	174	43	32	1509	0.115	173	363	0.0	0.1	2.963	A
3 - IRR (NE)	304	76	47	1624	0.187	303	159	0.0	0.3	2.997	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 - Link Rd (SE)	174	44	299	1350	0.129	174	119	0.1	0.2	3.367	A
2 - IRR (W)	208	52	39	1505	0.138	208	435	0.1	0.2	3.050	A
3 - IRR (NE)	363	91	56	1618	0.224	363	190	0.3	0.3	3.153	A

17:30 - 17:45

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 - Link Rd (SE)	214	53	366	1313	0.163	213	146	0.2	0.2	3.602	A
2 - IRR (W)	254	64	47	1501	0.169	254	532	0.2	0.2	3.176	A
3 - IRR (NE)	445	111	68	1611	0.276	444	233	0.3	0.4	3.394	A

17:45 - 18:00

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 - Link Rd (SE)	214	53	367	1312	0.163	214	146	0.2	0.2	3.602	A
2 - IRR (W)	254	64	47	1501	0.169	254	533	0.2	0.2	3.176	A
3 - IRR (NE)	445	111	68	1611	0.276	445	233	0.4	0.4	3.394	A

18:00 - 18:15

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 - Link Rd (SE)	174	44	300	1350	0.129	175	120	0.2	0.2	3.372	A
2 - IRR (W)	208	52	39	1505	0.138	208	436	0.2	0.2	3.054	A
3 - IRR (NE)	363	91	56	1618	0.224	364	191	0.4	0.3	3.158	A

18:15 - 18:30

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 - Link Rd (SE)	146	37	251	1377	0.106	146	100	0.2	0.1	3.217	A
2 - IRR (W)	174	43	32	1509	0.115	174	365	0.2	0.1	2.968	A
3 - IRR (NE)	304	76	47	1624	0.187	304	160	0.3	0.3	3.001	A

Do Nothing - 2042 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.89	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 segment length (min)	Run automatically
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	150	100.000
2 - IRR (W)		ONE HOUR	✓	551	100.000
3 - IRR (NE)		ONE HOUR	✓	260	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	100	50
	2 - IRR (W)	135	0	416
	3 - IRR (NE)	63	197	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.12	3.22	0.1	A	138	206
2 - IRR (W)	0.41	4.45	0.7	A	506	758
3 - IRR (NE)	0.18	3.10	0.2	A	239	358

Main Results for each time segment

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 - Link Rd (SE)	113	28	148	1434	0.079	113	149	0.0	0.1	2.997	A
2 - IRR (W)	415	104	38	1506	0.275	413	223	0.0	0.4	3.619	A
3 - IRR (NE)	196	49	101	1592	0.123	195	349	0.0	0.2	2.833	A

08:30 - 08:45

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 - Link Rd (SE)	135	34	177	1418	0.095	135	178	0.1	0.1	3.086	A
2 - IRR (W)	495	124	45	1502	0.330	495	267	0.4	0.5	3.930	A
3 - IRR (NE)	234	58	121	1580	0.148	234	419	0.2	0.2	2.939	A

08:45 - 09:00

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 - Link Rd (SE)	165	41	217	1396	0.118	165	218	0.1	0.1	3.217	A
2 - IRR (W)	607	152	55	1496	0.405	606	327	0.5	0.7	4.443	A
3 - IRR (NE)	286	72	148	1565	0.183	286	512	0.2	0.2	3.097	A

09:00 - 09:15

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 - Link Rd (SE)	165	41	217	1396	0.118	165	218	0.1	0.1	3.217	A
2 - IRR (W)	607	152	55	1496	0.405	607	327	0.7	0.7	4.450	A
3 - IRR (NE)	286	72	149	1565	0.183	286	513	0.2	0.2	3.097	A

09:15 - 09:30

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 - Link Rd (SE)	135	34	177	1418	0.095	135	178	0.1	0.1	3.087	A
2 - IRR (W)	495	124	45	1502	0.330	496	267	0.7	0.5	3.941	A
3 - IRR (NE)	234	58	122	1580	0.148	234	420	0.2	0.2	2.943	A

09:30 - 09:45

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 - Link Rd (SE)	113	28	148	1434	0.079	113	149	0.1	0.1	3.000	A
2 - IRR (W)	415	104	38	1506	0.275	415	224	0.5	0.4	3.634	A
3 - IRR (NE)	196	49	102	1592	0.123	196	351	0.2	0.2	2.836	A

Do Nothing - 2042 DN, 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	IRR Junction 4	Standard Roundabout		1, 2, 3	3.44	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 segment length (min)	Run automatically
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	203	100.000
2 - IRR (W)		ONE HOUR	✓	240	100.000
3 - IRR (NE)		ONE HOUR	✓	422	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	0	158	45
	2 - IRR (W)	65	0	175
	3 - IRR (NE)	74	348	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.17	3.67	0.2	A	186	279
2 - IRR (W)	0.18	3.20	0.2	A	220	330
3 - IRR (NE)	0.29	3.46	0.4	A	387	581

Main Results for each time segment

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 - Link Rd (SE)	153	38	261	1371	0.111	152	104	0.0	0.1	3.247	A
2 - IRR (W)	181	45	34	1508	0.120	180	380	0.0	0.1	2.980	A
3 - IRR (NE)	318	79	49	1622	0.196	317	165	0.0	0.3	3.029	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 - Link Rd (SE)	182	46	313	1342	0.136	182	125	0.1	0.2	3.413	A
2 - IRR (W)	216	54	40	1504	0.143	216	455	0.1	0.2	3.072	A
3 - IRR (NE)	379	95	58	1617	0.235	379	198	0.3	0.3	3.199	A

17:30 - 17:45

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 - Link Rd (SE)	224	56	383	1304	0.171	223	153	0.2	0.2	3.665	A
2 - IRR (W)	264	66	49	1499	0.176	264	557	0.2	0.2	3.205	A
3 - IRR (NE)	465	116	72	1609	0.289	464	242	0.3	0.4	3.458	A

17:45 - 18:00

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 - Link Rd (SE)	224	56	383	1303	0.171	224	153	0.2	0.2	3.666	A
2 - IRR (W)	264	66	50	1499	0.176	264	557	0.2	0.2	3.205	A
3 - IRR (NE)	465	116	72	1609	0.289	465	242	0.4	0.4	3.458	A

18:00 - 18:15

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 - Link Rd (SE)	182	46	313	1342	0.136	183	125	0.2	0.2	3.415	A
2 - IRR (W)	216	54	41	1504	0.143	216	455	0.2	0.2	3.073	A
3 - IRR (NE)	379	95	58	1617	0.235	380	198	0.4	0.3	3.201	A

18:15 - 18:30

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 - Link Rd (SE)	153	38	262	1370	0.112	153	105	0.2	0.1	3.252	A
2 - IRR (W)	181	45	34	1508	0.120	181	381	0.2	0.2	2.983	A
3 - IRR (NE)	318	79	49	1622	0.196	318	166	0.3	0.3	3.038	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 1 Inner Relief Road _ Link Road (Roundabout upgrated).j9

Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis

Report generation date: 09/08/2024 16:23:24

»Do Something - 2027 DS, AM

»Do Something - 2027 DS, PM

»Do Something - 2032 DS, AM

»Do Something - 2032 DS, PM

»Do Something - 2042 DS, AM

»Do Something - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Something - 2027 DS									
1 - Link Rd (SE)	D7	0.2	4.80	0.16	A	D8	0.3	5.62	0.23	A
2 - IRR (W)		1.3	8.25	0.54	A		0.4	5.06	0.25	A
3 - IRR (NE)		0.4	5.32	0.27	A		0.8	6.40	0.41	A
	Do Something - 2032 DS									
1 - Link Rd (SE)	D9	0.2	4.86	0.17	A	D10	0.4	5.75	0.24	A
2 - IRR (W)		1.4	8.71	0.56	A		0.4	5.12	0.26	A
3 - IRR (NE)		0.4	5.40	0.28	A		0.8	6.60	0.43	A
	Do Something - 2042 DS									
1 - Link Rd (SE)	D11	0.2	4.92	0.18	A	D12	0.4	5.90	0.26	A
2 - IRR (W)		1.6	9.29	0.59	A		0.4	5.20	0.27	A
3 - IRR (NE)		0.5	5.51	0.29	A		0.9	6.85	0.45	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

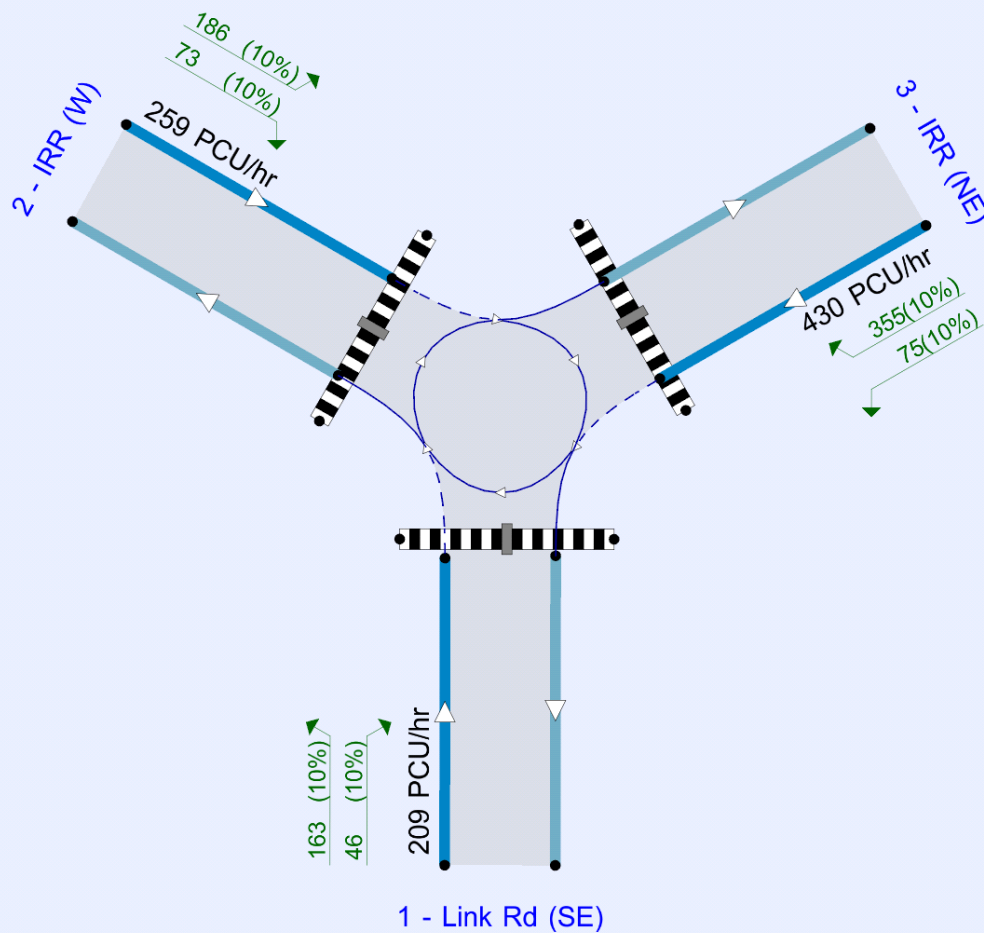
File summary

File Description

Title	Blessington LDR
Location	Blessington, Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230058
Enumerator	HEADOFFICE\LS
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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

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
D7	2027 DS	AM	ONE HOUR	08:15	09:45	15	✓
D8	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓
D9	2032 DS	AM	ONE HOUR	08:15	09:45	15	✓
D10	2032 DS	PM	ONE HOUR	17:00	18:30	15	✓
D11	2042 DS	AM	ONE HOUR	08:15	09:45	15	✓
D12	2042 DS	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Do Something - 2027 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	6.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Link Rd (SE)	
2	IRR (W)	
3	IRR (NE)	

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
1 - Link Rd (SE)	3.50	4.00	14.0	19.0	48.0	56.0	
2 - IRR (W)	3.50	4.00	15.0	18.0	48.0	59.0	
3 - IRR (NE)	3.50	4.00	19.0	13.0	48.0	49.0	

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1 - Link Rd (SE)	1.00	1.00	✓	Distance	6.00	4.29	6.00	4.29
2 - IRR (W)	1.00	1.00	✓	Distance	7.00	5.00	7.00	5.00
3 - IRR (NE)	1.00	1.00	✓	Distance	6.00	4.29	6.00	4.29

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Link Rd (SE)	0.472	1085
2 - IRR (W)	0.465	1070
3 - IRR (NE)	0.473	1089

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
D7	2027 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	146	100.000
2 - IRR (W)		ONE HOUR	✓	514	100.000
3 - IRR (NE)		ONE HOUR	✓	253	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	0	98	48
	2 - IRR (W)	128	0	386
	3 - IRR (NE)	60	193	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
From				
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.16	4.80	0.2	A	134	201
2 - IRR (W)	0.54	8.25	1.3	A	472	707
3 - IRR (NE)	0.27	5.32	0.4	A	232	348

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	110	27	145	0.00	1017	0.108	109	141	0.0	0.1	4.360	A
2 - IRR (W)	387	97	36	0.00	1054	0.367	384	218	0.0	0.6	5.894	A
3 - IRR (NE)	190	48	96	0.00	1044	0.182	189	325	0.0	0.2	4.628	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	131	33	173	0.00	1004	0.131	131	169	0.1	0.2	4.538	A
2 - IRR (W)	462	116	43	0.00	1050	0.440	461	261	0.6	0.9	6.712	A
3 - IRR (NE)	227	57	115	0.00	1035	0.220	227	389	0.2	0.3	4.900	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	161	40	212	0.00	985	0.163	161	206	0.2	0.2	4.800	A
2 - IRR (W)	566	141	53	0.00	1046	0.541	564	320	0.9	1.3	8.193	A
3 - IRR (NE)	279	70	141	0.00	1023	0.272	278	477	0.3	0.4	5.314	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	161	40	212	0.00	985	0.163	161	207	0.2	0.2	4.803	A
2 - IRR (W)	566	141	53	0.00	1046	0.541	566	320	1.3	1.3	8.247	A
3 - IRR (NE)	279	70	141	0.00	1023	0.272	279	478	0.4	0.4	5.319	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	131	33	174	0.00	1003	0.131	131	170	0.2	0.2	4.543	A
2 - IRR (W)	462	116	43	0.00	1050	0.440	464	262	1.3	0.9	6.771	A
3 - IRR (NE)	227	57	115	0.00	1035	0.220	228	391	0.4	0.3	4.910	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	110	27	145	0.00	1017	0.108	110	142	0.2	0.1	4.367	A
2 - IRR (W)	387	97	36	0.00	1054	0.367	388	219	0.9	0.6	5.958	A
3 - IRR (NE)	190	48	97	0.00	1044	0.182	191	327	0.3	0.2	4.643	A

Do Something - 2027 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	5.83	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 segment length (min)	Run automatically
D8	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	192	100.000
2 - IRR (W)		ONE HOUR	✓	242	100.000
3 - IRR (NE)		ONE HOUR	✓	396	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	149	43
	2 - IRR (W)	67	0	175
	3 - IRR (NE)	70	326	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.23	5.62	0.3	A	176	264
2 - IRR (W)	0.25	5.06	0.4	A	222	333
3 - IRR (NE)	0.41	6.40	0.8	A	363	545

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	145	36	244	0.00	970	0.149	144	103	0.0	0.2	4.787	A
2 - IRR (W)	182	46	32	0.00	1055	0.173	181	356	0.0	0.2	4.525	A
3 - IRR (NE)	298	75	50	0.00	1066	0.280	296	163	0.0	0.4	5.136	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	293	0.00	947	0.182	172	123	0.2	0.2	5.109	A
2 - IRR (W)	218	54	39	0.00	1052	0.207	217	426	0.2	0.3	4.740	A
3 - IRR (NE)	356	89	60	0.00	1061	0.336	355	196	0.4	0.6	5.609	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	211	53	358	0.00	916	0.231	211	151	0.2	0.3	5.612	A
2 - IRR (W)	266	67	47	0.00	1048	0.254	266	522	0.3	0.4	5.059	A
3 - IRR (NE)	436	109	74	0.00	1055	0.413	435	240	0.6	0.8	6.382	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	211	53	359	0.00	916	0.231	211	151	0.3	0.3	5.619	A
2 - IRR (W)	266	67	47	0.00	1048	0.254	266	523	0.4	0.4	5.063	A
3 - IRR (NE)	436	109	74	0.00	1055	0.413	436	240	0.8	0.8	6.400	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	294	0.00	947	0.182	173	123	0.3	0.2	5.118	A
2 - IRR (W)	218	54	39	0.00	1052	0.207	218	428	0.4	0.3	4.746	A
3 - IRR (NE)	356	89	60	0.00	1061	0.336	357	196	0.8	0.6	5.630	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	145	36	246	0.00	969	0.149	145	103	0.2	0.2	4.804	A
2 - IRR (W)	182	46	32	0.00	1055	0.173	182	358	0.3	0.2	4.539	A
3 - IRR (NE)	298	75	51	0.00	1066	0.280	299	164	0.6	0.4	5.166	A

Do Something - 2032 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	7.18	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 segment length (min)	Run automatically
D9	2032 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	152	100.000
2 - IRR (W)		ONE HOUR	✓	536	100.000
3 - IRR (NE)		ONE HOUR	✓	261	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	102	50
	2 - IRR (W)	133	0	403
	3 - IRR (NE)	62	199	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.17	4.86	0.2	A	139	209
2 - IRR (W)	0.56	8.71	1.4	A	492	738
3 - IRR (NE)	0.28	5.40	0.4	A	239	359

