



APPENDICES

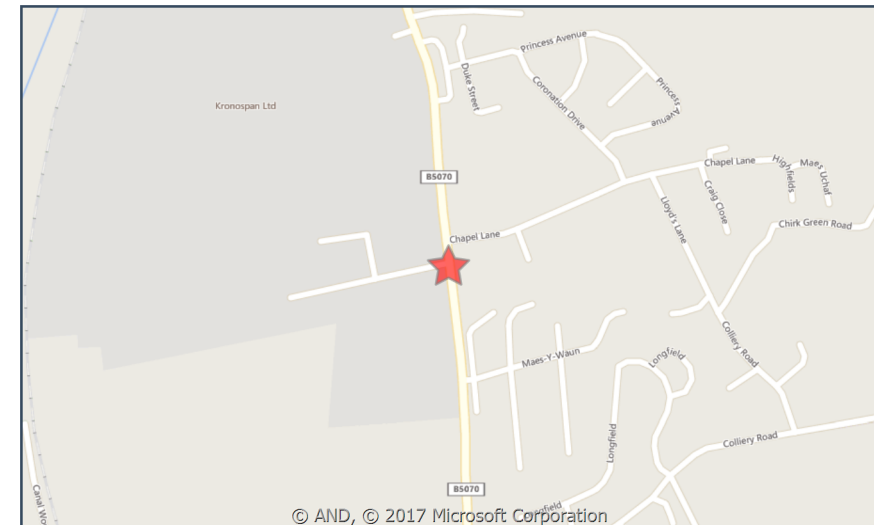


APPENDIX TA1



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Crash Date:	Monday, November 05, 2012	Time of Crash:	6:15:00 PM	Crash Reference:	201260N183803
Highest Injury Severity:	Serious	Road Number:	B5070	Number of Casualties:	5
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329020 338320
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	56 - 65	Vehicle is in the act of turning right	Nearside	Journey as part of work	None	None
2	Car (excluding private hire)	-1	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	Other permanent object

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	2	Slight	Pedestrian	Female	11 - 15	Unknown or other	Unknown or other
1	3	Slight	Pedestrian	Female	11 - 15	Unknown or other	Unknown or other
1	4	Serious	Pedestrian	Female	11 - 15	Unknown or other	Unknown or other
1	5	Slight	Pedestrian	Female	11 - 15	Unknown or other	Unknown or other
2	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

Accident Description:

Accident description text currently unavailable for this highway authority / police force

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Crash Date: Saturday, November 10, 2012 **Time of Crash:** 11:05:00 AM **Crash Reference:** 201260N186451

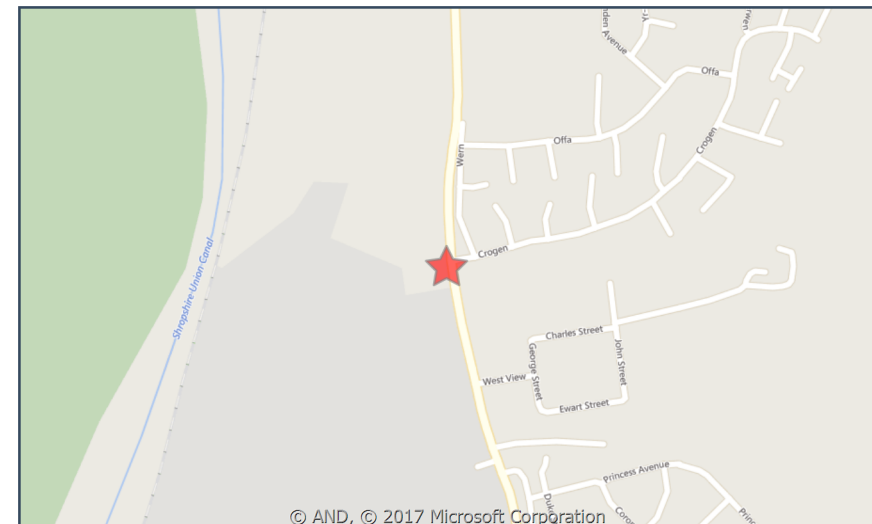
Highest Injury Severity: Slight
Highway Authority: Wrexham
Local Authority: Wrexham
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 40
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: T or staggered junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: B5070

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 328900 338980



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	Over 75	Vehicle is passing another moving vehicle on its offside	Nearside	Other	None	None
2	Bus or coach (17+ passenger seats)	-1	Male	56 - 65	Vehicle is in the act of turning right	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Male	36 - 45	Unknown or other	Unknown or other

Accident Description:

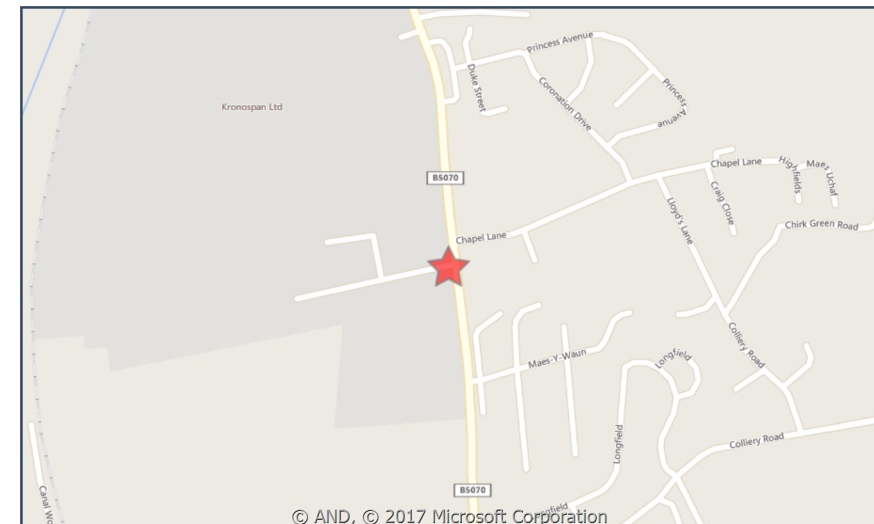
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Thursday, April 04, 2013	Time of Crash:	11:53:00 AM	Crash Reference:	201360P051268
Highest Injury Severity:	Slight	Road Number:	B5070	Number of Casualties:	1
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329010 338320
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	36 - 45	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

Accident Description:

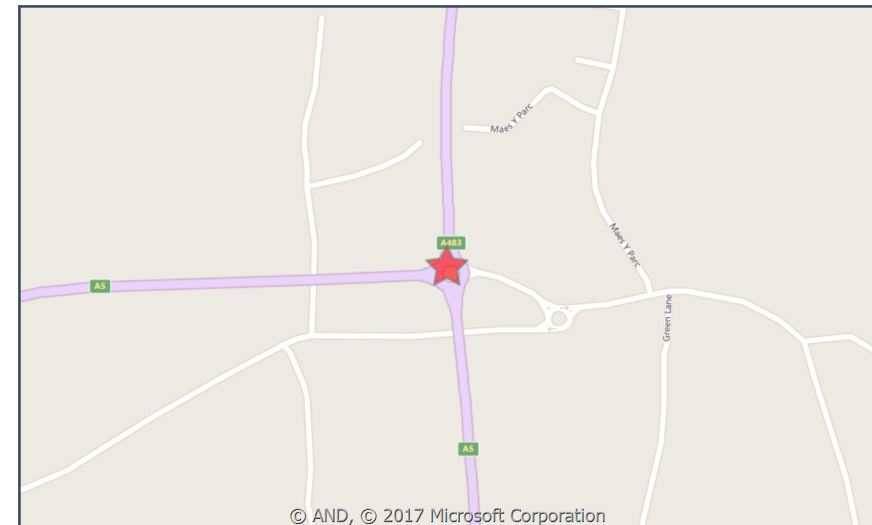
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Saturday, July 13, 2013	Time of Crash:	2:44:00 AM	Crash Reference:	201360P111650
Highest Injury Severity:	Slight	Road Number:	A483	Number of Casualties:	1
Highway Authority:	Wrexham			Number of Vehicles:	1
Local Authority:	Wrexham			OS Grid Reference:	329920 339850
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	Central island of roundabout	Other permanent object

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

Accident Description:

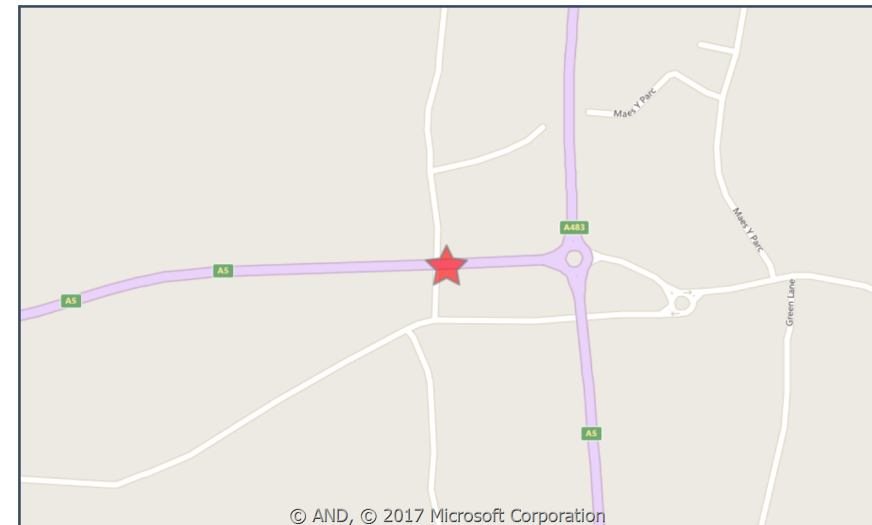
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Monday, July 15, 2013	Time of Crash:	8:36:00 AM	Crash Reference:	201360P113200
Highest Injury Severity:	Slight	Road Number:	A5	Number of Casualties:	3
Highway Authority:	Wrexham			Number of Vehicles:	4
Local Authority:	Wrexham			OS Grid Reference:	329730 339830
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	Parked vehicle	None
2	Car (excluding private hire)	-1	Male	56 - 65	Vehicle is waiting to proceed normally but is held up	Back	Journey as part of work	None	None
3	Car (excluding private hire)	-1	Female	26 - 35	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None
4	Car (excluding private hire)	-1	Female	56 - 65	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other
3	3	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date: Wednesday, August 07, 2013 **Time of Crash:** 1:03:00 PM **Crash Reference:** 201360P128946

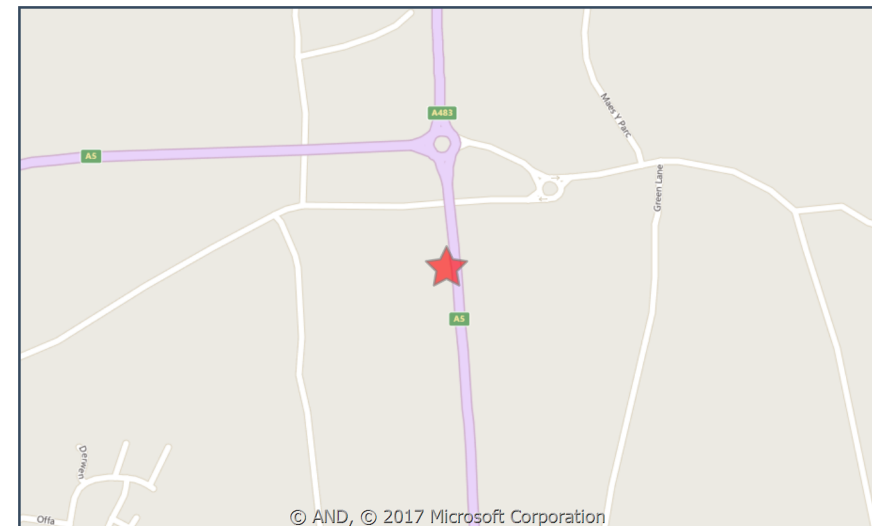
Highest Injury Severity: Slight
Highway Authority: Wrexham
Local Authority: Wrexham
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 60
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: Not at or within 20 metres of junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Not Applicable

Road Number: A5

Number of Casualties: 2

Number of Vehicles: 4

OS Grid Reference: 329930 339650



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	36 - 45	Vehicle is slowing down or stopping	Front	Journey as part of work	None	None
2	Car (excluding private hire)	-1	Male	21 - 25	Vehicle is slowing down or stopping	Front	Journey as part of work	None	None
3	Car (excluding private hire)	-1	Female	26 - 35	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None
4	Car (excluding private hire)	-1	Male	46 - 55	Vehicle is waiting to proceed normally but is held up	Back	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
3	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other
3	2	Slight	Vehicle or pillion passenger	Female	56 - 65	Unknown or other	Unknown or other

Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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8/23/2017 11:40:39 AM



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Crash Date: Saturday, December 07, 2013 **Time of Crash:** 5:20:00 PM **Crash Reference:** 201360P200071

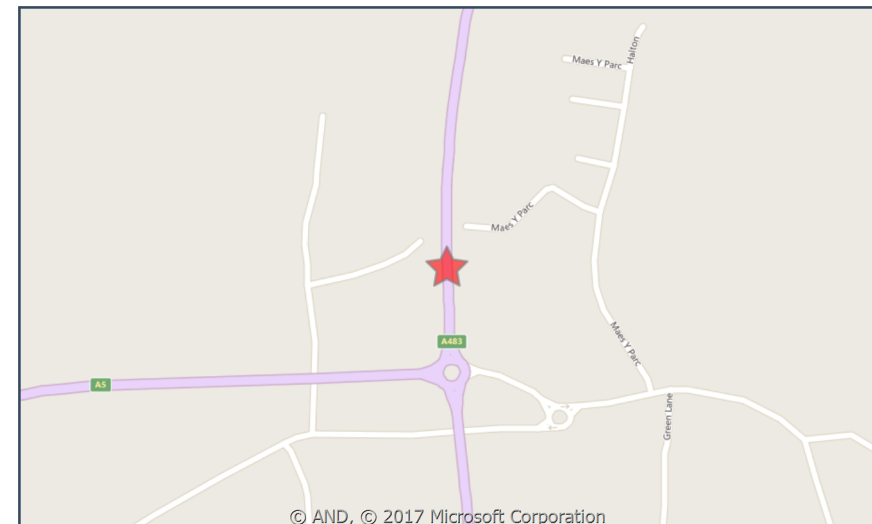
Highest Injury Severity: Slight
Highway Authority: Wrexham
Local Authority: Wrexham
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 60
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: Not at or within 20 metres of junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Not Applicable

Road Number: A483

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 329920 340000



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	56 - 65	Vehicle is slowing down or stopping	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	26 - 35	Vehicle is slowing down or stopping	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

Accident Description:

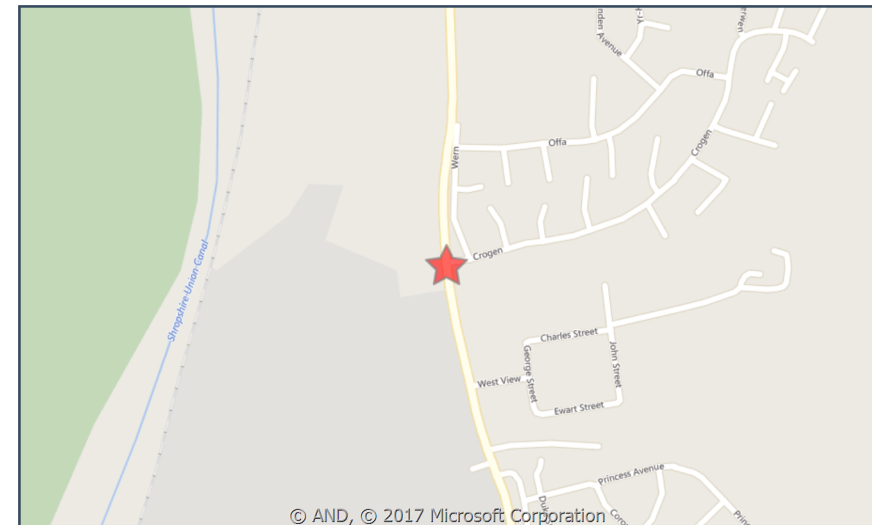
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For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Friday, March 28, 2014	Time of Crash:	7:30:00 PM	Crash Reference:	201460R045452
Highest Injury Severity:	Slight	Road Number:	B5070	Number of Casualties:	2
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	328908 338984
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Other junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	-1	Male	36 - 45	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	36 - 45	Unknown or other	Unknown or other

