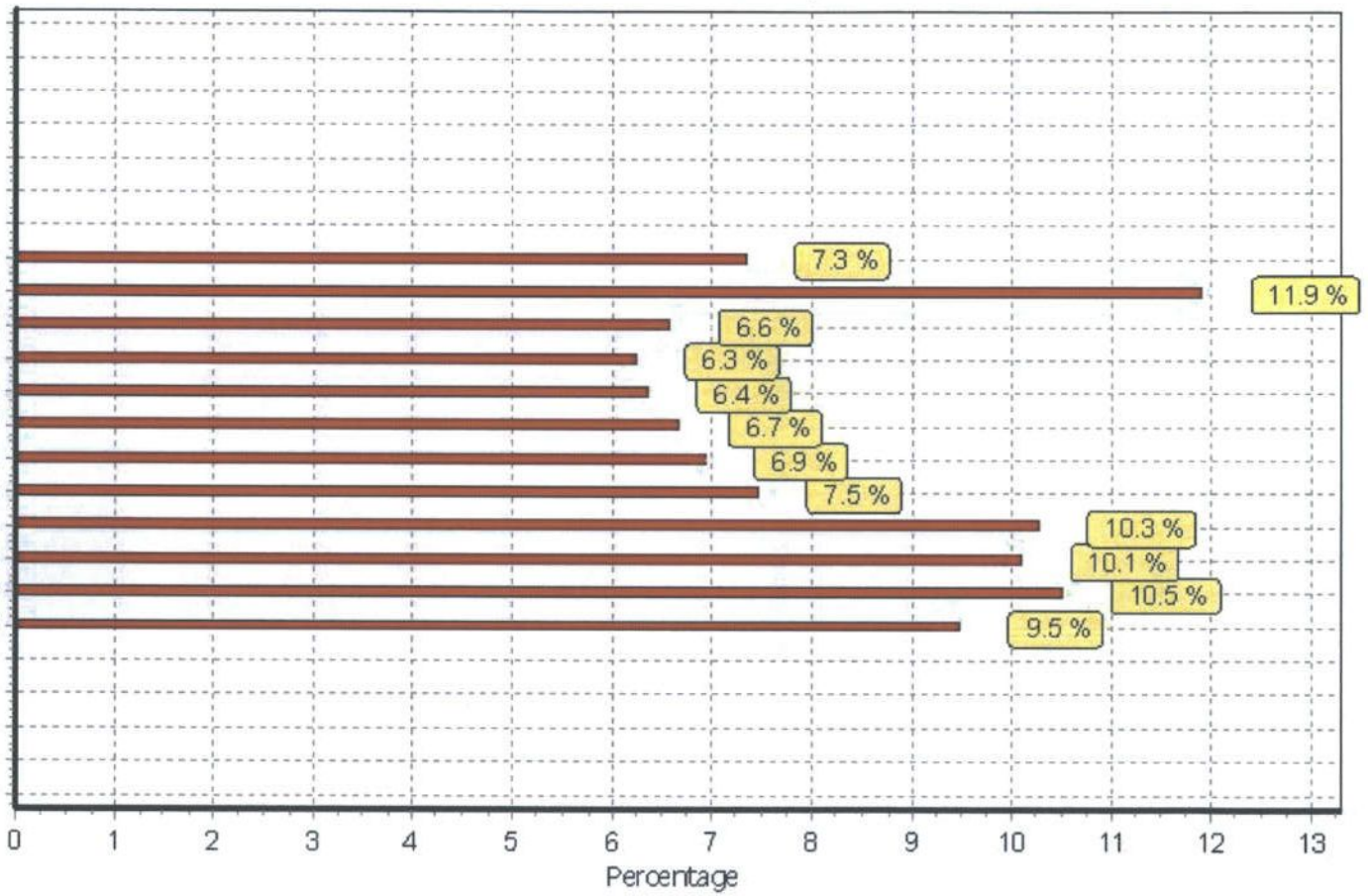
PB Barnfield Road Exeter

Licence No: 709706

TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL TOTAL

TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.525	7.3
08:00-09:00	0.852	11.9
09:00-10:00	0.470	6.6
10:00-11:00	0.447	6.3
11:00-12:00	0.456	6.4
12:00-13:00	0.477	6.7
13:00-14:00	0.496	6.9
14:00-15:00	0.535	7.5
15:00-16:00	0.736	10.3
16:00-17:00	0.724	10.1
17:00-18:00	0.752	10.5
18:00-19:00	0.679	9.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Appendix 3 – Mode Split Data

Office for National Statistics | Privacy Statement | Accessibility

Neighbourhood Statistics

Area: Portman (Ward)

Method of Travel to Work, 2011 (QS701EW)

About this dataset (PDF 54Kb)

Map this data (opens a new window)

Email me about data releases

Period Mar11 | Print this table | Download the complete dataset .CSV format **under 1MB** | Download this table