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	114	29	149	0.00	1015	0.113	114	146	0.0	0.1	4.391	A
2 - IRR (W)	404	101	37	0.00	1053	0.383	401	225	0.0	0.7	6.049	A
3 - IRR (NE)	196	49	99	0.00	1042	0.188	195	339	0.0	0.3	4.669	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	137	34	179	0.00	1001	0.137	137	175	0.1	0.2	4.580	A
2 - IRR (W)	482	120	45	0.00	1050	0.459	481	270	0.7	0.9	6.950	A
3 - IRR (NE)	235	59	119	0.00	1033	0.227	234	406	0.3	0.3	4.957	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	167	42	219	0.00	982	0.170	167	214	0.2	0.2	4.857	A
2 - IRR (W)	590	148	55	0.00	1045	0.565	588	331	0.9	1.4	8.636	A
3 - IRR (NE)	287	72	146	0.00	1020	0.282	287	497	0.3	0.4	5.394	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	167	42	219	0.00	982	0.170	167	215	0.2	0.2	4.860	A
2 - IRR (W)	590	148	55	0.00	1045	0.565	590	331	1.4	1.4	8.706	A
3 - IRR (NE)	287	72	146	0.00	1020	0.282	287	499	0.4	0.4	5.402	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	137	34	179	0.00	1001	0.137	137	176	0.2	0.2	4.584	A
2 - IRR (W)	482	120	45	0.00	1049	0.459	484	271	1.4	0.9	7.021	A
3 - IRR (NE)	235	59	120	0.00	1033	0.227	235	409	0.4	0.3	4.968	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	114	29	150	0.00	1015	0.113	115	147	0.2	0.1	4.401	A
2 - IRR (W)	404	101	38	0.00	1053	0.383	405	227	0.9	0.7	6.119	A
3 - IRR (NE)	196	49	100	0.00	1042	0.189	197	342	0.3	0.3	4.686	A

Do Something - 2032 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	5.98	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 segment length (min)	Run automatically
D10	2032 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	200	100.000
2 - IRR (W)		ONE HOUR	✓	250	100.000
3 - IRR (NE)		ONE HOUR	✓	412	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	156	44
	2 - IRR (W)	70	0	180
	3 - IRR (NE)	72	340	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.24	5.75	0.4	A	184	275
2 - IRR (W)	0.26	5.12	0.4	A	229	344
3 - IRR (NE)	0.43	6.60	0.8	A	378	567

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	151	38	254	0.00	965	0.156	150	106	0.0	0.2	4.850	A
2 - IRR (W)	188	47	33	0.00	1055	0.178	187	371	0.0	0.2	4.558	A
3 - IRR (NE)	310	78	52	0.00	1065	0.291	308	168	0.0	0.4	5.220	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	180	45	305	0.00	941	0.191	180	127	0.2	0.3	5.197	A
2 - IRR (W)	225	56	40	0.00	1052	0.214	225	445	0.2	0.3	4.784	A
3 - IRR (NE)	370	93	63	0.00	1060	0.349	370	201	0.4	0.6	5.734	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	220	55	374	0.00	909	0.242	220	156	0.3	0.3	5.743	A
2 - IRR (W)	275	69	48	0.00	1048	0.263	275	545	0.3	0.4	5.120	A
3 - IRR (NE)	454	113	77	0.00	1053	0.431	453	246	0.6	0.8	6.584	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	220	55	374	0.00	909	0.242	220	156	0.3	0.4	5.750	A
2 - IRR (W)	275	69	48	0.00	1048	0.263	275	546	0.4	0.4	5.125	A
3 - IRR (NE)	454	113	77	0.00	1053	0.431	454	247	0.8	0.8	6.605	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	180	45	306	0.00	941	0.191	180	128	0.4	0.3	5.209	A
2 - IRR (W)	225	56	40	0.00	1052	0.214	225	447	0.4	0.3	4.790	A
3 - IRR (NE)	370	93	63	0.00	1060	0.350	371	202	0.8	0.6	5.759	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	151	38	256	0.00	964	0.156	151	107	0.3	0.2	4.870	A
2 - IRR (W)	188	47	33	0.00	1055	0.178	188	374	0.3	0.2	4.572	A
3 - IRR (NE)	310	78	53	0.00	1065	0.291	311	169	0.6	0.5	5.256	A

Do Something - 2042 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	7.56	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 segment length (min)	Run automatically
D11	2042 DS	AM	ONE HOUR	08:15	09:45	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	157	100.000
2 - IRR (W)		ONE HOUR	✓	562	100.000
3 - IRR (NE)		ONE HOUR	✓	271	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	107	50
	2 - IRR (W)	140	0	422
	3 - IRR (NE)	64	207	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.18	4.92	0.2	A	144	216
2 - IRR (W)	0.59	9.29	1.6	A	516	774
3 - IRR (NE)	0.29	5.51	0.5	A	249	373

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	118	30	155	0.00	1012	0.117	118	153	0.0	0.1	4.423	A
2 - IRR (W)	423	106	37	0.00	1053	0.402	420	235	0.0	0.7	6.229	A
3 - IRR (NE)	204	51	105	0.00	1040	0.196	203	353	0.0	0.3	4.725	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	141	35	186	0.00	998	0.141	141	183	0.1	0.2	4.622	A
2 - IRR (W)	505	126	45	0.00	1050	0.481	504	282	0.7	1.0	7.246	A
3 - IRR (NE)	244	61	126	0.00	1030	0.237	243	423	0.3	0.3	5.032	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	228	0.00	978	0.177	173	224	0.2	0.2	4.915	A
2 - IRR (W)	619	155	55	0.00	1045	0.592	617	345	1.0	1.6	9.198	A
3 - IRR (NE)	298	75	154	0.00	1017	0.293	298	518	0.3	0.5	5.504	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	173	43	228	0.00	978	0.177	173	225	0.2	0.2	4.918	A
2 - IRR (W)	619	155	55	0.00	1045	0.592	619	346	1.6	1.6	9.289	A
3 - IRR (NE)	298	75	154	0.00	1017	0.294	298	520	0.5	0.5	5.512	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	141	35	186	0.00	997	0.142	141	184	0.2	0.2	4.626	A
2 - IRR (W)	505	126	45	0.00	1049	0.481	507	283	1.6	1.0	7.333	A
3 - IRR (NE)	244	61	126	0.00	1030	0.237	244	426	0.5	0.3	5.042	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	118	30	156	0.00	1012	0.117	118	154	0.2	0.1	4.434	A
2 - IRR (W)	423	106	38	0.00	1053	0.402	424	237	1.0	0.7	6.310	A
3 - IRR (NE)	204	51	106	0.00	1040	0.196	204	356	0.3	0.3	4.742	A

Do Something - 2042 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Link Rd (SE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - IRR (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - IRR (NE) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	IRR Junction 4	Standard Roundabout		1, 2, 3	6.15	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 segment length (min)	Run automatically
D12	2042 DS	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	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 - Link Rd (SE)		ONE HOUR	✓	209	100.000
2 - IRR (W)		ONE HOUR	✓	259	100.000
3 - IRR (NE)		ONE HOUR	✓	430	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Link Rd (SE)	[ONEHOUR]	0.00
2 - IRR (W)	[ONEHOUR]	0.00
3 - IRR (NE)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	0	163	46
	2 - IRR (W)	73	0	186
	3 - IRR (NE)	75	355	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Link Rd (SE)	2 - IRR (W)	3 - IRR (NE)
	1 - Link Rd (SE)	10	10	10
	2 - IRR (W)	10	10	10
	3 - IRR (NE)	10	10	10

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 - Link Rd (SE)	0.26	5.90	0.4	A	192	288
2 - IRR (W)	0.27	5.20	0.4	A	238	356
3 - IRR (NE)	0.45	6.85	0.9	A	395	592

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	157	39	266	0.00	960	0.164	156	111	0.0	0.2	4.923	A
2 - IRR (W)	195	49	34	0.00	1054	0.185	194	388	0.0	0.2	4.598	A
3 - IRR (NE)	324	81	55	0.00	1064	0.304	322	174	0.0	0.5	5.324	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	188	47	319	0.00	935	0.201	188	133	0.2	0.3	5.297	A
2 - IRR (W)	233	58	41	0.00	1051	0.222	233	465	0.2	0.3	4.836	A
3 - IRR (NE)	387	97	66	0.00	1058	0.365	386	208	0.5	0.6	5.883	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	230	58	390	0.00	901	0.255	230	163	0.3	0.4	5.891	A
2 - IRR (W)	285	71	51	0.00	1047	0.272	285	569	0.3	0.4	5.194	A
3 - IRR (NE)	473	118	80	0.00	1052	0.450	472	255	0.6	0.9	6.825	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	230	58	391	0.00	901	0.255	230	163	0.4	0.4	5.902	A
2 - IRR (W)	285	71	51	0.00	1047	0.272	285	570	0.4	0.4	5.198	A
3 - IRR (NE)	473	118	80	0.00	1051	0.450	473	255	0.9	0.9	6.849	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	188	47	320	0.00	934	0.201	188	133	0.4	0.3	5.311	A
2 - IRR (W)	233	58	41	0.00	1051	0.222	233	467	0.4	0.3	4.845	A
3 - IRR (NE)	387	97	66	0.00	1058	0.365	388	209	0.9	0.6	5.913	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/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 - Link Rd (SE)	157	39	268	0.00	959	0.164	158	112	0.3	0.2	4.944	A
2 - IRR (W)	195	49	35	0.00	1054	0.185	195	391	0.3	0.3	4.612	A
3 - IRR (NE)	324	81	55	0.00	1063	0.304	324	175	0.6	0.5	5.363	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 3 Oak Drive _ Inner Relief Road Roundabout DN.j9

Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis

Report generation date: 09/08/2024 16:38:46

- »Do Nothing - 2027 DN, AM
- »Do Nothing - 2027 DN, PM
- »Do Nothing - 2032 DN, AM
- »Do Nothing - 2032 DN, PM
- »Do Nothing - 2042 DN, AM
- »Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
1 - Oak Drive	D1	0.2	3.15	0.17	A	D2	0.6	3.91	0.35	A
2 - Inner Relief Road (S)		0.4	3.21	0.29	A		0.2	2.71	0.14	A
3 - School Link Road		0.2	3.48	0.17	A		0.1	2.91	0.09	A
	Do Nothing - 2032 DN									
1 - Oak Drive	D3	0.2	3.19	0.18	A	D4	0.6	3.98	0.36	A
2 - Inner Relief Road (S)		0.5	3.28	0.30	A		0.2	2.73	0.15	A
3 - School Link Road		0.2	3.53	0.17	A		0.1	2.92	0.09	A
	Do Nothing - 2042 DN									
1 - Oak Drive	D5	0.3	3.22	0.19	A	D6	0.6	4.08	0.37	A
2 - Inner Relief Road (S)		0.5	3.35	0.32	A		0.2	2.75	0.16	A
3 - School Link Road		0.2	3.58	0.18	A		0.1	2.94	0.10	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

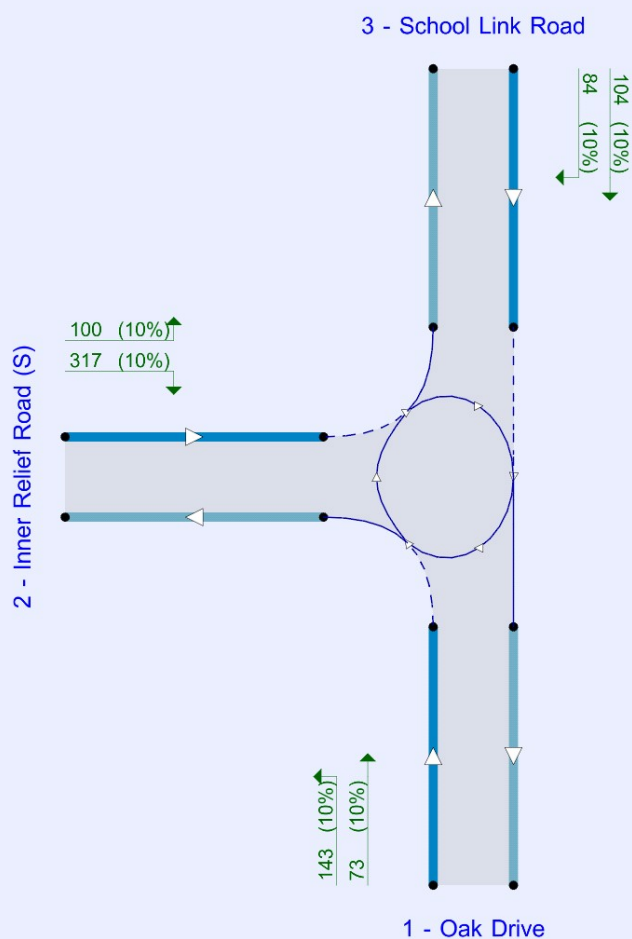
File summary

File Description

Title	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Nothing	100.000

Do Nothing - 2027 DN, 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	3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Oak Drive	
2	Inner Relief Road (S)	
3	School Link Road	

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
1 - Oak Drive	3.73	6.22	22.8	16.8	49.9	47.0	
2 - Inner Relief Road (S)	4.39	6.21	25.4	31.5	49.9	33.0	
3 - School Link Road	3.67	6.38	22.4	22.6	49.9	52.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Oak Drive	0.565	1574
2 - Inner Relief Road (S)	0.629	1792
3 - School Link Road	0.567	1583

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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	216	100.000
2 - Inner Relief Road (S)		✓	417	100.000
3 - School Link Road		✓	188	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
From	1 - Oak Drive	0	143	73
	2 - Inner Relief Road (S)	317	0	100
	3 - School Link Road	104	84	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
From	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.17	3.15	0.2	A
2 - Inner Relief Road (S)	0.29	3.21	0.4	A
3 - School Link Road	0.17	3.48	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	179	69	1535	0.117	178	0.1	2.917	A
2 - Inner Relief Road (S)	345	60	1754	0.197	344	0.3	2.807	A
3 - School Link Road	156	262	1435	0.108	155	0.1	3.091	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	214	83	1527	0.140	213	0.2	3.014	A
2 - Inner Relief Road (S)	412	72	1747	0.236	412	0.3	2.966	A
3 - School Link Road	186	313	1406	0.132	186	0.2	3.245	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	262	102	1516	0.173	261	0.2	3.155	A
2 - Inner Relief Road (S)	505	88	1737	0.291	505	0.4	3.214	A
3 - School Link Road	228	384	1366	0.167	227	0.2	3.477	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	262	102	1516	0.173	262	0.2	3.155	A
2 - Inner Relief Road (S)	505	88	1737	0.291	505	0.4	3.214	A
3 - School Link Road	228	384	1366	0.167	228	0.2	3.478	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	214	83	1527	0.140	214	0.2	3.015	A
2 - Inner Relief Road (S)	412	72	1747	0.236	413	0.3	2.969	A
3 - School Link Road	186	314	1406	0.132	186	0.2	3.246	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	179	70	1534	0.117	179	0.1	2.921	A
2 - Inner Relief Road (S)	345	60	1754	0.197	346	0.3	2.813	A
3 - School Link Road	156	263	1435	0.109	156	0.1	3.098	A

Do Nothing - 2027 DN, 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	3.44	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 segment length (min)
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	442	100.000
2 - Inner Relief Road (S)		✓	204	100.000
3 - School Link Road		✓	114	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	328	114
	2 - Inner Relief Road (S)	123	0	81
	3 - School Link Road	75	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.35	3.91	0.6	A
2 - Inner Relief Road (S)	0.14	2.71	0.2	A
3 - School Link Road	0.09	2.91	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	366	32	1556	0.235	365	0.3	3.322	A
2 - Inner Relief Road (S)	169	94	1733	0.097	168	0.1	2.531	A
3 - School Link Road	94	102	1526	0.062	94	0.1	2.765	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	437	39	1552	0.282	437	0.4	3.550	A
2 - Inner Relief Road (S)	202	113	1721	0.117	202	0.1	2.605	A
3 - School Link Road	113	122	1515	0.074	113	0.1	2.824	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	535	47	1547	0.346	535	0.6	3.908	A
2 - Inner Relief Road (S)	247	138	1705	0.145	247	0.2	2.714	A
3 - School Link Road	138	149	1499	0.092	138	0.1	2.908	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	535	47	1547	0.346	535	0.6	3.913	A
2 - Inner Relief Road (S)	247	138	1705	0.145	247	0.2	2.714	A
3 - School Link Road	138	149	1499	0.092	138	0.1	2.909	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	437	39	1552	0.282	438	0.4	3.554	A
2 - Inner Relief Road (S)	202	113	1721	0.117	202	0.1	2.606	A
3 - School Link Road	113	122	1514	0.074	113	0.1	2.824	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	366	32	1556	0.235	366	0.3	3.330	A
2 - Inner Relief Road (S)	169	95	1733	0.098	169	0.1	2.532	A
3 - School Link Road	94	102	1526	0.062	94	0.1	2.766	A

Do Nothing - 2032 DN, 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	3.31	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 segment length (min)
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	225	100.000
2 - Inner Relief Road (S)		✓	436	100.000
3 - School Link Road		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	150	75
	2 - Inner Relief Road (S)	332	0	104
	3 - School Link Road	106	87	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.18	3.19	0.2	A
2 - Inner Relief Road (S)	0.30	3.28	0.5	A
3 - School Link Road	0.17	3.53	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	186	72	1533	0.122	186	0.2	2.937	A
2 - Inner Relief Road (S)	361	62	1753	0.206	360	0.3	2.839	A
3 - School Link Road	160	274	1428	0.112	159	0.1	3.119	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	222	86	1525	0.146	222	0.2	3.039	A
2 - Inner Relief Road (S)	431	74	1746	0.247	431	0.4	3.012	A
3 - School Link Road	191	328	1398	0.137	191	0.2	3.280	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	273	105	1514	0.180	272	0.2	3.188	A
2 - Inner Relief Road (S)	528	91	1735	0.304	528	0.5	3.277	A
3 - School Link Road	234	402	1356	0.172	234	0.2	3.528	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	273	105	1514	0.180	273	0.2	3.188	A
2 - Inner Relief Road (S)	528	91	1735	0.304	528	0.5	3.280	A
3 - School Link Road	234	402	1356	0.172	234	0.2	3.528	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	222	86	1525	0.146	223	0.2	3.040	A
2 - Inner Relief Road (S)	431	74	1745	0.247	432	0.4	3.014	A
3 - School Link Road	191	329	1397	0.137	191	0.2	3.282	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	186	72	1533	0.122	186	0.2	2.942	A
2 - Inner Relief Road (S)	361	62	1753	0.206	361	0.3	2.847	A
3 - School Link Road	160	275	1428	0.112	160	0.1	3.126	A