Accident Description:

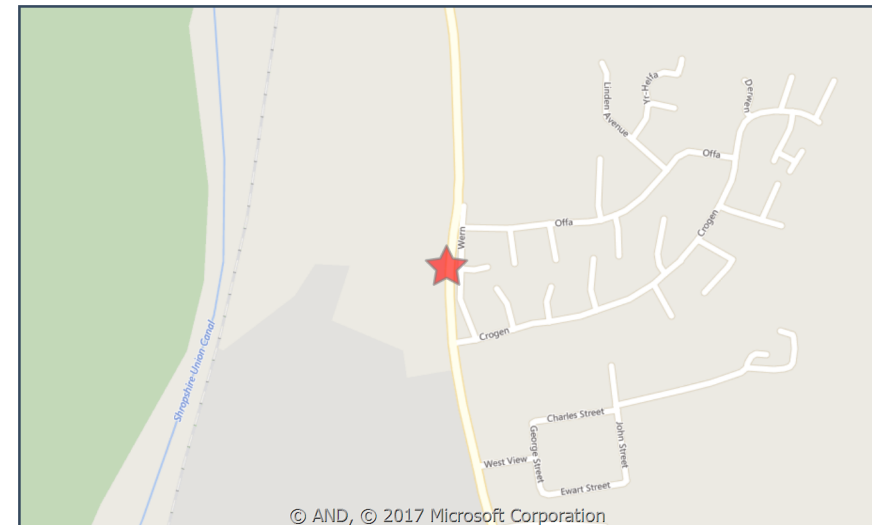
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For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Friday, October 10, 2014	Time of Crash:	1:46:00 PM	Crash Reference:	201460R160011
Highest Injury Severity:	Slight	Road Number:	B5070	Number of Casualties:	1
Highway Authority:	Wrexham			Number of Vehicles:	1
Local Authority:	Wrexham			OS Grid Reference:	328900 339107
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Pedestrian	Male	66 - 75	In carriageway, crossing elsewhere	Crossing from driver's nearside

Accident Description:

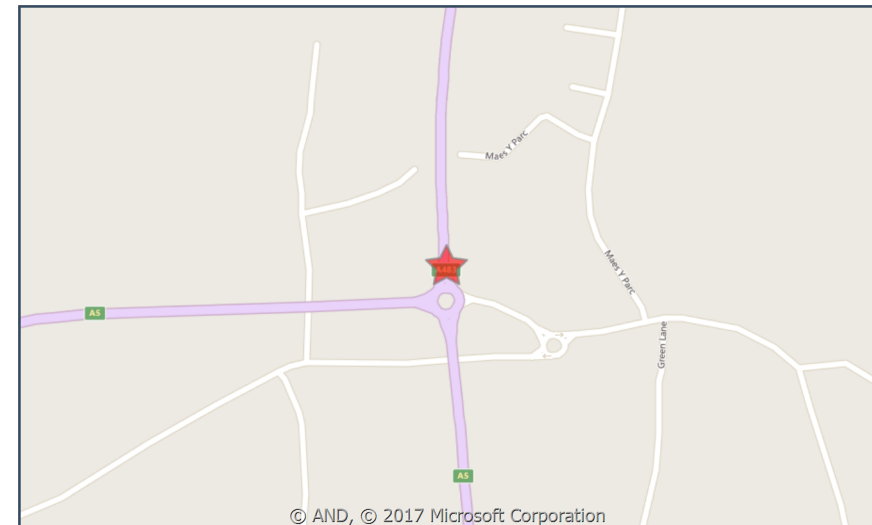
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Friday, February 13, 2015	Time of Crash:	1:30:00 PM	Crash Reference:	201560S020982
Highest Injury Severity:	Slight	Road Number:	A483	Number of Casualties:	2
Highway Authority:	Wrexham			Number of Vehicles:	3
Local Authority:	Wrexham			OS Grid Reference:	329926 339890
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	-1	Female	46 - 55	Vehicle is slowing down or stopping	Back	Journey as part of work	None	None
2	Goods vehicle 7.5 tonnes mgw and over	-1	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None
3	Car (excluding private hire)	-1	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other
3	2	Slight	Vehicle or pillion passenger	Male	26 - 35	Unknown or other	Unknown or other

Accident Description:

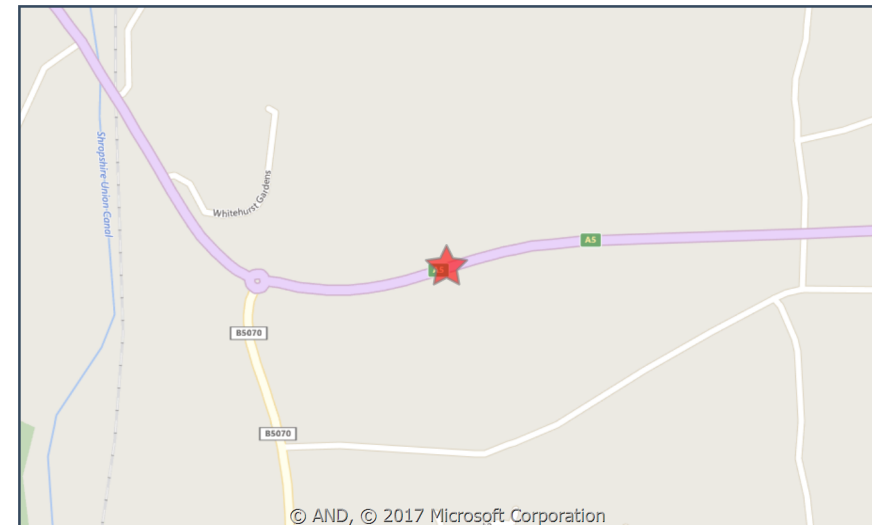
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Monday, May 04, 2015	Time of Crash:	1:01:00 PM	Crash Reference:	201560S063338
Highest Injury Severity:	Serious	Road Number:	A5	Number of Casualties:	1
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329162 339790
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	66 - 75	Vehicle is performing a U turn	Offside	Other	None	None
2	Motorcycle over 500cc	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Serious	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

Accident Description:

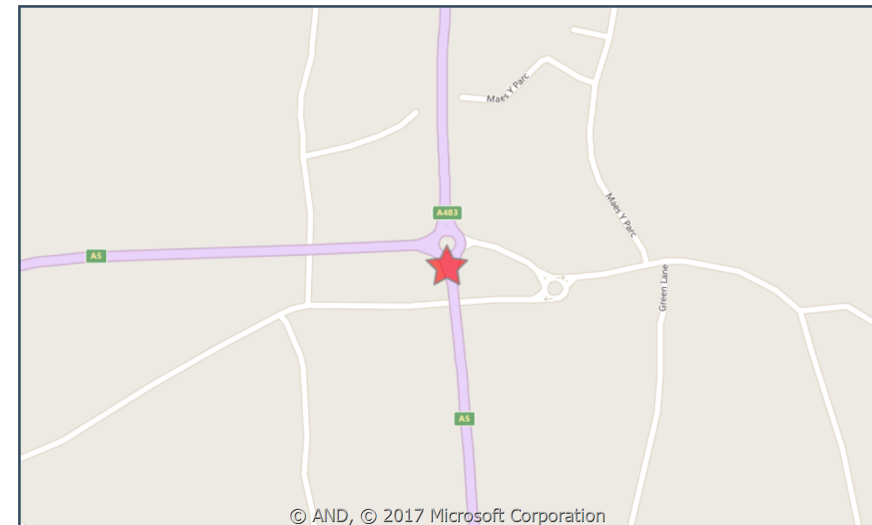
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Friday, May 15, 2015	Time of Crash:	3:00:00 PM	Crash Reference:	201560S069236
Highest Injury Severity:	Slight	Road Number:	A5	Number of Casualties:	2
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329922 339802
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	26 - 35	Vehicle is slowing down or stopping	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Male	46 - 55	Unknown or other	Unknown or other

Accident Description:

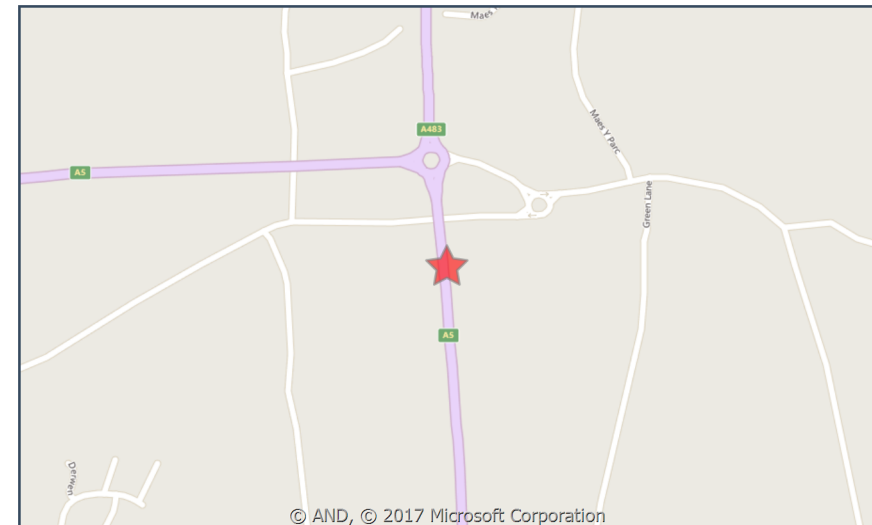
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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Crash Date:	Sunday, July 05, 2015	Time of Crash:	3:09:00 PM	Crash Reference:	201560S099090
Highest Injury Severity:	Slight	Road Number:	A5	Number of Casualties:	2
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329945 339675
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	46 - 55	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

Accident Description:

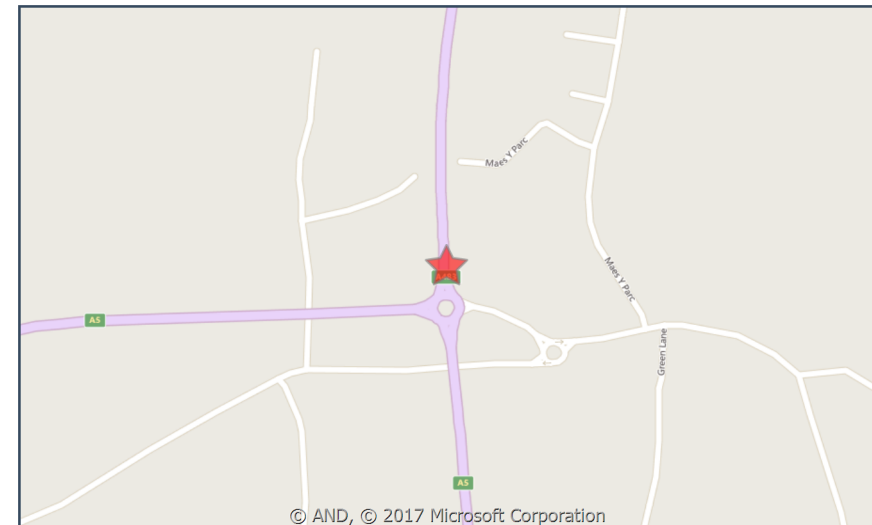
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



crashmap.co.uk

Crash Date:	Monday, September 07, 2015	Time of Crash:	9:30:00 AM	Crash Reference:	201560S136843
Highest Injury Severity:	Slight	Road Number:	A483	Number of Casualties:	1
Highway Authority:	Wrexham			Number of Vehicles:	2
Local Authority:	Wrexham			OS Grid Reference:	329925 339901
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None
2	Car (excluding private hire)	-1	Male	16 - 20	Vehicle is slowing down or stopping	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



APPENDIX TA2

2 WREXHAM - OSWESTRY via Ruabon, Plas Madoc, Acrefair, Chirk & Gobowen

Monday to Saturday except Bank Holidays : Llun i Sadwrn henblaw Gwyliau Cyhoeddus

ARRIVA MIDLANDS

Wrexham, Bus Station [1]	0907	1007	1107	1207	1307	1407	1507	1607	1707	1945	2045	2200
Rhostyllen	0914	1014	1114	1214	1314	1414	1514	1614	1714	1951	2051	2206
Johnstown, Shop	0919	1019	1119	1219	1319	1419	1519	1619	1719	1956	2056	2211
Ruabon, High Street	0923	1023	1123	1223	1323	1423	1523	1623	1723	2000	2100	2215
Plas Madoc	0926	1026	1126	1226	1326	1426	1526	1626	1726	2003	2103	2218
Acrefair, Eagles	0929	1029	1129	1229	1329	1429	1529	1629	1729	2007	2107	2222
Cefn Mawr, TESCO	0932	1032	1132	1232	1332	1432	1532	1632	1732	2010	2110	2225
Newbridge	0938	1038	1138	1238	1338	1438	1538	1638	1738	2015	2115	2230
Lodgevale	0944	1044	1144	1244	1344	1444	1544	1644	1744	....	....	....
Chirk, Hand Hotel	0947	1047	1147	1247	1347	1447	1547	1647	1747	2020	2120	2235
Gobowen Station	0956	1056	1156	1256	1356	1456	1556	1656	1756	2030	2130	2245
Oswestry, Bus Station	1008	1108	1208	1308	1408	1508	1608	1708	1808	2040	2140	2255

2 OSWESTRY - WREXHAM via Gobowen, Chirk, Acrefair, Plas Madoc & Ruabon

Monday to Saturday except Bank Holidays : Llun i Sadwrn henblaw Gwyliau Cyhoeddus

ARRIVA MIDLANDS

Oswestry, Bus Station	0642	0742	0842	0942	1042	1142	1242	1342	1442	1642	1845	1945	2100
Gobowen Station	0650	0750	0850	0950	1050	1150	1250	1350	1450	1650	1855	1955	2110
Chirk, Hand Hotel	0701	0801	0901	1001	1101	1201	1301	1401	1501	1701	1905	2005	2120
Lodgevale	0705	0805	0905	1005	1105	1205	1305	1405	1505	1705	....	....	....
Newbridge	0710	0810	0910	1010	1110	1210	1310	1410	1510	1710	1911	2011	2126
Cefn Mawr, TESCO	0715	0815	0915	1015	1115	1215	1315	1415	1515	1715	1915	2015	2130
Acrefair, Eagles	0719	0819	0919	1019	1119	1219	1319	1419	1519	1719	1918	2018	2133
Plas Madoc	0722	0822	0922	1022	1122	1222	1322	1422	1522	1722	1920	2020	2135
Ruabon, High Street	0727	0827	0927	1027	1127	1227	1327	1427	1527	1727	1925	2025	2140
Johnstown, Shop	0732	0832	0932	1032	1132	1232	1332	1432	1532	1732	1929	2029	2144
Rhostyllen	0737	0837	0937	1037	1137	1237	1337	1437	1537	1737	1933	2033	2148
Wrexham, Bus Station	0744	0844	0944	1044	1144	1244	1344	1444	1544	1744	1940	2040	2155

WREXHAM - OSWESTRY via Ruabon, Plas Madoc, Acrefair, Chirk & Gobowen

Sundays/ Dydd Sul

Wrexham, Bus Station [1]	0930	1030	1130	1230	1330	1430	1530	1630
Rhostyllen	0936	1036	1136	1236	1336	1436	1536	1636
Johnstown, Shop	0941	1041	1141	1241	1341	1441	1541	1641
Ruabon, High Street	0945	1045	1145	1245	1345	1445	1545	1645
Plas Madoc	0948	1048	1148	1248	1348	1448	1548	1648
Acrefair, Eagles	0952	1052	1152	1252	1352	1452	1552	1652
Cefn Mawr, TESCO	0955	1055	1155	1255	1355	1455	1555	1655
Newbridge	1000	1100	1200	1300	1400	1500	1600	1700
Chirk, Hand Hotel	1005	1105	1205	1305	1405	1505	1605	1705
Gobowen, Rail Station	1015	1115	1215	1315	1415	1515	1615	1715
Oswestry, Bus Station	1025	1125	1225	1325	1425	1525	1625	1725