Variable	Measure	Portman	North Dorset (Non-Metropolitan District)	South West	England
All Usual Residents Aged 16 to 74 (Persons)[1]	Count	1,719	49,140	3,856,715	38,881,374
Work Mainly at or From Home (Persons)[1]	Count	67	2,832	177,999	1,349,568
Underground, Metro, Light Rail, Tram (Persons)[1]	Count	8	65	3,086	1,027,625
Train (Persons)[1]	Count	7	435	38,898	1,343,684
Bus, Minibus or Coach (Persons)[1]	Count	21	370	119,878	1,886,539
Taxi (Persons)[1]	Count	3	67	7,493	131,465
Motorcycle, Scooter or Moped (Persons)[1]	Count	11	243	28,461	206,550
Driving a Car or Van (Persons)[1]	Count	609	21,916	1,596,171	14,345,882
Passenger in a Car or Van (Persons)[1]	Count	60	1,504	132,014	1,264,553
Bicycle (Persons)[1]	Count	24	713	90,285	742,675
On Foot (Persons)[1]	Count	174	5,047	348,463	2,701,453
Other Method of Travel to Work (Persons)[1]	Count	7	240	17,636	162,727
Not in Employment (Persons)[1]	Count	728	15,708	1,296,331	13,718,653

Last Updated: 30 January 2013

Source: Office for National Statistics

Area Map

Area: Portman (Ward)