Do Nothing - 2032 DN, 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	3.49	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 segment length (min)
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	457	100.000
2 - Inner Relief Road (S)		✓	212	100.000
3 - School Link Road		✓	116	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	343	114
	2 - Inner Relief Road (S)	129	0	83
	3 - School Link Road	77	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.36	3.98	0.6	A
2 - Inner Relief Road (S)	0.15	2.73	0.2	A
3 - School Link Road	0.09	2.92	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	378	32	1556	0.243	377	0.4	3.355	A
2 - Inner Relief Road (S)	176	94	1733	0.101	175	0.1	2.542	A
3 - School Link Road	96	107	1523	0.063	96	0.1	2.774	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	452	39	1552	0.291	452	0.4	3.598	A
2 - Inner Relief Road (S)	210	113	1721	0.122	210	0.2	2.619	A
3 - School Link Road	115	127	1511	0.076	115	0.1	2.835	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	553	47	1547	0.358	553	0.6	3.980	A
2 - Inner Relief Road (S)	257	138	1705	0.151	257	0.2	2.732	A
3 - School Link Road	140	156	1495	0.094	140	0.1	2.922	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	553	47	1547	0.358	553	0.6	3.985	A
2 - Inner Relief Road (S)	257	138	1705	0.151	257	0.2	2.733	A
3 - School Link Road	140	156	1495	0.094	140	0.1	2.923	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	452	39	1552	0.291	453	0.5	3.602	A
2 - Inner Relief Road (S)	210	113	1721	0.122	210	0.2	2.619	A
3 - School Link Road	115	128	1511	0.076	115	0.1	2.835	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	378	32	1556	0.243	379	0.4	3.368	A
2 - Inner Relief Road (S)	176	95	1733	0.101	176	0.1	2.542	A
3 - School Link Road	96	107	1523	0.063	96	0.1	2.775	A

Do Nothing - 2042 DN, 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	3.37	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 segment length (min)
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	233	100.000
2 - Inner Relief Road (S)		✓	456	100.000
3 - School Link Road		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	157	76
	2 - Inner Relief Road (S)	348	0	108
	3 - School Link Road	108	89	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.19	3.22	0.3	A
2 - Inner Relief Road (S)	0.32	3.35	0.5	A
3 - School Link Road	0.18	3.58	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	193	73	1532	0.126	192	0.2	2.953	A
2 - Inner Relief Road (S)	378	63	1753	0.215	376	0.3	2.874	A
3 - School Link Road	163	287	1421	0.115	163	0.1	3.145	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	230	88	1524	0.151	230	0.2	3.060	A
2 - Inner Relief Road (S)	451	75	1745	0.258	451	0.4	3.059	A
3 - School Link Road	195	344	1389	0.140	195	0.2	3.316	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	282	108	1513	0.187	282	0.3	3.216	A
2 - Inner Relief Road (S)	552	92	1734	0.318	552	0.5	3.346	A
3 - School Link Road	239	421	1345	0.177	238	0.2	3.578	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	282	108	1513	0.187	282	0.3	3.216	A
2 - Inner Relief Road (S)	552	92	1734	0.318	552	0.5	3.349	A
3 - School Link Road	239	421	1345	0.177	239	0.2	3.579	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	230	88	1524	0.151	231	0.2	3.063	A
2 - Inner Relief Road (S)	451	75	1745	0.258	451	0.4	3.062	A
3 - School Link Road	195	345	1388	0.140	195	0.2	3.318	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	193	74	1532	0.126	193	0.2	2.959	A
2 - Inner Relief Road (S)	378	63	1753	0.215	378	0.3	2.880	A
3 - School Link Road	163	288	1420	0.115	163	0.1	3.153	A

Do Nothing - 2042 DN, 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	3.55	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 segment length (min)
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	475	100.000
2 - Inner Relief Road (S)		✓	220	100.000
3 - School Link Road		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	360	115
	2 - Inner Relief Road (S)	135	0	85
	3 - School Link Road	78	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.37	4.08	0.6	A
2 - Inner Relief Road (S)	0.16	2.75	0.2	A
3 - School Link Road	0.10	2.94	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	393	33	1555	0.253	392	0.4	3.399	A
2 - Inner Relief Road (S)	182	95	1733	0.105	182	0.1	2.553	A
3 - School Link Road	98	111	1520	0.064	97	0.1	2.783	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	470	40	1551	0.303	469	0.5	3.656	A
2 - Inner Relief Road (S)	218	114	1721	0.126	217	0.2	2.633	A
3 - School Link Road	117	133	1508	0.077	117	0.1	2.845	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	575	48	1546	0.372	575	0.6	4.072	A
2 - Inner Relief Road (S)	266	139	1705	0.156	266	0.2	2.752	A
3 - School Link Road	143	163	1491	0.096	143	0.1	2.937	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	575	48	1546	0.372	575	0.6	4.077	A
2 - Inner Relief Road (S)	266	139	1705	0.156	266	0.2	2.752	A
3 - School Link Road	143	164	1491	0.096	143	0.1	2.937	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	470	40	1551	0.303	470	0.5	3.667	A
2 - Inner Relief Road (S)	218	114	1721	0.126	218	0.2	2.636	A
3 - School Link Road	117	134	1508	0.077	117	0.1	2.846	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	393	33	1555	0.253	394	0.4	3.413	A
2 - Inner Relief Road (S)	182	95	1732	0.105	182	0.1	2.554	A
3 - School Link Road	98	112	1520	0.064	98	0.1	2.783	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 3 Oak Drive _ Inner Relief Road Roundabout DS.j9

Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis

Report generation date: 09/08/2024 16:40:47

»Do Somethig - 2027 DS, AM

»Do Somethig - 2027 DS, PM

»Do Somethig - 2032 DS, AM

»Do Somethig - 2032 DS, PM

»Do Somethig - 2042 DS, AM

»Do Somethig - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Somethig - 2027 DS									
1 - Oak Drive	D1	0.3	3.24	0.19	A	D2	0.7	4.16	0.38	A
2 - Inner Relief Road (S)		0.5	3.36	0.32	A		0.2	2.79	0.17	A
3 - School Link Road		0.2	3.57	0.17	A		0.1	2.96	0.09	A
	Do Somethig - 2032 DS									
1 - Oak Drive	D3	0.3	3.27	0.20	A	D4	0.7	4.24	0.40	A
2 - Inner Relief Road (S)		0.6	3.43	0.34	A		0.2	2.81	0.17	A
3 - School Link Road		0.2	3.63	0.18	A		0.1	2.97	0.10	A
	Do Somethig - 2042 DS									
1 - Oak Drive	D5	0.3	3.30	0.21	A	D6	0.8	4.34	0.41	A
2 - Inner Relief Road (S)		0.6	3.51	0.35	A		0.2	2.83	0.18	A
3 - School Link Road		0.2	3.68	0.18	A		0.1	2.99	0.10	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

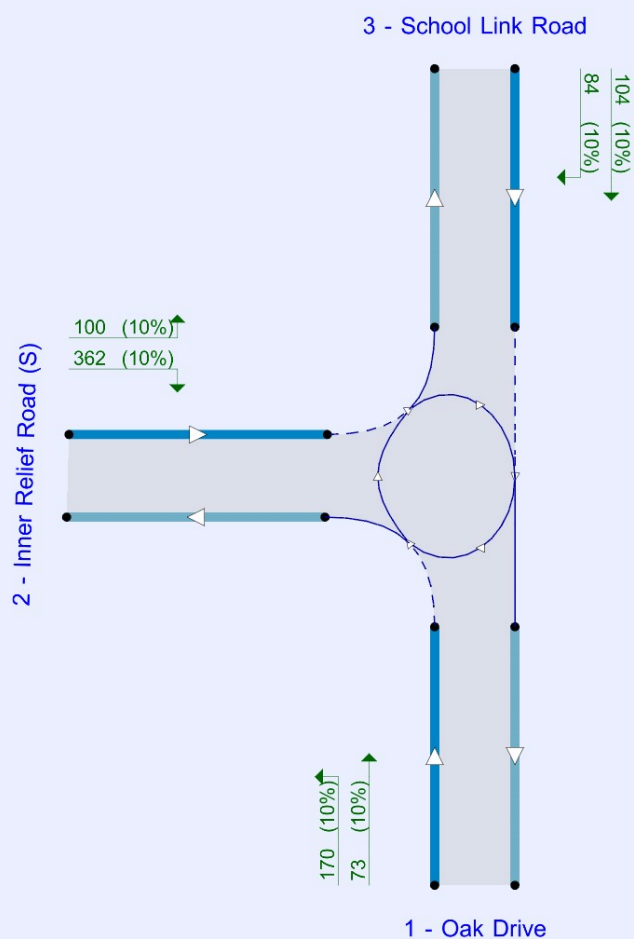
File summary

File Description

Title	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\LS
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	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Somethig - 2027 DS, 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	3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Oak Drive	
2	Inner Relief Road (S)	
3	School Link Road	

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
1 - Oak Drive	3.73	6.22	22.8	16.8	49.9	47.0	
2 - Inner Relief Road (S)	4.39	6.21	25.4	31.5	49.9	33.0	
3 - School Link Road	3.67	6.38	22.4	22.6	49.9	52.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Oak Drive	0.565	1574
2 - Inner Relief Road (S)	0.629	1792
3 - School Link Road	0.567	1583

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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	243	100.000
2 - Inner Relief Road (S)		✓	462	100.000
3 - School Link Road		✓	188	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
From	1 - Oak Drive	0	170	73
	2 - Inner Relief Road (S)	362	0	100
	3 - School Link Road	104	84	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
From	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.19	3.24	0.3	A
2 - Inner Relief Road (S)	0.32	3.36	0.5	A
3 - School Link Road	0.17	3.57	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	201	69	1535	0.131	201	0.2	2.966	A
2 - Inner Relief Road (S)	383	60	1754	0.218	381	0.3	2.881	A
3 - School Link Road	156	299	1414	0.110	155	0.1	3.143	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	240	83	1527	0.157	240	0.2	3.077	A
2 - Inner Relief Road (S)	457	72	1747	0.262	457	0.4	3.069	A
3 - School Link Road	186	358	1381	0.135	186	0.2	3.313	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	294	102	1516	0.194	294	0.3	3.239	A
2 - Inner Relief Road (S)	560	88	1737	0.322	559	0.5	3.360	A
3 - School Link Road	228	438	1335	0.171	227	0.2	3.574	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	294	102	1516	0.194	294	0.3	3.239	A
2 - Inner Relief Road (S)	560	88	1737	0.322	560	0.5	3.363	A
3 - School Link Road	228	438	1335	0.171	228	0.2	3.575	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	240	83	1527	0.157	241	0.2	3.078	A
2 - Inner Relief Road (S)	457	72	1747	0.262	457	0.4	3.071	A
3 - School Link Road	186	358	1380	0.135	186	0.2	3.315	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	201	70	1534	0.131	201	0.2	2.970	A
2 - Inner Relief Road (S)	383	61	1754	0.218	383	0.3	2.888	A
3 - School Link Road	156	300	1413	0.110	156	0.1	3.148	A

Do Somethig - 2027 DS, 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	3.61	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 segment length (min)
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	491	100.000
2 - Inner Relief Road (S)		✓	237	100.000
3 - School Link Road		✓	114	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	377	114
	2 - Inner Relief Road (S)	156	0	81
	3 - School Link Road	75	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.38	4.16	0.7	A
2 - Inner Relief Road (S)	0.17	2.79	0.2	A
3 - School Link Road	0.09	2.96	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	407	32	1556	0.261	405	0.4	3.437	A
2 - Inner Relief Road (S)	196	94	1733	0.113	196	0.1	2.576	A
3 - School Link Road	94	129	1510	0.063	94	0.1	2.795	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	486	39	1552	0.313	485	0.5	3.709	A
2 - Inner Relief Road (S)	234	113	1721	0.136	234	0.2	2.662	A
3 - School Link Road	113	154	1496	0.075	113	0.1	2.861	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	595	47	1547	0.384	594	0.7	4.154	A
2 - Inner Relief Road (S)	287	138	1705	0.168	287	0.2	2.791	A
3 - School Link Road	138	189	1476	0.094	138	0.1	2.958	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	595	47	1547	0.384	595	0.7	4.157	A
2 - Inner Relief Road (S)	287	138	1705	0.168	287	0.2	2.791	A
3 - School Link Road	138	189	1476	0.094	138	0.1	2.958	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	486	39	1552	0.313	486	0.5	3.717	A
2 - Inner Relief Road (S)	234	113	1721	0.136	235	0.2	2.663	A
3 - School Link Road	113	154	1496	0.075	113	0.1	2.862	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	407	32	1556	0.261	407	0.4	3.448	A
2 - Inner Relief Road (S)	196	95	1733	0.113	196	0.1	2.579	A
3 - School Link Road	94	129	1510	0.063	94	0.1	2.798	A

Do Somethig - 2032 DS, 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	3.43	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 segment length (min)
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	251	100.000
2 - Inner Relief Road (S)		✓	481	100.000
3 - School Link Road		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	176	75
	2 - Inner Relief Road (S)	377	0	104
	3 - School Link Road	106	87	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.20	3.27	0.3	A
2 - Inner Relief Road (S)	0.34	3.43	0.6	A
3 - School Link Road	0.18	3.63	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	208	72	1533	0.136	207	0.2	2.984	A
2 - Inner Relief Road (S)	398	62	1753	0.227	397	0.3	2.917	A
3 - School Link Road	160	311	1407	0.114	159	0.1	3.171	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	248	86	1525	0.163	248	0.2	3.100	A
2 - Inner Relief Road (S)	476	74	1746	0.272	475	0.4	3.117	A
3 - School Link Road	191	373	1372	0.139	191	0.2	3.350	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	304	105	1514	0.201	304	0.3	3.271	A
2 - Inner Relief Road (S)	583	91	1735	0.336	582	0.6	3.432	A
3 - School Link Road	234	456	1325	0.176	234	0.2	3.627	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	304	105	1514	0.201	304	0.3	3.271	A
2 - Inner Relief Road (S)	583	91	1735	0.336	583	0.6	3.435	A
3 - School Link Road	234	457	1325	0.176	234	0.2	3.628	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	248	86	1525	0.163	248	0.2	3.101	A
2 - Inner Relief Road (S)	476	74	1745	0.273	476	0.4	3.123	A
3 - School Link Road	191	373	1372	0.139	191	0.2	3.355	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	208	72	1533	0.136	208	0.2	2.988	A
2 - Inner Relief Road (S)	398	62	1753	0.227	399	0.3	2.924	A
3 - School Link Road	160	312	1406	0.114	160	0.1	3.179	A

Do Somethig - 2032 DS, 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	3.66	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 segment length (min)
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	506	100.000
2 - Inner Relief Road (S)		✓	245	100.000
3 - School Link Road		✓	116	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	392	114
	2 - Inner Relief Road (S)	162	0	83
	3 - School Link Road	77	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.40	4.24	0.7	A
2 - Inner Relief Road (S)	0.17	2.81	0.2	A
3 - School Link Road	0.10	2.97	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	419	32	1556	0.269	417	0.4	3.475	A
2 - Inner Relief Road (S)	203	94	1733	0.117	202	0.1	2.587	A
3 - School Link Road	96	134	1508	0.064	96	0.1	2.804	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	500	39	1552	0.322	500	0.5	3.761	A
2 - Inner Relief Road (S)	242	113	1721	0.141	242	0.2	2.676	A
3 - School Link Road	115	160	1493	0.077	115	0.1	2.873	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	613	47	1547	0.396	612	0.7	4.231	A
2 - Inner Relief Road (S)	297	138	1705	0.174	297	0.2	2.810	A
3 - School Link Road	140	196	1472	0.095	140	0.1	2.972	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	613	47	1547	0.396	613	0.7	4.238	A
2 - Inner Relief Road (S)	297	138	1705	0.174	297	0.2	2.810	A
3 - School Link Road	140	196	1472	0.095	140	0.1	2.972	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	500	39	1552	0.322	501	0.5	3.773	A
2 - Inner Relief Road (S)	242	113	1721	0.141	242	0.2	2.677	A
3 - School Link Road	115	160	1493	0.077	115	0.1	2.875	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	419	32	1556	0.269	420	0.4	3.489	A
2 - Inner Relief Road (S)	203	95	1733	0.117	203	0.1	2.588	A
3 - School Link Road	96	134	1507	0.064	96	0.1	2.805	A