ARRIVA MIDLANDS/Dydd Sul

2 OSWESTRY - WREXHAM via Gobowen, Chirk, Acrefair, Plas Madoc & Ruabon

Sundays/Dydd Sul

Oswestry, Bus Station	0830	0930	1030	1130	1230	1330	1430	1530
Gobowen, Rail Station	0840	0940	1040	1140	1240	1340	1440	1540
Chirk, Hand Hotel	0850	0950	1050	1150	1250	1350	1450	1550
Newbridge	0856	0956	1056	1156	1256	1356	1456	1556
Cefn Mawr, TESCO	0900	1000	1100	1200	1300	1400	1500	1600
Acrefair, Eagles	0903	1003	1103	1203	1303	1403	1503	1603
Plas Madoc	0905	1005	1105	1205	1305	1405	1505	1605
Ruabon, High Street	0910	1010	1110	1210	1310	1410	1510	1610
Johnstown, Shop	0914	1014	1114	1214	1314	1414	1514	1614
Rhostyllen	0918	1018	1118	1218	1318	1418	1518	1618
Wrexham, Bus Station	0925	1025	1125	1225	1325	1425	1525	1625

ARRIVA MIDLANDS

From 18 May 2014/o 18 Mai 2014

2A WREXHAM - OSWESTRY via Ruabon, Plas Madoc, Acrefair, Chirk & Weston Rhyn

Monday to Saturday (not Bank Hol Mondays)

ARRIVA MIDLANDS

Days / Dyddiau:	NS	NS	S											
Wrexham, Bus Station [1]	0637	0737	....	0837	0937	1037	1137	1237	1337	1437	1537	1637	1737	1837
Rhostyllen	0644	0744	....	0844	0944	1044	1144	1244	1344	1444	1544	1644	1744	1844
Johnstown	0649	0749	....	0849	0949	1049	1149	1249	1349	1449	1549	1649	1749	1849
Ruabon	0653	0753	....	0853	0953	1053	1153	1253	1353	1453	1553	1653	1753	1853
Plas Madoc	0656	0756	....	0856	0956	1056	1156	1256	1356	1456	1556	1656	1756	1856
Acrefair	0659	0759	....	0859	0959	1059	1159	1259	1359	1459	1559	1659	1759	1859
Cefn Mawr, TESCO	0702	0802	....	0902	1002	1102	1202	1302	1402	1502	1602	1702	1802	1902
Newbridge	0708	0808	....	0908	1008	1108	1208	1308	1408	1508	1608	1708	1808	1908
Chirk, The Hollies	0711	0811	0811	0911	1011	1111	1211	1311	1411	1511	1611	1711	1811	1911
Chirk, Hand Hotel	0715	0815	0815	0915	1015	1115	1215	1315	1415	1515	1615	1715	1815	1915
Weston Rhyn, Institute	0723	0823	0823	0923	1023	1123	1223	1323	1423	1523	1623	1723	1823	1923
Oswestry, Bus Station	0738	0838	0838	0938	1038	1138	1238	1338	1438	1538	1638	1738	1838	1938

NS: Not Saturday/ Dim ar Dydd Sadwrn

S: Saturday Only/Dydd Sadwrn yn unig

2A OSWESTRY - WREXHAM via Weston Rhyn, Chirk, Acrefair, Plas Madoc & Ruabon

Monday to Saturday (not Bank Hol Mondays)

ARRIVA MIDLANDS

Days / Dyddiau:	NS													
Oswestry, Bus Station	0612	0712	0812	0912	1012	1112	1212	1312	1412	1512	1542	1612	1712	1742
Weston Rhyn, Institute	0623	0723	0823	0923	1023	1123	1223	1323	1423	1523	1553	1623	1723	1753
Chirk, Hand Hotel	0631	0731	0831	0931	1031	1131	1231	1331	1431	1531	1601	1631	1731	1801
Chirk, The Hollies	0634	0734	0834	0934	1034	1134	1234	1334	1434	1534	1604	....	1734	1804
Chirk, Lodgevale Estate	....	....	....	....	....	....	....	....	....	....	....	1635	....	....
Newbridge	0639	0739	0839	0939	1039	1139	1239	1339	1439	1539	1609	1639	1739	1809
Cefn Mawr, TESCO	0645	0745	0845	0945	1045	1145	1245	1345	1445	1545	1615	1645	1745	1815
Acrefair	0649	0749	0849	0949	1049	1149	1249	1349	1449	1549	1619	1649	1749	1819
Plas Madoc	0652	0752	0852	0952	1052	1152	1252	1352	1452	1552	1622	1652	1752	1822
Ruabon	0657	0757	0857	0957	1057	1157	1257	1357	1457	1557	1627	1657	1757	1827
Johnstown	0702	0802	0902	1002	1102	1202	1302	1402	1502	1602	1632	1702	1802	1832
Rhostyllen	0707	0807	0907	1007	1107	1207	1307	1407	1507	1607	1637	1707	1807	1837
Wrexham, Bus Station	0714	0814	0914	1014	1114	1214	1314	1414	1514	1614	1644	1714	1814	1844

NS: Not Saturday/ Dim ar Dydd Sadwrn

0 22 Ebrill 2014/From 22 April 2014

2C Wrexham - Ruabon - Cefn Mawr

Monday to Saturday (not Bank Hol Mondays) Llun I Sadwrn Heblaw Gwyliau Cyhoeddus

ARRIVA MIDLANDS

Wrexham, Bus Station [1]	0752	0822	0852	0922	0952	1022		52	22		1452	1522	1552	1622	1652	1722	1752
Rhostyllen	0759	0829	0859	0929	0959	1029		59	29	minutes	1459	1529	1559	1629	1659	1729	1759
Johnstown	0804	0834	0904	0934	1004	1034	and	04	34	past	1504	1534	1604	1634	1704	1734	1804
Ruabon	0808	0838	0908	0938	1008	1038	then	08	38	each	1508	1538	1608	1638	1708	1738	1808
Plas Madoc	0813	0843	0913	0943	1013	1043	at	13	43	hour	1513	1543	1613	1643	1713	1743	1813
Cefn Mawr, Cae Gwilym Lane	0825	0855	0925	0955	1025	1055	every	25	55	until	1525	1555	1625	1655	1725	1755	1825
Chirk, Hand Hotel	....	....	....	....	....	....		....	....		....	....	....	....	1740	1810	1840
Oswestry Bus Station	....	....	....	....	....	....		....	....		....	....	....	....	1755	1825	1855

2C Cefn Mawr - Ruabon - Wrexham

Monday to Saturday (not Bank Hol Mondays) Llun I Sadwrn Heblaw Gwyliau Cyhoeddus

ARRIVA MIDLANDS

Oswestry Bus Station	0725	....	....	....	....	....		....	....		....	....	....	....			
Chirk, Hand Hotel	0740	....	....	....	....	....		....	....		....	....	....	....			
Cefn Mawr, Cae Gwilym Lane	0755	0825	0855	0925	0955	1025	and	55	25	minutes	1525	1555	1625	1655			
Cefn Mawr, TESCO	0800	0830	0900	0930	1000	1030	then	00	30	past	1530	1600	1630	1700			
Plas Madoc	0807	0837	0907	0937	1007	1037	at	07	37	each	1537	1607	1637	1707			
Ruabon	0812	0842	0912	0942	1012	1042	every	12	42	hour	1542	1612	1642	1712			
Johnstown	0817	0847	0917	0947	1017	1047		17	47	until	1547	1617	1647	1717			
Rhostyllen	0822	0852	0922	0952	1022	1052		22	52		1552	1622	1652	1722			
Wrexham, Bus Station	0829	0859	0929	0959	1029	1059		29	59		1559	1629	1659	1729			



APPENDIX TA3

NTM Growth Factors

2017-2018 AM Peak Hour

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Weekday AM peak period (0700 - 0959)

Trip end type
☐ Production/Attraction
☒ Origin/Destination

Reset Selections

Select data type
☒ Growth factors
☐ Future year minus base year
☐ Base year data
☐ Future year data

Results
*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0094	1.0091

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:
☒ Wrexham 019 (W02000096)

3: Select area type:
☐ Urban
☐ Rural
☒ All

4: Select road type:
☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:
☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0146

2017-2018 PM Peak Hour

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Weekday PM peak period (1600 - 1859)

Trip end type
☐ Production/Attraction
☒ Origin/Destination

Reset Selections

Select data type
☒ Growth factors
☐ Future year minus base year
☐ Base year data
☐ Future year data

Results
*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0289	1.0091

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:
☒ Wrexham 019 (W02000096)

3: Select area type:
☐ Urban
☐ Rural
☒ All

4: Select road type:
☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:
☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0144

2017-2018 Average Weekday

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Average Weekday

Results

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0098	1.0098

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Wrexham 019 (W02000096)

3: Select area type:

☐ Urban
☐ Rural
☒ All

4: Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0152

2017-2023 AM Peak Hour

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Weekday AM peak period (0700 - 0959)

Results

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0554	1.0492

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Wrexham 019 (W02000096)

3: Select area type:

☐ Urban
☐ Rural
☒ All

4: Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0746

2017-2023 PM Peak Hour

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Weekday PM peak period (1600 - 1859)

Reset Selections

Results

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0497	1.0537

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Wrexham 019 (W02000096)

3: Select area type:

☐ Urban
☐ Rural
☒ All

4: Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0740

2017-2023 Average Weekday

TEMPPro main form

Data selections
Trip end selections
Trip end by time period selections
Select time period:
Average Weekday

Reset Selections

Results

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description	Name	Origin	Destination
Level			
W02000096	Wrexham 019	1.0557	1.0556

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Wrexham 019 (W02000096)

3: Select area type:

☐ Urban
☐ Rural
☒ All

4: Select road type:

☐ Motorway
☐ Trunk
☐ Principal
☐ Minor
☒ All

5: Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
W02000096	Wrexham 019	1.0780



APPENDIX TA4

Junctions 8							
PICADY 8 - Priority Intersection Module							
Version: 8.0.6.541 [19821.26/11/2015] © Copyright TRL Limited, 2017							
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: Chapel_Lane_B5070_staggered_crossroad.arc8
Path: Q:\2151-2200\2197-01 OSB Facility\Background Information\Traffic\Junction Assessments
Report generation date: 29/08/2017 16:31:35

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
A1 - Future Year								
Stream B-ACD	0.16	8.86	0.14	A	0.19	11.33	0.16	B
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	-	-	-	-	-	-	-	-
Stream AB-CD	0.69	6.03	0.26	A	0.31	5.27	0.12	A
Stream AB-C	-	-	-	-	-	-	-	-
Stream D-AB	0.20	12.44	0.09	B	0.35	10.17	0.22	B
Stream D-C	0.02	13.07	0.02	B	0.12	15.19	0.10	C
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	-	-	-	-	-	-	-	-
Stream CD-AB	0.24	5.05	0.10	A	0.18	4.45	0.09	A
Stream CD-A	-	-	-	-	-	-	-	-
A1 - Future Year + Development								
Stream B-ACD	0.16	9.01	0.14	A	0.20	11.51	0.16	B
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	-	-	-	-	-	-	-	-
Stream AB-CD	0.80	6.41	0.29	A	0.45	5.51	0.15	A
Stream AB-C	-	-	-	-	-	-	-	-
Stream D-AB	0.31	13.26	0.14	B	0.40	10.73	0.24	B
Stream D-C	0.02	13.34	0.02	B	0.12	15.51	0.11	C
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	-	-	-	-	-	-	-	-
Stream CD-AB	0.25	5.05	0.11	A	0.18	4.45	0.09	A
Stream CD-A	-	-	-	-	-	-	-	-
A1 - Opening Year								
Stream B-ACD	0.15	8.53	0.13	A	0.17	10.66	0.14	B
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	-	-	-	-	-	-	-	-
Stream AB-CD	0.61	5.97	0.24	A	0.26	5.41	0.10	A
Stream AB-C	-	-	-	-	-	-	-	-
Stream D-AB	0.18	12.20	0.09	B	0.32	9.76	0.20	A
Stream D-C	0.02	12.57	0.02	B	0.10	14.28	0.09	B
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	-	-	-	-	-	-	-	-
Stream CD-AB	0.21	5.05	0.10	A	0.15	4.47	0.08	A
Stream CD-A	-	-	-	-	-	-	-	-
A1 - Opening Year + Development								
Stream B-ACD	0.15	8.67	0.13	A	0.17	10.81	0.14	B
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	-	-	-	-	-	-	-	-
Stream AB-CD	0.71	6.34	0.27	A	0.39	5.58	0.13	A
Stream AB-C	-	-	-	-	-	-	-	-
Stream D-AB	0.29	13.00	0.13	B	0.36	10.30	0.22	B
Stream D-C	0.02	12.82	0.02	B	0.10	14.56	0.09	B

Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	-	-	-	-	-	-	-	-
Stream CD-AB	0.22	5.06	0.10	A	0.15	4.48	0.08	A
Stream CD-A	-	-	-	-	-	-	-	-

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

"D1 - Opening Year, AM" model duration: 07:30 - 09:00

"D2 - Opening Year, PM" model duration: 16:15 - 17:45

"D3 - Opening Year + Development, AM" model duration: 07:30 - 09:00

"D4 - Opening Year + Development, PM" model duration: 16:15 - 17:45

"D5 - Future Year, AM" model duration: 07:30 - 09:00

"D6 - Future Year, PM" model duration: 16:15 - 17:45

"D7 - Future Year + Development, AM" model duration: 07:30 - 09:00

"D8 - Future Year + Development, PM" model duration: 16:15 - 17:45

Run using Junctions 8.0.6.541 at 29/08/2017 16:31:26

File summary

Title	(untitled)
Location	
Site Number	
Date	21/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Traffic
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	Veh	PCU	perHour	s	-Min	perMin

(Default Analysis Set) - Opening Year, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Opening Year, AM	Opening Year	AM		ONE HOUR	07:30	09:00	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		7.16	A

Junction Network Options

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Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	742.616	-	-	-	-	-	0.284	0.284	0.112	-	-
1	D-C	482.722	-	0.138	0.313	0.138	0.313	0.219	0.219	0.087	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	469.00	100.000
B	ONE HOUR	✓	56.00	100.000
C	ONE HOUR	✓	386.00	100.000
D	ONE HOUR	✓	30.00	100.000

Turning Proportions

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

	To				
		A	B	C	D
From	A	0.000	25.000	372.000	72.000
	B	18.000	0.000	36.000	2.000
	C	318.000	37.000	0.000	31.000
	D	25.000	0.000	5.000	0.000

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

	To				
		A	B	C	D
From	A	0.00	0.05	0.79	0.15
	B	0.32	0.00	0.64	0.04
	C	0.82	0.10	0.00	0.08
	D	0.83	0.00	0.17	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.044	1.282
	B	1.000	1.000	1.029	1.000
	C	1.051	1.028	1.000	1.000
	D	1.920	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	4.4	28.2
	B	0.0	0.0	2.9	0.0
	C	5.1	2.8	0.0	0.0
	D	92.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.13	8.53	0.15	A	52.33	78.50	10.16	7.77	0.11	10.16	7.77
A-B	-	-	-	-	22.94	34.41	-	-	-	-	-
A-C	-	-	-	-	356.24	534.35	-	-	-	-	-
A-D	-	-	-	-	84.68	127.02	-	-	-	-	-
AB-CD	0.24	5.97	0.61	A	159.30	238.95	38.80	9.74	0.43	38.80	9.74
AB-C	-	-	-	-	317.39	476.08	-	-	-	-	-
D-AB	0.09	12.20	0.18	B	44.05	66.07	12.71	11.54	0.14	12.71	11.54
D-C	0.02	12.57	0.02	B	4.59	6.88	1.30	11.35	0.01	1.30	11.35
C-D	-	-	-	-	28.45	42.67	-	-	-	-	-
C-A	-	-	-	-	306.72	460.08	-	-	-	-	-
C-B	-	-	-	-	34.89	52.34	-	-	-	-	-
CD-AB	0.10	5.05	0.21	A	61.11	91.67	12.98	8.50	0.14	12.98	8.50
CD-A	-	-	-	-	324.47	486.71	-	-	-	-	-