View

Choose another table from the list

Advanced options

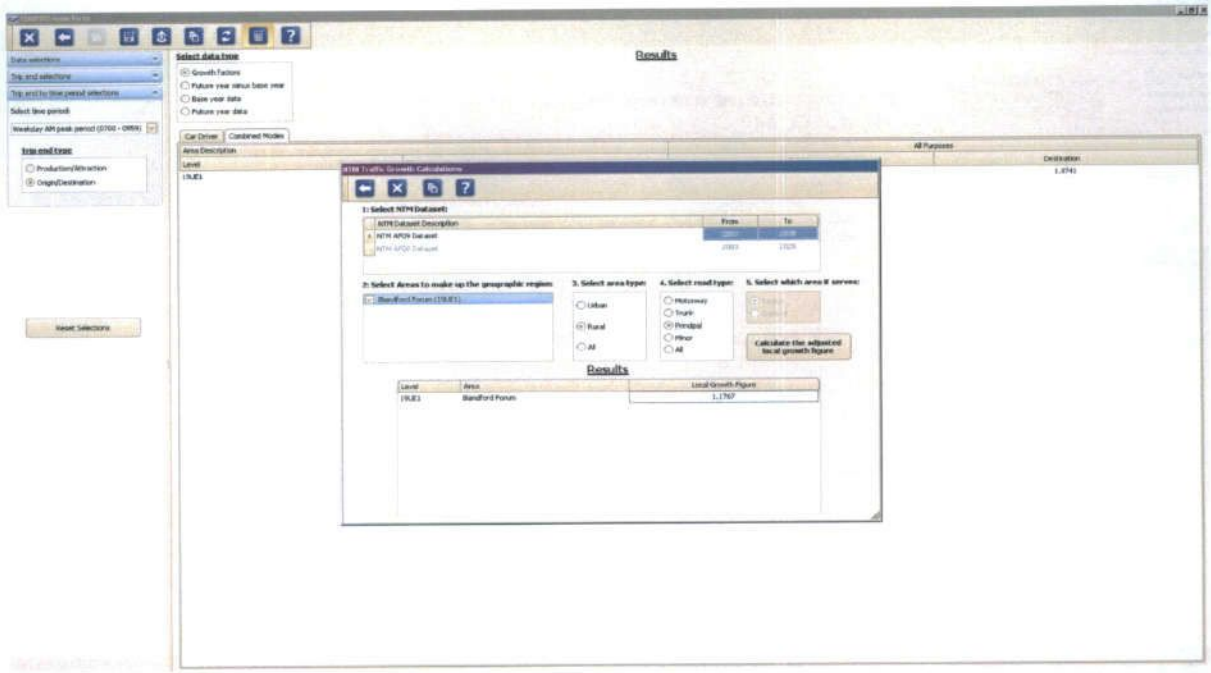
Compare your data further

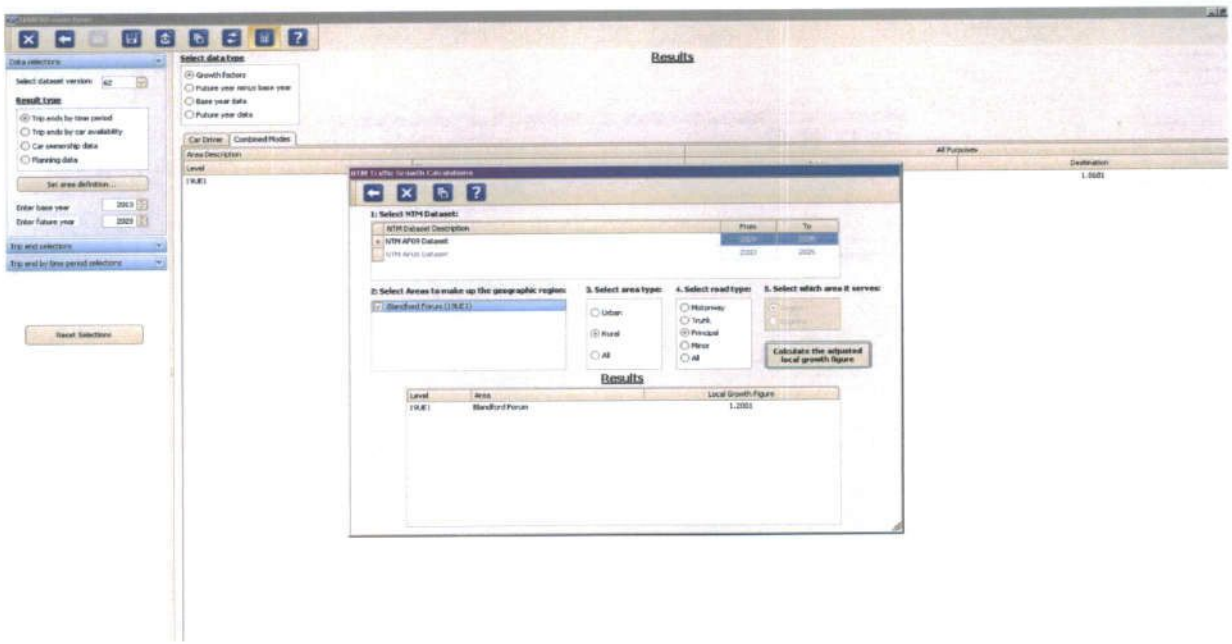
External links

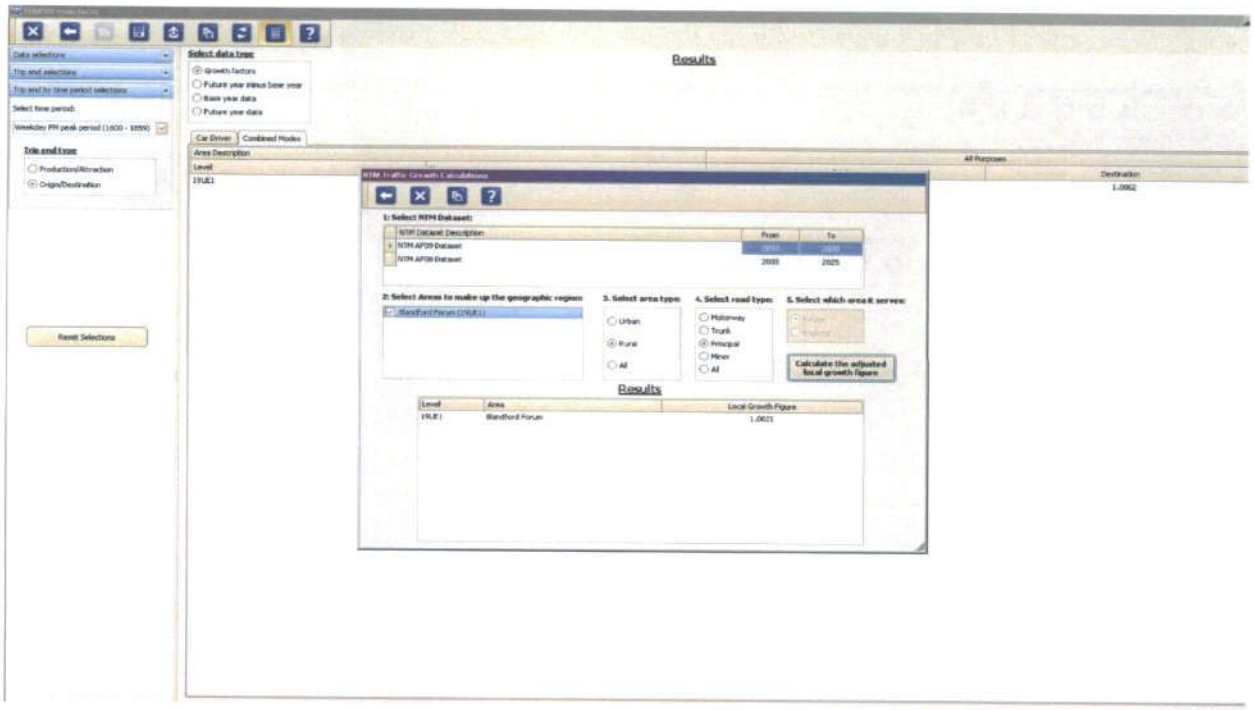
Data.gov.uk
Eurostat
Ordnance Survey
RSS
Straight Statistics
Data 4 Neighbourhood Renewal
Floor Targets Interactive
Association of Research Observatories
CLIP
Information for Local Government from Central Government