Do Somethig - 2042 DS, 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	3.49	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 segment length (min)
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	260	100.000
2 - Inner Relief Road (S)		✓	501	100.000
3 - School Link Road		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	184	76
	2 - Inner Relief Road (S)	393	0	108
	3 - School Link Road	108	89	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.21	3.30	0.3	A
2 - Inner Relief Road (S)	0.35	3.51	0.6	A
3 - School Link Road	0.18	3.68	0.2	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	215	73	1532	0.141	215	0.2	3.003	A
2 - Inner Relief Road (S)	415	63	1753	0.237	414	0.3	2.954	A
3 - School Link Road	163	324	1400	0.117	163	0.1	3.199	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	257	88	1524	0.169	257	0.2	3.124	A
2 - Inner Relief Road (S)	495	75	1745	0.284	495	0.4	3.168	A
3 - School Link Road	195	388	1363	0.143	195	0.2	3.387	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	315	108	1513	0.208	315	0.3	3.304	A
2 - Inner Relief Road (S)	607	92	1734	0.350	606	0.6	3.508	A
3 - School Link Road	239	475	1314	0.182	238	0.2	3.681	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	315	108	1513	0.208	315	0.3	3.304	A
2 - Inner Relief Road (S)	607	92	1734	0.350	607	0.6	3.511	A
3 - School Link Road	239	476	1314	0.182	239	0.2	3.682	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	257	88	1524	0.169	257	0.2	3.126	A
2 - Inner Relief Road (S)	495	75	1745	0.284	496	0.4	3.171	A
3 - School Link Road	195	389	1363	0.143	195	0.2	3.390	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	215	74	1532	0.141	215	0.2	3.009	A
2 - Inner Relief Road (S)	415	63	1753	0.237	415	0.3	2.961	A
3 - School Link Road	163	326	1399	0.117	163	0.1	3.204	A

Do Somethig - 2042 DS, 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	3.74	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 segment length (min)
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Oak Drive		✓	524	100.000
2 - Inner Relief Road (S)		✓	253	100.000
3 - School Link Road		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	0	409	115
	2 - Inner Relief Road (S)	168	0	85
	3 - School Link Road	78	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Oak Drive	2 - Inner Relief Road (S)	3 - School Link Road
	1 - Oak Drive	10	10	10
	2 - Inner Relief Road (S)	10	10	10
	3 - School Link Road	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Oak Drive	0.41	4.34	0.8	A
2 - Inner Relief Road (S)	0.18	2.83	0.2	A
3 - School Link Road	0.10	2.99	0.1	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	434	33	1555	0.279	432	0.4	3.522	A
2 - Inner Relief Road (S)	210	95	1733	0.121	209	0.2	2.597	A
3 - School Link Road	98	139	1505	0.065	97	0.1	2.813	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	518	40	1551	0.334	518	0.5	3.828	A
2 - Inner Relief Road (S)	250	114	1721	0.145	250	0.2	2.692	A
3 - School Link Road	117	166	1489	0.078	117	0.1	2.884	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	635	48	1546	0.410	634	0.8	4.335	A
2 - Inner Relief Road (S)	306	139	1705	0.180	306	0.2	2.831	A
3 - School Link Road	143	203	1468	0.097	143	0.1	2.987	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	635	48	1546	0.410	635	0.8	4.342	A
2 - Inner Relief Road (S)	306	139	1705	0.180	306	0.2	2.831	A
3 - School Link Road	143	203	1468	0.097	143	0.1	2.987	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	518	40	1551	0.334	519	0.6	3.837	A
2 - Inner Relief Road (S)	250	114	1721	0.145	250	0.2	2.693	A
3 - School Link Road	117	166	1489	0.078	117	0.1	2.887	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Oak Drive	434	33	1555	0.279	434	0.4	3.537	A
2 - Inner Relief Road (S)	210	95	1732	0.121	210	0.2	2.602	A
3 - School Link Road	98	139	1505	0.065	98	0.1	2.814	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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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: Junction 4 R410 Nass Road DN.j9
Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis
Report generation date: 09/08/2024 16:42:41

»Do Nothing - 2027 DN, AM
 »Do Nothing - 2027 DN, PM
 »Do Nothing - 2032 DN, AM
 »Do Nothing - 2032 DN, PM
 »Do Nothing - 2042 DN, AM
 »Do Nothing - 2042 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Nothing - 2027 DN									
Arm 1	D1	0.2	3.13	0.16	A	D2	0.4	3.75	0.28	A
Arm 2		0.2	3.72	0.18	A		0.5	4.71	0.33	A
Arm 3		0.1	2.72	0.10	A		0.3	3.36	0.24	A
	Do Nothing - 2032 DN									
Arm 1	D3	0.2	3.15	0.17	A	D4	0.4	3.80	0.29	A
Arm 2		0.2	3.75	0.19	A		0.5	4.81	0.34	A
Arm 3		0.1	2.74	0.10	A		0.3	3.41	0.25	A
	Do Nothing - 2042 DN									
Arm 1	D5	0.2	3.18	0.18	A	D6	0.4	3.88	0.30	A
Arm 2		0.2	3.80	0.20	A		0.6	4.96	0.36	A
Arm 3		0.1	2.75	0.10	A		0.4	3.49	0.27	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	(new file)
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\santosl
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Nothing	100.000

Do Nothing - 2027 DN, 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		1, 2, 3	3.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R410 Nass Rd (SE)	
2	R410 Nass Rd (NW)	
3	Blessington Inner Relief Road (NE)	

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
1	4.01	5.84	5.5	20.0	60.0	49.0	
2	3.97	5.38	6.2	10.0	60.0	62.0	
3	4.15	5.80	14.9	15.0	60.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.485	1386
2	0.432	1218
3	0.517	1544

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)
D1	2027 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	204	100.000
2		✓	195	100.000
3		✓	127	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	130	74
	2	145	0	50
	3	106	21	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.16	3.13	0.2	A
2	0.18	3.72	0.2	A
3	0.10	2.72	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	154	16	1378	0.111	153	0.1	2.936	A
2	147	56	1194	0.123	146	0.1	3.433	A
3	96	109	1487	0.064	95	0.1	2.585	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	183	19	1377	0.133	183	0.2	3.016	A
2	175	66	1190	0.147	175	0.2	3.548	A
3	114	130	1476	0.077	114	0.1	2.642	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	225	23	1375	0.163	224	0.2	3.129	A
2	215	81	1183	0.181	215	0.2	3.716	A
3	140	160	1461	0.096	140	0.1	2.723	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	225	23	1375	0.163	225	0.2	3.129	A
2	215	81	1183	0.181	215	0.2	3.716	A
3	140	160	1461	0.096	140	0.1	2.723	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	183	19	1377	0.133	184	0.2	3.019	A
2	175	67	1190	0.147	175	0.2	3.552	A
3	114	130	1476	0.077	114	0.1	2.644	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	154	16	1378	0.111	154	0.1	2.942	A
2	147	56	1194	0.123	147	0.1	3.437	A
3	96	109	1487	0.064	96	0.1	2.586	A

Do Nothing - 2027 DN, PM

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		1, 2, 3	3.95	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 segment length (min)
D2	2027 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	342	100.000
2		✓	337	100.000
3		✓	314	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	167	175
	2	225	0	112
	3	222	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.28	3.75	0.4	A
2	0.33	4.71	0.5	A
3	0.24	3.36	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	257	69	1352	0.190	257	0.2	3.282	A
2	254	131	1162	0.218	253	0.3	3.955	A
3	236	169	1457	0.162	236	0.2	2.947	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	307	83	1346	0.228	307	0.3	3.466	A
2	303	157	1150	0.263	303	0.4	4.246	A
3	282	202	1439	0.196	282	0.2	3.110	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	377	101	1337	0.282	376	0.4	3.745	A
2	371	192	1135	0.327	371	0.5	4.705	A
3	346	247	1416	0.244	345	0.3	3.363	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	377	101	1337	0.282	377	0.4	3.748	A
2	371	193	1135	0.327	371	0.5	4.711	A
3	346	248	1416	0.244	346	0.3	3.363	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	307	83	1346	0.228	308	0.3	3.472	A
2	303	158	1150	0.263	303	0.4	4.253	A
3	282	203	1439	0.196	283	0.2	3.113	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	257	69	1352	0.190	258	0.2	3.289	A
2	254	132	1161	0.218	254	0.3	3.968	A
3	236	170	1456	0.162	237	0.2	2.952	A

Do Nothing - 2032 DN, 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		1, 2, 3	3.27	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 segment length (min)
D3	2032 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	211	100.000
2		✓	202	100.000
3		✓	130	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	135	76
	2	150	0	52
	3	108	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.17	3.15	0.2	A
2	0.19	3.75	0.2	A
3	0.10	2.74	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	17	1378	0.115	158	0.1	2.950	A
2	152	57	1194	0.127	151	0.1	3.452	A
3	98	112	1486	0.066	98	0.1	2.593	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	20	1376	0.138	190	0.2	3.033	A
2	182	68	1189	0.153	181	0.2	3.573	A
3	117	135	1474	0.079	117	0.1	2.652	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	232	24	1374	0.169	232	0.2	3.152	A
2	222	84	1182	0.188	222	0.2	3.750	A
3	143	165	1458	0.098	143	0.1	2.736	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	232	24	1374	0.169	232	0.2	3.152	A
2	222	84	1182	0.188	222	0.2	3.750	A
3	143	165	1458	0.098	143	0.1	2.736	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	20	1376	0.138	190	0.2	3.036	A
2	182	68	1189	0.153	182	0.2	3.575	A
3	117	135	1474	0.079	117	0.1	2.652	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	17	1378	0.115	159	0.1	2.953	A
2	152	57	1194	0.127	152	0.1	3.459	A
3	98	113	1485	0.066	98	0.1	2.594	A

Do Nothing - 2032 DN, PM

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		1, 2, 3	4.02	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 segment length (min)
D4	2032 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	353	100.000
2		✓	349	100.000
3		✓	324	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	173	180
	2	233	0	116
	3	229	95	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.29	3.80	0.4	A
2	0.34	4.81	0.5	A
3	0.25	3.41	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	266	71	1351	0.197	265	0.2	3.310	A
2	263	135	1160	0.227	262	0.3	4.002	A
3	244	175	1453	0.168	243	0.2	2.973	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	317	85	1344	0.236	317	0.3	3.504	A
2	314	162	1148	0.273	313	0.4	4.309	A
3	291	209	1436	0.203	291	0.3	3.145	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	389	104	1335	0.291	388	0.4	3.799	A
2	384	198	1133	0.339	384	0.5	4.803	A
3	357	256	1411	0.253	356	0.3	3.412	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	389	105	1335	0.291	389	0.4	3.803	A
2	384	198	1133	0.339	384	0.5	4.809	A
3	357	257	1411	0.253	357	0.3	3.413	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	317	85	1344	0.236	318	0.3	3.510	A
2	314	162	1148	0.273	314	0.4	4.320	A
3	291	210	1435	0.203	292	0.3	3.147	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	266	72	1351	0.197	266	0.2	3.320	A
2	263	136	1160	0.227	263	0.3	4.016	A
3	244	176	1453	0.168	244	0.2	2.980	A

Do Nothing - 2042 DN, 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		1, 2, 3	3.31	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 segment length (min)
D5	2042 DN	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	219	100.000
2		✓	212	100.000
3		✓	134	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	141	78
	2	158	0	54
	3	111	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	3.18	0.2	A
2	0.20	3.80	0.2	A
3	0.10	2.75	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	17	1377	0.120	164	0.1	2.966	A
2	160	59	1193	0.134	159	0.2	3.480	A
3	101	118	1482	0.068	101	0.1	2.605	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	21	1376	0.143	197	0.2	3.053	A
2	191	70	1188	0.160	190	0.2	3.608	A
3	120	142	1470	0.082	120	0.1	2.666	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	25	1373	0.176	241	0.2	3.178	A
2	233	86	1181	0.198	233	0.2	3.797	A
3	148	174	1454	0.101	147	0.1	2.755	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	25	1373	0.176	241	0.2	3.178	A
2	233	86	1181	0.198	233	0.2	3.797	A
3	148	174	1454	0.101	148	0.1	2.755	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	21	1376	0.143	197	0.2	3.056	A
2	191	70	1188	0.160	191	0.2	3.610	A
3	120	142	1470	0.082	121	0.1	2.667	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	17	1377	0.120	165	0.1	2.969	A
2	160	59	1193	0.134	160	0.2	3.486	A
3	101	119	1482	0.068	101	0.1	2.606	A

Do Nothing - 2042 DN, PM

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		1, 2, 3	4.13	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 segment length (min)
D6	2042 DN	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	368	100.000
2		✓	367	100.000
3		✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	182	186
	2	245	0	122
	3	239	100	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.88	0.4	A
2	0.36	4.96	0.6	A
3	0.27	3.49	0.4	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	277	75	1349	0.205	276	0.3	3.351	A
2	276	140	1158	0.239	275	0.3	4.071	A
3	255	184	1449	0.176	254	0.2	3.013	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	331	90	1342	0.246	331	0.3	3.558	A
2	330	167	1146	0.288	330	0.4	4.406	A
3	305	220	1430	0.213	305	0.3	3.198	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	405	110	1332	0.304	405	0.4	3.879	A
2	404	205	1130	0.358	403	0.6	4.951	A
3	373	269	1404	0.266	373	0.4	3.490	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	405	110	1332	0.304	405	0.4	3.882	A
2	404	205	1130	0.358	404	0.6	4.959	A
3	373	270	1404	0.266	373	0.4	3.490	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	331	90	1342	0.247	331	0.3	3.564	A
2	330	167	1146	0.288	331	0.4	4.419	A
3	305	221	1430	0.213	305	0.3	3.201	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	277	75	1349	0.205	277	0.3	3.358	A
2	276	140	1158	0.239	277	0.3	4.088	A
3	255	185	1448	0.176	255	0.2	3.020	A

Junctions 9										
ARCADY 9 - Roundabout Module										
Version: 9.5.2.1013										
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Filename: Junction 4 R410 Nass Road DS.j9
 Path: G:\2023\p230199\calcs\arcady\Sensitivity Analysis
 Report generation date: 09/08/2024 16:45:08

- »Do Something - 2027 DS, AM
- »Do Something - 2027 DS, PM
- »Do Something - 2032 DS, AM
- »Do Something - 2032 DS, PM
- »Do Something - 2042 DS, AM
- »Do Something - 2042 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Do Something - 2027 DS									
Arm 1	D1	0.2	3.16	0.17	A	D2	0.4	3.83	0.30	A
Arm 2		0.2	3.74	0.18	A		0.5	4.77	0.33	A
Arm 3		0.1	2.76	0.11	A		0.3	3.41	0.25	A
	Do Something - 2032 DS									
Arm 1	D3	0.2	3.19	0.18	A	D4	0.4	3.89	0.31	A
Arm 2		0.2	3.77	0.19	A		0.5	4.87	0.34	A
Arm 3		0.1	2.78	0.11	A		0.4	3.46	0.26	A
	Do Something - 2042 DS									
Arm 1	D5	0.2	3.21	0.18	A	D6	0.5	3.97	0.32	A
Arm 2		0.2	3.82	0.20	A		0.6	5.02	0.36	A
Arm 3		0.1	2.79	0.11	A		0.4	3.54	0.28	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	Blessington LDR
Location	Blessington, Co. Wicklow
Site number	
Date	08/08/2024
Version	
Status	Planning
Identifier	
Client	Marshall Yards Development Company
Jobnumber	230199
Enumerator	HEADOFFICE\santosl
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

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Something	100.000

Do Something - 2027 DS, 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		1, 2, 3	3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R410 Nass Rd (SE)	
2	R410 Nass Rd (NW)	
3	Blessington Inner Relief Road (NE)	

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
1	4.01	5.84	5.5	20.0	60.0	49.0	
2	3.97	5.38	6.2	10.0	60.0	62.0	
3	4.15	5.80	14.9	15.0	60.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.485	1386
2	0.432	1218
3	0.517	1544

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)
D1	2027 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	215	100.000
2		✓	195	100.000
3		✓	144	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	130	85
	2	145	0	50
	3	123	21	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.17	3.16	0.2	A
2	0.18	3.74	0.2	A
3	0.11	2.76	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	162	16	1378	0.117	161	0.1	2.956	A
2	147	64	1191	0.123	146	0.1	3.445	A
3	108	109	1487	0.073	108	0.1	2.609	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	19	1377	0.140	193	0.2	3.041	A
2	175	76	1185	0.148	175	0.2	3.563	A
3	129	130	1476	0.088	129	0.1	2.672	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	237	23	1375	0.172	237	0.2	3.163	A
2	215	94	1178	0.182	215	0.2	3.736	A
3	159	160	1461	0.109	158	0.1	2.762	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	237	23	1375	0.172	237	0.2	3.163	A
2	215	94	1178	0.182	215	0.2	3.736	A
3	159	160	1461	0.109	159	0.1	2.763	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	19	1377	0.140	193	0.2	3.044	A
2	175	76	1185	0.148	175	0.2	3.565	A
3	129	130	1476	0.088	130	0.1	2.675	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	162	16	1378	0.117	162	0.1	2.962	A
2	147	64	1191	0.123	147	0.1	3.451	A
3	108	109	1487	0.073	108	0.1	2.610	A

Do Something - 2027 DS, PM

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		1, 2, 3	4.00	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 segment length (min)
D2	2027 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	361	100.000
2		✓	337	100.000
3		✓	326	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	167	194
	2	225	0	112
	3	234	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.83	0.4	A
2	0.33	4.77	0.5	A
3	0.25	3.41	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	272	69	1352	0.201	271	0.3	3.325	A
2	254	146	1155	0.220	253	0.3	3.982	A
3	245	169	1457	0.169	245	0.2	2.969	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	325	83	1346	0.241	324	0.3	3.524	A
2	303	174	1143	0.265	303	0.4	4.283	A
3	293	202	1439	0.204	293	0.3	3.140	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	397	101	1337	0.297	397	0.4	3.829	A
2	371	213	1126	0.329	371	0.5	4.761	A
3	359	247	1416	0.254	359	0.3	3.405	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	397	101	1337	0.297	397	0.4	3.832	A
2	371	214	1126	0.330	371	0.5	4.767	A
3	359	248	1416	0.254	359	0.3	3.405	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	325	83	1346	0.241	325	0.3	3.530	A
2	303	175	1143	0.265	303	0.4	4.290	A
3	293	203	1439	0.204	293	0.3	3.145	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	272	69	1352	0.201	272	0.3	3.333	A
2	254	146	1155	0.220	254	0.3	3.997	A
3	245	170	1456	0.169	246	0.2	2.976	A