Main Results for each time segment**Main results: (07:30-07:45)**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.93	10.73	42.60	0.00	559.06	0.077	0.00	0.08	7.093	A
A-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
A-C	292.27	73.07	292.27	0.00	-	-	-	-	-	-
A-D	69.47	17.37	69.47	0.00	-	-	-	-	-	-
AB-CD	113.66	28.42	112.52	0.00	841.35	0.135	0.00	0.29	5.805	A
AB-C	277.24	69.31	277.24	0.00	-	-	-	-	-	-

D-AB	36.14	9.03	35.70	0.00	658.64	0.055	0.00	0.11	11.087	B
D-C	3.76	0.94	3.72	0.00	352.76	0.011	0.00	0.01	10.312	B
C-D	23.34	5.83	23.34	0.00	-	-	-	-	-	-
C-A	251.65	62.91	251.65	0.00	-	-	-	-	-	-
C-B	28.63	7.16	28.63	0.00	-	-	-	-	-	-
CD-AB	43.23	10.81	42.87	0.00	798.79	0.054	0.00	0.09	5.025	A
CD-A	272.74	68.19	272.74	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	51.27	12.82	51.17	0.00	531.58	0.096	0.08	0.11	7.628	A
A-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
A-C	349.00	87.25	349.00	0.00	-	-	-	-	-	-
A-D	82.96	20.74	82.96	0.00	-	-	-	-	-	-
AB-CD	149.96	37.49	149.52	0.00	868.21	0.173	0.28	0.40	5.861	A
AB-C	317.02	79.26	317.02	0.00	-	-	-	-	-	-
D-AB	43.15	10.79	43.04	0.00	642.21	0.067	0.11	0.14	11.535	B
D-C	4.49	1.12	4.48	0.00	327.19	0.014	0.01	0.01	11.155	B
C-D	27.87	6.97	27.87	0.00	-	-	-	-	-	-
C-A	300.49	75.12	300.49	0.00	-	-	-	-	-	-
C-B	34.19	8.55	34.19	0.00	-	-	-	-	-	-
CD-AB	58.33	14.58	58.16	0.00	822.14	0.071	0.09	0.13	4.990	A
CD-A	319.39	79.85	319.39	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	62.79	15.70	62.63	0.00	492.82	0.127	0.11	0.15	8.519	A
A-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
A-C	427.44	106.86	427.44	0.00	-	-	-	-	-	-
A-D	101.60	25.40	101.60	0.00	-	-	-	-	-	-
AB-CD	213.59	53.40	212.75	0.00	908.98	0.235	0.40	0.60	5.974	A
AB-C	358.32	89.58	358.32	0.00	-	-	-	-	-	-
D-AB	52.85	13.21	52.69	0.00	619.41	0.085	0.14	0.18	12.194	B
D-C	5.51	1.38	5.48	0.00	292.16	0.019	0.01	0.02	12.557	B
C-D	34.13	8.53	34.13	0.00	-	-	-	-	-	-
C-A	368.02	92.01	368.02	0.00	-	-	-	-	-	-
C-B	41.87	10.47	41.87	0.00	-	-	-	-	-	-
CD-AB	81.54	20.39	81.24	0.00	850.76	0.096	0.13	0.21	4.985	A
CD-A	381.04	95.26	381.04	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	62.79	15.70	62.79	0.00	492.76	0.127	0.15	0.15	8.526	A
A-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
A-C	427.44	106.86	427.44	0.00	-	-	-	-	-	-
A-D	101.60	25.40	101.60	0.00	-	-	-	-	-	-
AB-CD	213.95	53.49	213.95	0.00	909.38	0.235	0.60	0.61	5.937	A
AB-C	358.05	89.51	358.05	0.00	-	-	-	-	-	-
D-AB	52.85	13.21	52.84	0.00	619.39	0.085	0.18	0.18	12.199	B
D-C	5.51	1.38	5.50	0.00	291.98	0.019	0.02	0.02	12.565	B
C-D	34.13	8.53	34.13	0.00	-	-	-	-	-	-
C-A	368.02	92.01	368.02	0.00	-	-	-	-	-	-
C-B	41.87	10.47	41.87	0.00	-	-	-	-	-	-
CD-AB	81.67	20.42	81.66	0.00	850.97	0.096	0.21	0.21	5.002	A
CD-A	381.06	95.27	381.06	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	51.27	12.82	51.42	0.00	531.48	0.096	0.15	0.11	7.638	A
A-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
A-C	349.00	87.25	349.00	0.00	-	-	-	-	-	-
A-D	82.96	20.74	82.96	0.00	-	-	-	-	-	-
AB-CD	150.38	37.60	151.21	0.00	868.79	0.173	0.61	0.40	5.777	A
AB-C	316.77	79.19	316.77	0.00	-	-	-	-	-	-
D-AB	43.15	10.79	43.30	0.00	642.19	0.067	0.18	0.14	11.546	B
D-C	4.49	1.12	4.51	0.00	326.91	0.014	0.02	0.01	11.166	B
C-D	27.87	6.97	27.87	0.00	-	-	-	-	-	-
C-A	300.49	75.12	300.49	0.00	-	-	-	-	-	-
C-B	34.19	8.55	34.19	0.00	-	-	-	-	-	-
CD-AB	58.49	14.62	58.78	0.00	822.48	0.071	0.21	0.14	5.029	A

CD-A	319.49	79.87	319.49	0.00	-	-	-	-	-	-
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Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.93	10.73	43.03	0.00	558.92	0.077	0.11	0.09	7.106	A
A-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
A-C	292.27	73.07	292.27	0.00	-	-	-	-	-	-
A-D	69.47	17.37	69.47	0.00	-	-	-	-	-	-
AB-CD	114.28	28.57	114.71	0.00	841.93	0.136	0.40	0.29	5.784	A
AB-C	276.92	69.23	276.92	0.00	-	-	-	-	-	-
D-AB	36.14	9.03	36.25	0.00	658.61	0.055	0.14	0.11	11.107	B
D-C	3.76	0.94	3.78	0.00	352.34	0.011	0.01	0.01	10.330	B
C-D	23.34	5.83	23.34	0.00	-	-	-	-	-	-
C-A	251.65	62.91	251.65	0.00	-	-	-	-	-	-
C-B	28.63	7.16	28.63	0.00	-	-	-	-	-	-
CD-AB	43.42	10.86	43.60	0.00	799.26	0.054	0.14	0.09	5.052	A
CD-A	273.10	68.27	273.10	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:30-07:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.22	0.08	7.093	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.21	0.28	5.805	A	A
AB-C	-	-	-	-	-
D-AB	1.58	0.11	11.087	B	B
D-C	0.15	0.01	10.312	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.32	0.09	5.025	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.58	0.11	7.628	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.97	0.40	5.861	A	A
AB-C	-	-	-	-	-
D-AB	2.00	0.13	11.535	B	B
D-C	0.20	0.01	11.155	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.97	0.13	4.990	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.15	0.14	8.519	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	9.11	0.61	5.974	A	A
AB-C	-	-	-	-	-
D-AB	2.57	0.17	12.194	B	B
D-C	0.28	0.02	12.557	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.11	0.21	4.985	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

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Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.21	0.15	8.526	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	9.14	0.61	5.937	A	A
AB-C	-	-	-	-	-
D-AB	2.66	0.18	12.199	B	B
D-C	0.29	0.02	12.565	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.17	0.21	5.002	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.69	0.11	7.638	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.01	0.40	5.777	A	A
AB-C	-	-	-	-	-
D-AB	2.16	0.14	11.546	B	B
D-C	0.22	0.01	11.166	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.04	0.14	5.029	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.31	0.09	7.106	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.35	0.29	5.784	A	A
AB-C	-	-	-	-	-
D-AB	1.74	0.12	11.107	B	B
D-C	0.17	0.01	10.330	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.38	0.09	5.052	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Opening Year, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Opening Year, PM	Opening Year	PM		ONE HOUR	16:15	17:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		8.18	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	746.479	-	-	-	-	-	0.285	0.285	0.113	-	-
1	D-C	489.709	-	0.140	0.318	0.140	0.318	0.223	0.223	0.088	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	516.00	100.000
B	ONE HOUR	✓	51.00	100.000
C	ONE HOUR	✓	493.00	100.000
D	ONE HOUR	✓	108.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	14.000	475.000	27.000
	B	28.000	0.000	23.000	0.000
	C	454.000	24.000	0.000	15.000
	D	83.000	2.000	23.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.03	0.92	0.05
	B	0.55	0.00	0.45	0.00
	C	0.92	0.05	0.00	0.03
	D	0.77	0.02	0.21	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.011	1.407
	B	1.000	1.000	1.043	1.000
	C	1.013	1.042	1.000	1.067
	D	1.256	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	1.1	40.7
	B	0.0	0.0	4.3	0.0
	C	1.3	4.2	0.0	6.7
	D	25.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.14	10.66	0.17	B	47.72	71.57	11.17	9.36	0.12	11.17	9.36
A-B	-	-	-	-	12.85	19.27	-	-	-	-	-
A-C	-	-	-	-	440.53	660.79	-	-	-	-	-
A-D	-	-	-	-	34.87	52.30	-	-	-	-	-
AB-CD	0.10	5.41	0.26	A	71.34	107.01	15.90	8.91	0.18	15.90	8.91
AB-C	-	-	-	-	426.05	639.08	-	-	-	-	-
D-AB	0.20	9.76	0.32	A	97.50	146.25	21.65	8.88	0.24	21.65	8.88
D-C	0.09	14.28	0.10	B	21.11	31.66	6.60	12.50	0.07	6.60	12.50
C-D	-	-	-	-	14.68	22.02	-	-	-	-	-
C-A	-	-	-	-	422.18	633.27	-	-	-	-	-
C-B	-	-	-	-	22.94	34.41	-	-	-	-	-
CD-AB	0.08	4.47	0.15	A	54.99	82.48	9.23	6.71	0.10	9.23	6.71
CD-A	-	-	-	-	487.51	731.27	-	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.15	9.79	38.79	0.00	485.60	0.081	0.00	0.09	8.202	A
A-B	10.54	2.63	10.54	0.00	-	-	-	-	-	-
A-C	361.43	90.36	361.43	0.00	-	-	-	-	-	-
A-D	28.61	7.15	28.61	0.00	-	-	-	-	-	-
AB-CD	48.20	12.05	47.77	0.00	855.94	0.056	0.00	0.11	5.410	A
AB-C	359.74	89.93	359.74	0.00	-	-	-	-	-	-
D-AB	80.00	20.00	79.28	0.00	632.81	0.126	0.00	0.18	8.119	A
D-C	17.32	4.33	17.11	0.00	345.02	0.050	0.00	0.05	10.972	B
C-D	12.05	3.01	12.05	0.00	-	-	-	-	-	-
C-A	346.37	86.59	346.37	0.00	-	-	-	-	-	-
C-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
CD-AB	36.20	9.05	35.96	0.00	876.74	0.041	0.00	0.06	4.468	A
CD-A	408.27	102.07	408.27	0.00	-	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	46.75	11.69	46.63	0.00	450.86	0.104	0.09	0.12	9.079	A
A-B	12.59	3.15	12.59	0.00	-	-	-	-	-	-
A-C	431.58	107.89	431.58	0.00	-	-	-	-	-	-
A-D	34.16	8.54	34.16	0.00	-	-	-	-	-	-
AB-CD	67.81	16.95	67.59	0.00	894.75	0.076	0.11	0.16	5.203	A
AB-C	419.45	104.86	419.45	0.00	-	-	-	-	-	-
D-AB	95.52	23.88	95.32	0.00	610.05	0.157	0.18	0.23	8.739	A
D-C	20.68	5.17	20.61	0.00	316.71	0.065	0.05	0.07	12.155	B
C-D	14.38	3.60	14.38	0.00	-	-	-	-	-	-
C-A	413.60	103.40	413.60	0.00	-	-	-	-	-	-
C-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
CD-AB	52.13	13.03	52.00	0.00	922.85	0.056	0.06	0.09	4.318	A
CD-A	479.27	119.82	479.27	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	57.25	14.31	57.05	0.00	401.64	0.143	0.12	0.17	10.645	B
A-B	15.41	3.85	15.41	0.00	-	-	-	-	-	-
A-C	528.57	132.14	528.57	0.00	-	-	-	-	-	-
A-D	41.84	10.46	41.84	0.00	-	-	-	-	-	-
AB-CD	97.70	24.43	97.32	0.00	939.61	0.104	0.16	0.26	4.975	A
AB-C	499.04	124.76	499.04	0.00	-	-	-	-	-	-
D-AB	116.99	29.25	116.66	0.00	578.18	0.202	0.23	0.31	9.744	A
D-C	25.32	6.33	25.20	0.00	277.49	0.091	0.07	0.10	14.264	B
C-D	17.62	4.40	17.62	0.00	-	-	-	-	-	-
C-A	506.56	126.64	506.56	0.00	-	-	-	-	-	-
C-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
CD-AB	76.38	19.10	76.16	0.00	974.03	0.078	0.09	0.15	4.193	A
CD-A	574.36	143.59	574.36	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	57.25	14.31	57.25	0.00	401.55	0.143	0.17	0.17	10.660	B
A-B	15.41	3.85	15.41	0.00	-	-	-	-	-	-
A-C	528.57	132.14	528.57	0.00	-	-	-	-	-	-
A-D	41.84	10.46	41.84	0.00	-	-	-	-	-	-
AB-CD	97.87	24.47	97.87	0.00	939.83	0.104	0.26	0.26	4.924	A
AB-C	498.96	124.74	498.96	0.00	-	-	-	-	-	-
D-AB	116.99	29.25	116.98	0.00	578.07	0.202	0.31	0.32	9.759	A
D-C	25.32	6.33	25.32	0.00	277.42	0.091	0.10	0.10	14.279	B
C-D	17.62	4.40	17.62	0.00	-	-	-	-	-	-
C-A	506.56	126.64	506.56	0.00	-	-	-	-	-	-
C-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
CD-AB	76.52	19.13	76.52	0.00	974.31	0.079	0.15	0.15	4.197	A
CD-A	574.54	143.64	574.54	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	46.75	11.69	46.94	0.00	450.71	0.104	0.17	0.12	9.094	A

