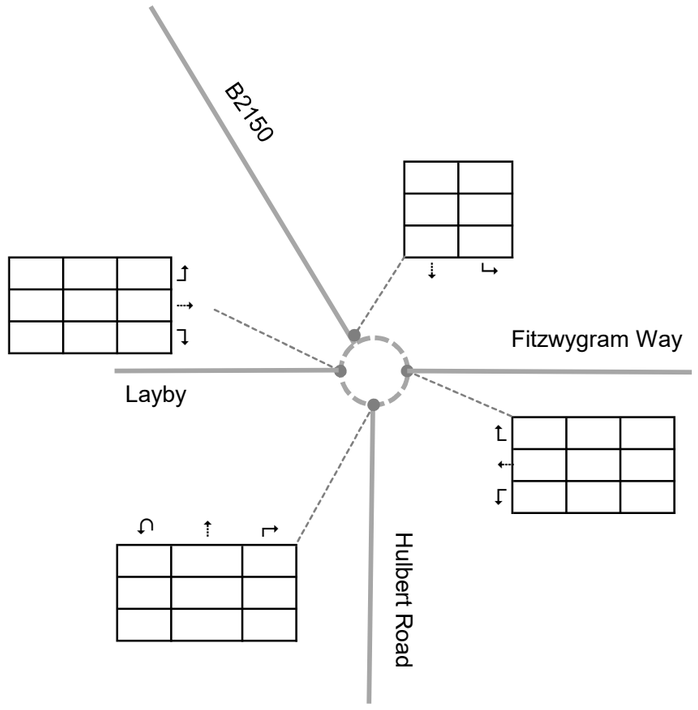
Appendix J

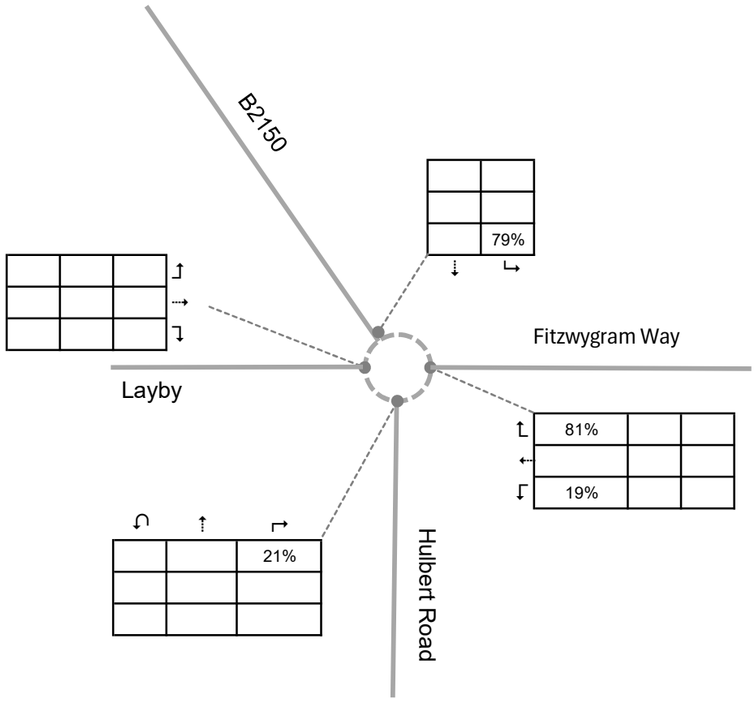
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Diagram



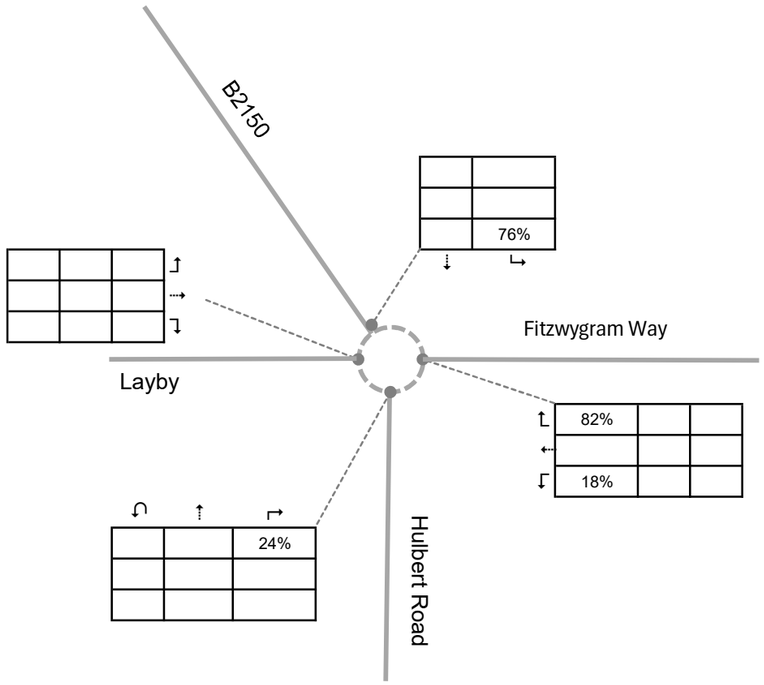
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Distributions (AM)



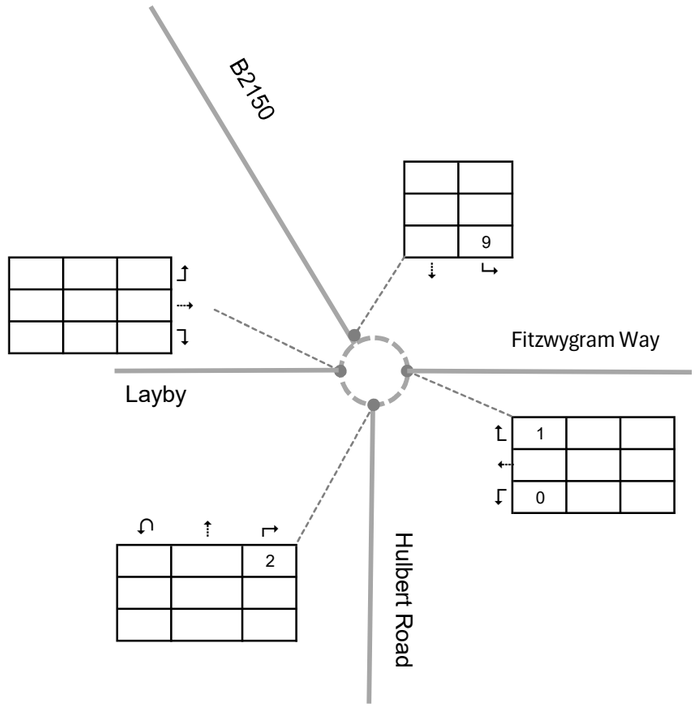
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Distributions (PM)



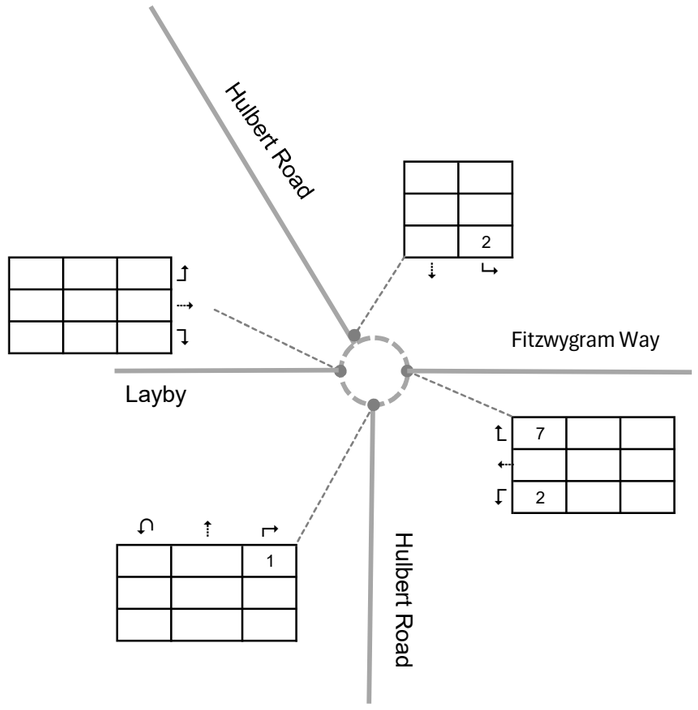
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (AM)



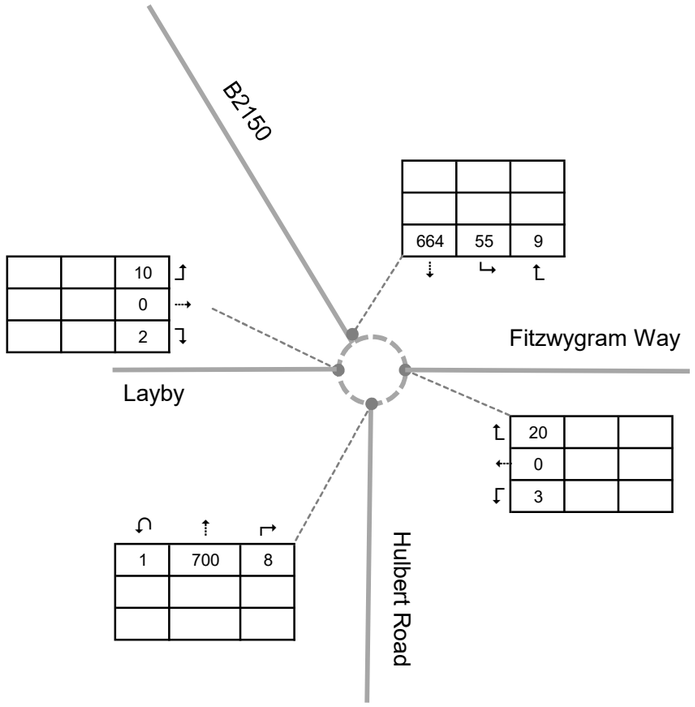
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (PM)



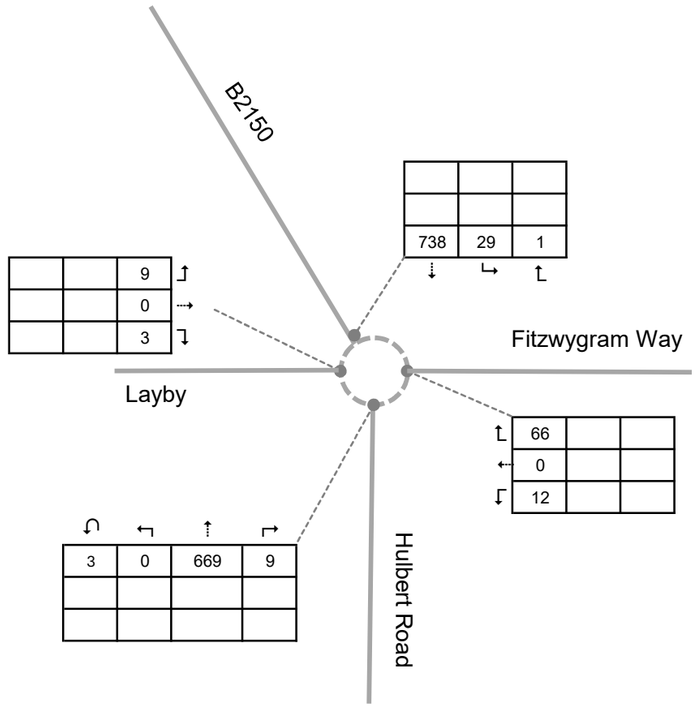
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2025 (AM)



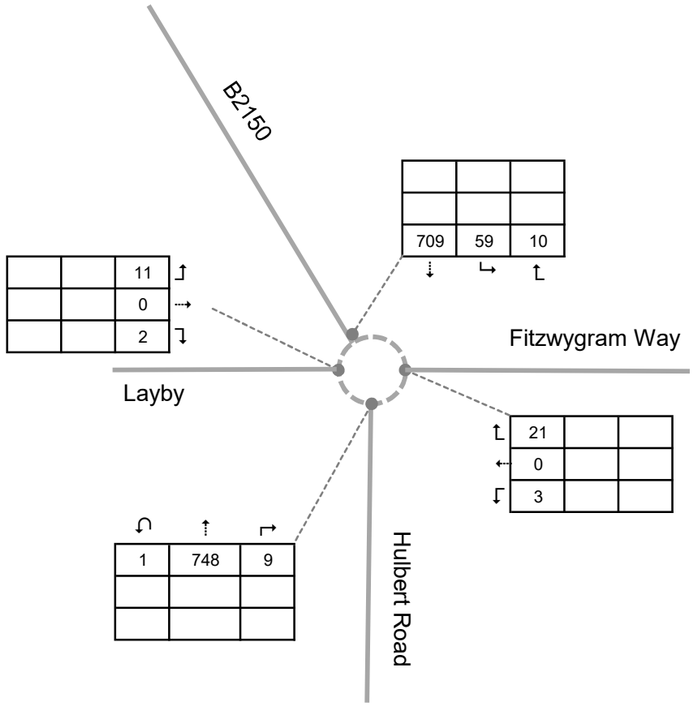
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2025 (PM)



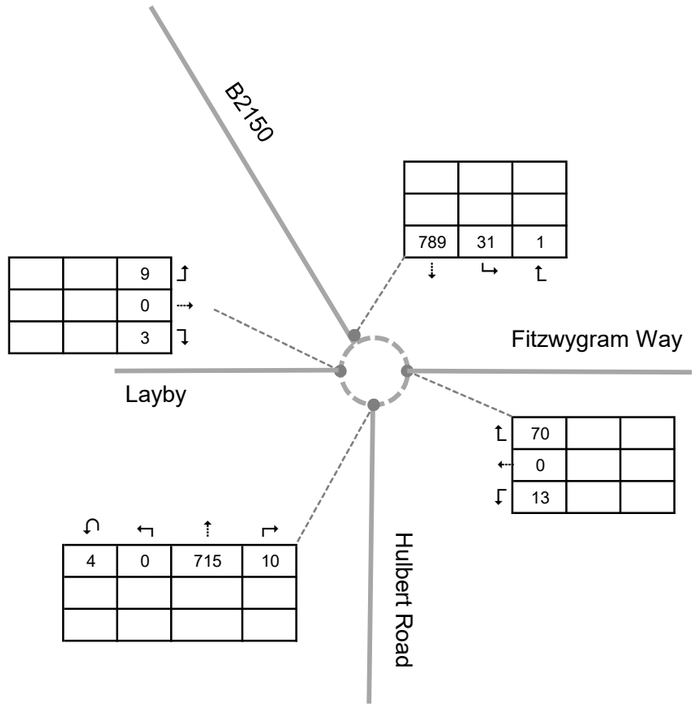
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM)



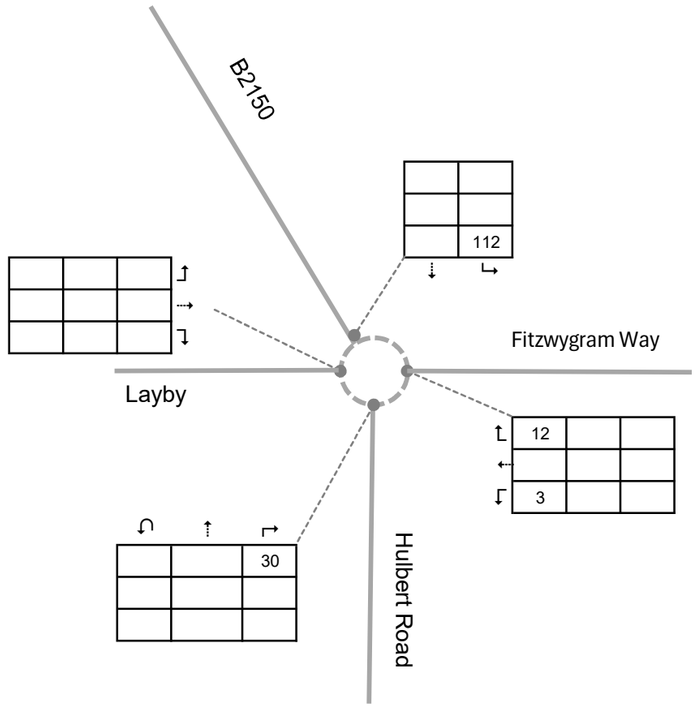
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM)