Do Something - 2032 DS, 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		1, 2, 3	3.29	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 segment length (min)
D3	2032 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	222	100.000
2		✓	202	100.000
3		✓	147	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	135	87
	2	150	0	52
	3	125	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	3.19	0.2	A
2	0.19	3.77	0.2	A
3	0.11	2.78	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	167	17	1378	0.121	167	0.1	2.970	A
2	152	65	1190	0.128	151	0.1	3.464	A
3	111	112	1486	0.075	110	0.1	2.617	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	20	1376	0.145	199	0.2	3.058	A
2	182	78	1185	0.153	181	0.2	3.588	A
3	132	135	1474	0.090	132	0.1	2.682	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	244	24	1374	0.178	244	0.2	3.186	A
2	222	96	1177	0.189	222	0.2	3.770	A
3	162	165	1458	0.111	162	0.1	2.776	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	244	24	1374	0.178	244	0.2	3.186	A
2	222	96	1177	0.189	222	0.2	3.770	A
3	162	165	1458	0.111	162	0.1	2.776	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	20	1376	0.145	200	0.2	3.062	A
2	182	78	1184	0.153	182	0.2	3.590	A
3	132	135	1474	0.090	132	0.1	2.685	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	167	17	1378	0.121	167	0.1	2.976	A
2	152	66	1190	0.128	152	0.1	3.468	A
3	111	113	1485	0.075	111	0.1	2.618	A

Do Something - 2032 DS, PM

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		1, 2, 3	4.07	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 segment length (min)
D4	2032 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	372	100.000
2		✓	349	100.000
3		✓	336	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	173	199
	2	233	0	116
	3	241	95	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.31	3.89	0.4	A
2	0.34	4.87	0.5	A
3	0.26	3.46	0.4	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	71	1351	0.207	279	0.3	3.354	A
2	263	149	1154	0.228	262	0.3	4.030	A
3	253	175	1453	0.174	252	0.2	2.995	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	334	85	1344	0.249	334	0.3	3.563	A
2	314	179	1141	0.275	313	0.4	4.347	A
3	302	209	1436	0.210	302	0.3	3.175	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	410	104	1335	0.307	409	0.4	3.886	A
2	384	219	1124	0.342	384	0.5	4.861	A
3	370	256	1411	0.262	370	0.4	3.456	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	410	105	1335	0.307	410	0.4	3.889	A
2	384	219	1124	0.342	384	0.5	4.868	A
3	370	257	1411	0.262	370	0.4	3.456	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	334	86	1344	0.249	335	0.3	3.567	A
2	314	179	1141	0.275	314	0.4	4.357	A
3	302	210	1435	0.210	302	0.3	3.180	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	72	1351	0.207	280	0.3	3.362	A
2	263	150	1154	0.228	263	0.3	4.045	A
3	253	176	1453	0.174	253	0.2	3.002	A

Do Something - 2042 DS, 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		1, 2, 3	3.32	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 segment length (min)
D5	2042 DS	AM	ONE HOUR	08:15	09:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	230	100.000
2		✓	212	100.000
3		✓	151	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	141	89
	2	158	0	54
	3	128	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	3.21	0.2	A
2	0.20	3.82	0.2	A
3	0.11	2.79	0.1	A

Main Results for each time segment

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	17	1377	0.126	173	0.1	2.986	A
2	160	67	1189	0.134	159	0.2	3.492	A
3	114	118	1482	0.077	113	0.1	2.629	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	207	21	1376	0.150	207	0.2	3.078	A
2	191	80	1184	0.161	190	0.2	3.623	A
3	136	142	1470	0.092	136	0.1	2.696	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	253	25	1373	0.184	253	0.2	3.212	A
2	233	98	1176	0.198	233	0.2	3.818	A
3	166	174	1454	0.114	166	0.1	2.795	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	253	25	1373	0.184	253	0.2	3.212	A
2	233	98	1176	0.198	233	0.2	3.818	A
3	166	174	1454	0.114	166	0.1	2.795	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	207	21	1376	0.150	207	0.2	3.079	A
2	191	80	1184	0.161	191	0.2	3.628	A
3	136	142	1470	0.092	136	0.1	2.697	A

09:30 - 09:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	173	17	1377	0.126	173	0.1	2.989	A
2	160	67	1189	0.134	160	0.2	3.499	A
3	114	119	1482	0.077	114	0.1	2.632	A

Do Something - 2042 DS, PM

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		1, 2, 3	4.18	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 segment length (min)
D6	2042 DS	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	387	100.000
2		✓	367	100.000
3		✓	351	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	182	205
	2	245	0	122
	3	251	100	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.32	3.97	0.5	A
2	0.36	5.02	0.6	A
3	0.28	3.54	0.4	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	291	75	1349	0.216	290	0.3	3.396	A
2	276	154	1152	0.240	275	0.3	4.099	A
3	264	184	1449	0.182	263	0.2	3.036	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	348	90	1342	0.259	348	0.3	3.619	A
2	330	184	1139	0.290	330	0.4	4.446	A
3	316	220	1430	0.221	315	0.3	3.229	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	426	110	1332	0.320	426	0.5	3.968	A
2	404	225	1121	0.360	403	0.6	5.013	A
3	386	269	1405	0.275	386	0.4	3.535	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	426	110	1332	0.320	426	0.5	3.972	A
2	404	226	1121	0.361	404	0.6	5.022	A
3	386	270	1404	0.275	386	0.4	3.536	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	348	90	1342	0.259	348	0.4	3.623	A
2	330	185	1139	0.290	331	0.4	4.458	A
3	316	221	1430	0.221	316	0.3	3.232	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	291	75	1349	0.216	292	0.3	3.406	A
2	276	154	1152	0.240	277	0.3	4.117	A
3	264	185	1448	0.182	264	0.2	3.043	A

Appendix E : Traffic Survey Results

Arm A. Oak Drive										Arm B. Unnamed Road(SE)										Arm C. Unnamed Road(W)										Arm Totals
Destination : Arm A. Oak Drive										Destination : Arm B. Unnamed Road(SE)										Destination : Arm C. Unnamed Road(W)										Arm Totals
Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	Total		Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	Total		Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	Total		Arm Totals
07:00	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3	2	2	0	1	2	1	0	0	0	6	9	12
07:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	8	0	0	1	0	0	0	0	1	10	12	19
07:30	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	7	0	1	0	1	0	0	0	0	9	11	20
07:45	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	3	7	0	1	2	0	1	0	0	0	14	11	24
1.Hr	0	0	0	0	0	0	0	0	0	7	0	2	1	0	0	0	0	10	24	0	3	5	2	1	0	1	0	36	46	48
08:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	8	2	0	1	0	0	0	0	0	11	13	20
08:15	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	0	6	11	0	1	0	0	2	0	0	0	14	10	27
08:30	0	0	0	0	0	0	0	0	0	7	0	1	1	0	0	0	0	9	35	0	0	0	0	1	0	0	0	36	45	36
08:45	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	22	0	2	1	0	0	0	0	0	25	32	42
1.Hr	0	0	0	0	0	0	0	0	0	20	0	2	2	0	0	0	0	24	46	2	3	2	0	2	0	0	0	60	110	116
09:00	1	1	0	0	0	0	0	1	1	25	0	0	1	0	0	0	0	26	46	0	3	0	0	0	0	0	0	51	78	77
09:15	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	19	0	4	0	0	0	0	0	0	23	27	31
09:30	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	13	0	1	1	0	1	0	0	0	16	24	27
09:45	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	19	0	1	0	2	0	0	0	0	22	27	31
1.Hr	1	0	0	0	0	0	0	0	1	42	0	0	0	0	1	0	0	43	97	0	9	1	4	1	0	0	0	112	156	169
10:00	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	10	0	3	0	0	0	0	0	0	13	22	22
10:15	0	0	0	0																										

07:00	21	0	2	1	0	0	0	0	24
07:15	34	0	6	0	1	1	0	0	42
07:30	26	0	5	1	1	0	0	0	33
07:45	27	0	6	0	1	0	0	0	34
1 Hr	108	0	19	2	3	1	0	0	133
08:00	30	0	3	0	1	1	0	0	35
08:15	23	0	7	1	1	0	0	0	32
08:30	67	0	3	1	1	1	0	0	73
08:45	132	1	6	2	1	2	0	0	144
1 Hr	252	1	19	4	4	4	0	0	284
09:00	92	1	2	1	2	2	0	0	100
09:15	19	0	4	0	1	1	0	0	25
09:30	22	0	1	3	0	0	0	0	26
09:45	21	0	1	0	0	1	0	0	23
1 Hr	154	1	8	4	3	4	0	0	174
10:00	11	0	1	1	1	0	0	0	14
10:15	14	0	2	0	2	0	0	0	18
10:30	10	0	1	1	0	0	0	0	12
10:45	17	0	1	1	1	0	0	0	20
1 Hr	52	0	5	3	4	4	0	0	64
11:00	14	0	3	1	1	1	0	0	19
11:15	14	0	1	1	1	1	0	0	18
11:30	13	0	3	0	1	0	0	0	17
11:45	54	1	2	2	0	0	0	0	18
1 Hr	141	1	9	9	3	3	0	0	172
12:00	16	0	2	0	1	0	0	0	19
12:15	11	0	0	0	0	0	0	0	11
12:30	7	0	1	1	0	0	0	0	9
12:45	13	0	3	0	0	0	0	0	16
1 Hr	47	0	6	1	1	0	0	0	55
13:00	15	2	4	0	2	2	0	0	23
13:15	17	0	1	0	1	0	0	0	19
13:30	48	0	1	0	2	2	0	0	53
13:45	22	0	1	1	1	0	0	0	26
1 Hr	102	2	7	1	5	2	0	0	119
14:00	12	0	0	2	2	0	0	0	16
14:15	15	0	0	1	2	1	0	0	18
14:30	20	0	1	0	0	2	0	0	23
14:45	16	0	1	1	2	0	0	0	20
1 Hr	63	0	2	3	5	4	0	0	77
15:00	12	0	4	0	2	0	0	0	18
15:15	16	0	0	0	2	0	0	0	19
15:30	17	0	2	2	0	2	0	0	21
15:45	29	0	1	1	3	0	0	0	34
1 Hr	74	0	7	1	9	0	0	0	92
16:00	18	0	2	0	0	0	0	0	20
16:15	13	0	3	0	0	1	0	0	18
16:30	13	0	1	0	0	0	0	0	17
16:45	16	0	1	0	0	0	0	0	19
1 Hr	60	0	7	0	1	1	0	0	69
17:00	19	0	3	0	2	0	0	0	24
17:15	12	0	1	0	0	0	0	0	13
17:30	23	0	2	0	0	0	0	0	25
17:45	35	0	5	5	0	0	0	0	40
1 Hr	89	0	11	0	2	0	0	0	102
18:00	32	0	0	0	0	0	0	0	32
18:15	21	0	0	0	0	1	0	0	23
18:30	19	0	0	0	0	1	0	0	20
18:45	34	0	0	0	0	0	0	0	34
1 Hr	106	0	1	0	0	2	0	0	109
Total	1161	5	101	23	40	19	0	1	1350

ORIGIN SUMMARY

	Origin: Arm A Oak Drive								Total
	Car	Taxi	LGV	OGV1	OGV2	FSV	MC	PC	
07:00	4	0	2	2	1	0	0	0	9
07:15	10	0	0	1	1	0	0	0	12
07:30	9	0	1	0	1	0	0	0	11
07:45	8	0	2	3	0	1	0	0	14
1 Hr	31	0	5	6	2	1	0	1	46
08:00	9	2	1	1	0	0	0	0	13
08:15	16	0	1	1	0	2	0	0	20
08:30	42	0	1	1	0	1	0	0	45
08:45	29	0	2	1	0	0	0	0	32
1 Hr	96	2	5	4	0	3	0	0	110
09:00	72	0	3	0	2	1	0	0	78
09:15	23	0	4	0	0	0	0	0	27
09:30	21	0	1	1	0	1	0	0	24
09:45	24	0	1	2	0	2	0	0	27
1 Hr	140	0	9	1	4	2	0	0	156
10:00	19	0	3	0	0	0	0	0	22
10:15	14	0	2	0	0	1	0	0	17
10:30	8	0	0	4	2	0	0	0	14
10:45	25	0	4	0	1	1	0	0	30
1 Hr	66	0	9	4	3	1	0	0	83
11:00	17	0	1	1	1	0	0	0	20
11:15	27	0	0	1	3	0	0	0	31
11:30	25	0	1	0	0	0	0	0	26
11:45	20	0	4	0	1	0	0	0	25
12:00	86	0	5	6	5	0	0	0	102
12:15	34	0	2	0	1	0	0	0	37
12:30	34	0	3	0	0	0	0	0	37
12:45	15	0	2	1	0	1	0	0	19
1 Hr	102	0	8	2	1	1	0	0	114
13:00	37	1	4	0	0	0	42	0	84
13:15	28	0	1	0	0	1	0	0	30
13:30	30	0	2	1	0	0	0	0	33
13:45	83	0	1	0	3	1	0	0	88
1 Hr	178	1	8	1	3	2	0	0	193
14:00	25	0	4	0	1	1	0	0	31
14:15	26	0	2	1	1	1	0	0	31
14:30	40	0	1	0	1	0	0	0	42
14:45	43	0	2	1	0	2	0	0	48
1 Hr	134	0	9	1	3	4	0	0	151
15:00	41	0	5	0	1	1	0	0	48
15:15	42	0	5	0	2	1	0	0	50
15:30	57	0	3	3	0	1	0	0	62
15:45	25	0	5	0	1	0	0	0	31
1 Hr	155	0	18	1	4	3	0	0	181
16:00	67	0	3	1	0	0	0	0	71
16:15	37	0	7	0	3	0	0	0	47
16:30	56	0	8	0	2	1	0	0	67
16:45	58	0	6	0	0	0	0	0	64
1 Hr	218	0	24	1	5	4	0	0	249
17:00	75	0	15	0	0	0	1	0	91
17:15	74	0	10	0	0	0	1	0	86
17:30	76	0	8	0	0	0	0	0	84
17:45	61	0	7	0	0	0	0	0	68
1 Hr	286	0	40	1	2	1	0	0	329
18:00	81	0	7	0	0	1	0	0	89
18:15	39	0	5	1	0	0	0	0	45
18:30	51	0	2	0	0	0	0	0	53
18:45	36	0	0	0	0	0	0	0	36
1 Hr	207	0	14	1	0	1	0	0	223
Total	1702	3	155	24	30	20	2	1	1937

DESTINATION SUMMARY

	Destination : Arm A Oak Drive								Total
	Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	
07:00	21	0	2	1	0	0	0	0	24
07:15	37	0	6	0	1	1	0	0	45
07:30	27	0	5	1	1	0	0	0	34
07:45	28	0	6	0	1	0	0	0	35

1	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	5
3	0	0	0	0	0	0	0	3
8	0	0	0	0	0	0	0	8
17	0	0	0	0	0	0	0	17
18	0	0	0	0	0	0	0	8
12	0	0	0	0	0	0	0	12
42	0	0	0	0	1	0	0	43
42	0	0	1	0	0	0	0	43
104	0	0	1	0	1	0	0	106
20	0	0	0	0	0	0	0	20
11	0	0	0	0	0	0	0	11
8	0	0	0	0	0	0	0	8
10	0	0	0	0	0	0	0	10
49	0	0	0	0	0	0	0	49
8	0	0	1	0	0	0	0	9
9	0	0	0	0	0	0	0	9
13	0	0	1	0	0	0	0	14
12	0	1	0	0	0	0	0	13
42	0	1	2	0	0	0	0	45
1	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	9
2	0	0	1	0	0	0	0	3
10	0	2	0	0	0	0	0	12
22	0	2	1	0	0	0	0	26
8	0	1	0	0	0	0	0	9
8	0	0	0	0	0	0	0	8
15	0	0	0	0	0	0	0	15
6	0	1	0	0	1	0	0	8
37	0	2	0	0	1	0	0	40
9	4	4	0	0	1	0	0	14
13	0	1	0	0	0	0	0	13
12	0	1	0	0	0	0	0	13
10	0	0	0	0	0	0	0	10
43	0	6	0	0	1	0	0	50
8	0	0	0	0	0	0	0	8
24	1	1	0	0	0	0	0	25
15	1	1	0	0	1	0	0	17
15	0	1	0	0	0	0	0	16
62	0	3	0	0	1	0	0	66
11	0	0	0	0	0	0	0	11
12	0	0	1	0	0	0	0	13
8	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	6
37	0	0	1	0	0	0	0	38
10	0	2	0	0	0	0	0	12
11	0	0	0	0	1	0	0	13
15	1	2	0	0	0	0	0	16
50	0	5	0	0	1	0	0	57
12	0	0	0	0	0	0	0	12
14	0	0	0	0	0	0	0	14
15	0	2	0	0	0	0	0	17
8	3	3	0	0	0	0	0	11
40	0	5	0	0	0	0	0	54
8	0	0	1	0	0	0	0	9
5	0	0	0	0	0	0	0	5
8	0	1	0	0	0	0	0	9
10	0	0	1	0	0	0	0	10
31	0	1	1	0	0	0	0	33
543	0	25	6	0	5	0	1	580