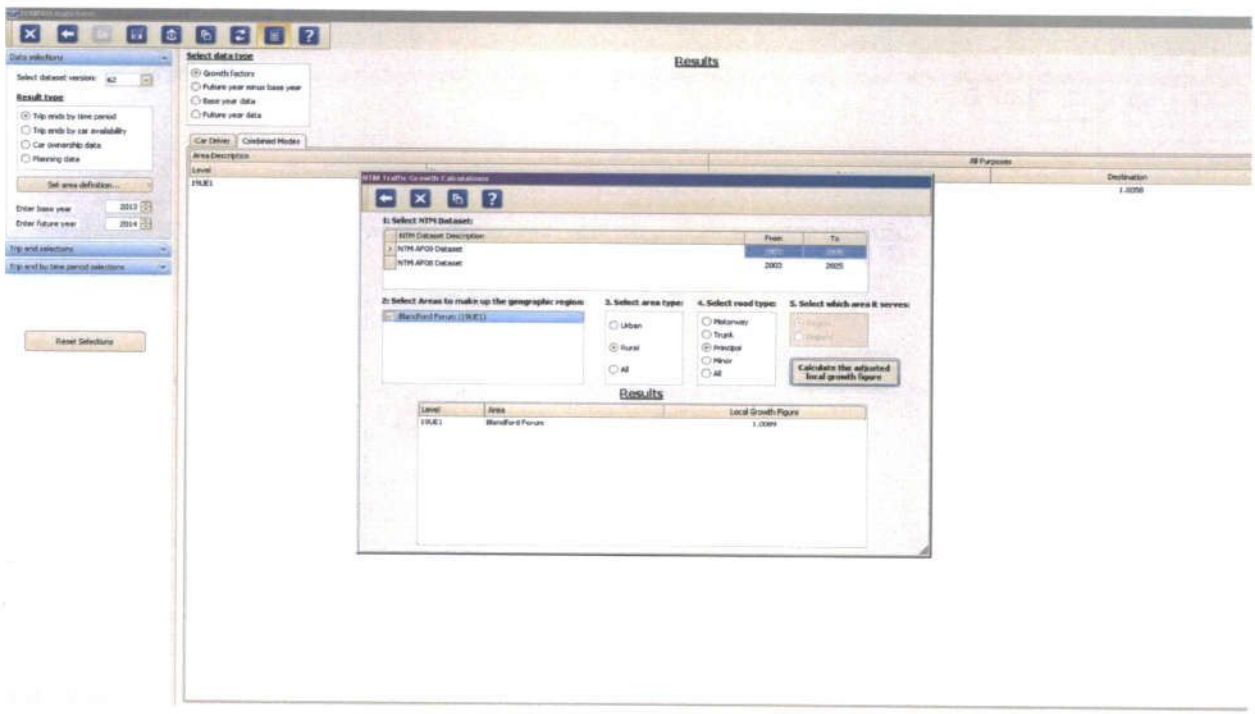
Appendix 4 – TEMpro Output

St Mary's Hill Transport Assessment - APPENDIX 1






Results
Select data type
Growth factors
Future year minus base year
Base year data
Future year data
Reset Selections
1: Select NTM Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Urban
Rural
All
Motorway
Trunk
Principal
Minor
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
1 - Blandford Forum
1.0021


Results
Select data type
Growth factors
Future year minus base year
Base year data
Future year data
Reset Selections
1: Select NTM Dataset:
2: Select Areas to make up the geographic region:
3. Select area type:
4. Select road type:
5. Select which area it serves:
Urban
Rural
All
Motorway
Trunk
Principal
Minor
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
1 - Blandford Forum
1.0089

Appendix 5 - JUNCTIONS OUTPUTS

Generated on 12/06/2013 12:52:12 using Junctions 8 (8.0.1.305)

Junctions 8

ARCADY 8 - Roundabout Module

Filename: (new file)
Path:
Report generation date: 12/06/2013 12:52:05

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013 BY							
Arm 1	0.94	3.18	0.47	A	0.99	3.33	0.49	A
Arm 2	1.17	6.80	0.53	A	1.21	7.09	0.55	A
Arm 3	0.59	3.86	0.36	A	0.56	4.04	0.34	A
Arm 4	0.73	5.07	0.42	A	1.47	7.12	0.60	A
	A1 - 2014 DM							
Arm 1	0.93	3.16	0.47	A	0.99	3.34	0.49	A
Arm 2	1.16	6.73	0.53	A	1.21	7.12	0.55	A
Arm 3	0.59	3.83	0.36	A	0.56	4.05	0.34	A
Arm 4	0.73	5.07	0.42	A	1.48	7.15	0.60	A
	A1 - 2014 DS							
Arm 1	0.96	3.21	0.48	A	1.02	3.40	0.50	A
Arm 2	1.28	7.16	0.55	A	1.30	7.43	0.56	A
Arm 3	0.65	4.03	0.38	A	0.58	4.12	0.35	A
Arm 4	0.76	5.23	0.43	A	1.55	7.39	0.61	A
	A1 - 2029 DM							
Arm 1	1.37	3.95	0.57	A	1.58	4.46	0.61	A
Arm 2	2.09	10.44	0.67	B	2.51	12.48	0.72	B
Arm 3	0.88	4.89	0.46	A	0.88	5.32	0.45	A
Arm 4	1.11	6.57	0.52	A	3.19	13.06	0.77	B
	A1 - 2029 DS							
Arm 1	1.39	3.99	0.57	A	1.64	4.58	0.62	A
Arm 2	2.32	11.28	0.70	B	2.75	13.44	0.74	B
Arm 3	0.97	5.16	0.48	A	0.92	5.44	0.46	A
Arm 4	1.16	6.83	0.53	A	3.41	13.87	0.78	B

Generated on 12/06/2013 12:52:12 using Junctions 8 (8.0.1.305)