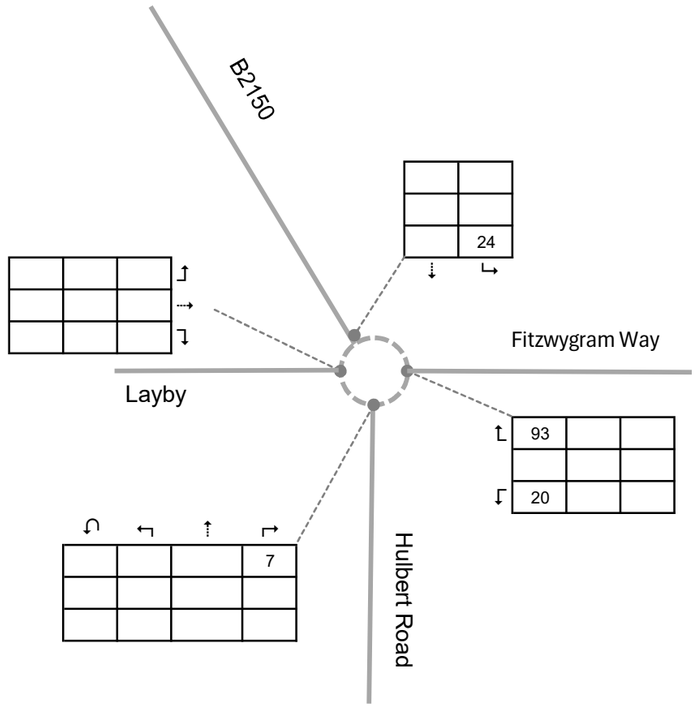
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (AM) CD1



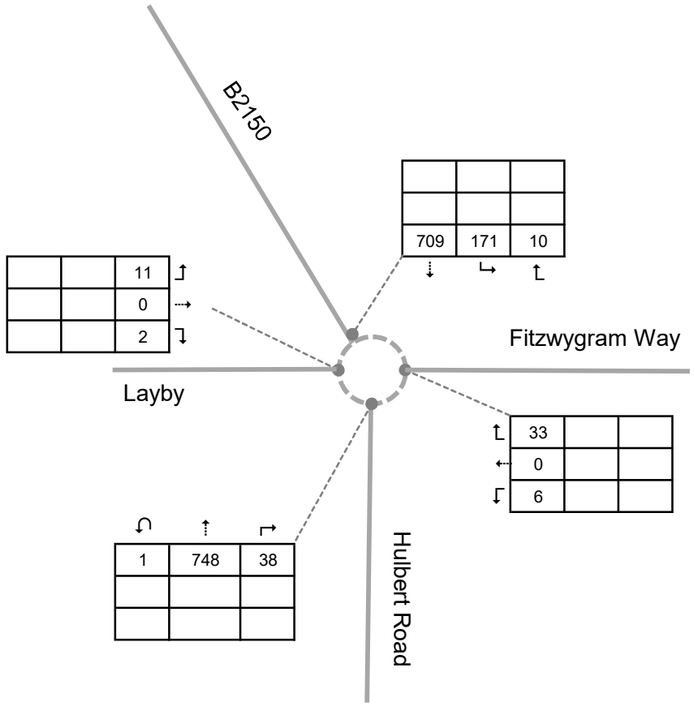
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (PM) CD1



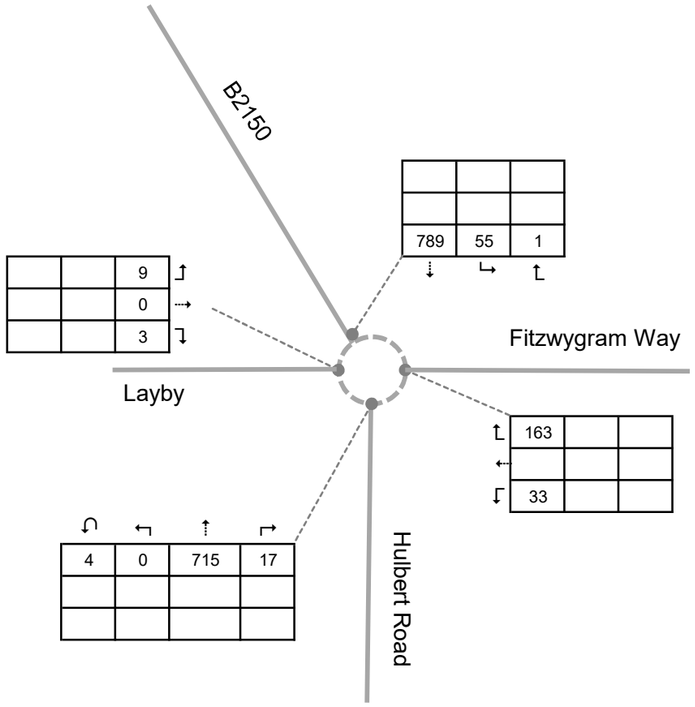
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM) + CD1



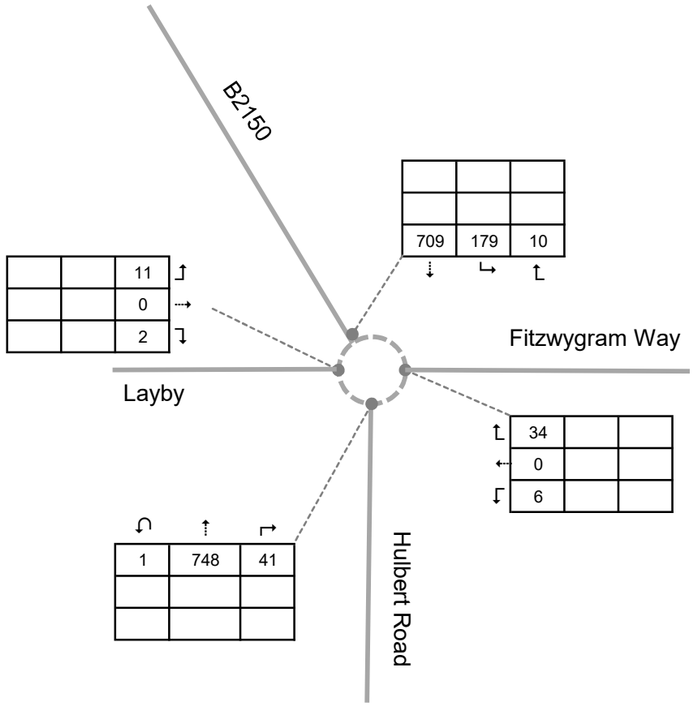
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM) + CD1



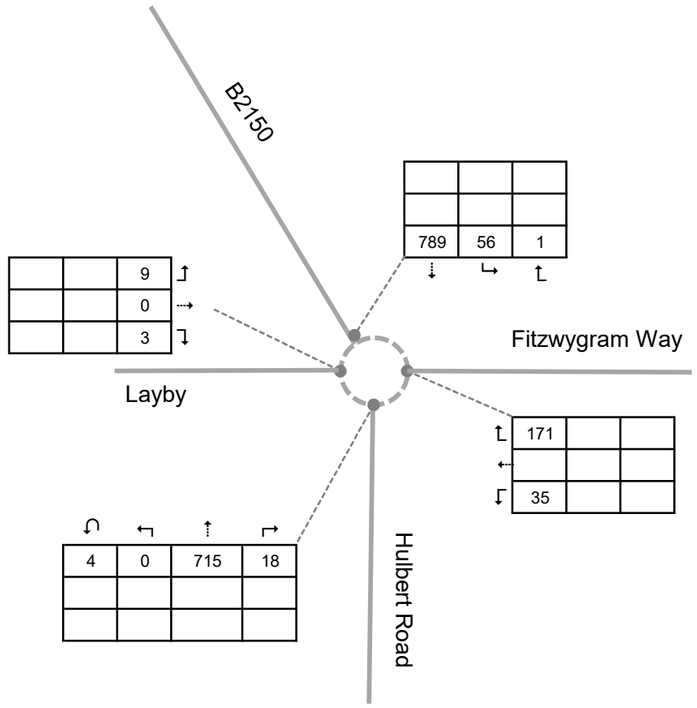
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM) + CD1 + PD



Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM) + CD1 + PD



Appendix K

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

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Filename: Fitzwygram Way_B2150 RAB_Unit_100.j11
Path: P:\Southern\270-279\273 Avison Young\273.0002 Dunsbury Park Unit 100\03 Technical\TPL\Modelling
Report generation date: 13/11/2025 09:36:57

»2025 | Base | AM
»2025 | Base | PM
»2030 | Base | AM
»2030 | Base | PM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | AM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | PM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park | AM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2025 - Base																
1 - Hulbert Way (B2150) (N)	D1	1.1	5.59	0.51	A	4.47	A	82 % [1 - Hulbert Way (B2150) (N)]	D2	1.4	6.26	0.56	A	4.79	A	65 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.0	2.67	0.02	A					0.1	2.89	0.06	A			
3 - Hulbert Way (B2150) (S)		0.7	3.35	0.40	A					0.7	3.34	0.39	A			
4 - Lay-by		0.0	5.42	0.02	A					0.0	5.47	0.02	A			
2030 - Base																
1 - Hulbert Way (B2150) (N)	D3	1.3	6.03	0.55	A	4.77	A	70 % [1 - Hulbert Way (B2150) (N)]	D4	1.6	6.88	0.60	A	5.18	A	55 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.0	2.74	0.02	A					0.1	2.98	0.06	A			
3 - Hulbert Way (B2150) (S)		0.8	3.52	0.43	A					0.8	3.51	0.42	A			
4 - Lay-by		0.0	5.65	0.02	A					0.0	5.69	0.02	A			
2030 - Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)																
1 - Hulbert Way (B2150) (N)	D5	1.4	6.20	0.55	A	4.96	A	67 % [1 - Hulbert Way (B2150) (N)]	D6	1.7	6.93	0.60	A	5.22	A	54 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.0	2.77	0.03	A					0.2	3.29	0.15	A			
3 - Hulbert Way (B2150) (S)		0.9	3.65	0.44	A					0.8	3.76	0.43	A			
4 - Lay-by		0.0	5.84	0.02	A					0.0	6.19	0.02	A			
2030 - Baseline 2030 + Fully Occupied Dunsbury Park																
1 - Hulbert Way (B2150) (N)	D7	1.4	6.21	0.55	A	4.97	A	66 % [1 - Hulbert Way (B2150) (N)]	D8	1.7	6.94	0.60	A	5.23	A	54 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.0	2.77	0.03	A					0.2	3.32	0.16	A			
3 - Hulbert Way (B2150) (S)		0.9	3.66	0.45	A					0.8	3.78	0.44	A			
4 - Lay-by		0.0	5.86	0.02	A					0.0	6.24	0.02	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

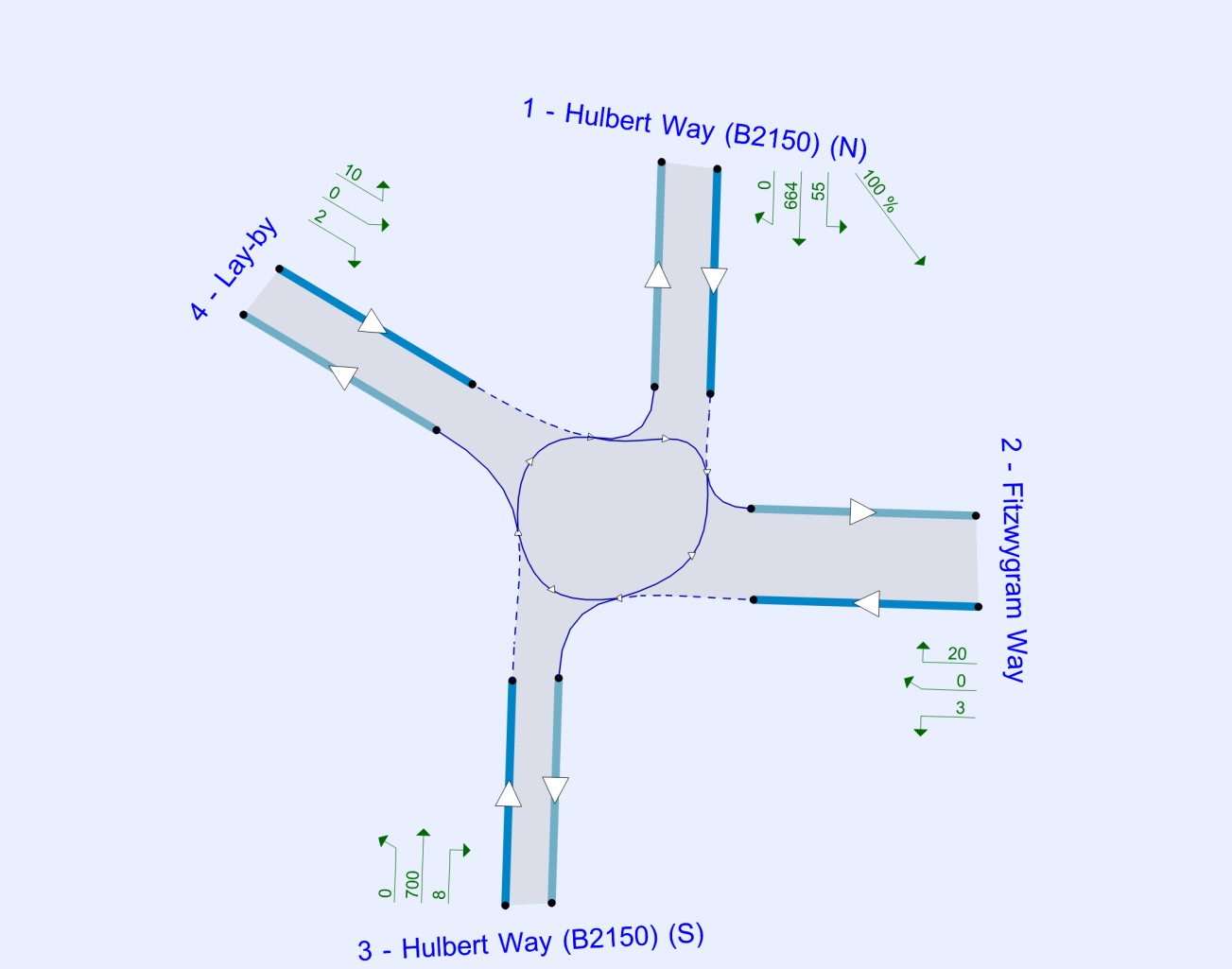
File summary

File Description

Title	
Location	
Site number	
Date	08/09/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\a.ford
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	00:00	01:30	15	✓
D2	2025	Base	PM	ONE HOUR	00:00	01:30	15	✓
D3	2030	Base	AM	ONE HOUR	00:00	01:30	15	✓
D4	2030	Base	PM	ONE HOUR	00:00	01:30	15	✓
D5	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	AM	ONE HOUR	00:00	01:30	15	✓
D6	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	PM	ONE HOUR	00:00	01:30	15	✓
D7	2030	Baseline 2030 + Fully Occupied Dunsbury Park	AM	ONE HOUR	00:00	01:30	15	✓
D8	2030	Baseline 2030 + Fully Occupied Dunsbury Park	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D1,D2,D3,D4,D5,D6,D7,D8	100.000	100.000