A-B	12.59	3.15	12.59	0.00	-	-	-	-	-	-
A-C	431.58	107.89	431.58	0.00	-	-	-	-	-	-
A-D	34.16	8.54	34.16	0.00	-	-	-	-	-	-
AB-CD	68.01	17.00	68.40	0.00	895.09	0.076	0.26	0.16	5.059	A
AB-C	419.39	104.85	419.39	0.00	-	-	-	-	-	-
D-AB	95.52	23.88	95.84	0.00	609.88	0.157	0.31	0.23	8.759	A
D-C	20.68	5.17	20.79	0.00	316.60	0.065	0.10	0.07	12.176	B
C-D	14.38	3.60	14.38	0.00	-	-	-	-	-	-
C-A	413.60	103.40	413.60	0.00	-	-	-	-	-	-
C-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
CD-AB	52.29	13.07	52.51	0.00	923.31	0.057	0.15	0.10	4.325	A
CD-A	479.63	119.91	479.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.15	9.79	39.26	0.00	485.39	0.081	0.12	0.09	8.231	A
A-B	10.54	2.63	10.54	0.00	-	-	-	-	-	-
A-C	361.43	90.36	361.43	0.00	-	-	-	-	-	-
A-D	28.61	7.15	28.61	0.00	-	-	-	-	-	-
AB-CD	48.44	12.11	48.65	0.00	856.25	0.057	0.16	0.11	5.316	A
AB-C	359.72	89.93	359.72	0.00	-	-	-	-	-	-
D-AB	80.00	20.00	80.20	0.00	632.58	0.126	0.23	0.18	8.151	A
D-C	17.32	4.33	17.38	0.00	344.89	0.050	0.07	0.05	10.996	B
C-D	12.05	3.01	12.05	0.00	-	-	-	-	-	-
C-A	346.37	86.59	346.37	0.00	-	-	-	-	-	-
C-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
CD-AB	36.40	9.10	36.53	0.00	877.37	0.041	0.10	0.06	4.473	A
CD-A	409.00	102.25	409.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.28	0.09	8.202	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	1.60	0.11	5.410	A	A
AB-C	-	-	-	-	-
D-AB	2.59	0.17	8.119	A	A
D-C	0.75	0.05	10.972	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	0.91	0.06	4.468	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:30-16:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.71	0.11	9.079	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.46	0.16	5.203	A	A
AB-C	-	-	-	-	-
D-AB	3.36	0.22	8.739	A	A
D-C	1.00	0.07	12.155	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.40	0.09	4.318	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.43	0.16	10.645	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	3.89	0.26	4.975	A	A

AB-C	-	-	-	-	-
D-AB	4.56	0.30	9.744	A	A
D-C	1.43	0.10	14.264	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.26	0.15	4.193	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.52	0.17	10.660	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	3.89	0.26	4.924	A	A
AB-C	-	-	-	-	-
D-AB	4.71	0.31	9.759	A	A
D-C	1.49	0.10	14.279	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.28	0.15	4.197	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.84	0.12	9.094	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.44	0.16	5.059	A	A
AB-C	-	-	-	-	-
D-AB	3.62	0.24	8.759	A	A
D-C	1.10	0.07	12.176	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.44	0.10	4.325	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.39	0.09	8.231	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	1.63	0.11	5.316	A	A
AB-C	-	-	-	-	-
D-AB	2.81	0.19	8.151	A	A
D-C	0.83	0.06	10.996	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	0.94	0.06	4.473	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Opening Year + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Opening Year + Development, AM	Opening Year + Development	AM		ONE HOUR	07:30	09:00	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		7.76	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	744.382	-	-	-	-	-	0.285	0.285	0.113	-	-
1	D-C	481.011	-	0.138	0.312	0.138	0.312	0.219	0.219	0.086	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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			✓	✓
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Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	475.00	100.000
B	ONE HOUR	✓	56.00	100.000
C	ONE HOUR	✓	386.00	100.000
D	ONE HOUR	✓	43.00	100.000

Turning Proportions

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

	To				
		A	B	C	D
From	A	0.000	25.000	372.000	78.000
	B	18.000	0.000	36.000	2.000
	C	318.000	37.000	0.000	31.000
	D	38.000	0.000	5.000	0.000

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

	To				
		A	B	C	D
From	A	0.00	0.05	0.78	0.16
	B	0.32	0.00	0.64	0.04
	C	0.82	0.10	0.00	0.08
	D	0.88	0.00	0.12	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.044	1.337
	B	1.000	1.000	1.029	1.000
	C	1.051	1.028	1.000	1.000
	D	1.947	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	4.4	33.7
	B	0.0	0.0	2.9	0.0
	C	5.1	2.8	0.0	0.0
	D	94.7	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.13	8.67	0.15	A	52.33	78.50	10.29	7.87	0.11	10.29	7.87
A-B	-	-	-	-	22.94	34.41	-	-	-	-	-
A-C	-	-	-	-	356.24	534.35	-	-	-	-	-
A-D	-	-	-	-	95.69	143.53	-	-	-	-	-
AB-CD	0.27	6.34	0.71	A	179.61	269.41	45.18	10.06	0.50	45.19	10.06
AB-C	-	-	-	-	308.09	462.13	-	-	-	-	-
D-AB	0.13	13.00	0.29	B	67.89	101.84	20.66	12.17	0.23	20.66	12.17
D-C	0.02	12.82	0.02	B	4.59	6.88	1.32	11.54	0.01	1.32	11.54
C-D	-	-	-	-	28.45	42.67	-	-	-	-	-

C-A	-	-	-	-	306.72	460.08	-	-	-	-	-
C-B	-	-	-	-	34.89	52.34	-	-	-	-	-
CD-AB	0.10	5.06	0.22	A	63.41	95.11	13.59	8.57	0.15	13.59	8.57
CD-A	-	-	-	-	345.98	518.97	-	-	-	-	-

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.93	10.73	42.60	0.00	554.63	0.077	0.00	0.08	7.155	A
A-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
A-C	292.27	73.07	292.27	0.00	-	-	-	-	-	-
A-D	78.51	19.63	78.51	0.00	-	-	-	-	-	-
AB-CD	128.13	32.03	126.81	0.00	841.35	0.152	0.00	0.33	6.063	A
AB-C	271.80	67.95	271.80	0.00	-	-	-	-	-	-
D-AB	55.70	13.93	55.00	0.00	660.18	0.084	0.00	0.18	11.570	B
D-C	3.76	0.94	3.72	0.00	348.56	0.011	0.00	0.01	10.438	B
C-D	23.34	5.83	23.34	0.00	-	-	-	-	-	-
C-A	251.65	62.91	251.65	0.00	-	-	-	-	-	-
C-B	28.63	7.16	28.63	0.00	-	-	-	-	-	-
CD-AB	44.35	11.09	43.98	0.00	808.61	0.055	0.00	0.09	5.022	A
CD-A	290.92	72.73	290.92	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	51.27	12.82	51.17	0.00	526.13	0.097	0.08	0.11	7.717	A
A-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
A-C	349.00	87.25	349.00	0.00	-	-	-	-	-	-
A-D	93.75	23.44	93.75	0.00	-	-	-	-	-	-
AB-CD	169.06	42.27	168.54	0.00	868.25	0.195	0.33	0.46	6.160	A
AB-C	308.70	77.18	308.70	0.00	-	-	-	-	-	-
D-AB	66.52	16.63	66.34	0.00	643.70	0.103	0.18	0.22	12.136	B
D-C	4.49	1.12	4.48	0.00	322.39	0.014	0.01	0.01	11.323	B
C-D	27.87	6.97	27.87	0.00	-	-	-	-	-	-
C-A	300.49	75.12	300.49	0.00	-	-	-	-	-	-
C-B	34.19	8.55	34.19	0.00	-	-	-	-	-	-
CD-AB	60.43	15.11	60.25	0.00	835.02	0.072	0.09	0.14	4.983	A
CD-A	340.59	85.15	340.59	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	62.79	15.70	62.63	0.00	485.86	0.129	0.11	0.15	8.662	A
A-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
A-C	427.44	106.86	427.44	0.00	-	-	-	-	-	-
A-D	114.81	28.70	114.81	0.00	-	-	-	-	-	-
AB-CD	240.81	60.20	239.81	0.00	909.05	0.265	0.46	0.71	6.340	A
AB-C	344.30	86.08	344.30	0.00	-	-	-	-	-	-
D-AB	81.46	20.37	81.19	0.00	620.82	0.131	0.22	0.29	12.982	B
D-C	5.51	1.38	5.48	0.00	286.51	0.019	0.01	0.02	12.810	B
C-D	34.13	8.53	34.13	0.00	-	-	-	-	-	-
C-A	368.02	92.01	368.02	0.00	-	-	-	-	-	-
C-B	41.87	10.47	41.87	0.00	-	-	-	-	-	-
CD-AB	85.16	21.29	84.83	0.00	866.80	0.098	0.14	0.22	4.980	A
CD-A	405.93	101.48	405.93	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	62.79	15.70	62.79	0.00	485.78	0.129	0.15	0.15	8.666	A
A-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
A-C	427.44	106.86	427.44	0.00	-	-	-	-	-	-
A-D	114.81	28.70	114.81	0.00	-	-	-	-	-	-
AB-CD	241.25	60.31	241.25	0.00	909.51	0.265	0.71	0.71	6.294	A
AB-C	343.96	85.99	343.96	0.00	-	-	-	-	-	-
D-AB	81.46	20.37	81.46	0.00	620.80	0.131	0.29	0.29	12.995	B
D-C	5.51	1.38	5.50	0.00	286.30	0.019	0.02	0.02	12.820	B
C-D	34.13	8.53	34.13	0.00	-	-	-	-	-	-

C-A	368.02	92.01	368.02	0.00	-	-	-	-	-	-
C-B	41.87	10.47	41.87	0.00	-	-	-	-	-	-
CD-AB	85.32	21.33	85.30	0.00	867.08	0.098	0.22	0.22	5.002	A
CD-A	406.03	101.51	406.03	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	51.27	12.82	51.42	0.00	526.01	0.097	0.15	0.11	7.728	A
A-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
A-C	349.00	87.25	349.00	0.00	-	-	-	-	-	-
A-D	93.75	23.44	93.75	0.00	-	-	-	-	-	-
AB-CD	169.57	42.39	170.55	0.00	868.92	0.195	0.71	0.46	6.053	A
AB-C	308.37	77.09	308.37	0.00	-	-	-	-	-	-
D-AB	66.52	16.63	66.77	0.00	643.68	0.103	0.29	0.23	12.155	B
D-C	4.49	1.12	4.52	0.00	322.05	0.014	0.02	0.01	11.337	B
C-D	27.87	6.97	27.87	0.00	-	-	-	-	-	-
C-A	300.49	75.12	300.49	0.00	-	-	-	-	-	-
C-B	34.19	8.55	34.19	0.00	-	-	-	-	-	-
CD-AB	60.62	15.15	60.93	0.00	835.48	0.073	0.22	0.14	5.033	A
CD-A	340.83	85.21	340.83	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.93	10.73	43.03	0.00	554.46	0.077	0.11	0.09	7.171	A
A-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
A-C	292.27	73.07	292.27	0.00	-	-	-	-	-	-
A-D	78.51	19.63	78.51	0.00	-	-	-	-	-	-
AB-CD	128.84	32.21	129.34	0.00	842.00	0.153	0.46	0.34	6.034	A
AB-C	271.39	67.85	271.39	0.00	-	-	-	-	-	-
D-AB	55.70	13.93	55.89	0.00	660.16	0.084	0.23	0.18	11.605	B
D-C	3.76	0.94	3.78	0.00	348.07	0.011	0.01	0.01	10.456	B
C-D	23.34	5.83	23.34	0.00	-	-	-	-	-	-
C-A	251.65	62.91	251.65	0.00	-	-	-	-	-	-
C-B	28.63	7.16	28.63	0.00	-	-	-	-	-	-
CD-AB	44.57	11.14	44.76	0.00	809.29	0.055	0.14	0.09	5.057	A
CD-A	291.59	72.90	291.59	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment**Queueing Delay results: (07:30-07:45)**

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.23	0.08	7.155	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.87	0.32	6.063	A	A
AB-C	-	-	-	-	-
D-AB	2.53	0.17	11.570	B	B
D-C	0.16	0.01	10.438	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.36	0.09	5.022	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.60	0.11	7.717	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.94	0.46	6.160	A	A
AB-C	-	-	-	-	-
D-AB	3.23	0.22	12.136	B	B
D-C	0.20	0.01	11.323	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.05	0.14	4.983	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.19	0.15	8.662	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	10.68	0.71	6.340	A	A
AB-C	-	-	-	-	-
D-AB	4.21	0.28	12.982	B	B
D-C	0.28	0.02	12.810	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.28	0.22	4.980	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.25	0.15	8.666	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	10.70	0.71	6.294	A	A
AB-C	-	-	-	-	-
D-AB	4.36	0.29	12.995	B	B
D-C	0.29	0.02	12.820	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.35	0.22	5.002	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.71	0.11	7.728	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.96	0.46	6.053	A	A
AB-C	-	-	-	-	-
D-AB	3.52	0.23	12.155	B	B
D-C	0.22	0.01	11.337	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.13	0.14	5.033	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.32	0.09	7.171	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.03	0.34	6.034	A	A
AB-C	-	-	-	-	-
D-AB	2.81	0.19	11.605	B	B
D-C	0.17	0.01	10.456	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.42	0.09	5.057	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Opening Year + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Opening Year + Development, PM	Opening Year + Development	PM		ONE HOUR	16:15	17:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		8.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	748.589	-	-	-	-	-	0.286	0.286	0.113	-	-
1	D-C	488.074	-	0.140	0.317	0.140	0.317	0.222	0.222	0.088	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	521.00	100.000
B	ONE HOUR	✓	51.00	100.000
C	ONE HOUR	✓	493.00	100.000
D	ONE HOUR	✓	113.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	14.000	475.000	32.000
	B	28.000	0.000	23.000	0.000
	C	454.000	24.000	0.000	15.000
	D	88.000	2.000	23.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.03	0.91	0.06
	B	0.55	0.00	0.45	0.00
	C	0.92	0.05	0.00	0.03
	D	0.78	0.02	0.20	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.011	1.499
	B	1.000	1.000	1.043	1.000
	C	1.013	1.042	1.000	1.067
	D	1.298	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	1.1	49.9
	B	0.0	0.0	4.3	0.0
	C	1.3	4.2	0.0	6.7
	D	29.8	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)

B-ACD	0.14	10.81	0.17	B	47.72	71.57	11.29	9.47	0.13	11.29	9.47
A-B	-	-	-	-	12.85	19.27	-	-	-	-	-
A-C	-	-	-	-	440.53	660.79	-	-	-	-	-
A-D	-	-	-	-	44.01	66.02	-	-	-	-	-
AB-CD	0.13	5.58	0.39	A	91.04	136.56	23.69	10.41	0.26	23.69	10.41
AB-C	-	-	-	-	415.49	623.24	-	-	-	-	-
D-AB	0.22	10.30	0.36	B	106.67	160.01	24.86	9.32	0.28	24.86	9.32
D-C	0.09	14.56	0.10	B	21.11	31.66	6.70	12.70	0.07	6.70	12.70
C-D	-	-	-	-	14.68	22.02	-	-	-	-	-
C-A	-	-	-	-	422.18	633.27	-	-	-	-	-
C-B	-	-	-	-	22.94	34.41	-	-	-	-	-
CD-AB	0.08	4.48	0.15	A	55.81	83.71	9.42	6.75	0.10	9.42	6.75
CD-A	-	-	-	-	495.84	743.76	-	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.15	9.79	38.79	0.00	482.43	0.081	0.00	0.09	8.267	A
A-B	10.54	2.63	10.54	0.00	-	-	-	-	-	-
A-C	361.43	90.36	361.43	0.00	-	-	-	-	-	-
A-D	36.11	9.03	36.11	0.00	-	-	-	-	-	-
AB-CD	63.59	15.90	62.94	0.00	862.92	0.074	0.00	0.16	5.584	A
AB-C	351.85	87.96	351.85	0.00	-	-	-	-	-	-
D-AB	87.52	21.88	86.70	0.00	634.51	0.138	0.00	0.20	8.475	A
D-C	17.32	4.33	17.10	0.00	341.41	0.051	0.00	0.05	11.094	B
C-D	12.05	3.01	12.05	0.00	-	-	-	-	-	-
C-A	346.37	86.59	346.37	0.00	-	-	-	-	-	-
C-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
CD-AB	36.56	9.14	36.31	0.00	879.47	0.042	0.00	0.06	4.472	A
CD-A	415.34	103.83	415.34	0.00	-	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	46.75	11.69	46.63	0.00	446.98	0.105	0.09	0.12	9.167	A
A-B	12.59	3.15	12.59	0.00	-	-	-	-	-	-
A-C	431.58	107.89	431.58	0.00	-	-	-	-	-	-
A-D	43.12	10.78	43.12	0.00	-	-	-	-	-	-
AB-CD	85.64	21.41	85.33	0.00	894.81	0.096	0.16	0.24	5.448	A
AB-C	410.58	102.65	410.58	0.00	-	-	-	-	-	-
D-AB	104.50	26.13	104.27	0.00	611.63	0.171	0.20	0.26	9.161	A
D-C	20.68	5.17	20.61	0.00	312.60	0.066	0.05	0.07	12.326	B
C-D	14.38	3.60	14.38	0.00	-	-	-	-	-	-
C-A	413.60	103.40	413.60	0.00	-	-	-	-	-	-
C-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
CD-AB	52.87	13.22	52.74	0.00	926.74	0.057	0.06	0.10	4.320	A
CD-A	487.48	121.87	487.48	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	57.25	14.31	57.05	0.00	396.74	0.144	0.12	0.17	10.799	B
A-B	15.41	3.85	15.41	0.00	-	-	-	-	-	-
A-C	528.57	132.14	528.57	0.00	-	-	-	-	-	-
A-D	52.81	13.20	52.81	0.00	-	-	-	-	-	-
AB-CD	123.41	30.85	122.82	0.00	939.70	0.131	0.24	0.39	5.257	A
AB-C	484.30	121.07	484.30	0.00	-	-	-	-	-	-
D-AB	127.99	32.00	127.60	0.00	579.54	0.221	0.26	0.36	10.279	B
D-C	25.32	6.33	25.20	0.00	272.68	0.093	0.07	0.10	14.538	B
C-D	17.62	4.40	17.62	0.00	-	-	-	-	-	-
C-A	506.56	126.64	506.56	0.00	-	-	-	-	-	-
C-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
CD-AB	77.73	19.43	77.50	0.00	978.84	0.079	0.10	0.15	4.198	A
CD-A	583.95	145.99	583.95	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS