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

"D1 - 2014 DM, AM " model duration: 07:45 - 09:15
"D2 - 2014 DM, PM" model duration: 16:45 - 18:15
"D3 - 2014 DS, AM" model duration: 07:45 - 09:15
"D4 - 2014 DS, PM" model duration: 16:45 - 18:15
"D5 - 2029 DM, AM" model duration: 07:45 - 09:15
"D6 - 2029 DM, PM" model duration: 16:45 - 18:15
"D7 - 2029 DS, AM" model duration: 07:45 - 09:15
"D8 - 2029 DS, PM" model duration: 16:45 - 18:15
"D9 - 2013 BY, AM" model duration: 07:45 - 09:15
"D10 - 2013 BY, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.1.305 at 12/06/2013 12:52:01

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	30/05/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\haywardr
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2014 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, AM	2014 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			4.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	961.92	100.000
2	ONE HOUR	✓	565.64	100.000
3	ONE HOUR	✓	505.48	100.000
4	ONE HOUR	✓	471.45	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	390.370	397.380	174.170
	2	293.380	0.000	7.010	265.250
	3	319.300	0.000	0.000	186.180
	4	208.200	158.150	105.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.41	0.41	0.18
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240

	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	3.16	0.93	A
2	0.53	6.73	1.16	A
3	0.36	3.83	0.59	A
4	0.42	5.07	0.73	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	724.18	722.30	197.40	0.00	2332.44	0.310	0.47	2.349	A
2	425.84	423.89	507.98	0.00	1319.92	0.323	0.49	4.144	A
3	380.55	379.38	549.42	0.00	1726.41	0.220	0.29	2.783	A
4	354.93	353.52	459.50	0.00	1379.99	0.257	0.35	3.584	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.75	864.11	236.37	0.00	2301.02	0.376	0.63	2.633	A
2	508.50	507.68	607.80	0.00	1259.09	0.404	0.69	4.948	A
3	454.42	454.01	657.85	0.00	1646.13	0.276	0.40	3.148	A
4	423.82	423.32	550.10	0.00	1323.06	0.320	0.48	4.093	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1059.09	1057.92	289.30	0.00	2258.37	0.469	0.92	3.151	A
2	622.78	620.97	744.09	0.00	1176.02	0.530	1.15	6.684	A
3	556.54	555.78	804.83	0.00	1537.32	0.362	0.59	3.817	A
4	519.08	518.10	673.15	0.00	1245.74	0.417	0.72	5.057	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1059.09	1059.08	289.83	0.00	2257.93	0.469	0.93	3.157	A
2	622.78	622.74	744.99	0.00	1175.47	0.530	1.16	6.732	A
3	556.54	556.53	806.79	0.00	1535.88	0.362	0.59	3.830	A
4	519.08	519.06	674.55	0.00	1244.86	0.417	0.73	5.075	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.75	865.90	237.20	0.00	2300.36	0.376	0.64	2.642	A
2	508.50	510.29	609.20	0.00	1258.24	0.404	0.71	4.989	A

3	454.42	455.18	660.75	0.00	1643.98	0.276	0.40	3.160	A
4	423.82	424.79	552.20	0.00	1321.74	0.321	0.49	4.112	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	724.18	724.83	198.48	0.00	2331.57	0.311	0.48	2.358	A
2	425.84	426.69	509.92	0.00	1318.75	0.323	0.50	4.175	A
3	380.55	380.97	552.64	0.00	1724.02	0.221	0.30	2.796	A
4	354.93	355.45	461.96	0.00	1378.44	0.257	0.36	3.602	A

(Default Analysis Set) - 2014 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, PM	2014 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			5.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	973.07	100.000
2	ONE HOUR	✓	562.21	100.000
3	ONE HOUR	✓	455.97	100.000
4	ONE HOUR	✓	683.46	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	379.810	324.690	268.570
	2	306.660	0.000	12.030	243.520

	3	268.570	19.040	0.000	168.360
	4	337.720	196.420	149.320	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	3.34	0.99	A
2	0.55	7.12	1.21	A
3	0.34	4.05	0.56	A
4	0.60	7.15	1.48	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	732.58	730.65	273.39	0.00	2271.19	0.323	0.48	2.374	A
2	423.26	421.29	557.36	0.00	1289.83	0.328	0.49	4.193	A
3	343.28	342.17	613.94	0.00	1678.64	0.205	0.28	2.915	A

4	514.54	512.20	445.62	0.00	1388.71	0.371	0.59	4.114	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	874.77	874.08	327.38	0.00	2227.67	0.393	0.65	2.704	A
2	505.42	504.55	666.91	0.00	1223.06	0.413	0.71	5.073	A
3	409.91	409.52	735.01	0.00	1589.02	0.258	0.37	3.307	A
4	614.42	613.37	533.52	0.00	1333.48	0.461	0.85	5.013	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1071.37	1070.04	400.35	0.00	2168.85	0.494	0.99	3.328	A
2	619.00	617.02	816.25	0.00	1132.04	0.547	1.20	7.060	A
3	502.03	501.29	899.16	0.00	1467.50	0.342	0.56	4.034	A
4	752.50	750.04	652.76	0.00	1258.55	0.598	1.47	7.076	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1071.37	1071.35	401.60	0.00	2167.84	0.494	0.99	3.339	A
2	619.00	618.96	817.57	0.00	1131.24	0.547	1.21	7.124	A
3	502.03	502.02	901.41	0.00	1465.83	0.342	0.56	4.046	A
4	752.50	752.44	654.27	0.00	1257.60	0.598	1.48	7.154	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	874.77	876.08	329.20	0.00	2226.20	0.393	0.66	2.716	A
2	505.42	507.38	668.90	0.00	1221.85	0.414	0.72	5.123	A
3	409.91	410.64	738.33	0.00	1586.56	0.258	0.38	3.320	A
4	614.42	616.87	535.77	0.00	1332.06	0.461	0.87	5.071	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	732.58	733.28	275.19	0.00	2269.73	0.323	0.49	2.386	A
2	423.26	424.15	559.72	0.00	1288.39	0.329	0.50	4.227	A
3	343.28	343.67	617.46	0.00	1676.03	0.205	0.28	2.927	A
4	514.54	515.63	448.13	0.00	1387.13	0.371	0.60	4.153	A