2025 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	4.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	82	1 - Hulbert Way (B2150) (N)	4.47	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Hulbert Way (B2150) (N)		
2	Fitzwygram Way		
3	Hulbert Way (B2150) (S)		
4	Lay-by		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Hulbert Way (B2150) (N)	4.20	5.50	15.2	11.2	48.8	42.0		
2 - Fitzwygram Way	3.80	7.70	41.5	19.2	48.9	38.0		
3 - Hulbert Way (B2150) (S)	5.70	7.70	9.5	17.8	48.9	43.0		
4 - Lay-by	3.85	3.85	0.0	15.6	48.9	29.0		

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Hulbert Way (B2150) (N)	✓	100
2 - Fitzwygram Way		
3 - Hulbert Way (B2150) (S)		
4 - Lay-by		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hulbert Way (B2150) (N)	0.544	1455
2 - Fitzwygram Way	0.662	1999
3 - Hulbert Way (B2150) (S)	0.652	1982
4 - Lay-by	0.506	1155

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	Base	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	728	100.000
2 - Fitzwygram Way		ONE HOUR	✓	23	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	709	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	9	55	664	0
	2 - Fitzwygram Way	20	0	3	0
	3 - Hulbert Way (B2150) (S)	700	8	1	0
	4 - Lay-by	10	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.08	0.91	0.
	2 - Fitzwygram Way	0.87	0.00	0.13	0.
	3 - Hulbert Way (B2150) (S)	0.99	0.01	0.00	0.
	4 - Lay-by	0.83	0.00	0.17	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
From	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	548	548
	2 - Fitzwygram Way	17	17
	3 - Hulbert Way (B2150) (S)	534	534
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	654	654
	2 - Fitzwygram Way	21	21
	3 - Hulbert Way (B2150) (S)	637	637
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	802	802
	2 - Fitzwygram Way	25	25
	3 - Hulbert Way (B2150) (S)	781	781
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	802	802
	2 - Fitzwygram Way	25	25
	3 - Hulbert Way (B2150) (S)	781	781
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	654	654
	2 - Fitzwygram Way	21	21
	3 - Hulbert Way (B2150) (S)	637	637
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	548	548
	2 - Fitzwygram Way	17	17
	3 - Hulbert Way (B2150) (S)	534	534
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.51	5.59	1.1	A	668	926
2 - Fitzwygram Way	0.02	2.67	0.0	A	21	32
3 - Hulbert Way (B2150) (S)	0.40	3.35	0.7	A	651	976
4 - Lay-by	0.02	5.42	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	548	507	127	41	0	8	1451	0.349	504	555	0.0	0.6	4.174
2 - Fitzwygram Way	17	17	4	0	41	507	1663	0.010	17	6	0.0	0.0	2.405
3 - Hulbert Way (B2150) (S)	534	534	133	0	0	22	1968	0.271	532	502	0.0	0.4	2.755
4 - Lay-by	9	9	2	0	0	554	874	0.010	9	0	0.0	0.0	4.577

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	654	605	151	49	0	10	1450	0.417	604	664	0.6	0.8	4.679
2 - Fitzwygram Way	21	21	5	0	49	607	1597	0.013	21	7	0.0	0.0	2.511
3 - Hulbert Way (B2150) (S)	637	637	159	0	0	26	1965	0.324	637	602	0.4	0.5	2.981
4 - Lay-by	11	11	3	0	0	663	819	0.013	11	0	0.0	0.0	4.899

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	802	741	185	61	0	12	1449	0.512	740	813	0.8	1.1	5.573
2 - Fitzwygram Way	25	25	6	0	61	743	1507	0.017	25	9	0.0	0.0	2.671
3 - Hulbert Way (B2150) (S)	781	781	195	0	0	32	1962	0.398	780	736	0.5	0.7	3.350
4 - Lay-by	13	13	3	0	0	812	744	0.018	13	0	0.0	0.0	5.421

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	802	741	185	61	0	12	1449	0.512	741	814	1.1	1.1	5.595
2 - Fitzwygram Way	25	25	6	0	61	744	1506	0.017	25	9	0.0	0.0	2.673
3 - Hulbert Way (B2150) (S)	781	781	195	0	0	32	1961	0.398	781	738	0.7	0.7	3.352
4 - Lay-by	13	13	3	0	0	813	743	0.018	13	0	0.0	0.0	5.424

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	654	605	151	49	0	10	1450	0.417	606	665	1.1	0.8	4.702
2 - Fitzwygram Way	21	21	5	0	49	609	1596	0.013	21	7	0.0	0.0	2.514
3 - Hulbert Way (B2150) (S)	637	637	159	0	0	26	1965	0.324	638	604	0.7	0.5	2.987
4 - Lay-by	11	11	3	0	0	664	818	0.013	11	0	0.0	0.0	4.905

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	548	507	127	41	0	8	1451	0.349	507	557	0.8	0.6	4.201
2 - Fitzwygram Way	17	17	4	0	41	510	1661	0.010	17	6	0.0	0.0	2.408
3 - Hulbert Way (B2150) (S)	534	534	133	0	0	22	1968	0.271	534	505	0.5	0.4	2.764
4 - Lay-by	9	9	2	0	0	556	873	0.010	9	0	0.0	0.0	4.583

2025 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	1 - Hulbert Way (B2150) (N)	4.79	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	768	100.000
2 - Fitzwygram Way		ONE HOUR	✓	78	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	681	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	29	738	0
	2 - Fitzwygram Way	66	0	12	0
	3 - Hulbert Way (B2150) (S)	669	9	3	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.04	0.96	0.
	2 - Fitzwygram Way	0.85	0.00	0.15	0.
	3 - Hulbert Way (B2150) (S)	0.98	0.01	0.00	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	578	578
	2 - Fitzwygram Way	59	59
	3 - Hulbert Way (B2150) (S)	513	513
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	690	690
	2 - Fitzwygram Way	70	70
	3 - Hulbert Way (B2150) (S)	612	612
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	846	846
	2 - Fitzwygram Way	86	86
	3 - Hulbert Way (B2150) (S)	750	750
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	846	846
	2 - Fitzwygram Way	86	86
	3 - Hulbert Way (B2150) (S)	750	750
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	690	690
	2 - Fitzwygram Way	70	70
	3 - Hulbert Way (B2150) (S)	612	612
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	578	578
	2 - Fitzwygram Way	59	59
	3 - Hulbert Way (B2150) (S)	513	513
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.56	6.26	1.4	A	705	1017
2 - Fitzwygram Way	0.06	2.89	0.1	A	72	107
3 - Hulbert Way (B2150) (S)	0.39	3.34	0.7	A	625	937
4 - Lay-by	0.02	5.47	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	578	556	139	22	0	11	1449	0.384	554	559	0.0	0.7	4.409
2 - Fitzwygram Way	59	59	15	0	22	558	1629	0.036	59	7	0.0	0.0	2.520
3 - Hulbert Way (B2150) (S)	513	513	128	0	0	50	1949	0.263	511	566	0.0	0.4	2.751
4 - Lay-by	9	9	2	0	0	561	870	0.010	9	0	0.0	0.0	4.597

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	690	664	166	26	0	13	1448	0.459	663	669	0.7	0.9	5.041
2 - Fitzwygram Way	70	70	18	0	26	669	1556	0.045	70	8	0.0	0.1	2.664
3 - Hulbert Way (B2150) (S)	612	612	153	0	0	60	1943	0.315	612	679	0.4	0.5	2.974
4 - Lay-by	11	11	3	0	0	672	814	0.013	11	0	0.0	0.0	4.927

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	846	814	203	32	0	16	1446	0.563	812	819	0.9	1.4	6.222
2 - Fitzwygram Way	86	86	21	0	32	818	1457	0.059	86	10	0.1	0.1	2.887
3 - Hulbert Way (B2150) (S)	750	750	187	0	0	74	1934	0.388	749	830	0.5	0.7	3.339
4 - Lay-by	13	13	3	0	0	823	738	0.018	13	0	0.0	0.0	5.462

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	846	814	203	32	0	17	1446	0.563	814	820	1.4	1.4	6.259
2 - Fitzwygram Way	86	86	21	0	32	820	1456	0.059	86	10	0.1	0.1	2.889
3 - Hulbert Way (B2150) (S)	750	750	187	0	0	74	1934	0.388	750	832	0.7	0.7	3.342
4 - Lay-by	13	13	3	0	0	824	738	0.018	13	0	0.0	0.0	5.465

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	690	664	166	26	0	14	1448	0.459	666	671	1.4	0.9	5.077
2 - Fitzwygram Way	70	70	18	0	26	672	1554	0.045	70	8	0.1	0.1	2.667
3 - Hulbert Way (B2150) (S)	612	612	153	0	0	60	1943	0.315	613	681	0.7	0.5	2.978
4 - Lay-by	11	11	3	0	0	673	814	0.013	11	0	0.0	0.0	4.931

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	578	556	139	22	0	11	1449	0.384	557	561	0.9	0.7	4.445
2 - Fitzwygram Way	59	59	15	0	22	562	1627	0.036	59	7	0.1	0.0	2.527
3 - Hulbert Way (B2150) (S)	513	513	128	0	0	50	1949	0.263	513	570	0.5	0.4	2.757
4 - Lay-by	9	9	2	0	0	564	869	0.010	9	0	0.0	0.0	4.603

2030 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	4.77	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	70	1 - Hulbert Way (B2150) (N)	4.77	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	Base	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	778	100.000
2 - Fitzwygram Way		ONE HOUR	✓	24	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	758	100.000
4 - Lay-by		ONE HOUR	✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	59	709	0
	2 - Fitzwygram Way	21	0	3	0
	3 - Hulbert Way (B2150) (S)	748	9	1	0
	4 - Lay-by	11	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.08	0.91	0.
	2 - Fitzwygram Way	0.88	0.00	0.13	0.
	3 - Hulbert Way (B2150) (S)	0.99	0.01	0.00	0.
	4 - Lay-by	0.85	0.00	0.15	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	586	586
	2 - Fitzwygram Way	18	18
	3 - Hulbert Way (B2150) (S)	571	571
	4 - Lay-by	10	10
00:15-00:30	1 - Hulbert Way (B2150) (N)	699	699
	2 - Fitzwygram Way	22	22
	3 - Hulbert Way (B2150) (S)	681	681
	4 - Lay-by	12	12
00:30-00:45	1 - Hulbert Way (B2150) (N)	857	857
	2 - Fitzwygram Way	26	26
	3 - Hulbert Way (B2150) (S)	835	835
	4 - Lay-by	14	14
00:45-01:00	1 - Hulbert Way (B2150) (N)	857	857
	2 - Fitzwygram Way	26	26
	3 - Hulbert Way (B2150) (S)	835	835
	4 - Lay-by	14	14
01:00-01:15	1 - Hulbert Way (B2150) (N)	699	699
	2 - Fitzwygram Way	22	22
	3 - Hulbert Way (B2150) (S)	681	681
	4 - Lay-by	12	12
01:15-01:30	1 - Hulbert Way (B2150) (N)	586	586
	2 - Fitzwygram Way	18	18
	3 - Hulbert Way (B2150) (S)	571	571
	4 - Lay-by	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 - Hulbert Way (B2150) (N)	0.55	6.03	1.3	A	714	990
2 - Fitzwygram Way	0.02	2.74	0.0	A	22	33
3 - Hulbert Way (B2150) (S)	0.43	3.52	0.8	A	696	1043
4 - Lay-by	0.02	5.65	0.0	A	12	18

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	586	541	135	44	0	9	1450	0.373	539	593	0.0	0.7	4.332
2 - Fitzwygram Way	18	18	5	0	44	541	1641	0.011	18	7	0.0	0.0	2.440
3 - Hulbert Way (B2150) (S)	571	571	143	0	0	23	1967	0.290	569	536	0.0	0.4	2.828
4 - Lay-by	10	10	2	0	0	592	855	0.011	10	0	0.0	0.0	4.686

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	699	646	162	53	0	11	1449	0.446	645	710	0.7	0.9	4.921
2 - Fitzwygram Way	22	22	5	0	53	648	1570	0.014	22	8	0.0	0.0	2.557
3 - Hulbert Way (B2150) (S)	681	681	170	0	0	28	1964	0.347	681	642	0.4	0.6	3.084
4 - Lay-by	12	12	3	0	0	709	796	0.015	12	0	0.0	0.0	5.050

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	857	792	198	65	0	13	1448	0.547	790	869	0.9	1.3	6.001
2 - Fitzwygram Way	26	26	7	0	65	793	1474	0.018	26	10	0.0	0.0	2.735
3 - Hulbert Way (B2150) (S)	835	835	209	0	0	34	1960	0.426	834	786	0.6	0.8	3.512
4 - Lay-by	14	14	4	0	0	868	715	0.020	14	0	0.0	0.0	5.648

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	857	792	198	65	0	13	1448	0.547	792	870	1.3	1.3	6.032
2 - Fitzwygram Way	26	26	7	0	65	795	1473	0.018	26	10	0.0	0.0	2.737
3 - Hulbert Way (B2150) (S)	835	835	209	0	0	34	1960	0.426	835	787	0.8	0.8	3.517
4 - Lay-by	14	14	4	0	0	869	715	0.020	14	0	0.0	0.0	5.652

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	699	646	162	53	0	11	1449	0.446	648	711	1.3	0.9	4.954
2 - Fitzwygram Way	22	22	5	0	53	651	1568	0.014	22	8	0.0	0.0	2.562
3 - Hulbert Way (B2150) (S)	681	681	170	0	0	28	1964	0.347	682	644	0.8	0.6	3.090
4 - Lay-by	12	12	3	0	0	710	795	0.015	12	0	0.0	0.0	5.057

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	586	541	135	44	0	9	1450	0.373	542	595	0.9	0.7	4.365
2 - Fitzwygram Way	18	18	5	0	44	544	1638	0.011	18	7	0.0	0.0	2.445
3 - Hulbert Way (B2150) (S)	571	571	143	0	0	23	1967	0.290	571	539	0.6	0.5	2.837
4 - Lay-by	10	10	2	0	0	595	854	0.011	10	0	0.0	0.0	4.693

2030 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.18	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	55	1 - Hulbert Way (B2150) (N)	5.18	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030	Base	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	821	100.000
2 - Fitzwygram Way		ONE HOUR	✓	83	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	729	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	31	789	0
	2 - Fitzwygram Way	70	0	13	0
	3 - Hulbert Way (B2150) (S)	715	10	4	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.04	0.96	0.
	2 - Fitzwygram Way	0.84	0.00	0.16	0.
	3 - Hulbert Way (B2150) (S)	0.98	0.01	0.01	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	618	618
	2 - Fitzwygram Way	62	62
	3 - Hulbert Way (B2150) (S)	549	549
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	738	738
	2 - Fitzwygram Way	75	75
	3 - Hulbert Way (B2150) (S)	655	655
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	904	904
	2 - Fitzwygram Way	91	91
	3 - Hulbert Way (B2150) (S)	803	803
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	904	904
	2 - Fitzwygram Way	91	91
	3 - Hulbert Way (B2150) (S)	803	803
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	738	738
	2 - Fitzwygram Way	75	75
	3 - Hulbert Way (B2150) (S)	655	655
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	618	618
	2 - Fitzwygram Way	62	62
	3 - Hulbert Way (B2150) (S)	549	549
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.60	6.88	1.6	A	753	1087
2 - Fitzwygram Way	0.06	2.98	0.1	A	76	114
3 - Hulbert Way (B2150) (S)	0.42	3.51	0.8	A	669	1003
4 - Lay-by	0.02	5.69	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	618	595	149	23	0	13	1448	0.411	592	597	0.0	0.8	4.608
2 - Fitzwygram Way	62	62	16	0	23	597	1604	0.039	62	8	0.0	0.0	2.569
3 - Hulbert Way (B2150) (S)	549	549	137	0	0	53	1948	0.282	547	606	0.0	0.4	2.823
4 - Lay-by	9	9	2	0	0	600	851	0.011	9	0	0.0	0.0	4.705