B-ACD	57.25	14.31	57.25	0.00	396.63	0.144	0.17	0.17	10.815	B
A-B	15.41	3.85	15.41	0.00	-	-	-	-	-	-
A-C	528.57	132.14	528.57	0.00	-	-	-	-	-	-
A-D	52.81	13.20	52.81	0.00	-	-	-	-	-	-
AB-CD	123.68	30.92	123.68	0.00	940.01	0.132	0.39	0.39	5.195	A
AB-C	484.12	121.03	484.12	0.00	-	-	-	-	-	-
D-AB	127.99	32.00	127.98	0.00	579.43	0.221	0.36	0.36	10.299	B
D-C	25.32	6.33	25.32	0.00	272.56	0.093	0.10	0.10	14.560	B
C-D	17.62	4.40	17.62	0.00	-	-	-	-	-	-
C-A	506.56	126.64	506.56	0.00	-	-	-	-	-	-
C-B	27.53	6.88	27.53	0.00	-	-	-	-	-	-
CD-AB	77.88	19.47	77.87	0.00	979.16	0.080	0.15	0.15	4.201	A
CD-A	584.19	146.05	584.19	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	46.75	11.69	46.95	0.00	446.82	0.105	0.17	0.12	9.183	A
A-B	12.59	3.15	12.59	0.00	-	-	-	-	-	-
A-C	431.58	107.89	431.58	0.00	-	-	-	-	-	-
A-D	43.12	10.78	43.12	0.00	-	-	-	-	-	-
AB-CD	85.95	21.49	86.56	0.00	895.28	0.096	0.39	0.24	5.292	A
AB-C	410.41	102.60	410.41	0.00	-	-	-	-	-	-
D-AB	104.50	26.13	104.88	0.00	611.46	0.171	0.36	0.27	9.187	A
D-C	20.68	5.17	20.80	0.00	312.43	0.066	0.10	0.07	12.348	B
C-D	14.38	3.60	14.38	0.00	-	-	-	-	-	-
C-A	413.60	103.40	413.60	0.00	-	-	-	-	-	-
C-B	22.47	5.62	22.47	0.00	-	-	-	-	-	-
CD-AB	53.05	13.26	53.28	0.00	927.26	0.057	0.15	0.10	4.332	A
CD-A	487.91	121.98	487.91	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.15	9.79	39.27	0.00	482.20	0.081	0.12	0.09	8.290	A
A-B	10.54	2.63	10.54	0.00	-	-	-	-	-	-
A-C	361.43	90.36	361.43	0.00	-	-	-	-	-	-
A-D	36.11	9.03	36.11	0.00	-	-	-	-	-	-
AB-CD	63.98	15.99	64.27	0.00	863.35	0.074	0.24	0.16	5.505	A
AB-C	351.68	87.92	351.68	0.00	-	-	-	-	-	-
D-AB	87.52	21.88	87.76	0.00	634.28	0.138	0.27	0.21	8.513	A
D-C	17.32	4.33	17.39	0.00	341.20	0.051	0.07	0.05	11.119	B
C-D	12.05	3.01	12.05	0.00	-	-	-	-	-	-
C-A	346.37	86.59	346.37	0.00	-	-	-	-	-	-
C-B	18.82	4.71	18.82	0.00	-	-	-	-	-	-
CD-AB	36.77	9.19	36.90	0.00	880.18	0.042	0.10	0.06	4.479	A
CD-A	416.19	104.05	416.19	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.29	0.09	8.267	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.39	0.16	5.584	A	A
AB-C	-	-	-	-	-
D-AB	2.95	0.20	8.475	A	A
D-C	0.76	0.05	11.094	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	0.92	0.06	4.472	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:30-16:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.72	0.11	9.167	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-

AB-CD	3.59	0.24	5.448	A	A
AB-C	-	-	-	-	-
D-AB	3.85	0.26	9.161	A	A
D-C	1.02	0.07	12.326	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.43	0.10	4.320	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.47	0.16	10.799	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.83	0.39	5.257	A	A
AB-C	-	-	-	-	-
D-AB	5.25	0.35	10.279	B	B
D-C	1.46	0.10	14.538	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.31	0.15	4.198	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.56	0.17	10.815	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.83	0.39	5.195	A	A
AB-C	-	-	-	-	-
D-AB	5.44	0.36	10.299	B	B
D-C	1.52	0.10	14.560	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.34	0.16	4.201	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.86	0.12	9.183	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	3.58	0.24	5.292	A	A
AB-C	-	-	-	-	-
D-AB	4.16	0.28	9.187	A	A
D-C	1.12	0.07	12.348	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.47	0.10	4.332	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.40	0.09	8.290	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.46	0.16	5.505	A	A
AB-C	-	-	-	-	-
D-AB	3.22	0.21	8.513	A	A
D-C	0.84	0.06	11.119	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

C-B	-	-	-	-	-
CD-AB	0.95	0.06	4.479	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Future Year, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Future Year, AM	Future Year	AM		ONE HOUR	07:30	09:00	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		7.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-

1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	742.978	-	-	-	-	-	0.284	0.284	0.112	-	-
1	D-C	482.371	-	0.138	0.313	0.138	0.313	0.219	0.219	0.087	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	497.00	100.000
B	ONE HOUR	✓	59.00	100.000
C	ONE HOUR	✓	408.00	100.000
D	ONE HOUR	✓	32.00	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	27.000	394.000	76.000
	B	19.000	0.000	38.000	2.000
	C	336.000	39.000	0.000	33.000
	D	27.000	0.000	5.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.05	0.79	0.15
	B	0.32	0.00	0.64	0.03
	C	0.82	0.10	0.00	0.08
	D	0.84	0.00	0.16	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.044	1.282
	B	1.000	1.000	1.029	1.000
	C	1.051	1.028	1.000	1.000
	D	1.920	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.0	0.0	4.4	28.2
	B	0.0	0.0	2.9	0.0
	C	5.1	2.8	0.0	0.0
	D	92.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.14	8.86	0.16	A	55.14	82.70	11.04	8.01	0.12	11.04	8.01
A-B	-	-	-	-	24.78	37.16	-	-	-	-	-
A-C	-	-	-	-	377.30	565.95	-	-	-	-	-
A-D	-	-	-	-	89.38	134.08	-	-	-	-	-
AB-CD	0.26	6.03	0.69	A	174.57	261.86	43.41	9.95	0.48	43.42	9.95
AB-C	-	-	-	-	329.77	494.66	-	-	-	-	-
D-AB	0.09	12.44	0.20	B	47.57	71.35	13.94	11.72	0.15	13.94	11.72
D-C	0.02	13.07	0.02	B	4.59	6.88	1.34	11.71	0.01	1.34	11.71
C-D	-	-	-	-	30.28	45.42	-	-	-	-	-
C-A	-	-	-	-	324.08	486.12	-	-	-	-	-
C-B	-	-	-	-	36.78	55.17	-	-	-	-	-
CD-AB	0.10	5.05	0.24	A	66.82	100.23	14.70	8.80	0.16	14.70	8.80
CD-A	-	-	-	-	341.53	512.29	-	-	-	-	-

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.24	11.31	44.87	0.00	550.67	0.082	0.00	0.09	7.244	A
A-B	20.33	5.08	20.33	0.00	-	-	-	-	-	-
A-C	309.56	77.39	309.56	0.00	-	-	-	-	-	-
A-D	73.33	18.33	73.33	0.00	-	-	-	-	-	-
AB-CD	123.34	30.84	122.09	0.00	849.43	0.145	0.00	0.31	5.798	A
AB-C	290.23	72.56	290.23	0.00	-	-	-	-	-	-
D-AB	39.03	9.76	38.55	0.00	654.28	0.060	0.00	0.12	11.218	B
D-C	3.76	0.94	3.72	0.00	345.10	0.011	0.00	0.01	10.544	B
C-D	24.84	6.21	24.84	0.00	-	-	-	-	-	-
C-A	265.89	66.47	265.89	0.00	-	-	-	-	-	-
C-B	30.18	7.54	30.18	0.00	-	-	-	-	-	-
CD-AB	46.72	11.68	46.33	0.00	804.11	0.058	0.00	0.10	5.021	A
CD-A	287.89	71.97	287.89	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	54.02	13.50	53.91	0.00	521.39	0.104	0.09	0.12	7.841	A
A-B	24.27	6.07	24.27	0.00	-	-	-	-	-	-
A-C	369.64	92.41	369.64	0.00	-	-	-	-	-	-
A-D	87.57	21.89	87.57	0.00	-	-	-	-	-	-
AB-CD	163.74	40.93	163.23	0.00	878.14	0.186	0.31	0.44	5.874	A
AB-C	330.34	82.58	330.34	0.00	-	-	-	-	-	-
D-AB	46.60	11.65	46.49	0.00	636.92	0.073	0.12	0.15	11.703	B
D-C	4.49	1.12	4.48	0.00	318.08	0.014	0.01	0.01	11.479	B
C-D	29.67	7.42	29.67	0.00	-	-	-	-	-	-
C-A	317.50	79.37	317.50	0.00	-	-	-	-	-	-
C-B	36.03	9.01	36.03	0.00	-	-	-	-	-	-
CD-AB	63.65	15.91	63.46	0.00	829.57	0.077	0.10	0.15	4.986	A
CD-A	336.37	84.09	336.37	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.16	16.54	65.98	0.00	479.98	0.138	0.12	0.16	8.852	A
A-B	29.73	7.43	29.73	0.00	-	-	-	-	-	-
A-C	452.71	113.18	452.71	0.00	-	-	-	-	-	-
A-D	107.25	26.81	107.25	0.00	-	-	-	-	-	-
AB-CD	235.80	58.95	234.82	0.00	922.09	0.256	0.44	0.68	6.028	A
AB-C	369.28	92.32	369.28	0.00	-	-	-	-	-	-
D-AB	57.08	14.27	56.90	0.00	612.82	0.093	0.15	0.19	12.429	B
D-C	5.51	1.38	5.48	0.00	281.05	0.020	0.01	0.02	13.064	B
C-D	36.33	9.08	36.33	0.00	-	-	-	-	-	-

C-A	388.85	97.21	388.85	0.00	-	-	-	-	-	-
C-B	44.13	11.03	44.13	0.00	-	-	-	-	-	-
CD-AB	89.79	22.45	89.43	0.00	860.37	0.104	0.15	0.24	4.988	A
CD-A	400.10	100.02	400.10	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.16	16.54	66.15	0.00	479.90	0.138	0.16	0.16	8.860	A
A-B	29.73	7.43	29.73	0.00	-	-	-	-	-	-
A-C	452.71	113.18	452.71	0.00	-	-	-	-	-	-
A-D	107.25	26.81	107.25	0.00	-	-	-	-	-	-
AB-CD	236.25	59.06	236.24	0.00	922.56	0.256	0.68	0.69	5.993	A
AB-C	368.95	92.24	368.95	0.00	-	-	-	-	-	-
D-AB	57.08	14.27	57.07	0.00	612.80	0.093	0.19	0.20	12.437	B
D-C	5.51	1.38	5.50	0.00	280.85	0.020	0.02	0.02	13.073	B
C-D	36.33	9.08	36.33	0.00	-	-	-	-	-	-
C-A	388.85	97.21	388.85	0.00	-	-	-	-	-	-
C-B	44.13	11.03	44.13	0.00	-	-	-	-	-	-
CD-AB	89.95	22.49	89.94	0.00	860.62	0.105	0.24	0.24	5.008	A
CD-A	400.11	100.03	400.11	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	54.02	13.50	54.19	0.00	521.27	0.104	0.16	0.12	7.851	A
A-B	24.27	6.07	24.27	0.00	-	-	-	-	-	-
A-C	369.64	92.41	369.64	0.00	-	-	-	-	-	-
A-D	87.57	21.89	87.57	0.00	-	-	-	-	-	-
AB-CD	164.24	41.06	165.21	0.00	878.83	0.187	0.69	0.44	5.789	A
AB-C	330.02	82.50	330.02	0.00	-	-	-	-	-	-
D-AB	46.60	11.65	46.77	0.00	636.89	0.073	0.20	0.15	11.715	B
D-C	4.49	1.12	4.52	0.00	317.75	0.014	0.02	0.01	11.495	B
C-D	29.67	7.42	29.67	0.00	-	-	-	-	-	-
C-A	317.50	79.37	317.50	0.00	-	-	-	-	-	-
C-B	36.03	9.01	36.03	0.00	-	-	-	-	-	-
CD-AB	63.85	15.96	64.20	0.00	829.96	0.077	0.24	0.15	5.027	A
CD-A	336.46	84.11	336.46	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.24	11.31	45.34	0.00	550.51	0.082	0.12	0.09	7.260	A
A-B	20.33	5.08	20.33	0.00	-	-	-	-	-	-
A-C	309.56	77.39	309.56	0.00	-	-	-	-	-	-
A-D	73.33	18.33	73.33	0.00	-	-	-	-	-	-
AB-CD	124.06	31.01	124.55	0.00	850.10	0.146	0.44	0.32	5.776	A
AB-C	289.84	72.46	289.84	0.00	-	-	-	-	-	-
D-AB	39.03	9.76	39.15	0.00	654.25	0.060	0.15	0.12	11.238	B
D-C	3.76	0.94	3.78	0.00	344.63	0.011	0.01	0.01	10.561	B
C-D	24.84	6.21	24.84	0.00	-	-	-	-	-	-
C-A	265.89	66.47	265.89	0.00	-	-	-	-	-	-
C-B	30.18	7.54	30.18	0.00	-	-	-	-	-	-
CD-AB	46.95	11.74	47.15	0.00	804.63	0.058	0.15	0.10	5.050	A
CD-A	288.27	72.07	288.27	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment**Queueing Delay results: (07:30-07:45)**