Origin :	Arm B	Unnamed Road(SE)
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Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	Total
0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	5
4	0	0	0	0	0	0	0	4
4	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	14
14	0	1	1	0	0	0	0	16
8	1	1	1	0	0	0	0	11
24	1	1	0	0	0	0	0	26
37	0	0	0	0	2	2	0	39
83	2	3	2	0	2	0	0	92
24	2	2	0	0	0	0	0	28
24	2	0	0	0	0	0	0	26
16	0	0	0	0	0	0	0	16
17	0	0	0	0	0	0	0	17
81	4	2	0	0	0	0	0	87
12	2	2	0	0	0	0	0	22
22	0	0	0	0	0	0	0	22
15	1	1	0	0	0	0	0	17
19	0	1	1	0	0	0	0	21
68	1	4	1	0	0	0	0	74
20	0	2	0	0	0	0	0	22
24	0	1	1	0	0	0	0	25
21	0	1	1	0	0	0	0	23
85	0	4	1	0	0	0	0	90
30	0	1	0	0	0	0	0	31
23	0	1	0	0	0	0	0	24
23	0	1	0	0	0	0	0	24
28	0	4	4	0	0	0	0	32
104	0	7	0	0	0	0	0	111
31	0	1	0	0	0	0	0	32
34	0	0	0	0	1	0	0	35
39	0	2	0	0	0	0	0	41
27	0	0	0	0	0	0	0	28
131	3	3	0	0	2	2	0	136
33	0	3	0	0	0	0	0	36
25	0	2	0	0	1	0	0	28
48	0	2	0	1	0	0	0	51
37	0	3	0	0	0	0	0	41
132	0	7	0	1	2	0	0	142
41	0	1	0	0	0	0	0	41
33	0	1	2	0	1	0	0	37
32	0	1	0	0	0	0	0	33
20	0	0	0	0	0	0	0	20
126	0	2	2	0	0	0	0	131
30	0	3	0	0	0	0	0	33
41	1	3	0	0	0	0	0	45
35	0	2	0	0	0	0	0	27
42	0	4	0	0	0	0	0	46
138	1	12	0	0	0	0	0	151
30	0	2	0	0	0	0	0	32
43	0	2	0	0	0	0	0	43
42	0	1	0	0	0	0	0	43
33	0	4	4	0	0	0	1	38
148	0	9	0	0	0	0	1	158
33	0	3	0	0	0	0	0	35
20	0	2	0	0	0	0	0	22
26	0	1	0	0	0	0	0	27
24	0	2	0	0	0	0	0	26
103	0	7	0	0	0	0	0	110
1213	8	60	6	1	7	0	1	1296

Destination : Arm B Unnamed Road(SE)

Description:		Amounts in US\$ (thousands)						Total
Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	
3	0	1	0	0	0	0	0	4
7	0	0	0	0	0	0	0	7
5	0	0	0	0	0	0	0	5
9	0	1	1	0	0	0	0	11

0	0	0	0	0	0	0	0	0	0	25
0	0	0	0	0	0	0	0	0	0	47
0	0	0	0	0	0	0	0	0	0	46
0	0	0	0	0	0	0	0	0	0	150
0	0	0	0	0	0	0	0	0	0	43
0	0	0	0	0	0	0	0	0	0	44
0	0	0	0	0	0	0	0	0	0	116
0	0	0	0	0	0	0	0	0	0	187
0	0	0	0	0	0	0	0	0	0	390
0	0	0	0	0	0	0	0	0	0	120
0	0	0	0	0	0	0	0	0	0	33
0	0	0	0	0	0	0	0	0	0	37
0	0	0	0	0	0	0	0	0	0	33
0	0	0	0	0	0	0	0	0	0	223
0	0	0	0	0	0	0	0	0	0	23
0	0	0	0	0	0	0	0	0	0	27
0	0	0	0	0	0	0	0	0	0	26
0	0	0	0	0	0	0	0	0	0	33
0	0	0	0	0	0	0	0	0	0	109
0	0	0	0	0	0	0	0	0	0	20
0	0	0	0	0	0	0	0	0	0	27
0	0	0	0	0	0	0	0	0	0	20
0	0	0	0	0	0	0	0	0	0	30
0	0	0	0	0	0	0	0	0	0	97
0	0	0	0	0	0	0	0	0	0	28
1	0	0	0	0	0	0	0	0	1	20
0	0	0	0	0	0	0	0	0	0	24
1	0	0	0	0	0	0	0	0	1	96
0	0	0	0	0	0	0	0	0	0	36
0	0	0	0	0	0	0	0	0	0	33
0	0	0	0	0	0	0	0	0	0	66
0	0	0	0	0	0	0	0	0	0	34
0	0	0	0	0	0	0	0	0	0	169
0	0	0	0	0	0	0	0	0	0	24
0	0	0	0	0	0	0	0	0	0	43
0	0	0	0	0	0	0	0	0	0	40
0	0	0	0	0	0	0	0	0	0	36
0	0	0	0	0	0	0	0	0	0	143
0	0	0	0	0	0	0	0	0	0	29
0	0	0	0	0	0	0	0	0	0	32
0	0	0	0	0	0	0	0	0	0	29
0	0	0	0	0	0	0	0	0	0	40
0	0	0	0	0	0	0	0	0	0	130
0	0	0	0	0	0	0	0	0	0	32
0	0	0	0	0	0	0	0	0	0	31
0	0	0	0	0	0	0	0	0	0	30
0	0	0	0	0	0	0	0	0	0	33
0	0	0	0	0	0	0	0	0	0	126
0	0	0	0	0	0	0	0	0	0	36
0	0	0	0	0	0	0	0	0	0	27
0	0	0	0	0	0	0	0	0	0	42
0	0	0	0	0	0	0	0	0	0	51
0	0	0	0	0	0	0	0	0	0	156
0	0	0	0	0	0	0	0	0	0	41
0	0	0	0	0	0	0	0	0	0	28
1	0	0	0	0	0	0	0	0	1	30
0	0	0	0	0	0	0	0	0	0	44
1	0	0	0	0	0	0	0	0	1	143
2	0	0	0	0	0	0	0	0	2	1932

Origin :	Arm C	Unnamed Road(W)
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[illegible]

Destination : Arm C Unnamed Road(W)

Destination	Arrive	Unimpaired	Unimpaired	Unimpaired	Unimpaired	Unimpaired	Unimpaired	Total
Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC	
2	0	1	2	1	0	0	0	6
10	0	0	1	0	0	0	1	12
11	0	1	0	1	0	0	0	13
10	0	1	2	0	1	0	0	14

1 Hr	113	0	19	2	3	1	0	0	138
08:00	32	0	4	1	1	1	0	0	39
08:15	24	0	8	2	1	0	0	0	35
08:30	74	0	4	1	1	1	0	0	81
08:45	140	1	6	2	1	4	0	0	154
1 Hr	270	1	22	6	4	6	0	0	309
09:00	104	1	4	1	2	2	0	0	114
09:15	25	0	4	0	1	1	0	0	31
09:30	26	0	1	3	0	0	0	0	30
09:45	26	0	1	0	0	1	0	0	28
1 Hr	181	1	10	4	3	4	0	0	203
10:00	16	0	2	1	1	0	0	0	20
10:15	24	0	2	0	2	0	0	0	28
10:30	16	0	1	1	0	0	0	0	18
10:45	21	0	2	2	1	0	0	0	26
1 Hr	77	0	7	4	4	0	0	0	92
11:00	20	0	3	1	1	0	0	0	25
11:15	19	0	2	1	1	1	0	0	24
11:30	21	0	4	0	1	0	0	0	26
11:45	22	1	2	3	0	0	0	0	28
1 Hr	82	1	11	5	3	1	0	0	103
12:00	21	0	3	0	1	0	0	0	25
12:15	20	0	0	0	0	0	0	0	20
12:30	15	0	1	1	0	0	0	0	17
12:45	21	0	6	0	0	0	0	0	27
1 Hr	77	0	10	1	1	0	0	0	89
13:00	25	2	5	0	2	0	0	0	34
13:15	32	0	1	0	1	0	0	0	34
13:30	59	0	1	0	2	2	0	0	64
13:45	32	0	1	1	0	1	0	0	35
1 Hr	148	2	8	1	5	3	0	0	167
14:00	17	0	0	2	2	0	0	0	21
14:15	22	0	1	0	1	2	0	0	26
14:30	24	0	2	0	0	2	0	0	28
14:45	25	0	2	1	2	0	0	0	30
1 Hr	88	0	5	3	5	4	0	0	105
15:00	22	0	4	0	2	0	0	0	28
15:15	21	0	0	2	2	0	0	1	26
15:30	25	0	3	0	2	0	0	0	30
15:45	31	0	1	1	3	0	0	0	36
1 Hr	99	0	8	3	9	0	0	1	120
16:00	24	0	3	0	0	0	0	0	27
16:15	24	0	5	0	1	1	0	0	31
16:30	19	0	2	0	0	0	0	0	21
16:45	25	0	2	0	0	0	0	0	27
1 Hr	92	0	12	0	1	1	0	0	106
17:00	26	0	4	0	2	0	0	0	32
17:15	24	0	1	0	0	0	0	0	25
17:30	29	0	3	0	0	0	0	0	32
17:45	39	0	5	0	0	0	0	0	44
1 Hr	118	0	13	0	2	0	0	0	133
18:00	37	0	0	0	0	0	0	0	37
18:15	28	0	1	0	0	1	0	0	30
18:30	20	0	0	0	0	1	0	0	21
18:45	43	0	1	0	0	0	0	0	44
1 Hr	128	0	2	0	0	2	0	0	132
Total	1473	5	127	29	40	22	0	1	1697

24	0	2	1	0	0	0	0	27
9	0	1	0	0	0	0	0	10
17	0	0	1	0	0	0	0	18
49	0	1	1	0	1	0	0	52
49	0	0	1	0	0	0	0	50
124	0	2	3	0	1	0	0	130
45	0	0	0	0	1	0	0	46
12	0	0	0	0	0	0	0	12
19	0	0	0	0	0	0	0	19
15	0	0	0	0	0	0	0	15
91	0	0	0	0	1	0	0	92
17	0	0	1	0	0	0	0	18
13	0	0	0	0	0	0	0	13
17	0	0	1	0	0	0	0	18
22	0	1	0	0	0	0	0	23
69	0	1	2	0	0	0	0	72
7	0	0	0	0	0	0	0	7
21	0	0	0	0	0	0	0	21
14	0	0	1	0	0	0	0	15
18	0	2	0	0	0	0	0	20
60	0	2	1	0	0	0	0	63
17	0	2	0	0	0	0	0	19
22	0	1	0	0	0	0	0	23
19	0	0	0	0	0	0	0	19
13	0	1	0	0	1	0	0	15
71	0	4	0	0	1	0	0	76
17	0	5	0	0	1	0	0	23
23	0	1	0	0	0	0	0	24
19	0	1	0	0	0	0	0	20
30	0	0	0	0	1	0	0	31
89	0	7	0	0	2	0	0	98
20	0	2	0	0	0	0	0	22
36	0	1	0	0	0	0	0	37
24	0	1	0	1	1	0	0	27
23	0	2	0	0	0	0	0	25
103	0	6	0	1	1	0	0	111
24	0	1	0	0	0	0	0	25
23	0	2	1	0	0	0	0	26
19	0	0	1	0	0	0	0	20
14	0	2	0	0	0	0	0	16
80	0	5	2	0	0	0	0	87
24	0	2	0	0	0	0	0	26
17	0	1	0	0	1	0	1	20
25	0	3	0	0	0	0	0	28
26	0	1	0	0	0	0	0	27
92	0	7	0	0	1	0	1	101
25	0	1	0	0	0	0	0	26
28	0	0	0	0	0	0	0	28
28	0	5	0	0	0	0	0	33
18	0	3	0	0	0	0	0	21
99	0	9	0	0	0	0	0	108
21	0	0	1	0	0	0	0	22
10	0	0	0	0	0	0	0	10
14	0	1	0	0	0	0	0	15
18	0	0	0	0	0	0	0	18
63	0	1	1	0	0	0	0	65
965	0	46	10	1	7	0	1	1030

33	0	3	5	2	1	0	1	45
20	2	0	1	0	0	0	0	23
18	1	1	0	0	2	0	0	22
52	1	0	0	0	1	0	0	54
51	0	2	1	0	0	0	0	54
141	4	3	2	0	3	0	0	153
59	2	3	0	2	0	0	0	66
37	2	4	0	0	0	0	0	43
25	0	1	1	0	1	0	0	28
31	0	1	0	2	0	0	0	34
152	4	9	1	4	1	0	0	171
17	0	4	0	0	0	0	0	21
22	0	2	0	0	1	0	0	25
13	1	1	4	2	0	0	0	21
30	0	4	0	1	0	0	0	35
82	1	11	4	3	1	0	0	102
25	0	1	1	1	0	0	0	28
30	0	1	1	3	0	0	0	35
29	0	1	0	0	0	0	0	30
24	0	5	0	1	0	0	0	30
108	0	8	2	5	0	0	0	123
50	0	1	0	1	0	0	0	52
35	0	3	0	0	0	0	0	36
26	0	3	1	0	1	0	0	31
32	0	2	1	0	0	0	0	35
143	0	9	2	1	1	0	0	156
49	1	3	0	0	0	0	0	53
37	0	1	0	0	2	0	0	40
51	0	4	1	0	0	0	0	56
80	0	1	0	3	0	0	0	84
217	1	9	1	3	2	0	0	233
30	0	2	0	1	1	0	0	34
32	0	3	0	1	2	0	0	38
75	0	2	0	1	0	0	0	78
63	0	3	1	0	3	0	0	70
200	0	10	1	3	6	0	0	220
49	0	4	0	1	1	0	0	55
59	0	4	0	2	2	0	0	67
70	0	3	0	0	1	0	0	74
35	0	3	0	1	0	0	0	36
213	0	14	0	4	4	0	0	235
77	0	5	1	0	0	0	0	83
61	1	7	0	3	0	0	0	72
64	0	8	0	2	1	0	0	75
80	0	9	0	0	0	0	0	89
282	1	20	1	5	1	0	0	319
85	0	15	0	0	0	1	0	101
91	0	12	0	0	1	1	0	105
99	0	5	0	0	0	0	0	104
80	0	11	0	0	0	0	1	92
355	0	43	0	0	1	2	1	402
96	0	9	0	0	1	0	0	106
47	0	7	1	0	0	0	0	55
71	0	3	0	0	0	0	0	74
43	0	1	0	0	0	0	0	44
257	0	20	1	0	1	0	0	279
2183	11	168	20	30	22	2	2	2438

210
72
75
187
258
592
226
86
77
77
466
59
66
57
84
286
192
60
80
71
78
289
96
81
67
77
321
110
98
140
150
498
77
101
133
125
436
108
119
124
91
442
136
123
124
143
526
159
158
169
157
643
165
95
110
106
476

Origin Arm A - NB1

Destination : Arm A - NB1											Total
Car	Tail	LGV	OGV1	OGV2	PSV	MC	PC				
07:00	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0

Destination : Arm B - Access Road											Total
Car	Tail	LGV	OGV1	OGV2	PSV	MC	PC				
07:00	3	0	2	0	0	0	0	0	0	0	5
07:15	1	0	2	0	0	0	0	0	0	0	3
07:30	14	0	2	1	0	0	0	0	0	0	17
07:45	2	0	2	0	0	0	0	0	0	0	4
11:15	2	0	2	0	0	0	0	0	0	0	4
08:00	2	0	2	0	0	0	0	0	0	0	4
08:15	2	0	3	0	0	0	0	0	0	0	5
08:30	3	0	0	0	0	0	0	0	0	0	3
08:45	0	0	1	0	0	0	0	0	0	0	1
11:15	4	0	6	0	0	0	0	0	0	0	10
10:00	3	0	1	0	0	0	0	0	0	0	4
10:15	2	0	0	0	0	0	0	0	0	0	2
10:30	2	0	1	0	0	0	0	0	0	0	3
10:45	4	0	2	0	0	0	0	0	0	0	6
11:15	11	0	4	0	0	0	0	0	0	0	15
11:00	2	0	1	0	0	0	0	0	0	0	3
11:15	3	0	0	0	0	0	0	0	0	0	3
11:30	3	0	1	0	0	0	0	0	0	0	4
11:45	11	0	2	0	0	0	0	0	0	0	13
11:15	3	0	0	0	0	0	0	0	0	0	3
12:00	3	0	0	0	0	0	0	0	0	0	3
12:15	3	0	2	0	0	0	0	0	0	0	5
12:30	3	0	0	0	0	0	0	0	0	0	3
12:45	3	0	0	0	0	0	0	0	0	0	3
11:15	11	0	2	0	0	0	0	0	0	0	13
13:00	5	0	3	1	0	0	0	0	0	0	9
13:15	7	0	1	0	0	0	0	0	0	0	8
13:30	3	1	1	0	0	0	0	0	0	0	5
13:45	6	0	1	0	0	0	0	0	0	0	7
11:15	21	0	6	2	0	0	0	0	0	0	29
14:00	3	0	2	0	0	0	0	0	0	0	5
14:15	0	0	1	1	0	0	0	0	0	0	2
14:30	3	1	3	0	0	0	0	0	0	0	7
14:45	2	0	5	1	0	0	0	0	0	0	8
11:15	8	1	6	1	0	0	0	0	0	0	16
15:00	1	1	1	0	0	0	0	0	0	0	3
15:15	6	0	0	0	0	0	0	0	0	0	6
15:30	0	0	0	0	0	0	0	0	0	0	0
15:45	6	0	0	0	0	0	0	0	0	0	6
11:15	16	0	1	0	0	0	0	0	0	0	17
16:00	2	0	0	1	0	0	0	0	0	0	3
16:15	8	0	1	0	0	0	0	0	0	0	9
16:30	5	0	3	0	0	0	0	0	0	0	8
16:45	0	0	1	0	0	0	0	0	0	0	1
11:15	20	0	5	1	0	0	0	0	0	0	26
17:00	5	0	5	1	0	0	0	0	0	0	11
17:15	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0
17:45	7	0	1	0	0	0	0	0	0	0	8
11:15	16	0	8	1	0	0	0	0	0	0	25
18:00	6	0	2	0	0	0	0	0	0	0	8
18:15	3	0	1	0	0	0	0	0	0	0	4
18:30	12	0	2	0	0	0	0	0	0	0	14
18:45	5	0	0	0	0	0	0	0	0	0	5
11:15	21	0	0	0	0	0	0	0	0	0	21
Total	159	2	59	6	0	0	0	0	0	0	226