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	738	710	178	28	0	15	1447	0.491	709	714	0.8	1.0	5.357
2 - Fitzwygram Way	75	75	19	0	28	715	1525	0.049	75	9	0.0	0.1	2.729
3 - Hulbert Way (B2150) (S)	655	655	164	0	0	64	1941	0.338	655	726	0.4	0.6	3.077
4 - Lay-by	11	11	3	0	0	719	791	0.014	11	0	0.0	0.0	5.076

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	904	870	217	34	0	19	1445	0.602	867	874	1.0	1.6	6.829
2 - Fitzwygram Way	91	91	23	0	34	875	1420	0.064	91	11	0.1	0.1	2.980
3 - Hulbert Way (B2150) (S)	803	803	201	0	0	78	1931	0.416	802	888	0.6	0.8	3.500
4 - Lay-by	13	13	3	0	0	880	709	0.019	13	0	0.0	0.0	5.689

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	904	870	217	34	0	19	1445	0.602	870	875	1.6	1.6	6.880
2 - Fitzwygram Way	91	91	23	0	34	877	1418	0.064	91	11	0.1	0.1	2.984
3 - Hulbert Way (B2150) (S)	803	803	201	0	0	78	1931	0.416	803	891	0.8	0.8	3.507
4 - Lay-by	13	13	3	0	0	881	709	0.019	13	0	0.0	0.0	5.693

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	738	710	178	28	0	15	1447	0.491	712	716	1.6	1.1	5.410
2 - Fitzwygram Way	75	75	19	0	28	719	1523	0.049	75	9	0.1	0.1	2.735
3 - Hulbert Way (B2150) (S)	655	655	164	0	0	64	1941	0.338	656	730	0.8	0.6	3.086
4 - Lay-by	11	11	3	0	0	720	790	0.014	11	0	0.0	0.0	5.081

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	618	595	149	23	0	13	1448	0.411	596	599	1.1	0.8	4.652
2 - Fitzwygram Way	62	62	16	0	23	601	1601	0.039	63	8	0.1	0.0	2.573
3 - Hulbert Way (B2150) (S)	549	549	137	0	0	53	1947	0.282	549	610	0.6	0.4	2.832
4 - Lay-by	9	9	2	0	0	603	849	0.011	9	0	0.0	0.0	4.712

2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	4.96	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	67	1 - Hulbert Way (B2150) (N)	4.96	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	890	100.000
2 - Fitzwygram Way		ONE HOUR	✓	39	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	787	100.000
4 - Lay-by		ONE HOUR	✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	171	709	0
	2 - Fitzwygram Way	33	0	6	0
	3 - Hulbert Way (B2150) (S)	748	38	1	0
	4 - Lay-by	11	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.19	0.80	0.
	2 - Fitzwygram Way	0.85	0.00	0.15	0.
	3 - Hulbert Way (B2150) (S)	0.95	0.05	0.00	0.
	4 - Lay-by	0.85	0.00	0.15	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To				
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
1 - Hulbert Way (B2150) (N)		10	10	10	10
2 - Fitzwygram Way		10	10	10	10
3 - Hulbert Way (B2150) (S)		10	10	10	10
4 - Lay-by		10	10	10	10

Average PCU Per Veh

From	To				
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
1 - Hulbert Way (B2150) (N)		1.100	1.100	1.100	1.
2 - Fitzwygram Way		1.100	1.100	1.100	1.
3 - Hulbert Way (B2150) (S)		1.100	1.100	1.100	1.
4 - Lay-by		1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	670	670
	2 - Fitzwygram Way	29	29
	3 - Hulbert Way (B2150) (S)	592	592
	4 - Lay-by	10	10
00:15-00:30	1 - Hulbert Way (B2150) (N)	800	800
	2 - Fitzwygram Way	35	35
	3 - Hulbert Way (B2150) (S)	707	707
	4 - Lay-by	12	12
00:30-00:45	1 - Hulbert Way (B2150) (N)	980	980
	2 - Fitzwygram Way	43	43
	3 - Hulbert Way (B2150) (S)	867	867
	4 - Lay-by	14	14
00:45-01:00	1 - Hulbert Way (B2150) (N)	980	980
	2 - Fitzwygram Way	43	43
	3 - Hulbert Way (B2150) (S)	867	867
	4 - Lay-by	14	14
01:00-01:15	1 - Hulbert Way (B2150) (N)	800	800
	2 - Fitzwygram Way	35	35
	3 - Hulbert Way (B2150) (S)	707	707
	4 - Lay-by	12	12
01:15-01:30	1 - Hulbert Way (B2150) (N)	670	670
	2 - Fitzwygram Way	29	29
	3 - Hulbert Way (B2150) (S)	592	592
	4 - Lay-by	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 - Hulbert Way (B2150) (N)	0.55	6.20	1.4	A	817	990
2 - Fitzwygram Way	0.03	2.77	0.0	A	36	54
3 - Hulbert Way (B2150) (S)	0.44	3.65	0.9	A	722	1083
4 - Lay-by	0.02	5.84	0.0	A	12	18

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	670	541	135	129	0	31	1438	0.376	539	602	0.0	0.7	4.389
2 - Fitzwygram Way	29	29	7	0	129	541	1641	0.018	29	29	0.0	0.0	2.457
3 - Hulbert Way (B2150) (S)	592	592	148	0	0	32	1961	0.302	591	538	0.0	0.5	2.885
4 - Lay-by	10	10	2	0	0	623	839	0.012	10	0	0.0	0.0	4.773

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	800	646	162	154	0	37	1435	0.450	645	720	0.7	0.9	5.007
2 - Fitzwygram Way	35	35	9	0	154	648	1570	0.022	35	34	0.0	0.0	2.579
3 - Hulbert Way (B2150) (S)	707	707	177	0	0	39	1957	0.362	707	645	0.5	0.6	3.165
4 - Lay-by	12	12	3	0	0	746	777	0.015	12	0	0.0	0.0	5.173

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	980	792	198	188	0	45	1431	0.553	790	882	0.9	1.3	6.161
2 - Fitzwygram Way	43	43	11	0	188	793	1474	0.029	43	42	0.0	0.0	2.766
3 - Hulbert Way (B2150) (S)	867	867	217	0	0	47	1951	0.444	865	789	0.6	0.9	3.643
4 - Lay-by	14	14	4	0	0	913	692	0.021	14	0	0.0	0.0	5.838

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	980	792	198	188	0	45	1431	0.553	792	883	1.3	1.4	6.196
2 - Fitzwygram Way	43	43	11	0	188	795	1473	0.029	43	42	0.0	0.0	2.769
3 - Hulbert Way (B2150) (S)	867	867	217	0	0	47	1951	0.444	866	790	0.9	0.9	3.649
4 - Lay-by	14	14	4	0	0	914	692	0.021	14	0	0.0	0.0	5.843

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	800	646	162	154	0	37	1435	0.450	648	722	1.4	0.9	5.044
2 - Fitzwygram Way	35	35	9	0	154	651	1568	0.022	35	34	0.0	0.0	2.584
3 - Hulbert Way (B2150) (S)	707	707	177	0	0	39	1957	0.362	708	647	0.9	0.6	3.173
4 - Lay-by	12	12	3	0	0	747	776	0.015	12	0	0.0	0.0	5.179

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	670	541	135	129	0	31	1438	0.376	542	604	0.9	0.7	4.423
2 - Fitzwygram Way	29	29	7	0	129	545	1638	0.018	29	29	0.0	0.0	2.460
3 - Hulbert Way (B2150) (S)	592	592	148	0	0	32	1961	0.302	593	542	0.6	0.5	2.897
4 - Lay-by	10	10	2	0	0	625	838	0.012	10	0	0.0	0.0	4.781

2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.22	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	1 - Hulbert Way (B2150) (N)	5.22	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	845	100.000
2 - Fitzwygram Way		ONE HOUR	✓	196	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	736	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	55	789	0
	2 - Fitzwygram Way	163	0	33	0
	3 - Hulbert Way (B2150) (S)	715	17	4	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.07	0.93	0.
	2 - Fitzwygram Way	0.83	0.00	0.17	0.
	3 - Hulbert Way (B2150) (S)	0.97	0.02	0.01	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To	1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

From	To	1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	636	636
	2 - Fitzwygram Way	148	148
	3 - Hulbert Way (B2150) (S)	554	554
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	760	760
	2 - Fitzwygram Way	176	176
	3 - Hulbert Way (B2150) (S)	662	662
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	930	930
	2 - Fitzwygram Way	216	216
	3 - Hulbert Way (B2150) (S)	810	810
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	930	930
	2 - Fitzwygram Way	216	216
	3 - Hulbert Way (B2150) (S)	810	810
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	760	760
	2 - Fitzwygram Way	176	176
	3 - Hulbert Way (B2150) (S)	662	662
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	636	636
	2 - Fitzwygram Way	148	148
	3 - Hulbert Way (B2150) (S)	554	554
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.60	6.93	1.7	A	775	1087
2 - Fitzwygram Way	0.15	3.29	0.2	A	180	270
3 - Hulbert Way (B2150) (S)	0.43	3.76	0.8	A	675	1013
4 - Lay-by	0.02	6.19	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	636	595	149	41	0	18	1445	0.411	592	666	0.0	0.8	4.622
2 - Fitzwygram Way	148	148	37	0	41	597	1604	0.092	147	13	0.0	0.1	2.719
3 - Hulbert Way (B2150) (S)	554	554	139	0	0	123	1902	0.291	552	621	0.0	0.5	2.930
4 - Lay-by	9	9	2	0	0	675	813	0.011	9	0	0.0	0.0	4.927

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	760	710	178	49	0	22	1443	0.492	709	798	0.8	1.1	5.382
2 - Fitzwygram Way	176	176	44	0	49	715	1525	0.116	176	15	0.1	0.1	2.934
3 - Hulbert Way (B2150) (S)	662	662	165	0	0	147	1886	0.351	661	744	0.5	0.6	3.230
4 - Lay-by	11	11	3	0	0	808	745	0.014	11	0	0.0	0.0	5.390

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	930	870	217	61	0	26	1441	0.604	867	977	1.1	1.6	6.876
2 - Fitzwygram Way	216	216	54	0	61	875	1420	0.152	216	19	0.1	0.2	3.288
3 - Hulbert Way (B2150) (S)	810	810	203	0	0	180	1865	0.435	809	910	0.6	0.8	3.749
4 - Lay-by	13	13	3	0	0	990	653	0.020	13	0	0.0	0.0	6.184

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	930	870	217	61	0	26	1441	0.604	870	978	1.6	1.7	6.931
2 - Fitzwygram Way	216	216	54	0	61	877	1418	0.152	216	19	0.2	0.2	3.293
3 - Hulbert Way (B2150) (S)	810	810	203	0	0	181	1865	0.435	810	913	0.8	0.8	3.755
4 - Lay-by	13	13	3	0	0	991	653	0.020	13	0	0.0	0.0	6.189

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	760	710	178	49	0	22	1443	0.492	713	799	1.7	1.1	5.434
2 - Fitzwygram Way	176	176	44	0	49	719	1523	0.116	176	15	0.2	0.1	2.942
3 - Hulbert Way (B2150) (S)	662	662	165	0	0	148	1886	0.351	663	748	0.8	0.6	3.241
4 - Lay-by	11	11	3	0	0	810	744	0.014	11	0	0.0	0.0	5.398

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	636	595	149	41	0	18	1445	0.411	596	669	1.1	0.8	4.668
2 - Fitzwygram Way	148	148	37	0	41	601	1601	0.092	148	13	0.1	0.1	2.724
3 - Hulbert Way (B2150) (S)	554	554	139	0	0	124	1902	0.291	555	625	0.6	0.5	2.942
4 - Lay-by	9	9	2	0	0	678	811	0.011	9	0	0.0	0.0	4.938

2030 | Baseline 2030 + Fully Occupied Dunsbury Park | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	4.97	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	66	1 - Hulbert Way (B2150) (N)	4.97	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2030	Baseline 2030 + Fully Occupied Dunsbury Park	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	898	100.000
2 - Fitzwygram Way		ONE HOUR	✓	40	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	790	100.000
4 - Lay-by		ONE HOUR	✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	179	709	0
	2 - Fitzwygram Way	34	0	6	0
	3 - Hulbert Way (B2150) (S)	748	41	1	0
	4 - Lay-by	11	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.20	0.79	0.
	2 - Fitzwygram Way	0.85	0.00	0.15	0.
	3 - Hulbert Way (B2150) (S)	0.95	0.05	0.00	0.
	4 - Lay-by	0.85	0.00	0.15	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	676	676
	2 - Fitzwygram Way	30	30
	3 - Hulbert Way (B2150) (S)	595	595
	4 - Lay-by	10	10
00:15-00:30	1 - Hulbert Way (B2150) (N)	807	807
	2 - Fitzwygram Way	36	36
	3 - Hulbert Way (B2150) (S)	710	710
	4 - Lay-by	12	12
00:30-00:45	1 - Hulbert Way (B2150) (N)	989	989
	2 - Fitzwygram Way	44	44
	3 - Hulbert Way (B2150) (S)	870	870
	4 - Lay-by	14	14
00:45-01:00	1 - Hulbert Way (B2150) (N)	989	989
	2 - Fitzwygram Way	44	44
	3 - Hulbert Way (B2150) (S)	870	870
	4 - Lay-by	14	14
01:00-01:15	1 - Hulbert Way (B2150) (N)	807	807
	2 - Fitzwygram Way	36	36
	3 - Hulbert Way (B2150) (S)	710	710
	4 - Lay-by	12	12
01:15-01:30	1 - Hulbert Way (B2150) (N)	676	676
	2 - Fitzwygram Way	30	30
	3 - Hulbert Way (B2150) (S)	595	595
	4 - Lay-by	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 - Hulbert Way (B2150) (N)	0.55	6.21	1.4	A	824	990
2 - Fitzwygram Way	0.03	2.77	0.0	A	37	55
3 - Hulbert Way (B2150) (S)	0.45	3.66	0.9	A	725	1087
4 - Lay-by	0.02	5.86	0.0	A	12	18

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	676	541	135	135	0	33	1437	0.377	539	603	0.0	0.7	4.395
2 - Fitzwygram Way	30	30	8	0	135	541	1641	0.018	30	31	0.0	0.0	2.458
3 - Hulbert Way (B2150) (S)	595	595	149	0	0	33	1961	0.303	593	538	0.0	0.5	2.891
4 - Lay-by	10	10	2	0	0	626	838	0.012	10	0	0.0	0.0	4.782

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	807	646	162	161	0	40	1434	0.451	645	721	0.7	0.9	5.017
2 - Fitzwygram Way	36	36	9	0	161	648	1570	0.023	36	37	0.0	0.0	2.581
3 - Hulbert Way (B2150) (S)	710	710	178	0	0	40	1957	0.363	710	645	0.5	0.6	3.174
4 - Lay-by	12	12	3	0	0	749	775	0.015	12	0	0.0	0.0	5.185