(Default Analysis Set) - 2014 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, AM	2014 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			4.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	977.50	100.000
2	ONE HOUR	✓	587.11	100.000
3	ONE HOUR	✓	526.55	100.000
4	ONE HOUR	✓	475.29	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	393.110	400.220	184.170
	2	304.420	0.000	7.360	275.330
	3	332.610	0.000	0.000	193.940
	4	208.200	160.440	106.650	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.48	3.21	0.96	A
2	0.55	7.16	1.28	A
3	0.38	4.03	0.65	A
4	0.43	5.23	0.76	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	735.91	733.98	200.27	0.00	2330.13	0.316	0.48	2.368	A
2	442.01	439.92	518.77	0.00	1313.35	0.337	0.52	4.250	A
3	396.41	395.16	572.70	0.00	1709.17	0.232	0.31	2.853	A
4	357.82	356.38	477.72	0.00	1368.54	0.261	0.36	3.635	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	878.75	878.09	239.81	0.00	2298.25	0.382	0.65	2.664	A
2	527.80	526.89	620.72	0.00	1251.21	0.422	0.75	5.132	A
3	473.36	472.91	685.73	0.00	1625.49	0.291	0.43	3.253	A
4	427.28	426.75	571.92	0.00	1309.35	0.326	0.49	4.171	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1076.25	1075.02	293.49	0.00	2254.99	0.477	0.95	3.205	A
2	646.42	644.36	759.89	0.00	1166.40	0.554	1.26	7.100	A
3	579.74	578.87	838.82	0.00	1512.16	0.383	0.64	4.018	A
4	523.30	522.27	699.76	0.00	1229.02	0.426	0.75	5.205	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1076.25	1076.23	294.06	0.00	2254.52	0.477	0.96	3.212	A
2	646.42	646.37	760.84	0.00	1165.82	0.554	1.28	7.164	A
3	579.74	579.73	841.04	0.00	1510.52	0.384	0.65	4.031	A
4	523.30	523.29	701.35	0.00	1228.02	0.426	0.76	5.226	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	878.75	879.96	240.68	0.00	2297.55	0.382	0.65	2.674	A
2	527.80	529.85	622.18	0.00	1250.32	0.422	0.76	5.181	A
3	473.36	474.22	689.00	0.00	1623.07	0.292	0.43	3.268	A
4	427.28	428.30	574.28	0.00	1307.86	0.327	0.50	4.192	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	735.91	736.58	201.38	0.00	2329.23	0.316	0.49	2.377	A
2	442.01	442.94	520.77	0.00	1312.13	0.337	0.53	4.287	A
3	396.41	396.87	576.17	0.00	1706.60	0.232	0.32	2.867	A
4	357.82	358.36	480.36	0.00	1366.88	0.262	0.36	3.653	A

(Default Analysis Set) - 2014 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, PM	2014 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			5.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	

3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	984.95	100.000
2	ONE HOUR	✓	575.68	100.000
3	ONE HOUR	✓	464.74	100.000
4	ONE HOUR	✓	691.74	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	386.030	330.350	268.570
	2	311.350	0.000	17.080	247.250
	3	273.350	20.040	0.000	171.350
	4	337.720	201.000	153.020	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.34	0.27
	2	0.54	0.00	0.03	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.50	3.40	1.02	A
2	0.56	7.43	1.30	A
3	0.35	4.12	0.58	A
4	0.61	7.39	1.55	A

Main Results for each time segment

Generated on 12/06/2013 12:52:12 using Junctions 8 (8.0.1.305)