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.31	0.09	7.244	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.63	0.31	5.798	A	A
AB-C	-	-	-	-	-
D-AB	1.72	0.11	11.218	B	B
D-C	0.16	0.01	10.544	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.46	0.10	5.021	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.71	0.11	7.841	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.63	0.44	5.874	A	A
AB-C	-	-	-	-	-
D-AB	2.19	0.15	11.703	B	B
D-C	0.21	0.01	11.479	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.21	0.15	4.986	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.35	0.16	8.852	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	10.32	0.69	6.028	A	A
AB-C	-	-	-	-	-
D-AB	2.83	0.19	12.429	B	B
D-C	0.29	0.02	13.064	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.57	0.24	4.988	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.42	0.16	8.860	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	10.36	0.69	5.993	A	A
AB-C	-	-	-	-	-
D-AB	2.93	0.20	12.437	B	B
D-C	0.30	0.02	13.073	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.64	0.24	5.008	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.83	0.12	7.851	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.68	0.45	5.789	A	A
AB-C	-	-	-	-	-
D-AB	2.37	0.16	11.715	B	B
D-C	0.22	0.01	11.495	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.30	0.15	5.027	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.41	0.09	7.260	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-

AB-CD	4.79	0.32	5.776	A	A
AB-C	-	-	-	-	-
D-AB	1.90	0.13	11.238	B	B
D-C	0.17	0.01	10.561	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.53	0.10	5.050	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Future Year, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Future Year, PM	Future Year	PM		ONE HOUR	16:15	17:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		8.37	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	745.847	-	-	-	-	-	0.285	0.285	0.113	-	-
1	D-C	490.199	-	0.140	0.318	0.140	0.318	0.223	0.223	0.088	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	547.00	100.000
B	ONE HOUR	✓	55.00	100.000
C	ONE HOUR	✓	523.00	100.000
D	ONE HOUR	✓	115.00	100.000

Turning Proportions

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

	To			
	A	B	C	D
From	A	0.000	15.000	503.000
	B	30.000	0.000	25.000
	C	481.000	26.000	0.000
	D	88.000	2.000	25.000

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

	To			
	A	B	C	D
From	A	0.00	0.03	0.92
	B	0.55	0.00	0.45
	C	0.92	0.05	0.00
	D	0.77	0.02	0.22

Vehicle Mix

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

	To			
	A	B	C	D
From	A	1.000	1.000	1.011
	B	1.000	1.000	1.043
	C	1.013	1.042	1.000
	D	1.256	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
	A	B	C	D
A	0.0	0.0	1.1	40.7

From	B	0.0	0.0	4.3	0.0
	C	1.3	4.2	0.0	6.7
	D	25.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.16	11.33	0.19	B	51.47	77.20	12.62	9.81	0.14	12.62	9.81
A-B	-	-	-	-	13.76	20.65	-	-	-	-	-
A-C	-	-	-	-	466.49	699.74	-	-	-	-	-
A-D	-	-	-	-	37.45	56.18	-	-	-	-	-
AB-CD	0.12	5.27	0.31	A	81.10	121.65	18.72	9.23	0.21	18.72	9.23
AB-C	-	-	-	-	446.75	670.13	-	-	-	-	-
D-AB	0.22	10.17	0.35	B	103.27	154.90	23.69	9.18	0.26	23.69	9.18
D-C	0.10	15.19	0.12	C	22.94	34.41	7.52	13.11	0.08	7.52	13.11
C-D	-	-	-	-	15.66	23.49	-	-	-	-	-
C-A	-	-	-	-	447.29	670.93	-	-	-	-	-
C-B	-	-	-	-	24.85	37.28	-	-	-	-	-
CD-AB	0.09	4.45	0.18	A	62.25	93.38	10.83	6.96	0.12	10.83	6.96
CD-A	-	-	-	-	513.02	769.53	-	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.23	10.56	41.83	0.00	475.69	0.089	0.00	0.10	8.454	A
A-B	11.29	2.82	11.29	0.00	-	-	-	-	-	-
A-C	382.73	95.68	382.73	0.00	-	-	-	-	-	-
A-D	30.73	7.68	30.73	0.00	-	-	-	-	-	-
AB-CD	56.09	14.02	55.57	0.00	872.61	0.064	0.00	0.13	5.268	A
AB-C	376.83	94.21	376.83	0.00	-	-	-	-	-	-
D-AB	84.72	21.18	83.95	0.00	625.02	0.136	0.00	0.19	8.308	A
D-C	18.82	4.71	18.59	0.00	336.44	0.056	0.00	0.06	11.318	B
C-D	12.85	3.21	12.85	0.00	-	-	-	-	-	-
C-A	366.97	91.74	366.97	0.00	-	-	-	-	-	-
C-B	20.39	5.10	20.39	0.00	-	-	-	-	-	-
CD-AB	40.31	10.08	40.03	0.00	886.32	0.045	0.00	0.07	4.440	A
CD-A	431.00	107.75	431.00	0.00	-	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	50.42	12.61	50.29	0.00	438.58	0.115	0.10	0.13	9.451	A
A-B	13.48	3.37	13.48	0.00	-	-	-	-	-	-
A-C	457.02	114.25	457.02	0.00	-	-	-	-	-	-
A-D	36.69	9.17	36.69	0.00	-	-	-	-	-	-
AB-CD	76.07	19.02	75.83	0.00	906.64	0.084	0.13	0.19	5.125	A
AB-C	441.03	110.26	441.03	0.00	-	-	-	-	-	-
D-AB	101.17	25.29	100.94	0.00	600.72	0.168	0.19	0.25	9.003	A
D-C	22.47	5.62	22.40	0.00	306.31	0.073	0.06	0.08	12.677	B
C-D	15.34	3.84	15.34	0.00	-	-	-	-	-	-
C-A	438.20	109.55	438.20	0.00	-	-	-	-	-	-
C-B	24.35	6.09	24.35	0.00	-	-	-	-	-	-
CD-AB	58.89	14.72	58.73	0.00	936.30	0.063	0.07	0.11	4.286	A
CD-A	504.60	126.15	504.60	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	61.75	15.44	61.51	0.00	385.85	0.160	0.13	0.19	11.311	B
A-B	16.52	4.13	16.52	0.00	-	-	-	-	-	-
A-C	559.73	139.93	559.73	0.00	-	-	-	-	-	-
A-D	44.94	11.23	44.94	0.00	-	-	-	-	-	-
AB-CD	110.74	27.68	110.27	0.00	954.45	0.116	0.19	0.31	4.930	A

AB-C	522.54	130.63	522.54	0.00	-	-	-	-	-	-
D-AB	123.91	30.98	123.53	0.00	566.56	0.219	0.25	0.35	10.152	B
D-C	27.53	6.88	27.38	0.00	264.57	0.104	0.08	0.11	15.168	C
C-D	18.79	4.70	18.79	0.00	-	-	-	-	-	-
C-A	536.68	134.17	536.68	0.00	-	-	-	-	-	-
C-B	29.82	7.45	29.82	0.00	-	-	-	-	-	-
CD-AB	87.24	21.81	86.96	0.00	990.64	0.088	0.11	0.18	4.167	A
CD-A	602.78	150.70	602.78	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	61.75	15.44	61.75	0.00	385.73	0.160	0.19	0.19	11.330	B
A-B	16.52	4.13	16.52	0.00	-	-	-	-	-	-
A-C	559.73	139.93	559.73	0.00	-	-	-	-	-	-
A-D	44.94	11.23	44.94	0.00	-	-	-	-	-	-
AB-CD	110.96	27.74	110.96	0.00	954.72	0.116	0.31	0.31	4.882	A
AB-C	522.43	130.61	522.43	0.00	-	-	-	-	-	-
D-AB	123.91	30.98	123.90	0.00	566.43	0.219	0.35	0.35	10.171	B
D-C	27.53	6.88	27.52	0.00	264.47	0.104	0.11	0.12	15.192	C
C-D	18.79	4.70	18.79	0.00	-	-	-	-	-	-
C-A	536.68	134.17	536.68	0.00	-	-	-	-	-	-
C-B	29.82	7.45	29.82	0.00	-	-	-	-	-	-
CD-AB	87.42	21.85	87.41	0.00	990.97	0.088	0.18	0.18	4.173	A
CD-A	602.98	150.74	602.98	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	50.42	12.61	50.66	0.00	438.41	0.115	0.19	0.13	9.473	A
A-B	13.48	3.37	13.48	0.00	-	-	-	-	-	-
A-C	457.02	114.25	457.02	0.00	-	-	-	-	-	-
A-D	36.69	9.17	36.69	0.00	-	-	-	-	-	-
AB-CD	76.33	19.08	76.81	0.00	907.05	0.084	0.31	0.19	5.002	A
AB-C	440.94	110.23	440.94	0.00	-	-	-	-	-	-
D-AB	101.17	25.29	101.53	0.00	600.52	0.168	0.35	0.26	9.027	A
D-C	22.47	5.62	22.61	0.00	306.19	0.073	0.12	0.08	12.703	B
C-D	15.34	3.84	15.34	0.00	-	-	-	-	-	-
C-A	438.20	109.55	438.20	0.00	-	-	-	-	-	-
C-B	24.35	6.09	24.35	0.00	-	-	-	-	-	-
CD-AB	59.10	14.77	59.37	0.00	936.84	0.063	0.18	0.11	4.294	A
CD-A	504.98	126.25	504.98	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.23	10.56	42.36	0.00	475.45	0.089	0.13	0.10	8.480	A
A-B	11.29	2.82	11.29	0.00	-	-	-	-	-	-
A-C	382.73	95.68	382.73	0.00	-	-	-	-	-	-
A-D	30.73	7.68	30.73	0.00	-	-	-	-	-	-
AB-CD	56.41	14.10	56.64	0.00	873.00	0.065	0.19	0.13	5.205	A
AB-C	376.75	94.19	376.75	0.00	-	-	-	-	-	-
D-AB	84.72	21.18	84.96	0.00	624.76	0.136	0.26	0.20	8.344	A
D-C	18.82	4.71	18.90	0.00	336.29	0.056	0.08	0.06	11.347	B
C-D	12.85	3.21	12.85	0.00	-	-	-	-	-	-
C-A	366.97	91.74	366.97	0.00	-	-	-	-	-	-
C-B	20.39	5.10	20.39	0.00	-	-	-	-	-	-
CD-AB	40.54	10.14	40.71	0.00	887.01	0.046	0.11	0.07	4.448	A
CD-A	431.77	107.94	431.77	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.42	0.09	8.454	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	1.90	0.13	5.268	A	A
AB-C	-	-	-	-	-
D-AB	2.80	0.19	8.308	A	A
D-C	0.84	0.06	11.318	B	B
C-D	-	-	-	-	-

C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.03	0.07	4.440	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:30-16:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.91	0.13	9.451	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.83	0.19	5.125	A	A
AB-C	-	-	-	-	-
D-AB	3.66	0.24	9.003	A	A
D-C	1.14	0.08	12.677	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.63	0.11	4.286	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.78	0.19	11.311	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.60	0.31	4.930	A	A
AB-C	-	-	-	-	-
D-AB	5.02	0.33	10.152	B	B
D-C	1.65	0.11	15.168	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.69	0.18	4.167	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.89	0.19	11.330	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.61	0.31	4.882	A	A
AB-C	-	-	-	-	-
D-AB	5.20	0.35	10.171	B	B
D-C	1.72	0.11	15.192	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.72	0.18	4.173	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.07	0.14	9.473	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.83	0.19	5.002	A	A
AB-C	-	-	-	-	-
D-AB	3.96	0.26	9.027	A	A
D-C	1.25	0.08	12.703	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.68	0.11	4.294	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

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Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.55	0.10	8.480	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	1.95	0.13	5.205	A	A
AB-C	-	-	-	-	-
D-AB	3.05	0.20	8.344	A	A
D-C	0.93	0.06	11.347	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.07	0.07	4.448	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Future Year + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Future Year + Development, AM	Future Year + Development	AM		ONE HOUR	07:30	09:00	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		7.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	744.549	-	-	-	-	-	0.285	0.285	0.113	-	-
1	D-C	480.849	-	0.137	0.312	0.137	0.312	0.218	0.218	0.086	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	503.00	100.000
B	ONE HOUR	✓	59.00	100.000
C	ONE HOUR	✓	408.00	100.000
D	ONE HOUR	✓	45.00	100.000

Turning Proportions

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

	To			
	A	B	C	D
From	A	0.000	27.000	394.000
	B	19.000	0.000	38.000
	C	336.000	39.000	0.000
	D	40.000	0.000	5.000

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

	To			
	A	B	C	D
From	A	0.00	0.05	0.78
	B	0.32	0.00	0.64
	C	0.82	0.10	0.00
	D	0.89	0.00	0.11

Vehicle Mix

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

	To			
	A	B	C	D

From	A	1.000	1.000	1.044	1.334
	B	1.000	1.000	1.029	1.000
	C	1.051	1.028	1.000	1.000
	D	1.946	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To				
	A	B	C	D	
	A	0.0	0.0	4.4	33.4
	B	0.0	0.0	2.9	0.0
	C	5.1	2.8	0.0	0.0
	D	94.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.14	9.01	0.16	A	55.14	82.70	11.18	8.11	0.12	11.18	8.11
A-B	-	-	-	-	24.78	37.16	-	-	-	-	-
A-C	-	-	-	-	377.30	565.95	-	-	-	-	-
A-D	-	-	-	-	100.38	150.57	-	-	-	-	-
AB-CD	0.29	6.41	0.80	A	195.66	293.49	50.27	10.28	0.56	50.28	10.28
AB-C	-	-	-	-	319.68	479.53	-	-	-	-	-
D-AB	0.14	13.26	0.31	B	71.43	107.15	22.08	12.37	0.25	22.08	12.37
D-C	0.02	13.34	0.02	B	4.59	6.88	1.37	11.91	0.02	1.37	11.91
C-D	-	-	-	-	30.28	45.42	-	-	-	-	-
C-A	-	-	-	-	324.08	486.12	-	-	-	-	-
C-B	-	-	-	-	36.78	55.17	-	-	-	-	-
CD-AB	0.11	5.05	0.25	A	69.33	104.00	15.39	8.88	0.17	15.39	8.88
CD-A	-	-	-	-	362.83	544.25	-	-	-	-	-