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	989	792	198	197	0	48	1429	0.554	790	883	0.9	1.3	6.179
2 - Fitzwygram Way	44	44	11	0	197	793	1474	0.030	44	45	0.0	0.0	2.769
3 - Hulbert Way (B2150) (S)	870	870	217	0	0	48	1951	0.446	869	789	0.6	0.9	3.656
4 - Lay-by	14	14	4	0	0	917	690	0.021	14	0	0.0	0.0	5.858

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	989	792	198	197	0	48	1429	0.554	792	884	1.3	1.4	6.213
2 - Fitzwygram Way	44	44	11	0	197	795	1473	0.030	44	45	0.0	0.0	2.771
3 - Hulbert Way (B2150) (S)	870	870	217	0	0	48	1951	0.446	870	790	0.9	0.9	3.662
4 - Lay-by	14	14	4	0	0	918	690	0.021	14	0	0.0	0.0	5.862

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	807	646	162	161	0	40	1434	0.451	648	723	1.4	0.9	5.052
2 - Fitzwygram Way	36	36	9	0	161	651	1568	0.023	36	37	0.0	0.0	2.586
3 - Hulbert Way (B2150) (S)	710	710	178	0	0	40	1956	0.363	711	647	0.9	0.6	3.184
4 - Lay-by	12	12	3	0	0	751	774	0.015	12	0	0.0	0.0	5.193

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	676	541	135	135	0	33	1437	0.377	542	605	0.9	0.7	4.431
2 - Fitzwygram Way	30	30	8	0	135	545	1638	0.018	30	31	0.0	0.0	2.463
3 - Hulbert Way (B2150) (S)	595	595	149	0	0	33	1961	0.303	595	542	0.6	0.5	2.903
4 - Lay-by	10	10	2	0	0	629	836	0.012	10	0	0.0	0.0	4.792

2030 | Baseline 2030 + Fully Occupied Dunsbury Park | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.23	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	1 - Hulbert Way (B2150) (N)	5.23	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2030	Baseline 2030 + Fully Occupied Dunsbury Park	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	846	100.000
2 - Fitzwygram Way		ONE HOUR	✓	206	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	737	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	56	789	0
	2 - Fitzwygram Way	171	0	35	0
	3 - Hulbert Way (B2150) (S)	715	18	4	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.07	0.93	0.
	2 - Fitzwygram Way	0.83	0.00	0.17	0.
	3 - Hulbert Way (B2150) (S)	0.97	0.02	0.01	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	637	637
	2 - Fitzwygram Way	155	155
	3 - Hulbert Way (B2150) (S)	555	555
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	761	761
	2 - Fitzwygram Way	185	185
	3 - Hulbert Way (B2150) (S)	663	663
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	931	931
	2 - Fitzwygram Way	227	227
	3 - Hulbert Way (B2150) (S)	811	811
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	931	931
	2 - Fitzwygram Way	227	227
	3 - Hulbert Way (B2150) (S)	811	811
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	761	761
	2 - Fitzwygram Way	185	185
	3 - Hulbert Way (B2150) (S)	663	663
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	637	637
	2 - Fitzwygram Way	155	155
	3 - Hulbert Way (B2150) (S)	555	555
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.60	6.94	1.7	A	776	1087
2 - Fitzwygram Way	0.16	3.32	0.2	A	189	284
3 - Hulbert Way (B2150) (S)	0.44	3.78	0.8	A	676	1014
4 - Lay-by	0.02	6.24	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	637	595	149	42	0	19	1445	0.412	592	672	0.0	0.8	4.624
2 - Fitzwygram Way	155	155	39	0	42	597	1604	0.097	155	14	0.0	0.1	2.733
3 - Hulbert Way (B2150) (S)	555	555	139	0	0	129	1898	0.292	553	622	0.0	0.5	2.940
4 - Lay-by	9	9	2	0	0	682	809	0.011	9	0	0.0	0.0	4.948

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	761	710	178	50	0	22	1443	0.492	709	805	0.8	1.1	5.386
2 - Fitzwygram Way	185	185	46	0	50	715	1525	0.121	185	16	0.1	0.2	2.954
3 - Hulbert Way (B2150) (S)	663	663	166	0	0	155	1882	0.352	662	746	0.5	0.6	3.245
4 - Lay-by	11	11	3	0	0	816	741	0.015	11	0	0.0	0.0	5.421

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	931	870	217	62	0	27	1440	0.604	867	985	1.1	1.6	6.883
2 - Fitzwygram Way	227	227	57	0	62	875	1420	0.160	227	20	0.2	0.2	3.319
3 - Hulbert Way (B2150) (S)	811	811	203	0	0	189	1859	0.437	810	913	0.6	0.8	3.773
4 - Lay-by	13	13	3	0	0	1000	648	0.020	13	0	0.0	0.0	6.232

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	931	870	217	62	0	28	1440	0.604	870	986	1.6	1.7	6.938
2 - Fitzwygram Way	227	227	57	0	62	877	1418	0.160	227	20	0.2	0.2	3.323
3 - Hulbert Way (B2150) (S)	811	811	203	0	0	189	1859	0.437	811	915	0.8	0.8	3.780
4 - Lay-by	13	13	3	0	0	1001	648	0.020	13	0	0.0	0.0	6.238

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	761	710	178	50	0	23	1443	0.492	713	807	1.7	1.1	5.438
2 - Fitzwygram Way	185	185	46	0	50	719	1523	0.122	185	16	0.2	0.2	2.962
3 - Hulbert Way (B2150) (S)	663	663	166	0	0	155	1881	0.352	664	749	0.8	0.6	3.256
4 - Lay-by	11	11	3	0	0	818	740	0.015	11	0	0.0	0.0	5.428

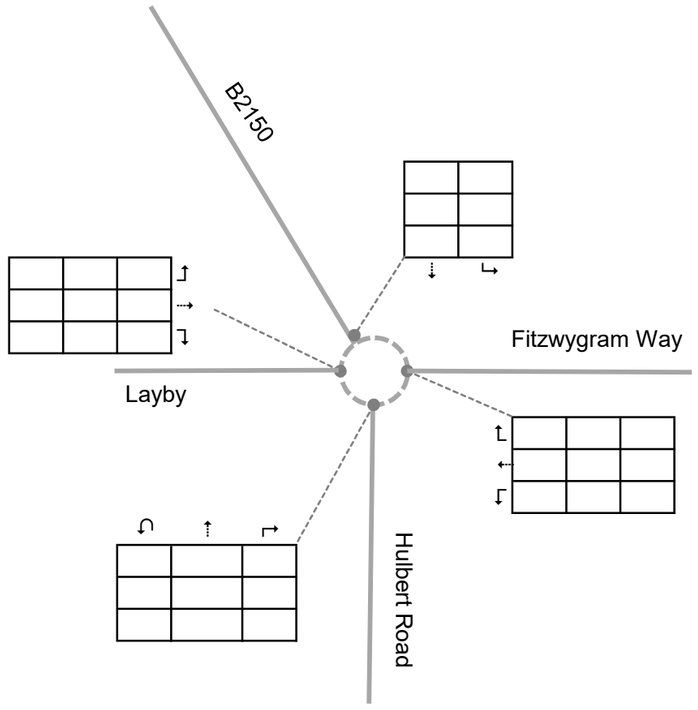
01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	637	595	149	42	0	19	1445	0.412	596	675	1.1	0.8	4.670
2 - Fitzwygram Way	155	155	39	0	42	601	1601	0.097	155	14	0.2	0.1	2.739
3 - Hulbert Way (B2150) (S)	555	555	139	0	0	130	1898	0.292	555	627	0.6	0.5	2.953
4 - Lay-by	9	9	2	0	0	685	808	0.011	9	0	0.0	0.0	4.957

Appendix L

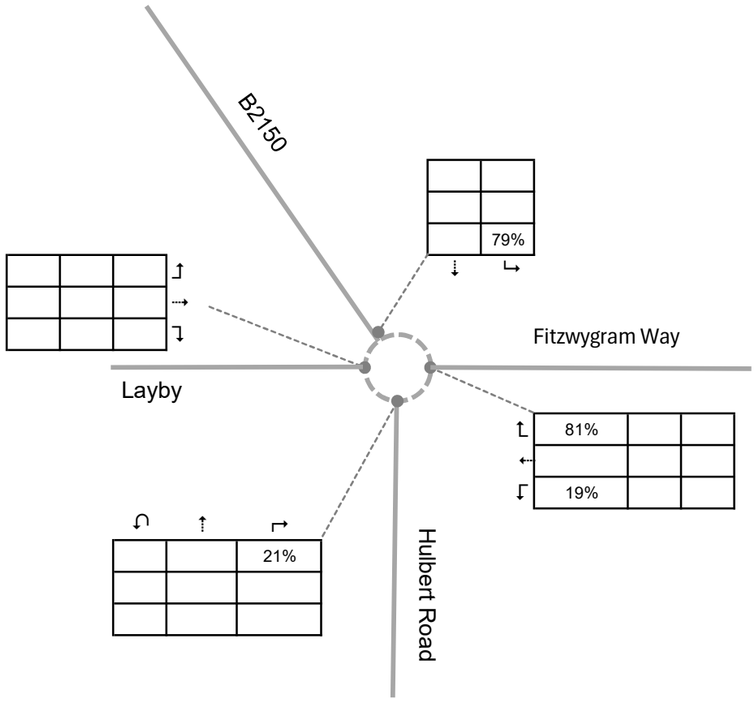
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Diagram (Parcel Dist Sensitivty Test)



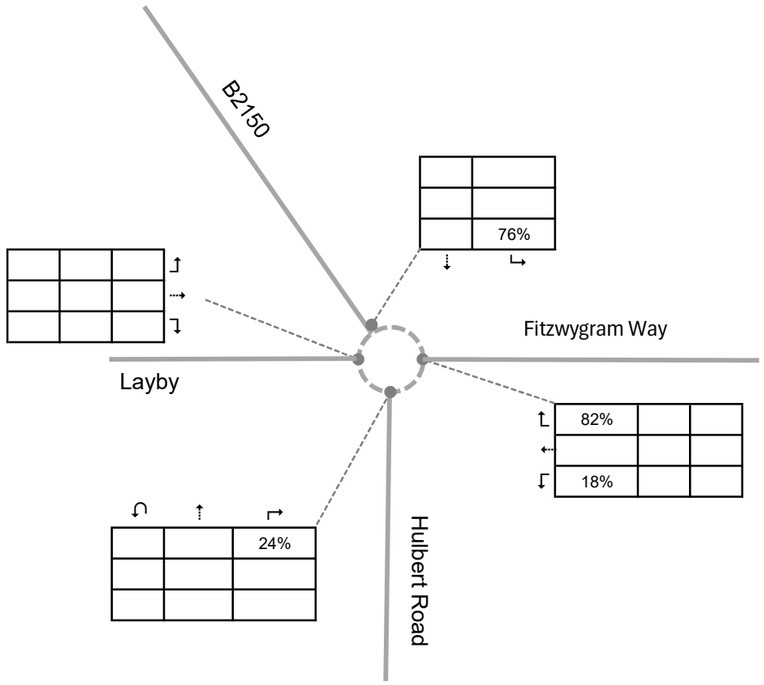
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Distributions (AM) (Parcel Dist Sensitivty Test)



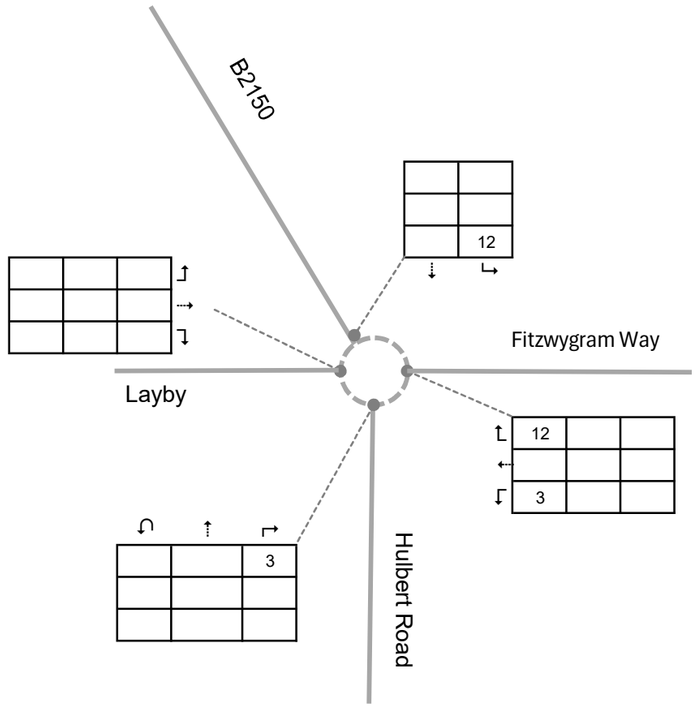
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Distributions (PM) (Parcel Dist Sensitivty Test)



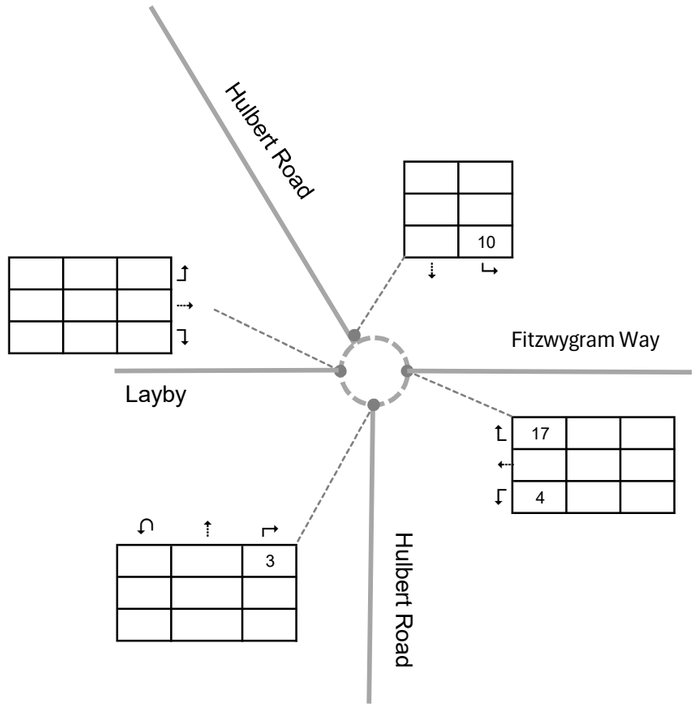
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (AM) (Parcel Dist Sensitivty Test)



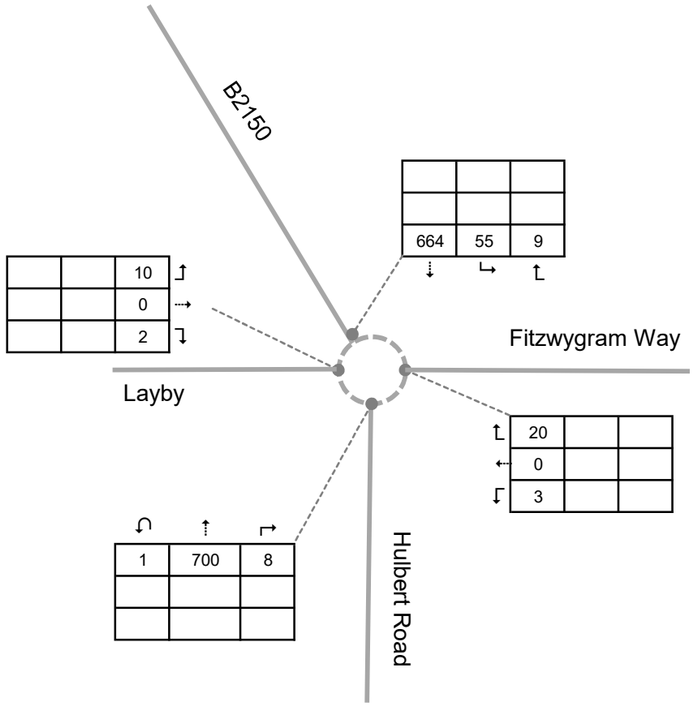
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (PM) (Parcel Dist Sensitivty Test)