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	741.52	739.55	280.33	0.00	2265.59	0.327	0.49	2.396	A
2	433.40	431.35	564.37	0.00	1285.56	0.337	0.51	4.262	A
3	349.88	348.74	620.21	0.00	1674.00	0.209	0.29	2.940	A
4	520.78	518.37	453.45	0.00	1383.79	0.376	0.60	4.166	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	885.45	884.74	335.69	0.00	2220.97	0.399	0.67	2.739	A
2	517.52	516.61	675.30	0.00	1217.95	0.425	0.74	5.197	A
3	417.79	417.39	742.52	0.00	1583.45	0.264	0.39	3.345	A
4	621.86	620.76	542.90	0.00	1327.58	0.468	0.88	5.099	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1084.45	1083.06	410.47	0.00	2160.69	0.502	1.02	3.394	A
2	633.84	631.67	826.48	0.00	1125.81	0.563	1.28	7.353	A
3	511.69	510.91	908.25	0.00	1460.76	0.350	0.58	4.102	A
4	761.62	759.00	664.17	0.00	1251.38	0.609	1.53	7.303	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1084.45	1084.43	411.81	0.00	2159.61	0.502	1.02	3.405	A
2	633.84	633.78	827.87	0.00	1124.96	0.563	1.30	7.427	A
3	511.69	511.68	910.68	0.00	1458.97	0.351	0.58	4.117	A
4	761.62	761.55	665.80	0.00	1250.36	0.609	1.55	7.393	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	885.45	886.82	337.64	0.00	2219.40	0.399	0.68	2.750	A
2	517.52	519.68	677.39	0.00	1216.67	0.425	0.76	5.251	A
3	417.79	418.56	746.07	0.00	1580.82	0.264	0.39	3.359	A
4	621.86	624.47	545.30	0.00	1326.08	0.469	0.90	5.173	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	741.52	742.25	282.21	0.00	2264.08	0.328	0.50	2.409	A
2	433.40	434.35	566.79	0.00	1284.08	0.338	0.52	4.301	A
3	349.88	350.29	623.86	0.00	1671.30	0.209	0.29	2.952	A
4	520.78	521.92	456.05	0.00	1382.15	0.377	0.61	4.208	A

(Default Analysis Set) - 2029 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DM, AM	2029 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			6.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)

1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1142.54	100.000
2	ONE HOUR	✓	664.81	100.000
3	ONE HOUR	✓	594.21	100.000
4	ONE HOUR	✓	554.20	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	458.900	467.130	216.510
	2	344.760	0.000	8.240	311.810
	3	375.350	0.000	0.000	218.860
	4	244.740	185.910	123.550	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		1	2	3	4

From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	3.95	1.37	A
2	0.67	10.44	2.09	B
3	0.46	4.89	0.88	A
4	0.52	6.57	1.11	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	860.16	857.67	231.94	0.00	2304.60	0.373	0.62	2.612	A
2	500.50	497.80	605.79	0.00	1260.31	0.397	0.67	4.865	A
3	447.35	445.81	654.16	0.00	1648.86	0.271	0.39	3.115	A
4	417.23	415.37	539.76	0.00	1329.56	0.314	0.46	4.021	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1027.12	1026.15	277.76	0.00	2267.66	0.453	0.87	3.045	A
2	597.65	596.22	724.89	0.00	1187.72	0.503	1.03	6.276	A
3	534.18	533.56	783.28	0.00	1553.28	0.344	0.54	3.678	A
4	498.21	497.43	646.23	0.00	1262.66	0.395	0.66	4.809	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1257.96	1255.96	339.75	0.00	2217.69	0.567	1.36	3.928	A
2	731.97	727.90	887.15	0.00	1088.83	0.672	2.05	10.196	B
3	654.24	652.90	956.88	0.00	1424.77	0.459	0.88	4.854	A
4	610.19	608.45	789.90	0.00	1172.38	0.520	1.09	6.513	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1257.96	1257.93	340.70	0.00	2216.93	0.567	1.37	3.947	A
2	731.97	731.82	888.71	0.00	1087.88	0.673	2.09	10.439	B
3	654.24	654.21	961.13	0.00	1421.62	0.460	0.88	4.889	A
4	610.19	610.14	792.76	0.00	1170.58	0.521	1.11	6.572	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1027.12	1029.10	279.16	0.00	2266.54	0.453	0.88	3.065	A
2	597.65	601.75	727.22	0.00	1186.31	0.504	1.06	6.409	A
3	534.18	535.51	789.30	0.00	1548.82	0.345	0.55	3.710	A
4	498.21	499.93	650.33	0.00	1260.08	0.395	0.68	4.856	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	860.16	861.15	233.43	0.00	2303.40	0.373	0.63	2.626	A
2	500.50	502.01	608.47	0.00	1258.68	0.398	0.69	4.929	A
3	447.35	448.00	658.97	0.00	1645.30	0.272	0.39	3.135	A
4	417.23	418.04	543.32	0.00	1327.32	0.314	0.47	4.056	A

(Default Analysis Set) - 2029 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DM, PM	2029 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			8.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1165.30	100.000
2	ONE HOUR	✓	673.26	100.000

3	ONE HOUR	✓	546.05	100.000
4	ONE HOUR	✓	818.47	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	454.840	388.830	321.630
	2	367.230	0.000	14.400	291.630
	3	321.630	22.800	0.000	201.620
	4	404.430	235.220	178.820	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	4.46	1.58	A
2	0.72	12.48	2.51	B
3	0.45	5.32	0.88	A
4	0.77	13.06	3.19	B