Destination : Arm C - NB1 The Green											Total
Car	Tail	LGV	OGV1	OGV2	PSV	MC	PC				
07:00	13	0	5	3	5	1	0	0	0	0	27
07:15	20	0	9	0	2	1	0	0	0	0	32
07:30	14	0	9	0	4	2	0	0	0	0	29
07:45	23	0	7	0	6	0	0	0	0	0	36
11:15	20	0	3	1	10	3	0	0	0	0	34
08:00	40	0	13	1	4	0	0	0	0	0	45
08:15	37	0	11	3	5	0	0	0	0	0	56
08:30	38	0	8	1	3	0	0	0	0	0	50
08:45	38	0	14	1	6	0	0	0	0	0	59
11:15	140	0	48	6	18	0	0	0	0	0	210
10:00	44	0	0	0	0	0	0	0	0	0	44
10:15	40	0	6	1	4	1	0	0	0	0	52
10:30	35	0	8	1	7	2	0	0	0	0	53
10:45	49	0	5	3	3	0	0	0	0	0	60
11:15	166	0	31	9	15	0	0	0	0	0	221
11:00	44	0	10	4	7	1	0	0	0	0	66
11:15	40	0	6	1	4	1	0	0	0	0	52
11:30	41	0	8	2	3	0	0	0	0	0	55
11:45	53	0	13	0	2	0	0	0	0	0	69
11:15	154	0	8	2	0	0	0	0	0	0	164
12:00	40	0	10	0	2	0	0	0	0	0	52
12:15	49	0	0	0	0	0	0	0	0	0	49
12:30	39	0	10	4	4	1	1	0	0	0	55
12:45	56	0	8	2	2	2	1	0	0	0	69
11:15	160	0	31	8	24	2	1	0	0	0	222
13:00	31	0	7	1	2	0	0	0	0	0	41
13:15	11	11	11	0	0	0	0	0	0	0	33
14:00	41	1	8	2	3	0	0	0	0	0	55
14:15	53	0	13	0	2	0	0	0	0	0	69
14:30	160	0	31	9	15	0	0	0	0	0	222
14:45	40	0	10	0	2	0	0	0	0	0	52
15:00	49	0	5	3	3	0	0	0	0	0	60
15:15	39	0	10	4	4	1	1	0	0	0	55
15:30	56	0	8	2	2	2	1	0	0	0	69
15:45	160	0	31	9	15	0	0	0	0	0	224
16:00	40	0	11	4	6	0	0	0	0	0	51
16:15	45	0	10	2	4	1	0	0	0	0	56
16:30	53	0	11	0	10	0	0	0	0	0	74
16:45	193	1	30	9	29	2	0	0	0	0	265
17:00	40	0	10	0	2	0	0	0	0	0	52
17:15	44	0	8	4	5	1	0	0	0	0	57
17:30	40	0	8	4	5	1	0	0	0	0	55
17:45	54	0	10	3	6	0	0	0	0	0	73
18:00	181	0	38	9	16	5	1	0	0	0	250
18:15	50	0	10	0	9	0	0	0	0	0	69
18:30	63	0	8	0	8	1	0	0	0	0	80
18:45	75	0	12	2	8	5	0	0	0	0	95
19:00	105	0	19	5	16	6	0	0	0	0	147
19:15	273	0	49	2	31	1	0	0	0	0	356
19:30	77	0	28	2	2	0	0	0	0	0	111
19:45	102	0	22	2	2	0	0	0	0	0	130
20:00	103	0	28	0	7	0	0	0	0	0	133
20:15	149	0	31	1	7	0	0	0	0	0	188
20:30	334	0	60	29	2	0	0	0	0	0	425
20:45	98	0	20	3	8	2	0	0	0	0	121
21:00	101	1	25	2	4	1	0	0	0	0	133
21:15	108	0	28	0	7	0	0	0	0	0	143
21:30	104	0	22	2	2	0	0	0	0	0	132
21:45	399	1	60	7	15	3	1	0	0	0	526
22:00	103	0	28	2	2	0	0	0	0	0	135
22:15	103	0	22	2	1	1	0	0	0	0	130
22:30	110	0	13	0	0	0	0	0	0	0	123
22:45	71	0	8	3	0	0	0	0	0	0	82
23:00	370	0	54	4	4	2	1	0	0	0	431
23:15	2638	0	564	76	210	21	11	0	0	0	3560

16:00	51	2	8	3	4	0	0	0	68
16:30	48	0	6	2	4	0	0	0	60
16:30	39	0	5	0	9	3	0	0	56
16:45	37	6	1	3	0	0	0	0	47
17:00	175	2	26	6	20	3	0	0	231
17:00	53	0	0	0	0	0	0	0	53
17:15	44	8	1	4	1	0	0	0	58
17:30	37	0	1	0	3	1	1	0	53
17:45	36	0	0	0	0	0	0	0	36
17:45	187	0	34	2	6	2	2	0	232
18:00	51	0	2	0	3	1	0	0	54
18:15	34	0	3	0	2	1	0	0	40
18:30	34	0	3	0	3	1	0	0	41
18:45	42	0	1	2	0	0	1	0	46
17:45	161	0	9	2	6	2	1	0	181

Total	2685	4	513	73	175	38	13	3	3758
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Origin : Arm D, Oak Drive

Destination : Arm A, NB1	Car	Tail	LGW	OGV1	OGV2	PSV	MC	PC	Total
07:00	31	0	4	0	1	0	0	0	36
07:15	38	0	5	0	1	0	0	0	44
07:30	36	0	3	0	3	0	0	0	42
07:45	32	0	0	2	1	0	0	0	35
17:00	137	0	12	0	6	0	0	0	154
08:00	35	0	4	0	2	0	0	0	41
08:15	20	8	2	1	0	0	0	0	31
08:30	44	0	5	1	2	1	0	0	53
08:45	73	0	2	2	1	1	0	0	78
17:45	178	0	19	0	6	0	0	0	203
09:00	62	2	5	1	2	2	0	0	74
09:15	32	0	3	0	3	0	0	0	38
09:30	17	0	3	0	0	0	0	0	20
09:45	13	0	0	0	0	0	0	0	13
17:45	124	2	11	0	6	0	0	0	142
10:00	17	0	1	1	1	0	1	0	21
10:15	23	0	5	0	2	0	0	0	30
10:30	11	0	2	1	0	0	0	0	14
10:45	15	0	1	1	1	0	0	0	18
17:45	86	0	9	2	3	0	0	0	98
11:00	9	4	1	0	0	0	0	0	14
11:15	15	0	2	0	0	0	0	0	17
11:30	17	0	5	1	0	0	0	0	23
11:45	15	0	2	3	1	0	0	0	21
17:45	96	0	13	4	3	0	0	0	116
12:00	21	0	2	1	0	0	0	0	24
12:15	14	0	0	1	0	0	0	0	15
12:30	11	0	2	1	1	0	0	0	15
12:45	22	0	3	0	0	0	0	0	25
17:45	68	0	7	3	2	0	0	0	80
13:00	12	0	6	0	2	0	0	0	21
13:15	19	0	2	0	0	0	0	0	21
13:30	18	0	3	0	2	0	0	0	23
13:45	42	0	2	0	0	0	0	0	46
17:45	91	1	13	2	6	0	0	0	112
14:00	12	0	3	3	0	0	0	0	18
14:15	23	0	1	1	0	0	0	0	25
14:30	17	0	2	0	0	2	0	0	21
14:45	19	0	2	0	2	1	0	0	24
17:45	71	0	8	3	6	0	0	0	88
15:00	19	0	1	0	1	0	0	0	22
15:15	21	0	2	0	3	0	0	0	26
15:30	22	0	3	1	0	0	0	0	26
15:45	20	0	4	0	2	0	0	0	26
17:45	92	0	9	2	3	0	0	0	104
16:00	22	0	1	0	1	0	0	0	24
16:15	25	0	3	0	1	1	0	0	30
16:30	17	0	5	1	0	0	0	0	23
16:45	14	0	0	0	1	0	0	0	15
17:45	78	0	9	0	3	1	0	0	91
17:00	24	0	3	0	0	0	0	0	27
17:15	20	0	1	0	0	0	0	0	21
17:30	23	0	1	0	0	0	0	0	24
17:45	15	0	0	0	0	0	0	0	15
17:45	82	0	5	0	2	0	0	0	89
18:00	19	0	1	0	0	0	0	0	20
18:15	11	0	1	0	0	0	0	0	12
18:30	14	0	0	0	0	0	0	0	14
18:45	17	0	0	0	0	0	0	0	17
17:45	61	0	3	0	0	0	0	0	64

Total	3054	4	118	26	47	8	1	0	3288
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ORIGIN SUMMARY

Destination : Arm A, NB1	Car	Tail	LGW	OGV1	OGV2	PSV	MC	PC	Total
07:00	19	0	9	3	9	1	0	0	41
07:15	27	1	13	1	2	1	0	0	45
07:30	26	0	13	0	5	2	0	0	46
07:45	34	0	18	0	6	1	0	0	59
17:00	106	1	48	7	22	5	0	0	189
08:00	42	0	18	0	6	0	0	0	56
08:15	50	0	17	5	5	1	0	0	78
08:30	66	0	9	1	3	0	0	0	79
08:45	65	0	16	0	7	0	0	0	88
17:45	223	0	60	9	19	3	0	0	314
09:00	64	0	13	5	4	1	0	0	87
09:15	59	0	11	0	0	0	0	0	70
09:30	43	0	13	3	9	0	0	0	68
09:45	62	0	5	3	3	1	0	0	83
17:45	228	0	18	0	10	2	0	0	308
10:00	57	0	13	4	7	0	1	0	82
10:15	49	0	8	8	0	0	0	0	65
10:30	49	0	12	3	7	2	0	0	73
10:45	56	0	12	2	7	0	0	0	77
17:45	211	0	15	0	10	2	0	0	238
11:00	46	0	9	2	3	0	1	0	61
11:15	51	1	12	3	6	0	0	0	70
11:30	59	0	13	2	0	0	0	0	79
11:45	66	0	16	1	2	0	1	0	86
17:45	222	2	50	8	15	6	2	0	295
12:00	60	0	14	0	0	0	0	0	74
12:15	68	2	5	2	7	0	0	0	84
12:30	52	0	13	0	0	0	0	0	65
12:45	66	0	11	2	2	1	0	0	84
17:45	245	2	43	9	17	1	1	0	321
13:00	81	2	17	1	0	0	0	0	102
13:15	76	0	13	4	4	1	0	0	98
13:30	82	0	5	5	5	1	0	0	98
13:45	86	0	13	0	0	0	0	0	103
17:45	302	2	48	14	30	2	0	0	421
14:00	63	0	13	0	1	4	2	0	83
14:15	58	0	10	5	6	0	0	0	79
14:30	79	1	15	4	7	0	0	0	106
14:45	124	0	18	0	6	0	0	0	148
17:45	280	2	36	12	18	5	1	0	373
15:00	84	0	12	0	10	0	0	0	106
15:15	97	0	13	1	1	1	0	0	122
15:30	115	0	15	3	8	1	0	0	142
15:45	113	0	21	0	6	0	0	0	140
17:45	408	0	61	6	0	0	0	0	511
16:00	118	1	31	3	5	1	0	0	159
16:15	120	0	28	2	9	0	0	0	159
16:30	157	0	36	0	9	1	0	0	205
16:45	117	0	38	1	3	0	0	0	159
17:45	512	1	132	6	39	1	1	0	673
17:00	150	0	33	6	2	1	0	0	186
17:15	160	1	41	2	4	1	1	0	210
17:30	153	0	36	1	3	0	0	0	192
17:45	168	0	35	2	3	0	1	0	209
17:45	631	1	144	9	19	3	3	0	892
18:00	133	0	21	2	0	3	0	0	161
18:15	151	0	31	4	1	1	0	0	189
18:30	154	0	15	0	1	1	1	0	172
18:45	156	0	10	0	0	2	0	0	138
17:45	544	0	77	8	4	2	7	0	641

Total	3939	11	802	105	247	32	16	0	5152
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DESTINATION SUMMARY

	LWP	HB	SP	SGT	LARGE	PSV	MC	PC
07:00	205	0	35	1	3	1	0	0
07:15	208	0	46	0	5	3	0	0
07:30	214	0	28	2	19	2	1	0
07:45	207	0	33	1	4	2	2	0
17:00	436	0	155	4	26	3	3	0
08:00	169	0	22	2	5	2	1	0
08:15	132	0	25	6	4	2	0	0
08:30	144	2	17	1	0	0	0	0
08:45	142	0	16	2	2	3	1	0
17:45	577	2	80	13	18	8	2	0
09:00	151	4	24	0	5	1	0	0
09:15	133	0	19	5	6	2	0	0
09:30	97	0	26	6	4	2	0	0
09:45	83	0	11	0	0	0	0	0
17:45	464	5	80	15	29	8	0	0
10:00	70	0	11	2	7	1	0	0
10:15	82	0	17	4	0	0	0	0
10:30	66	0	15	3	2	0	3	0
10:45	63	0	13	3	5	6	0	0
17:45	275	0	19	12	20	4	4	0
11:00	51	0	17	6	1	0	0	0
11:15	59	0	18	3	4	0	0	0
11:30	69	0	15	0	0	1	0	0
11:45	69	0	15	0	0	5	6	0
12:00	241	1	62	14	16	1	1	0
12:15	241	1	62	14	16	1	1	0
12:30	73	0	9	5	4	0	0	0
12:45	60	0	7	0	0	0	0	0



12:30	45	0	12	1	4	1	0	0	63	9	0	2	0	0	0	0	0	11	56	0	14	4	5	0	1	0	80	29	0	5	2	0	1	0	0	37	191
12:45	68	0	11	2	4	0	0	0	86	11	0	2	0	0	0	0	0	13	77	0	11	2	2	1	0	0	93	29	0	7	0	0	0	0	0	36	327
1 H	246	0	36	11	16	1	0	0	310	34	1	5	1	0	0	0	0	41	269	0	44	8	16	1	1	0	339	158	1	25	2	2	1	0	0	189	872
13:00	62	1	24	2	7	0	0	2	96	8	0	5	1	0	0	0	0	14	70	1	17	4	6	0	0	0	96	51	1	5	0	1	0	0	0	56	358
13:15	67	1	12	0	9	0	0	0	89	11	0	2	0	0	0	0	0	13	64	0	14	3	4	1	0	0	86	45	0	4	2	0	1	0	0	52	240
13:30	60	0	10	0	7	1	0	0	78	7	0	1	1	0	0	0	0	9	73	0	4	3	5	2	0	0	87	60	0	3	1	0	0	0	0	64	238
13:45	83	1	6	5	6	1	0	0	102	9	0	1	0	0	0	0	0	10	73	0	12	0	10	1	0	0	96	62	0	1	0	4	0	0	0	67	275
1 H	272	3	52	7	29	2	0	2	367	35	0	9	2	0	0	0	0	46	280	1	47	10	25	4	0	0	367	218	1	13	3	5	1	0	0	241	1021
14:00	49	0	11	5	3	0	1	0	69	6	0	5	0	0	0	0	0	11	65	0	9	1	4	1	0	0	80	42	0	8	1	0	1	0	0	50	210
14:15	61	0	11	3	8	1	0	0	84	3	0	3	1	0	0	0	0	7	60	0	11	5	5	3	0	0	84	36	0	2	0	1	1	0	0	40	215
14:30	47	1	14	1	4	3	0	0	70	9	1	5	0	0	0	0	0	15	75	0	14	3	6	0	0	0	98	56	2	4	1	1	0	0	0	64	247
14:45	72	1	10	0	8	1	0	0	92	7	0	1	0	0	0	0	0	8	80	0	16	1	1	3	1	0	102	65	2	4	1	0	2	0	0	74	276
1 H	222	2	46	9	29	5	1	0	314	20	1	14	1	0	0	0	0	41	280	0	50	10	16	7	1	0	364	199	4	16	3	2	4	0	0	228	848
15:00	77	1	4	4	8	1	0	1	96	3	0	2	0	0	0	0	0	5	77	0	12	0	9	0	0	0	99	43	0	5	1	1	0	0	0	50	249
15:15	68	0	13	0	5	0	0	0	86	12	0	0	0	0	0	0	0	12	87	0	13	1	9	1	0	0	111	53	0	9	1	2	1	0	0	66	275
15:30	62	1	12	1	7	2	0	0	85	5	0	1	0	0	0	0	0	6	95	0	13	3	8	0	0	0	119	61	0	4	1	0	2	0	0	68	278
15:45	69	1	16	2	6	1	0	0	93	8	0	2	0	0	0	0	0	10	103	0	22	0	5	0	0	0	130	52	0	6	0	1	0	0	0	95	292
1 H	276	3	44	7	25	4	0	1	369	28	0	4	0	0	0	0	0	33	302	0	60	4	31	1	0	0	458	209	0	26	3	4	3	0	0	243	1095
16:00	74	2	9	3	5	0	0	0	93	7	0	2	1	0	0	0	0	10	104	0	31	2	5	1	0	0	143	74	1	4	1	0	1	0	0	81	327
16:15	74	0	9	2	5	1	0	0	91	9	0	2	0	0	0	0	0	11	105	0	27	2	6	1	0	0	141	55	0	8	0	3	1	0	0	67	310
16:30	57	0	10	0	9	3	0	0	79	6	0	3	0	0	0	0	0	9	119	0	33	1	7	0	0	0	160	69	0	9	0	3	0	1	0	82	330
16:45	52	0	7	1	4	0	0	0	64	7	0	2	0	0	0	0	0	9	91	0	35	1	3	0	1	0	131	68	0	9	0	0	0	0	0	77	281
1 H	267	2	36	8	23	4	0	3	327	29	0	9	1	0	0	0	0	39	419	0	108	6	21	2	1	0	973	265	1	30	1	6	2	1	0	307	1484
17:00	76	0	13	0	2	0	0	0	93	8	0	5	1	0	0	0	0	14	116	0	25	4	6	2	0	0	153	76	0	11	0	0	0	1	0	88	348
17:15	65	0	9	1	1	1	0	0	77	6	0	2	0	0	0	0	0	8	116	1	31	2	4	1	0	0	155	80	0	16	0	0	1	1	0	98	338
17:30	60	0	13	0	3	1	1	0	78	1	0	1	0	0	0	0	0	2	112	0	36	1	3	0	0	0	152	69	0	12	0	0	0	0	1	82	314
17:45	48	0	5	1	1	0	0	1	56	10	0	2	0	0	0	0	0	12	120	0	30	1	2	0	1	0	154	80	0	8	2	1	0	0	0	91	313
1 H	251	0	40	2	7	2	2	0	304	25	0	10	1	0	0	0	0	36	464	1	122	8	15	3	1	0	614	305	0	47	2	1	1	2	1	359	1313
18:00	71	0	4	0	1	0	0	0	76	7	0	3	0	0	0	1	0	11	112	0	16	2	2	0	3	0	135	68	0	10	0	0	1	0	0	79	301
18:15	46	0	4	0	2	1	0	0	53	4	0	2	0	0	0	0	0	6	124	0	23	2	1	2	1	0	153	66	0	11	2	0	0	0	1	80	292
18:30	49	0	3	0	3	1	0	0	56	11	0	2	0	0	0	0	0	13	126	0	17	0	1	1	1	0	148	69	0	3	0	0	0	0	0	72	287
18:45	61	0	2	2	0	0	1	0	66	7	0	0	0	0	0	0	0	7	96	0	9	0	0	1	2	0	109	58	0	3	1	0	0	0	0	62	323
1 H	227	0	13	2	6	2	1	0	251	29	0	7	0	0	0	1	0	37	458	0	65	4	4	4	7	0	543	261	0	27	3	0	1	0	1	293	1123
Total	6150	18	677	102	223	47	14	3	5234	331	2	127	9	1	2	1	0	473	3536	4	755	87	213	37	13	0	4646	2199	12	279	36	30	22	4	2	2093	12945