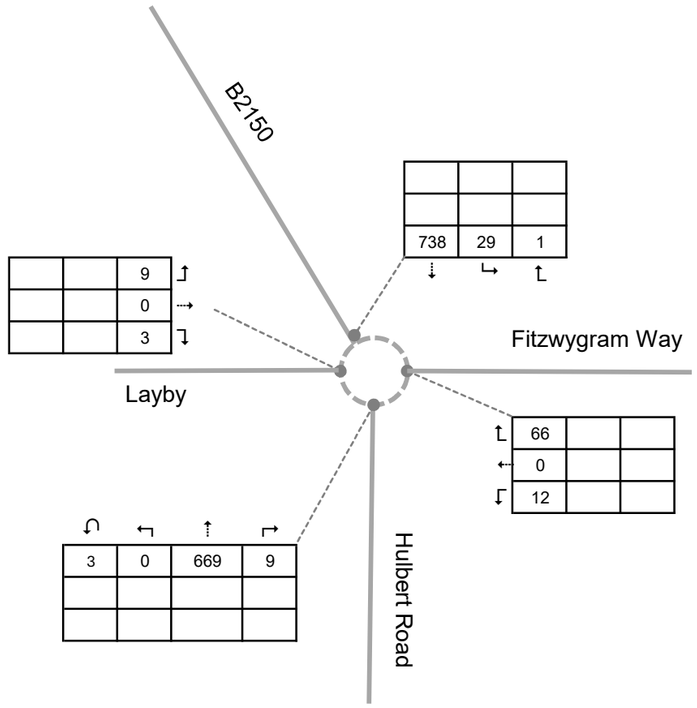
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2025 (AM) (Parcel Dist Sensitivty Test)



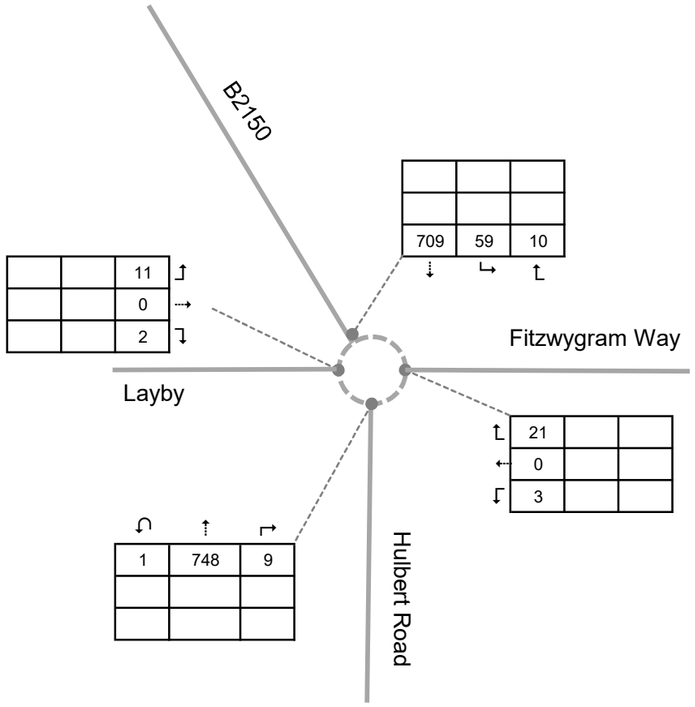
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2025 (PM) (Parcel Dist Sensitivty Test)



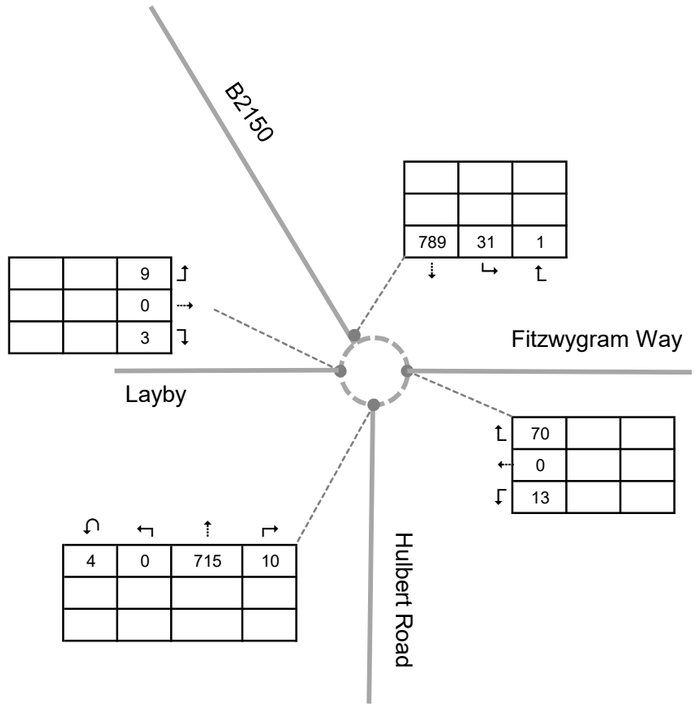
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM) (Parcel Dist Sensitivty Test)



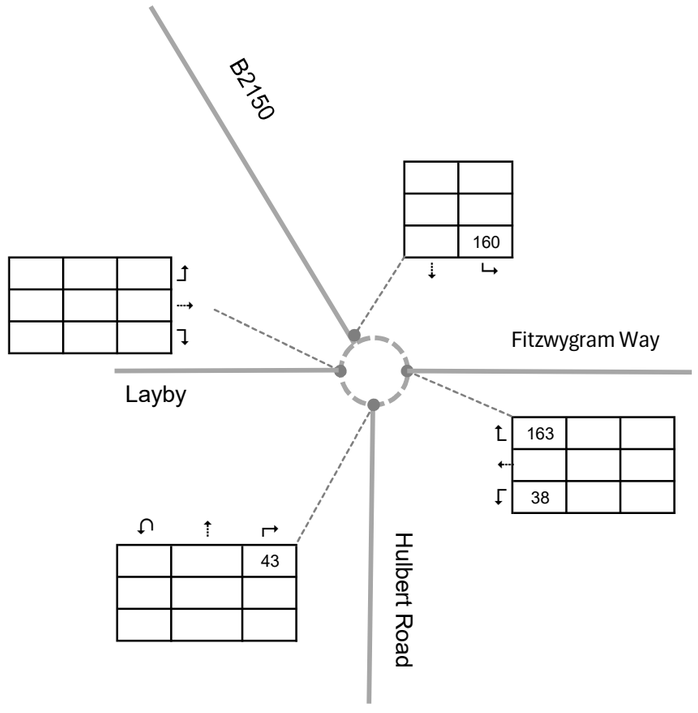
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM) (Parcel Dist Sensitivty Test)



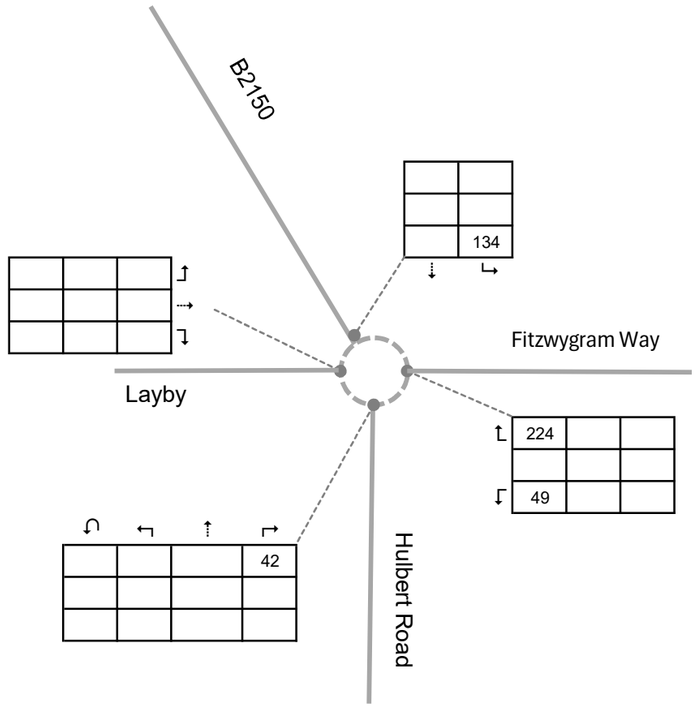
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (AM) CD1 (Parcel Dist Sensitivty Test)



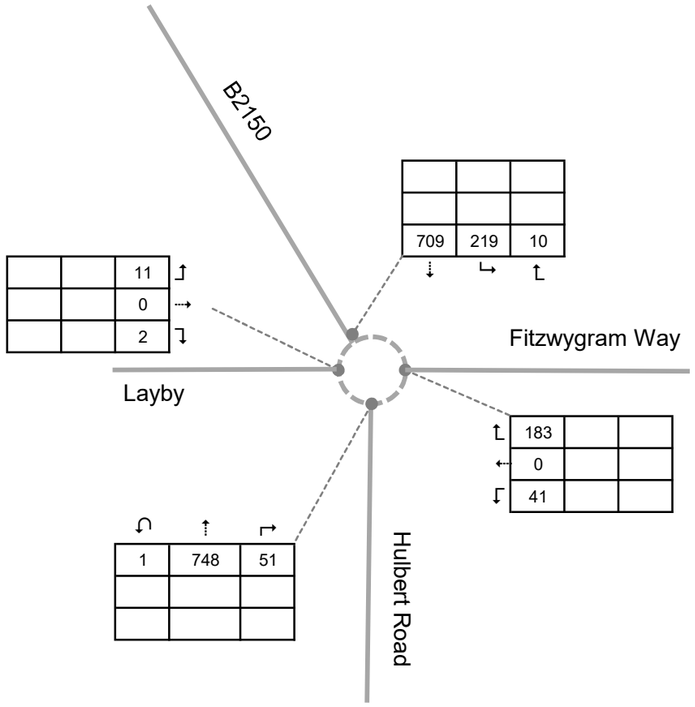
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Trip Generation (PM) CD1 (Parcel Dist Sensitivty Test)



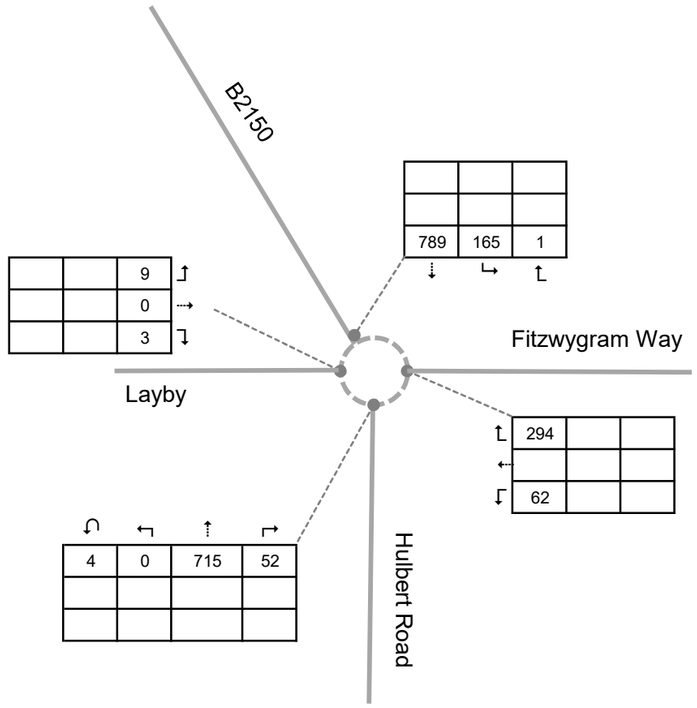
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM) + CD1 (Parcel Dist Sensitivty Test)



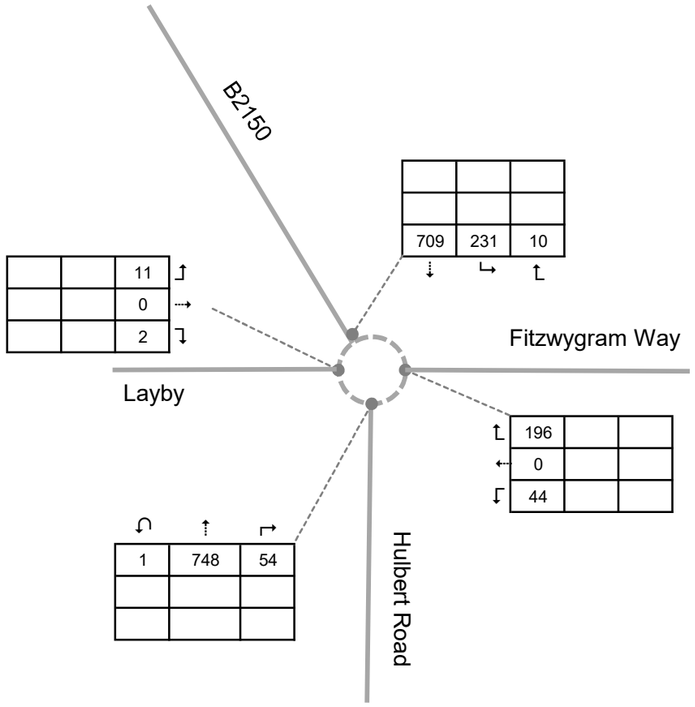
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM) + CD1 (Parcel Dist Sensitivty Test)



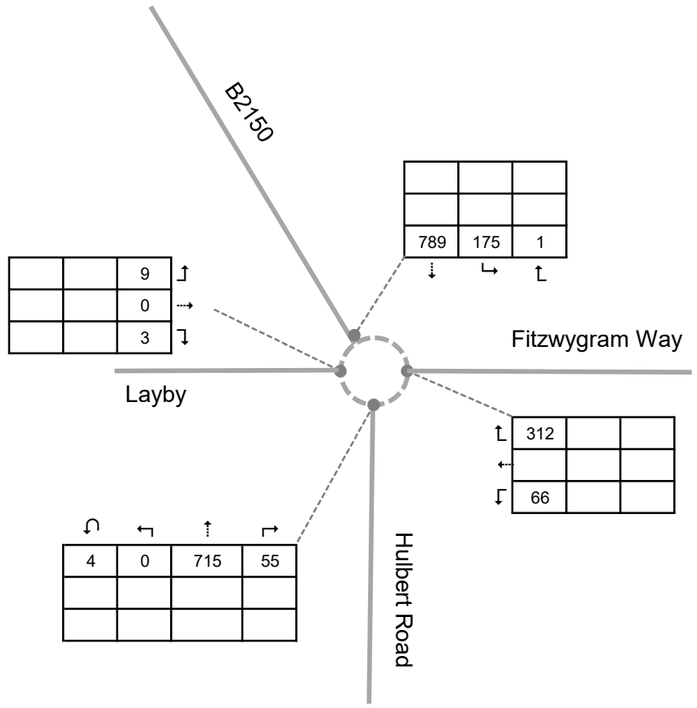
Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (AM) + CD1 + PD (Parcel Dist Sensitivty Test)



Project Name: Unit 100 Dunsbury Park, Havant
Project Number: 273.0002
Drawn By: AJF
Approved By: KCH