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	877.30	874.67	327.09	0.00	2227.91	0.394	0.66	2.702	A
2	506.87	504.02	667.15	0.00	1222.92	0.414	0.71	5.061	A
3	411.10	409.59	734.66	0.00	1589.27	0.259	0.38	3.301	A
4	616.19	612.77	533.28	0.00	1333.63	0.462	0.85	4.993	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1047.58	1046.46	391.65	0.00	2175.87	0.481	0.94	3.240	A
2	605.25	603.60	798.31	0.00	1142.98	0.530	1.12	6.746	A
3	490.89	490.26	879.51	0.00	1482.04	0.331	0.53	3.930	A
4	735.79	733.74	638.47	0.00	1267.53	0.580	1.37	6.748	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1283.02	1280.51	477.44	0.00	2106.71	0.609	1.57	4.419	A
2	741.27	735.97	976.09	0.00	1034.63	0.716	2.45	12.010	B
3	601.21	599.85	1073.66	0.00	1338.31	0.449	0.87	5.272	A
4	901.15	894.28	779.80	0.00	1178.72	0.765	3.08	12.419	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1283.02	1282.97	480.76	0.00	2104.03	0.610	1.58	4.460	A
2	741.27	741.01	978.99	0.00	1032.86	0.718	2.51	12.476	B
3	601.21	601.18	1079.27	0.00	1334.16	0.451	0.88	5.320	A
4	901.15	900.75	783.39	0.00	1176.47	0.766	3.19	13.064	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1047.58	1050.08	396.33	0.00	2172.09	0.482	0.95	3.273	A
2	605.25	610.64	802.51	0.00	1140.42	0.531	1.16	6.956	A
3	490.89	492.25	887.41	0.00	1476.19	0.333	0.54	3.969	A
4	735.79	742.84	643.57	0.00	1264.33	0.582	1.42	7.022	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	877.30	878.46	330.01	0.00	2225.55	0.394	0.67	2.722	A
2	506.87	508.62	670.68	0.00	1220.76	0.415	0.73	5.138	A
3	411.10	411.74	740.20	0.00	1585.17	0.259	0.38	3.327	A
4	616.19	618.38	537.14	0.00	1331.20	0.463	0.87	5.087	A

Generated on 12/06/2013 12:52:12 using Junctions 8 (8.0.1.305)

(Default Analysis Set) - 2029 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DS, AM	2029 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			6.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None

3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1148.11	100.000
2	ONE HOUR	✓	686.38	100.000
3	ONE HOUR	✓	615.29	100.000
4	ONE HOUR	✓	558.04	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	461.630	469.970	216.510
	2	355.900	0.000	8.590	321.890
	3	388.670	0.000	0.000	226.620
	4	244.740	188.200	125.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	3.99	1.39	A
2	0.70	11.28	2.32	B
3	0.48	5.16	0.97	A
4	0.53	6.83	1.16	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.36	861.84	234.80	0.00	2302.29	0.375	0.63	2.624	A
2	516.74	513.89	609.07	0.00	1258.31	0.411	0.71	4.980	A
3	463.22	461.59	669.98	0.00	1637.15	0.283	0.41	3.188	A
4	420.12	418.22	558.04	0.00	1318.07	0.319	0.48	4.086	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1032.13	1031.14	281.19	0.00	2264.90	0.456	0.88	3.065	A
2	617.04	615.47	728.82	0.00	1185.33	0.521	1.11	6.512	A
3	553.13	552.45	802.22	0.00	1539.26	0.359	0.58	3.801	A
4	501.67	500.85	668.11	0.00	1248.91	0.402	0.68	4.919	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1264.09	1262.05	343.91	0.00	2214.34	0.571	1.38	3.966	A
2	755.72	751.04	891.93	0.00	1085.92	0.696	2.28	10.962	B
3	677.45	675.95	979.63	0.00	1407.92	0.481	0.96	5.116	A
4	614.41	612.56	816.41	0.00	1155.72	0.532	1.14	6.759	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1264.09	1264.06	344.92	0.00	2213.53	0.571	1.39	3.987	A
2	755.72	755.53	893.54	0.00	1084.94	0.697	2.32	11.279	B
3	677.45	677.41	984.45	0.00	1404.36	0.482	0.97	5.161	A
4	614.41	614.36	819.67	0.00	1153.67	0.533	1.16	6.830	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1032.13	1034.15	282.68	0.00	2263.70	0.456	0.89	3.083	A
2	617.04	621.77	731.22	0.00	1183.87	0.521	1.14	6.674	A
3	553.13	554.63	809.01	0.00	1534.23	0.361	0.59	3.838	A
4	501.67	503.51	672.75	0.00	1245.99	0.403	0.70	4.975	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.36	865.36	236.35	0.00	2301.05	0.376	0.64	2.640	A
2	516.74	518.40	611.79	0.00	1256.66	0.411	0.73	5.051	A
3	463.22	463.93	675.10	0.00	1633.36	0.284	0.41	3.212	A
4	420.12	420.97	561.86	0.00	1315.67	0.319	0.48	4.121	A

(Default Analysis Set) - 2029 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DS, PM	2029 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS

(untitled)	Roundabout	1,2,3,4			8.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1177.17	100.000
2	ONE HOUR	✓	686.74	100.000
3	ONE HOUR	✓	554.82	100.000
4	ONE HOUR	✓	826.75	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	461.060	394.480	321.630
	2	371.930	0.000	19.460	295.350
	3	326.400	23.810	0.000	204.610
	4	404.430	239.800	182.520	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.34	0.27
	2	0.54	0.00	0.03	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results