Origin Arm A Oak Drive(ESE)

	Destination : Arm A Oak Drive(ESE)							Total
	Car	Taxi	LGV	OGV1	OGV2	PSV	MC	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1
08:45	1	0	0	0	0	0	0	1
1 Hr	2	0	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
1 Hr	1	0	0	0	0	0	0	1
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	1	0	0	0	0	0	0	1
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
1 Hr	1	0	0	0	0	0	0	1
12:00	1	0	0	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0
12:30	1	0	0	0	0	0	0	1
12:45	0	0	0	0	0	0	0	0
1 Hr	2	0	0	0	0	0	0	2
13:00	2	0	0	0	0	0	0	2
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
1 Hr	2	0	0	0	0	0	0	2
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	1	0	0	0	0	1
1 Hr	0	0	1	0	0	0	0	1
15:00	0	0	0	0	0	0	0	0
15:15	1	0	0	0	0	0	0	1
15:30	1	0	0	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0
1 Hr	2	0	0	0	0	0	0	2
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
Total	10	0	1	0	0	0	0	11

Origin Arm B Oak Drive(S)

	Destination : Arm A Oak Drive(ESE)							Total
	Car	Taxi	LGV	OGV1	OGV2	PSV	MC	
07:00	22	0	2	1	0	0	0	25
07:15	34	0	4	0	1	1	0	40
07:30	30	0	4	0	1	0	0	35
07:45	22	0	3	0	1	0	0	26
1 Hr	108	0	13	1	3	1	0	126
08:00	35	0	4	1	1	1	0	42
08:15	25	0	8	2	1	0	0	36
08:30	54	0	4	1	1	1	0	61
08:45	102	1	5	2	1	2	0	113
1 Hr	216	1	21	6	4	4	0	252
09:00	77	1	4	1	2	1	0	86
09:15	28	0	3	0	1	0	0	32
09:30	23	0	1	3	0	0	0	27
09:45	25	0	1	0	0	1	0	27
1 Hr	153	1	9	4	3	2	0	172
10:00	14	0	1	0	1	0	0	16
10:15	22	0	2	0	2	0	0	26
10:30	16	0	1	1	0	0	0	18
10:45	19	0	1	2	1	0	0	23
1 Hr	71	0	5	3	4	0	0	83
11:00	16	0	3	1	0	0	0	20
11:15	19	0	2	0	0	1	0	22
11:30	20	0	3	1	2	0	0	26
11:45	19	1	2	3	0	0	0	25
1 Hr	74	1	10	5	2	1	0	93
12:00	20	0	2	0	1	0	0	23
12:15	18	0	0	0	0	0	0	18
12:30	15	0	1	1	0	0	0	17
12:45	20	0	4	0	0	0	0	24
1 Hr	73	0	7	1	1	0	0	82
13:00	22	2	4	0	2	0	0	30
13:15	18	0	3	0	1	0	0	22
13:30	24	0	0	0	1	1	0	26
13:45	28	0	1	1	0	1	0	31
1 Hr	92	2	8	1	4	2	0	109
14:00	16	0	0	2	2	0	0	20
14:15	23	0	1	0	1	2	0	27
14:30	21	0	2	0	0	2	0	25
14:45	24	0	2	1	2	0	0	29
1 Hr	84	0	5	3	5	4	0	101
15:00	20	0	3	0	1	0	0	24
15:15	18	0	0	2	2	0	0	22
15:30	25	0	3	0	3	0	0	31
15:45	31	0	0	0	2	0	0	33
1 Hr	94	0	6	2	6	0	0	110
16:00	25	0	3	1	1	0	0	30
16:15	24	0	3	0	1	1	0	29
16:30	20	0	3	0	0	0	0	23
16:45	24	0	2	0	0	0	0	26
1 Hr	93	0	11	1	2	1	0	108
17:00	23	0	3	0	2	0	0	28
17:15	27	0	2	0	0	0	0	29
17:30	26	0	3	0	0	0	0	29
17:45	20	0	3	0	0	0	0	23
1 Hr	96	0	11	0	2	0	0	109
18:00	27	0	0	0	0	0	0	27
18:15	27	0	0	1	1	1	0	29
18:30	22	0	1	0	0	0	0	23
18:45	21	0	0	0	0	1	0	22
1 Hr	97	0	1	0	0	2	0	100
Total	1251	5	107	27	38	17	0	1445

Origin Arm C Oak Drive(W)

Destination : Arm A Oak Drive(ESE)							Total
Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC

Destination : Arm B Oak Drive(S)							Total
Car	Taxi	LGV	OGV1	OGV2	PSV	MC	PC
4	0	2	1	1	0	0	8
9	0	1	0	0	0	0	11
10	0	2	0	1	0	0	13
8	0	1	2	0	1	0	12
31	0	6	3	2	1	0	44
11	2	2	1	0	0	0	16
17	0	1	1	0	3	0	22
44	0	1	0	0	0	0	45
22	0	2	1	0	0	0	25
84	2	6	3	0	3	0	108
37	0	1	0	2	0	0	40
17	0	1	0	0	0	0	21
20	0	4	1	1	1	0	24
24	0	1	0	1	0	0	26
98	0	7	1	4	1	0	111
15	0	2	0	0	0	0	17
15	0	4	0	0	0	0	19
8	0	0	4	2	0	0	14
24	0	3	0	1	0	0	28
62	0	9	4	3	0	0	78
21	0	1	1	1	0	0	24
25	0	0	1	3	0	0	29
22	0	1	0	1	0	0	24
20	0	3	0	0	0	0	23
88	0	5	2	5	0	0	100
33	0	3	0	1	0	0	37
31	0	1	0	0	0	0	32
14	0	2	1	0	1	0	18
18	0	1	1	0	0	0	20
96	0	7	2	1	1	0	107
36	1	4	0	0	0	0	41
26	0	1	0	0	1	0	28
24	0	1	1	0	0	0	26
40	0	1	0	4	0	0	45
126	1	7	1	4	1	0	140
25	0	3	0	0	0	0	28
14	15	1	1	1	1	0	30
39	0	1	0	1	0	0	41
41	0	1	2	0	2	0	46
131	0	6	3	2	3	0	145
28	0	5	0	1	0	0	34
41	0	4	0	2	1	0	48
53	0	5	1	1	0	0	60
26	0	4	0	1	0	0	31
148	0	18	1	4	2	0	173
54	0	1	1	0	0	0	56
32	0	5	0	3	1	0	41
57	0	8	0	2	0	0	67
55	0	4	0	0	0	0	59
198	0	18	1	5	1	0	223
74	0	12	0	0	0	1	87
71	0	9	0	0	1	1	82
79	0	7	0	0	0	0	86
57	0	8	0	0	0	0	65
281	0	36	0	0	1	2	320
60	0	5	0	0	1	0	66
48	0	5	1	0	0	0	54
50	0	1	0	0	0	0	51
27	0	0	0	0	0	0	27
185	0	11	1	0	1	0	198
1538	3	136	22	30	15	2	1747

Destination : Arm C Oak Drive(W)	
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429

Origin	Totals
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226
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122
67
205
460
233
64
73
431
57
211
53
54
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235
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62
41
57
227
85
126
175
467
56
65
67
78
266
68
78
105
80
331
109
84
95
95
383
123
116
123
123
485
137
86
75
96
394
4116

Dest Totals

45
69
60
52

1 Hr	111	0	13	1	7	2	0	0	134
08:00	36	0	4	1	1	1	0	0	43
08:15	25	0	9	2	2	0	0	0	38
08:30	55	0	4	1	1	1	0	0	62
08:45	109	1	5	3	1	3	0	0	122
1 Hr	225	1	22	7	5	5	0	0	265
09:00	98	2	9	1	2	2	0	0	114
09:15	33	0	3	0	1	0	0	0	37
09:30	24	0	2	3	0	0	0	0	29
09:45	32	0	6	0	0	2	0	0	40
1 Hr	187	2	20	4	3	4	0	0	220
10:00	18	0	4	0	1	0	0	0	23
10:15	23	0	4	1	2	0	0	0	30
10:30	17	0	3	1	0	0	0	0	21
10:45	21	0	1	2	1	0	0	0	25
1 Hr	79	0	12	4	4	0	0	0	99
11:00	20	0	3	1	0	0	0	0	24
11:15	24	0	3	0	0	1	0	0	28
11:30	22	0	4	1	2	0	0	0	29
11:45	21	1	2	3	2	0	0	0	29
1 Hr	87	1	12	5	4	1	0	0	110
12:00	22	0	2	1	1	0	0	0	26
12:15	21	0	0	0	0	0	0	0	21
12:30	18	0	1	1	0	0	0	0	20
12:45	23	0	5	0	0	0	0	0	28
1 Hr	84	0	8	2	1	0	0	0	95
13:00	24	4	4	0	2	0	0	0	34
13:15	20	0	3	0	1	0	0	0	24
13:30	27	0	0	0	1	1	0	0	29
13:45	70	0	2	2	0	1	0	0	75
1 Hr	141	4	9	2	4	2	0	0	162
14:00	17	0	1	2	2	0	0	0	22
14:15	27	0	1	0	1	2	0	0	31
14:30	21	0	2	0	0	3	0	0	26
14:45	24	1	3	1	2	0	0	0	31
1 Hr	89	1	7	3	5	5	0	0	110
15:00	22	0	4	0	1	0	0	0	27
15:15	21	0	0	2	2	0	0	0	25
15:30	28	0	6	1	3	0	0	0	38
15:45	37	0	3	0	2	0	0	0	42
1 Hr	108	0	13	3	8	0	0	0	132
16:00	32	0	3	1	1	0	0	0	37
16:15	31	0	4	1	1	1	0	0	38
16:30	20	0	6	0	0	0	0	0	26
16:45	26	0	2	0	0	0	0	0	28
1 Hr	109	0	15	2	2	1	0	0	129
17:00	26	0	5	0	2	0	0	0	33
17:15	28	0	2	0	0	0	0	0	30
17:30	29	0	3	0	0	0	0	0	32
17:45	21	0	4	0	0	0	0	0	25
1 Hr	104	0	14	0	2	0	0	0	120
18:00	31	0	2	0	0	0	0	0	33
18:15	27	0	0	0	0	1	0	0	28
18:30	22	0	1	0	0	0	0	0	23
18:45	23	0	0	0	0	1	0	0	24
1 Hr	103	0	3	0	0	2	0	0	108
Total	1427	9	148	33	45	22	0	0	1684

32	0	7	5	2	1	0	1	48
11	2	2	1	0	0	0	0	16
17	0	1	1	0	3	0	0	22
44	0	1	0	0	0	0	0	45
28	0	2	1	0	1	0	0	32
100	2	6	3	0	4	0	0	115
74	0	2	0	2	1	0	0	79
20	0	4	0	0	0	0	0	24
22	0	1	1	1	1	0	0	26
25	0	1	0	1	0	0	0	27
141	0	8	1	4	2	0	0	156
17	0	3	0	0	0	0	0	20
15	0	5	0	0	1	0	0	21
8	0	0	4	2	0	0	0	14
25	0	3	0	1	0	0	0	29
65	0	11	4	3	1	0	0	84
21	0	1	1	1	0	0	0	24
26	0	0	1	3	0	0	0	30
27	0	1	0	1	0	0	0	29
21	0	4	0	0	0	0	0	25
95	0	6	2	5	0	0	0	108
33	0	3	0	1	0	0	0	37
33	0	2	0	0	0	0	0	35
16	0	2	1	0	1	0	0	20
19	0	1	1	0	0	0	0	21
101	0	8	2	1	1	0	0	113
37	1	4	0	0	0	0	0	42
27	0	1	0	0	1	0	0	29
31	0	2	1	0	0	0	0	34
85	0	1	0	4	1	0	0	91
180	1	8	1	4	2	0	0	196
25	0	5	0	0	0	0	0	30
27	0	1	1	1	1	0	0	31
39	0	1	0	1	0	0	0	41
42	0	1	2	0	2	0	0	47
133	0	8	3	2	3	0	0	149
30	0	5	0	1	1	0	0	37
43	0	4	0	2	1	0	0	50
56	0	6	1	0	1	0	0	64
29	0	5	0	1	0	0	0	34
157	0	20	1	4	3	0	0	185
66	0	3	1	0	0	0	0	70
34	0	5	0	3	1	0	0	43
58	0	8	0	2	0	0	0	68
58	0	7	0	0	0	0	0	65
216	0	23	1	5	1	0	0	246
76	0	13	0	0	0	1	0	90
73	0	10	0	0	1	1	0	85
80	0	7	0	0	0	0	0	87
62	0	8	0	0	0	0	0	70
291	0	38	0	0	1	2	0	332
75	0	8	0	0	1	0	0	84
48	0	5	1	0	0	0	0	54
50	0	1	0	0	0	0	0	51
34	0	0	0	0	0	0	0	34
207	0	14	1	0	1	0	0	223
1718	3	157	24	30	20	2	1	1955

25	0	15	1	3	0	0	0	44
5	0	2	0	0	0	0	0	7
2	0	2	1	2	0	0	0	7
15	0	0	0	0	0	0	0	15
46	0	3	0	0	2	0	0	51
68	0	7	1	2	2	0	0	80
37	0	1	0	0	2	0	0	40
2	0	1	0	0	0	0	0	3
2	0	3	0	0	1	0	0	6
4	0	1	0	0	1	0	0	6
45	0	6	0	0	4	0	0	55
6	0	6	1	0	1	0	0	14
1	0	2	0	0	0	0	0	3
2	0	2	0	0	0	0	0	4
6	0	1	0	0	0	0	0	7
15	0	11	1	0	1	0	0	28
4	0	0	0	1	0	0	0	5
1	0	0	0	0	0	0	0	1
4	0	1	0	1	0	0	0	6
4	0	0	1	0	0	0	0	5
13	0	1	1	2	0	0	0	17
2	0	2	0	0	0	0	0	4
5	0	1	0	0	0	0	0	6
1	0	0	0	0	0	0	0	1
5	0	3	0	0	0	0	0	8
13	0	6	0	0	0	0	0	19
9	0	0	0	0	0	0	0	9
25	0	2	1	0	0	0	0	28
59	0	2	0	1	1	0	0	63
6	0	2	1	0	0	0	0	9
99	0	6	2	1	1	0	0	109
2	0	1	0	0	1	0	0	4
3	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
5	0	1	0	0	1	0	0	7
2	0	1	1	0	0	0	0	4
3	0	0	0	0	0	0	0	3
2	0	0	0	0	1	0	0	3
2	0	2	0	0	0	0	0	4
9	0	3	1	0	1	0	0	14
1	1	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	3
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	2
7	1	0	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	4
23	0	5	0	0	0	0	0	28
28	0	5	0	0	0	0	0	33
19	0	1	0	0	0	0	0	20
3	0	1	0	0	0	0	0	4
1	0	0	0	0	0	0	0	1
36	0	2	0	0	0	0	0	38
59	0	4	0	0	0	0	0	63
386	1	65	7	8	10	0	0	477

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