Scenario: Baseline 2030 (PM) + CD1 + PD (Parcel Dist Sensitivty Test)



Appendix M

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: Fitzwygram Way_B2150 RAB_Unit_100 - Parcel Distro Sens Test.j11
Path: P:\Southern\270-279\273 Avison Young\273.0002 Dunsbury Park Unit 100\03 Technical\TPL\Modelling
Report generation date: 13/11/2025 09:40:06

»2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | AM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | PM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park | AM
»2030 | Baseline 2030 + Fully Occupied Dunsbury Park | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2030 - Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)																
1 - Hulbert Way (B2150) (N)	D1	1.4	6.27	0.56	A	5.05	A	65 % [1 - Hulbert Way (B2150) (N)]	D2	1.7	7.19	0.61	A	5.56	A	50 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.2	3.23	0.17	A					0.4	3.86	0.28	A			
3 - Hulbert Way (B2150) (S)		1.0	4.11	0.48	A					1.0	4.30	0.48	A			
4 - Lay-by		0.0	6.75	0.02	A					0.0	7.24	0.02	A			
2030 - Baseline 2030 + Fully Occupied Dunsbury Park																
1 - Hulbert Way (B2150) (N)	D3	1.4	6.29	0.56	A	5.08	A	65 % [1 - Hulbert Way (B2150) (N)]	D4	1.7	7.22	0.61	A	5.61	A	50 % [1 - Hulbert Way (B2150) (N)]
2 - Fitzwygram Way		0.2	3.28	0.18	A					0.5	3.95	0.29	A			
3 - Hulbert Way (B2150) (S)		1.0	4.17	0.48	A					1.0	4.37	0.48	A			
4 - Lay-by		0.0	6.85	0.02	A					0.0	7.39	0.02	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

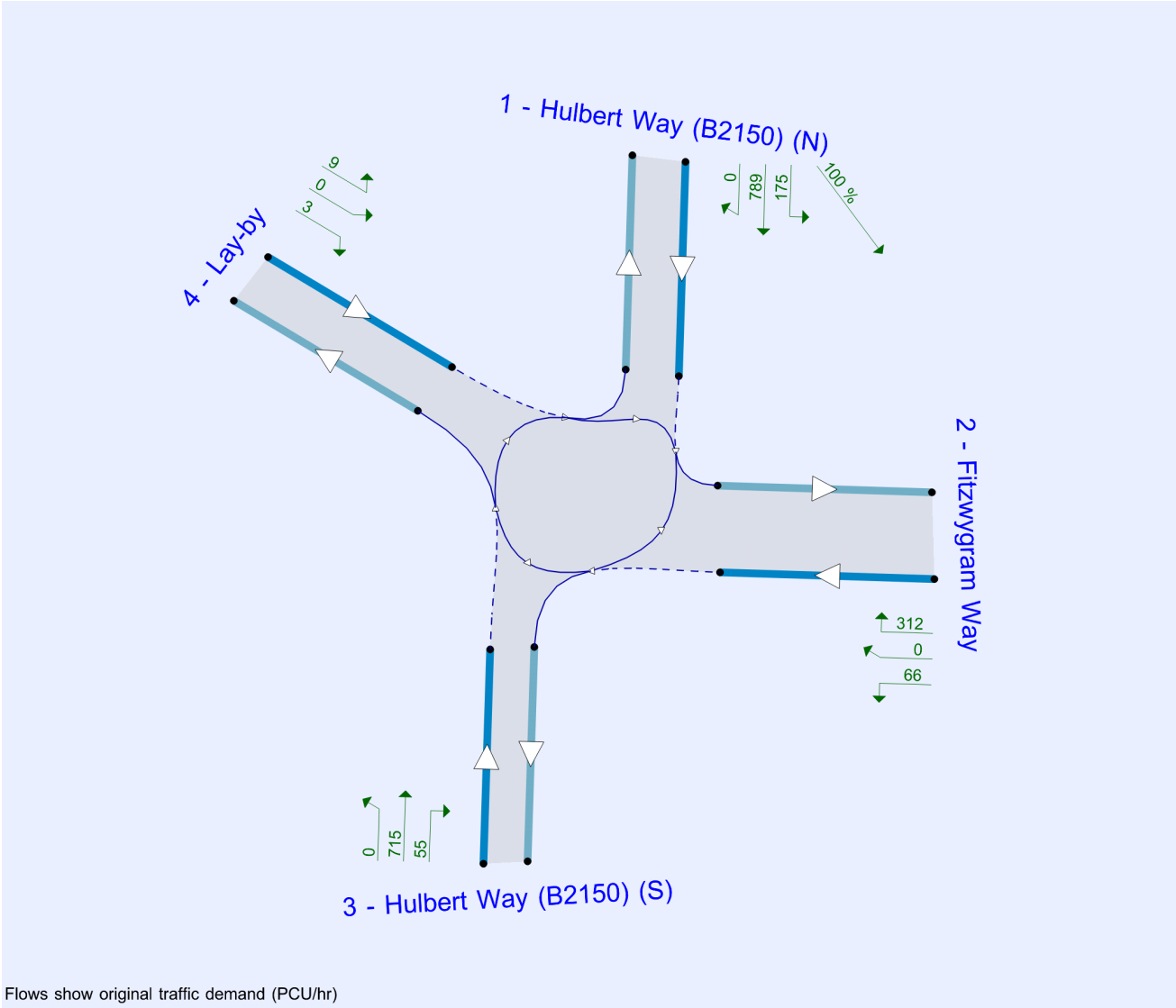
File summary

File Description

Title	
Location	
Site number	
Date	08/09/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\a.ford
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	AM	ONE HOUR	00:00	01:30	15	✓
D2	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	PM	ONE HOUR	00:00	01:30	15	✓
D3	2030	Baseline 2030 + Fully Occupied Dunsbury Park	AM	ONE HOUR	00:00	01:30	15	✓
D4	2030	Baseline 2030 + Fully Occupied Dunsbury Park	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D1,D2,D3,D4	100.000	100.000

2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.05	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	1 - Hulbert Way (B2150) (N)	5.05	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Hulbert Way (B2150) (N)		
2	Fitzwygram Way		
3	Hulbert Way (B2150) (S)		
4	Lay-by		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Hulbert Way (B2150) (N)	4.20	5.50	15.2	11.2	48.8	42.0		
2 - Fitzwygram Way	3.80	7.70	41.5	19.2	48.9	38.0		
3 - Hulbert Way (B2150) (S)	5.70	7.70	9.5	17.8	48.9	43.0		
4 - Lay-by	3.85	3.85	0.0	15.6	48.9	29.0		

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Hulbert Way (B2150) (N)	✓	100
2 - Fitzwygram Way		
3 - Hulbert Way (B2150) (S)		
4 - Lay-by		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hulbert Way (B2150) (N)	0.544	1455
2 - Fitzwygram Way	0.662	1999
3 - Hulbert Way (B2150) (S)	0.652	1982
4 - Lay-by	0.506	1155

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	938	100.000
2 - Fitzwygram Way		ONE HOUR	✓	224	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	800	100.000
4 - Lay-by		ONE HOUR	✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	219	709	0
	2 - Fitzwygram Way	183	0	41	0
	3 - Hulbert Way (B2150) (S)	748	51	1	0
	4 - Lay-by	11	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.23	0.76	0.
	2 - Fitzwygram Way	0.82	0.00	0.18	0.
	3 - Hulbert Way (B2150) (S)	0.94	0.06	0.00	0.
	4 - Lay-by	0.85	0.00	0.15	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
From	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	706	706
	2 - Fitzwygram Way	169	169
	3 - Hulbert Way (B2150) (S)	602	602
	4 - Lay-by	10	10
00:15-00:30	1 - Hulbert Way (B2150) (N)	843	843
	2 - Fitzwygram Way	201	201
	3 - Hulbert Way (B2150) (S)	719	719
	4 - Lay-by	12	12
00:30-00:45	1 - Hulbert Way (B2150) (N)	1033	1033
	2 - Fitzwygram Way	247	247
	3 - Hulbert Way (B2150) (S)	881	881
	4 - Lay-by	14	14
00:45-01:00	1 - Hulbert Way (B2150) (N)	1033	1033
	2 - Fitzwygram Way	247	247
	3 - Hulbert Way (B2150) (S)	881	881
	4 - Lay-by	14	14
01:00-01:15	1 - Hulbert Way (B2150) (N)	843	843
	2 - Fitzwygram Way	201	201
	3 - Hulbert Way (B2150) (S)	719	719
	4 - Lay-by	12	12
01:15-01:30	1 - Hulbert Way (B2150) (N)	706	706
	2 - Fitzwygram Way	169	169
	3 - Hulbert Way (B2150) (S)	602	602
	4 - Lay-by	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 - Hulbert Way (B2150) (N)	0.56	6.27	1.4	A	861	990
2 - Fitzwygram Way	0.17	3.23	0.2	A	206	308
3 - Hulbert Way (B2150) (S)	0.48	4.11	1.0	A	734	1101
4 - Lay-by	0.02	6.75	0.0	A	12	18

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	706	541	135	165	0	41	1433	0.378	539	714	0.0	0.7	4.413
2 - Fitzwygram Way	169	169	42	0	165	541	1641	0.103	168	38	0.0	0.1	2.689
3 - Hulbert Way (B2150) (S)	602	602	151	0	0	145	1888	0.319	600	564	0.0	0.5	3.070
4 - Lay-by	10	10	2	0	0	745	777	0.013	10	0	0.0	0.0	5.158

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	843	646	162	197	0	48	1429	0.452	645	855	0.7	0.9	5.048
2 - Fitzwygram Way	201	201	50	0	197	648	1570	0.128	201	46	0.1	0.2	2.893
3 - Hulbert Way (B2150) (S)	719	719	180	0	0	173	1869	0.385	718	676	0.5	0.7	3.439
4 - Lay-by	12	12	3	0	0	892	703	0.017	12	0	0.0	0.0	5.727

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1033	792	198	241	0	59	1423	0.556	790	1047	0.9	1.4	6.235
2 - Fitzwygram Way	247	247	62	0	241	793	1474	0.167	246	56	0.2	0.2	3.226
3 - Hulbert Way (B2150) (S)	881	881	220	0	0	212	1844	0.478	880	827	0.7	1.0	4.102
4 - Lay-by	14	14	4	0	0	1092	602	0.024	14	0	0.0	0.0	6.739

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1033	792	198	241	0	59	1423	0.556	792	1048	1.4	1.4	6.272
2 - Fitzwygram Way	247	247	62	0	241	795	1473	0.167	247	56	0.2	0.2	3.229
3 - Hulbert Way (B2150) (S)	881	881	220	0	0	212	1844	0.478	881	829	1.0	1.0	4.112
4 - Lay-by	14	14	4	0	0	1093	601	0.024	14	0	0.0	0.0	6.747

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	843	646	162	197	0	49	1429	0.452	648	857	1.4	0.9	5.084
2 - Fitzwygram Way	201	201	50	0	197	651	1568	0.128	202	46	0.2	0.2	2.900
3 - Hulbert Way (B2150) (S)	719	719	180	0	0	174	1869	0.385	720	679	1.0	0.7	3.450
4 - Lay-by	12	12	3	0	0	894	702	0.017	12	0	0.0	0.0	5.739

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	706	541	135	165	0	41	1433	0.378	542	718	0.9	0.7	4.450
2 - Fitzwygram Way	169	169	42	0	165	545	1638	0.103	169	38	0.2	0.1	2.696
3 - Hulbert Way (B2150) (S)	602	602	151	0	0	145	1887	0.319	603	568	0.7	0.5	3.086
4 - Lay-by	10	10	2	0	0	748	776	0.013	10	0	0.0	0.0	5.170

2030 | Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100) | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.56	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	50	1 - Hulbert Way (B2150) (N)	5.56	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2030	Baseline 2030 + Fully Occupied Dunsbury Park (Excluding Unit 100)	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	955	100.000
2 - Fitzwygram Way		ONE HOUR	✓	356	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	771	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	165	789	0
	2 - Fitzwygram Way	294	0	62	0
	3 - Hulbert Way (B2150) (S)	715	52	4	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.17	0.83	0.
	2 - Fitzwygram Way	0.83	0.00	0.17	0.
	3 - Hulbert Way (B2150) (S)	0.93	0.07	0.01	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
From	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	719	719
	2 - Fitzwygram Way	268	268
	3 - Hulbert Way (B2150) (S)	580	580
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	859	859
	2 - Fitzwygram Way	320	320
	3 - Hulbert Way (B2150) (S)	693	693
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	1051	1051
	2 - Fitzwygram Way	392	392
	3 - Hulbert Way (B2150) (S)	849	849
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	1051	1051
	2 - Fitzwygram Way	392	392
	3 - Hulbert Way (B2150) (S)	849	849
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	859	859
	2 - Fitzwygram Way	320	320
	3 - Hulbert Way (B2150) (S)	693	693
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	719	719
	2 - Fitzwygram Way	268	268
	3 - Hulbert Way (B2150) (S)	580	580
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.61	7.19	1.7	A	876	1087
2 - Fitzwygram Way	0.28	3.86	0.4	A	327	490
3 - Hulbert Way (B2150) (S)	0.48	4.30	1.0	A	707	1061
4 - Lay-by	0.02	7.24	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	719	595	149	124	0	44	1431	0.416	592	765	0.0	0.8	4.700
2 - Fitzwygram Way	268	268	67	0	124	597	1604	0.167	267	39	0.0	0.2	2.961
3 - Hulbert Way (B2150) (S)	580	580	145	0	0	221	1838	0.316	578	643	0.0	0.5	3.138
4 - Lay-by	9	9	2	0	0	800	750	0.012	9	0	0.0	0.0	5.346

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	859	710	178	148	0	53	1426	0.498	709	915	0.8	1.1	5.511
2 - Fitzwygram Way	320	320	80	0	148	715	1525	0.210	320	47	0.2	0.3	3.284
3 - Hulbert Way (B2150) (S)	693	693	173	0	0	265	1809	0.383	692	770	0.5	0.7	3.543
4 - Lay-by	11	11	3	0	0	957	670	0.016	11	0	0.0	0.0	6.007

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1051	870	217	182	0	65	1420	0.613	867	1120	1.1	1.7	7.132
2 - Fitzwygram Way	392	392	98	0	182	875	1420	0.276	391	57	0.3	0.4	3.850
3 - Hulbert Way (B2150) (S)	849	849	212	0	0	324	1771	0.479	848	942	0.7	1.0	4.283
4 - Lay-by	13	13	3	0	0	1172	561	0.024	13	0	0.0	0.0	7.224

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1051	870	217	182	0	65	1420	0.613	870	1122	1.7	1.7	7.195
2 - Fitzwygram Way	392	392	98	0	182	877	1418	0.276	392	57	0.4	0.4	3.859
3 - Hulbert Way (B2150) (S)	849	849	212	0	0	325	1770	0.479	849	945	1.0	1.0	4.296
4 - Lay-by	13	13	3	0	0	1174	560	0.024	13	0	0.0	0.0	7.236

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	859	710	178	148	0	53	1426	0.498	713	918	1.7	1.1	5.569
2 - Fitzwygram Way	320	320	80	0	148	719	1523	0.210	321	47	0.4	0.3	3.294
3 - Hulbert Way (B2150) (S)	693	693	173	0	0	266	1809	0.383	694	774	1.0	0.7	3.555
4 - Lay-by	11	11	3	0	0	960	669	0.016	11	0	0.0	0.0	6.020

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	719	595	149	124	0	44	1431	0.416	596	768	1.1	0.8	4.749
2 - Fitzwygram Way	268	268	67	0	124	601	1601	0.167	268	39	0.3	0.2	2.974
3 - Hulbert Way (B2150) (S)	580	580	145	0	0	222	1837	0.316	581	647	0.7	0.5	3.153
4 - Lay-by	9	9	2	0	0	803	748	0.012	9	0	0.0	0.0	5.362

2030 | Baseline 2030 + Fully Occupied Dunsbury Park | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.08	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	1 - Hulbert Way (B2150) (N)	5.08	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	Baseline 2030 + Fully Occupied Dunsbury Park	AM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	950	100.000
2 - Fitzwygram Way		ONE HOUR	✓	240	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	803	100.000
4 - Lay-by		ONE HOUR	✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	10	231	709	0
	2 - Fitzwygram Way	196	0	44	0
	3 - Hulbert Way (B2150) (S)	748	54	1	0
	4 - Lay-by	11	0	2	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.01	0.24	0.75	0.
	2 - Fitzwygram Way	0.82	0.00	0.18	0.
	3 - Hulbert Way (B2150) (S)	0.93	0.07	0.00	0.
	4 - Lay-by	0.85	0.00	0.15	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	715	715
	2 - Fitzwygram Way	181	181
	3 - Hulbert Way (B2150) (S)	605	605
	4 - Lay-by	10	10
00:15-00:30	1 - Hulbert Way (B2150) (N)	854	854
	2 - Fitzwygram Way	216	216
	3 - Hulbert Way (B2150) (S)	722	722
	4 - Lay-by	12	12
00:30-00:45	1 - Hulbert Way (B2150) (N)	1046	1046
	2 - Fitzwygram Way	264	264
	3 - Hulbert Way (B2150) (S)	884	884
	4 - Lay-by	14	14
00:45-01:00	1 - Hulbert Way (B2150) (N)	1046	1046
	2 - Fitzwygram Way	264	264
	3 - Hulbert Way (B2150) (S)	884	884
	4 - Lay-by	14	14
01:00-01:15	1 - Hulbert Way (B2150) (N)	854	854
	2 - Fitzwygram Way	216	216
	3 - Hulbert Way (B2150) (S)	722	722
	4 - Lay-by	12	12
01:15-01:30	1 - Hulbert Way (B2150) (N)	715	715
	2 - Fitzwygram Way	181	181
	3 - Hulbert Way (B2150) (S)	605	605
	4 - Lay-by	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 - Hulbert Way (B2150) (N)	0.56	6.29	1.4	A	872	990
2 - Fitzwygram Way	0.18	3.28	0.2	A	220	330
3 - Hulbert Way (B2150) (S)	0.48	4.17	1.0	A	737	1105
4 - Lay-by	0.02	6.85	0.0	A	12	18

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	715	541	135	174	0	43	1432	0.378	539	724	0.0	0.7	4.419
2 - Fitzwygram Way	181	181	45	0	174	541	1641	0.110	180	41	0.0	0.1	2.711
3 - Hulbert Way (B2150) (S)	605	605	151	0	0	155	1881	0.321	602	566	0.0	0.5	3.090
4 - Lay-by	10	10	2	0	0	757	771	0.013	10	0	0.0	0.0	5.199

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	854	646	162	208	0	51	1427	0.453	645	867	0.7	0.9	5.057
2 - Fitzwygram Way	216	216	54	0	208	648	1570	0.137	216	48	0.1	0.2	2.924
3 - Hulbert Way (B2150) (S)	722	722	180	0	0	185	1862	0.388	721	679	0.5	0.7	3.470
4 - Lay-by	12	12	3	0	0	906	696	0.017	12	0	0.0	0.0	5.788

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1046	792	198	254	0	63	1421	0.557	790	1061	0.9	1.4	6.253
2 - Fitzwygram Way	264	264	66	0	254	793	1474	0.179	264	59	0.2	0.2	3.273
3 - Hulbert Way (B2150) (S)	884	884	221	0	0	227	1835	0.482	883	830	0.7	1.0	4.156
4 - Lay-by	14	14	4	0	0	1109	593	0.024	14	0	0.0	0.0	6.843

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1046	792	198	254	0	63	1421	0.557	792	1062	1.4	1.4	6.290
2 - Fitzwygram Way	264	264	66	0	254	795	1473	0.179	264	59	0.2	0.2	3.276
3 - Hulbert Way (B2150) (S)	884	884	221	0	0	227	1834	0.482	884	832	1.0	1.0	4.167
4 - Lay-by	14	14	4	0	0	1111	592	0.024	14	0	0.0	0.0	6.852

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	854	646	162	208	0	51	1427	0.453	648	869	1.4	0.9	5.095
2 - Fitzwygram Way	216	216	54	0	208	651	1568	0.138	216	49	0.2	0.2	2.931
3 - Hulbert Way (B2150) (S)	722	722	180	0	0	185	1861	0.388	723	681	1.0	0.7	3.484
4 - Lay-by	12	12	3	0	0	909	695	0.017	12	0	0.0	0.0	5.798

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	715	541	135	174	0	43	1432	0.378	542	727	0.9	0.7	4.456
2 - Fitzwygram Way	181	181	45	0	174	545	1638	0.110	181	41	0.2	0.1	2.718
3 - Hulbert Way (B2150) (S)	605	605	151	0	0	155	1881	0.321	605	570	0.7	0.5	3.104
4 - Lay-by	10	10	2	0	0	760	770	0.013	10	0	0.0	0.0	5.213

2030 | Baseline 2030 + Fully Occupied Dunsbury Park | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Fitzwygram Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Hulbert Way/Fitzwygram Way/Hulbert Way/Layby	Standard Roundabout		1, 2, 3, 4	5.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	50	1 - Hulbert Way (B2150) (N)	5.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030	Baseline 2030 + Fully Occupied Dunsbury Park	PM	ONE HOUR	00:00	01:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hulbert Way (B2150) (N)		ONE HOUR	✓	965	100.000
2 - Fitzwygram Way		ONE HOUR	✓	378	100.000
3 - Hulbert Way (B2150) (S)		ONE HOUR	✓	774	100.000
4 - Lay-by		ONE HOUR	✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
From	1 - Hulbert Way (B2150) (N)	1	175	789	0
	2 - Fitzwygram Way	312	0	66	0
	3 - Hulbert Way (B2150) (S)	715	55	4	0
	4 - Lay-by	9	0	3	0

Proportions

		To			
		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - La b
From	1 - Hulbert Way (B2150) (N)	0.00	0.18	0.82	0.
	2 - Fitzwygram Way	0.83	0.00	0.17	0.
	3 - Hulbert Way (B2150) (S)	0.92	0.07	0.01	0.
	4 - Lay-by	0.75	0.00	0.25	0.

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	4 - Lay-by
	1 - Hulbert Way (B2150) (N)	10	10	10	10
	2 - Fitzwygram Way	10	10	10	10
	3 - Hulbert Way (B2150) (S)	10	10	10	10
	4 - Lay-by	10	10	10	10

Average PCU Per Veh

	To				
From		1 - Hulbert Way (B2150) (N)	2 - Fitzwygram Way	3 - Hulbert Way (B2150) (S)	L b
	1 - Hulbert Way (B2150) (N)	1.100	1.100	1.100	1.
	2 - Fitzwygram Way	1.100	1.100	1.100	1.
	3 - Hulbert Way (B2150) (S)	1.100	1.100	1.100	1.
	4 - Lay-by	1.100	1.100	1.100	1.

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
00:00-00:15	1 - Hulbert Way (B2150) (N)	727	727
	2 - Fitzwygram Way	285	285
	3 - Hulbert Way (B2150) (S)	583	583
	4 - Lay-by	9	9
00:15-00:30	1 - Hulbert Way (B2150) (N)	868	868
	2 - Fitzwygram Way	340	340
	3 - Hulbert Way (B2150) (S)	696	696
	4 - Lay-by	11	11
00:30-00:45	1 - Hulbert Way (B2150) (N)	1062	1062
	2 - Fitzwygram Way	416	416
	3 - Hulbert Way (B2150) (S)	852	852
	4 - Lay-by	13	13
00:45-01:00	1 - Hulbert Way (B2150) (N)	1062	1062
	2 - Fitzwygram Way	416	416
	3 - Hulbert Way (B2150) (S)	852	852
	4 - Lay-by	13	13
01:00-01:15	1 - Hulbert Way (B2150) (N)	868	868
	2 - Fitzwygram Way	340	340
	3 - Hulbert Way (B2150) (S)	696	696
	4 - Lay-by	11	11
01:15-01:30	1 - Hulbert Way (B2150) (N)	727	727
	2 - Fitzwygram Way	285	285
	3 - Hulbert Way (B2150) (S)	583	583
	4 - Lay-by	9	9

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 - Hulbert Way (B2150) (N)	0.61	7.22	1.7	A	886	1087
2 - Fitzwygram Way	0.29	3.95	0.5	A	347	520
3 - Hulbert Way (B2150) (S)	0.48	4.37	1.0	A	710	1065
4 - Lay-by	0.02	7.39	0.0	A	11	17

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	727	595	149	132	0	47	1430	0.416	592	778	0.0	0.8	4.707
2 - Fitzwygram Way	285	285	71	0	132	597	1604	0.177	284	41	0.0	0.2	2.999
3 - Hulbert Way (B2150) (S)	583	583	146	0	0	235	1829	0.319	581	646	0.0	0.5	3.166
4 - Lay-by	9	9	2	0	0	816	742	0.012	9	0	0.0	0.0	5.404

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	868	710	178	157	0	56	1425	0.498	709	931	0.8	1.1	5.522
2 - Fitzwygram Way	340	340	85	0	157	715	1525	0.223	340	49	0.2	0.3	3.339
3 - Hulbert Way (B2150) (S)	696	696	174	0	0	281	1799	0.387	695	774	0.5	0.7	3.586
4 - Lay-by	11	11	3	0	0	976	660	0.016	11	0	0.0	0.0	6.095

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1062	870	217	193	0	68	1418	0.613	867	1140	1.1	1.7	7.155
2 - Fitzwygram Way	416	416	104	0	193	875	1420	0.293	416	60	0.3	0.5	3.942
3 - Hulbert Way (B2150) (S)	852	852	213	0	0	344	1758	0.485	851	946	0.7	1.0	4.360
4 - Lay-by	13	13	3	0	0	1195	550	0.024	13	0	0.0	0.0	7.381

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	1062	870	217	193	0	68	1418	0.613	870	1142	1.7	1.7	7.218
2 - Fitzwygram Way	416	416	104	0	193	877	1418	0.294	416	61	0.5	0.5	3.952
3 - Hulbert Way (B2150) (S)	852	852	213	0	0	345	1758	0.485	852	949	1.0	1.0	4.373
4 - Lay-by	13	13	3	0	0	1197	549	0.024	13	0	0.0	0.0	7.394

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	868	710	178	157	0	56	1425	0.498	713	934	1.7	1.1	5.579
2 - Fitzwygram Way	340	340	85	0	157	719	1523	0.223	340	50	0.5	0.3	3.352
3 - Hulbert Way (B2150) (S)	696	696	174	0	0	282	1798	0.387	697	778	1.0	0.7	3.599
4 - Lay-by	11	11	3	0	0	979	659	0.016	11	0	0.0	0.0	6.111

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)
1 - Hulbert Way (B2150) (N)	727	595	149	132	0	47	1430	0.416	596	782	1.1	0.8	4.756
2 - Fitzwygram Way	285	285	71	0	132	601	1601	0.178	285	41	0.3	0.2	3.011
3 - Hulbert Way (B2150) (S)	583	583	146	0	0	236	1828	0.319	583	650	0.7	0.5	3.181
4 - Lay-by	9	9	2	0	0	819	740	0.012	9	0	0.0	0.0	5.421

Appendix N

count_poin	year	region_id	region_nan	local_auth	local_auth	road_name	road_type	start_junct	end_junctio
39044	2000	9	South East	65	Hampshire	A3	Major	4	3
39044	2001	9	South East	65	Hampshire	A3	Major	4	3
39044	2002	9	South East	65	Hampshire	A3	Major	4	3
39044	2003	9	South East	65	Hampshire	A3	Major	4	3
39044	2004	9	South East	65	Hampshire	A3	Major	4	3
39044	2005	9	South East	65	Hampshire	A3	Major	4	3
39044	2006	9	South East	65	Hampshire	A3	Major	4	3
39044	2007	9	South East	65	Hampshire	A3	Major	4	3
39044	2008	9	South East	65	Hampshire	A3	Major	4	3
39044	2009	9	South East	65	Hampshire	A3	Major	4	3
39044	2010	9	South East	65	Hampshire	A3	Major	4	3
39044	2011	9	South East	65	Hampshire	A3	Major	4	3
39044	2012	9	South East	65	Hampshire	A3	Major	4	3
39044	2013	9	South East	65	Hampshire	A3	Major	4	3
39044	2014	9	South East	65	Hampshire	A3	Major	4	3
39044	2015	9	South East	65	Hampshire	A3	Major	4	3
39044	2016	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2017	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2018	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2019	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2020	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2021	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2022	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2023	9	South East	65	Hampshire	A3(M)	Major	4	3
39044	2024	9	South East	65	Hampshire	A3(M)	Major	4	3

easting	northing	latitude	longitude	link_length	link_length	estimation	estimation	pedal_cycl	two_wheel
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	459
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	463
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	449
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	508
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	509
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	514
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	624
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	643
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	512
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	494
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	585
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	572
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	455
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	498
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	405
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	394
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	414
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	364
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	362
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	313
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	174
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	163
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	183
469300	108000	50.86735	-1.01657	1.5	0.93	Counted	Manual cou	0	286
469300	108000	50.86735	-1.01657	1.5	0.93	Estimated	Estimated	0	283

cars_and_t	buses_and	lgvs	hgvs_2_rigi	hgvs_3_rigi	hgvs_4_or_	hgvs_3_or_	hgvs_5_arti	hgvs_6_arti	all_hgvs
46133	273	6150	1511	169	109	270	503	300	2862
47517	279	6501	1542	202	114	246	449	350	2903
48134	281	6982	1576	223	126	232	405	398	2960
46979	289	7191	1524	227	133	215	349	425	2873
50692	280	8492	1394	217	169	190	521	300	2791
50692	291	8790	1393	211	177	174	472	329	2756
50692	285	9247	1503	223	202	156	417	351	2852
51047	322	9792	1463	217	216	137	403	368	2804
47786	196	6431	1414	171	210	77	516	301	2689
47355	210	6546	1305	171	201	71	443	291	2482
53715	200	7619	1068	219	224	70	511	357	2449
54628	228	7961	1021	226	242	53	494	369	2405
52342	152	9660	884	248	238	140	671	287	2468
52863	159	10429	899	272	273	108	661	303	2515
55592	176	10094	1092	270	239	82	738	254	2674
55740	163	11232	1125	300	247	102	747	257	2779
50451	121	11249	1021	260	235	120	614	499	2749
59336	119	11130	1029	202	207	97	977	209	2722
58830	119	11483	1048	208	215	97	991	211	2770
59731	142	12749	1018	218	317	101	518	596	2767
38590	77	10581	894	193	289	92	488	542	2498
45903	110	11420	937	125	367	65	622	330	2447
52030	127	12992	956	130	368	67	630	333	2485
57186	107	13630	755	263	464	82	285	720	2568
57089	107	14037	762	263	485	82	288	727	2606

all_motor_vehicles

- 55877
- 57663
- 58806
- 57840
- 62764
- 63043
- 63700
- 64608
- 57614
- 57087
- 64568
- 65794
- 65076
- 66465
- 68940
- 70308
- 64984
- 73672
- 73565
- 75703
- 51919
- 60043
- 67817
- 73779
- 74122