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.24	11.31	44.87	0.00	546.20	0.083	0.00	0.09	7.308	A
A-B	20.33	5.08	20.33	0.00	-	-	-	-	-	-
A-C	309.56	77.39	309.56	0.00	-	-	-	-	-	-
A-D	82.36	20.59	82.36	0.00	-	-	-	-	-	-
AB-CD	138.22	34.55	136.78	0.00	849.43	0.163	0.00	0.36	6.048	A
AB-C	284.38	71.09	284.38	0.00	-	-	-	-	-	-
D-AB	58.60	14.65	57.85	0.00	655.64	0.089	0.00	0.19	11.706	B
D-C	3.76	0.94	3.72	0.00	341.04	0.011	0.00	0.01	10.671	B
C-D	24.84	6.21	24.84	0.00	-	-	-	-	-	-
C-A	265.89	66.47	265.89	0.00	-	-	-	-	-	-
C-B	30.18	7.54	30.18	0.00	-	-	-	-	-	-
CD-AB	47.92	11.98	47.52	0.00	813.94	0.059	0.00	0.10	5.018	A
CD-A	305.99	76.50	305.99	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	54.02	13.50	53.91	0.00	515.88	0.105	0.09	0.12	7.934	A
A-B	24.27	6.07	24.27	0.00	-	-	-	-	-	-
A-C	369.64	92.41	369.64	0.00	-	-	-	-	-	-
A-D	98.34	24.59	98.34	0.00	-	-	-	-	-	-
AB-CD	183.50	45.87	182.91	0.00	878.18	0.209	0.36	0.51	6.167	A
AB-C	321.35	80.34	321.35	0.00	-	-	-	-	-	-
D-AB	69.98	17.49	69.79	0.00	638.23	0.110	0.19	0.24	12.321	B
D-C	4.49	1.12	4.48	0.00	313.40	0.014	0.01	0.01	11.653	B
C-D	29.67	7.42	29.67	0.00	-	-	-	-	-	-
C-A	317.50	79.37	317.50	0.00	-	-	-	-	-	-
C-B	36.03	9.01	36.03	0.00	-	-	-	-	-	-
CD-AB	65.95	16.49	65.74	0.00	842.53	0.078	0.10	0.15	4.977	A
CD-A	357.37	89.34	357.37	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.16	16.54	65.97	0.00	472.91	0.140	0.12	0.16	9.005	A
A-B	29.73	7.43	29.73	0.00	-	-	-	-	-	-
A-C	452.71	113.18	452.71	0.00	-	-	-	-	-	-
A-D	120.44	30.11	120.44	0.00	-	-	-	-	-	-
AB-CD	264.28	66.07	263.11	0.00	922.16	0.287	0.51	0.80	6.407	A
AB-C	353.99	88.50	353.99	0.00	-	-	-	-	-	-
D-AB	85.71	21.43	85.41	0.00	614.05	0.140	0.24	0.31	13.247	B
D-C	5.51	1.38	5.48	0.00	275.51	0.020	0.01	0.02	13.332	B
C-D	36.33	9.08	36.33	0.00	-	-	-	-	-	-
C-A	388.85	97.21	388.85	0.00	-	-	-	-	-	-
C-B	44.13	11.03	44.13	0.00	-	-	-	-	-	-
CD-AB	93.78	23.44	93.39	0.00	876.48	0.107	0.15	0.25	4.984	A
CD-A	424.62	106.16	424.62	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.16	16.54	66.15	0.00	472.82	0.140	0.16	0.16	9.015	A
A-B	29.73	7.43	29.73	0.00	-	-	-	-	-	-
A-C	452.71	113.18	452.71	0.00	-	-	-	-	-	-
A-D	120.44	30.11	120.44	0.00	-	-	-	-	-	-
AB-CD	264.82	66.21	264.82	0.00	922.71	0.287	0.80	0.80	6.358	A
AB-C	353.57	88.39	353.57	0.00	-	-	-	-	-	-
D-AB	85.71	21.43	85.70	0.00	614.03	0.140	0.31	0.31	13.259	B
D-C	5.51	1.38	5.50	0.00	275.26	0.020	0.02	0.02	13.344	B
C-D	36.33	9.08	36.33	0.00	-	-	-	-	-	-
C-A	388.85	97.21	388.85	0.00	-	-	-	-	-	-
C-B	44.13	11.03	44.13	0.00	-	-	-	-	-	-
CD-AB	93.97	23.49	93.96	0.00	876.81	0.107	0.25	0.25	5.007	A
CD-A	424.71	106.18	424.71	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	54.02	13.50	54.19	0.00	515.74	0.105	0.16	0.12	7.947	A
A-B	24.27	6.07	24.27	0.00	-	-	-	-	-	-
A-C	369.64	92.41	369.64	0.00	-	-	-	-	-	-
A-D	98.34	24.59	98.34	0.00	-	-	-	-	-	-
AB-CD	184.10	46.03	185.26	0.00	878.97	0.209	0.80	0.51	6.056	A
AB-C	320.94	80.23	320.94	0.00	-	-	-	-	-	-
D-AB	69.98	17.49	70.26	0.00	638.20	0.110	0.31	0.24	12.341	B
D-C	4.49	1.12	4.52	0.00	313.02	0.014	0.02	0.01	11.671	B
C-D	29.67	7.42	29.67	0.00	-	-	-	-	-	-
C-A	317.50	79.37	317.50	0.00	-	-	-	-	-	-
C-B	36.03	9.01	36.03	0.00	-	-	-	-	-	-
CD-AB	66.18	16.54	66.55	0.00	843.04	0.079	0.25	0.16	5.034	A
CD-A	357.61	89.40	357.61	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.24	11.31	45.35	0.00	546.01	0.083	0.12	0.09	7.326	A
A-B	20.33	5.08	20.33	0.00	-	-	-	-	-	-
A-C	309.56	77.39	309.56	0.00	-	-	-	-	-	-
A-D	82.36	20.59	82.36	0.00	-	-	-	-	-	-
AB-CD	139.04	34.76	139.61	0.00	850.17	0.164	0.51	0.37	6.019	A
AB-C	283.88	70.97	283.88	0.00	-	-	-	-	-	-
D-AB	58.60	14.65	58.80	0.00	655.61	0.089	0.24	0.19	11.744	B
D-C	3.76	0.94	3.78	0.00	340.51	0.011	0.01	0.01	10.693	B
C-D	24.84	6.21	24.84	0.00	-	-	-	-	-	-
C-A	265.89	66.47	265.89	0.00	-	-	-	-	-	-
C-B	30.18	7.54	30.18	0.00	-	-	-	-	-	-
CD-AB	48.19	12.05	48.41	0.00	814.67	0.059	0.16	0.10	5.053	A
CD-A	306.68	76.67	306.68	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment**Queueing Delay results: (07:30-07:45)**

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.32	0.09	7.308	A	A

A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.31	0.35	6.048	A	A
AB-C	-	-	-	-	-
D-AB	2.69	0.18	11.706	B	B
D-C	0.16	0.01	10.671	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.50	0.10	5.018	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.73	0.12	7.934	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	7.66	0.51	6.167	A	A
AB-C	-	-	-	-	-
D-AB	3.45	0.23	12.321	B	B
D-C	0.21	0.01	11.653	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.31	0.15	4.977	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.39	0.16	9.005	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	12.03	0.80	6.407	A	A
AB-C	-	-	-	-	-
D-AB	4.51	0.30	13.247	B	B
D-C	0.29	0.02	13.332	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.76	0.25	4.984	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.47	0.16	9.015	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	12.07	0.80	6.358	A	A
AB-C	-	-	-	-	-
D-AB	4.68	0.31	13.259	B	B
D-C	0.30	0.02	13.344	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	3.84	0.26	5.007	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.85	0.12	7.947	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	7.69	0.51	6.056	A	A
AB-C	-	-	-	-	-
D-AB	3.76	0.25	12.341	B	B

D-C	0.23	0.02	11.671	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.41	0.16	5.034	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.42	0.09	7.326	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	5.50	0.37	6.019	A	A
AB-C	-	-	-	-	-
D-AB	2.99	0.20	11.744	B	B
D-C	0.17	0.01	10.693	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.58	0.11	5.053	A	A
CD-A	-	-	-	-	-

(Default Analysis Set) - Future Year + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Future Year + Development, PM	Future Year + Development	PM		ONE HOUR	16:15	17:45	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	NS-OS Stagger (UK LR Stagger)	Two-way	A,B,C,D		8.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	B5070 (N)		Major
B	B	Chapel Lane		Minor
C	C	B5070 (S)		Major
D	D	Site Access		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.30		0.00		2.20	250.00	✓	0.00
C	6.15		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.89										12	23
D	One lane plus flare				10.00	9.50	5.85	4.42	3.75	✓	2.00	18	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.275	0.275	0.275	-	-
1	B-A	586.175	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	759.218	0.116	0.292	0.292	-	-	-	-	-	-	-
1	CD-B	718.741	0.277	0.277	0.277	-	-	-	-	-	-	-
1	D-AB	747.882	-	-	-	-	-	0.286	0.286	0.113	-	-
1	D-C	488.622	-	0.140	0.317	0.140	0.317	0.222	0.222	0.088	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic 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 (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	552.00	100.000
B	ONE HOUR	✓	55.00	100.000
C	ONE HOUR	✓	523.00	100.000
D	ONE HOUR	✓	120.00	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	15.000	503.000	34.000
	B	30.000	0.000	25.000	0.000
	C	481.000	26.000	0.000	16.000
	D	93.000	2.000	25.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.03	0.91	0.06
	B	0.55	0.00	0.45	0.00
	C	0.92	0.05	0.00	0.03
	D	0.78	0.02	0.21	0.00

Vehicle Mix

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

	To				
		A	B	C	D
	A	1.000	1.000	1.011	1.495
	B	1.000	1.000	1.043	1.000
	C	1.013	1.042	1.000	1.067
From	D	1.296	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
	A	0.0	0.0	1.1	49.5
	B	0.0	0.0	4.3	0.0
	C	1.3	4.2	0.0	6.7
From	D	29.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.16	11.51	0.20	B	51.47	77.20	12.77	9.92	0.14	12.77	9.92
A-B	-	-	-	-	13.76	20.65	-	-	-	-	-
A-C	-	-	-	-	466.49	699.74	-	-	-	-	-
A-D	-	-	-	-	46.63	69.94	-	-	-	-	-
AB-CD	0.15	5.51	0.45	A	102.50	153.75	27.08	10.57	0.30	27.08	10.57
AB-C	-	-	-	-	434.53	651.79	-	-	-	-	-
D-AB	0.24	10.73	0.40	B	112.44	168.66	27.05	9.62	0.30	27.05	9.62
D-C	0.11	15.51	0.12	C	22.94	34.41	7.64	13.32	0.08	7.64	13.33
C-D	-	-	-	-	15.66	23.49	-	-	-	-	-
C-A	-	-	-	-	447.29	670.93	-	-	-	-	-
C-B	-	-	-	-	24.85	37.28	-	-	-	-	-
CD-AB	0.09	4.45	0.18	A	63.18	94.78	11.05	7.00	0.12	11.05	7.00
CD-A	-	-	-	-	521.24	781.86	-	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.23	10.56	41.83	0.00	472.49	0.089	0.00	0.10	8.516	A
A-B	11.29	2.82	11.29	0.00	-	-	-	-	-	-
A-C	382.73	95.68	382.73	0.00	-	-	-	-	-	-
A-D	38.26	9.56	38.26	0.00	-	-	-	-	-	-
AB-CD	69.83	17.46	69.10	0.00	872.60	0.080	0.00	0.18	5.509	A
AB-C	370.61	92.65	370.61	0.00	-	-	-	-	-	-
D-AB	92.25	23.06	91.37	0.00	626.62	0.147	0.00	0.22	8.661	A
D-C	18.82	4.71	18.58	0.00	332.87	0.057	0.00	0.06	11.446	B
C-D	12.85	3.21	12.85	0.00	-	-	-	-	-	-
C-A	366.97	91.74	366.97	0.00	-	-	-	-	-	-
C-B	20.39	5.10	20.39	0.00	-	-	-	-	-	-
CD-AB	40.71	10.18	40.43	0.00	889.04	0.046	0.00	0.07	4.444	A
CD-A	438.02	109.51	438.02	0.00	-	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	50.42	12.61	50.29	0.00	434.67	0.116	0.10	0.13	9.548	A
A-B	13.48	3.37	13.48	0.00	-	-	-	-	-	-
A-C	457.02	114.25	457.02	0.00	-	-	-	-	-	-
A-D	45.68	11.42	45.68	0.00	-	-	-	-	-	-

AB-CD	94.77	23.69	94.40	0.00	906.70	0.105	0.18	0.27	5.382	A
AB-C	431.32	107.83	431.32	0.00	-	-	-	-	-	-
D-AB	110.16	27.54	109.89	0.00	602.19	0.183	0.22	0.29	9.427	A
D-C	22.47	5.62	22.39	0.00	302.24	0.074	0.06	0.08	12.859	B
C-D	15.34	3.84	15.34	0.00	-	-	-	-	-	-
C-A	438.20	109.55	438.20	0.00	-	-	-	-	-	-
C-B	24.35	6.09	24.35	0.00	-	-	-	-	-	-
CD-AB	59.74	14.93	59.57	0.00	940.21	0.064	0.07	0.11	4.289	A
CD-A	512.71	128.18	512.71	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	61.75	15.44	61.50	0.00	380.86	0.162	0.13	0.19	11.477	B
A-B	16.52	4.13	16.52	0.00	-	-	-	-	-	-
A-C	559.73	139.93	559.73	0.00	-	-	-	-	-	-
A-D	55.95	13.99	55.95	0.00	-	-	-	-	-	-
AB-CD	142.33	35.58	141.62	0.00	961.09	0.148	0.27	0.45	5.179	A
AB-C	501.95	125.49	501.95	0.00	-	-	-	-	-	-
D-AB	134.91	33.73	134.47	0.00	567.77	0.238	0.29	0.40	10.705	B
D-C	27.53	6.88	27.38	0.00	259.75	0.106	0.08	0.12	15.482	C
C-D	18.79	4.70	18.79	0.00	-	-	-	-	-	-
C-A	536.68	134.17	536.68	0.00	-	-	-	-	-	-
C-B	29.82	7.45	29.82	0.00	-	-	-	-	-	-
CD-AB	88.78	22.20	88.49	0.00	995.45	0.089	0.11	0.18	4.174	A
CD-A	612.19	153.05	612.19	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	61.75	15.44	61.75	0.00	380.74	0.162	0.19	0.20	11.508	B
A-B	16.52	4.13	16.52	0.00	-	-	-	-	-	-
A-C	559.73	139.93	559.73	0.00	-	-	-	-	-	-
A-D	55.95	13.99	55.95	0.00	-	-	-	-	-	-
AB-CD	142.66	35.67	142.67	0.00	961.50	0.148	0.45	0.45	5.109	A
AB-C	501.73	125.43	501.73	0.00	-	-	-	-	-	-
D-AB	134.91	33.73	134.90	0.00	567.64	0.238	0.40	0.40	10.729	B
D-C	27.53	6.88	27.52	0.00	259.61	0.106	0.12	0.12	15.511	C
C-D	18.79	4.70	18.79	0.00	-	-	-	-	-	-
C-A	536.68	134.17	536.68	0.00	-	-	-	-	-	-
C-B	29.82	7.45	29.82	0.00	-	-	-	-	-	-
CD-AB	88.97	22.24	88.97	0.00	995.83	0.089	0.18	0.18	4.177	A
CD-A	612.43	153.11	612.43	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	50.42	12.61	50.66	0.00	434.48	0.116	0.20	0.14	9.572	A
A-B	13.48	3.37	13.48	0.00	-	-	-	-	-	-
A-C	457.02	114.25	457.02	0.00	-	-	-	-	-	-
A-D	45.68	11.42	45.68	0.00	-	-	-	-	-	-
AB-CD	95.13	23.78	95.85	0.00	907.27	0.105	0.45	0.27	5.210	A
AB-C	431.13	107.78	431.13	0.00	-	-	-	-	-	-
D-AB	110.16	27.54	110.58	0.00	601.99	0.183	0.40	0.29	9.457	A
D-C	22.47	5.62	22.62	0.00	302.04	0.074	0.12	0.08	12.889	B
C-D	15.34	3.84	15.34	0.00	-	-	-	-	-	-
C-A	438.20	109.55	438.20	0.00	-	-	-	-	-	-
C-B	24.35	6.09	24.35	0.00	-	-	-	-	-	-
CD-AB	59.96	14.99	60.24	0.00	940.81	0.064	0.18	0.11	4.301	A
CD-A	513.17	128.29	513.17	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-ACD	42.23	10.56	42.36	0.00	472.24	0.089	0.14	0.10	8.542	A
A-B	11.29	2.82	11.29	0.00	-	-	-	-	-	-
A-C	382.73	95.68	382.73	0.00	-	-	-	-	-	-
A-D	38.26	9.56	38.26	0.00	-	-	-	-	-	-
AB-CD	70.29	17.57	70.63	0.00	873.10	0.081	0.27	0.18	5.431	A
AB-C	370.40	92.60	370.40	0.00	-	-	-	-	-	-
D-AB	92.25	23.06	92.52	0.00	626.37	0.147	0.29	0.23	8.703	A
D-C	18.82	4.71	18.90	0.00	332.64	0.057	0.08	0.06	11.479	B
C-D	12.85	3.21	12.85	0.00	-	-	-	-	-	-
C-A	366.97	91.74	366.97	0.00	-	-	-	-	-	-

C-B	20.39	5.10	20.39	0.00	-	-	-	-	-	-
CD-AB	40.95	10.24	41.12	0.00	889.81	0.046	0.11	0.07	4.454	A
CD-A	438.93	109.73	438.93	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.43	0.10	8.516	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.68	0.18	5.509	A	A
AB-C	-	-	-	-	-
D-AB	3.17	0.21	8.661	A	A
D-C	0.85	0.06	11.446	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.05	0.07	4.444	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:30-16:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.93	0.13	9.548	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.09	0.27	5.382	A	A
AB-C	-	-	-	-	-
D-AB	4.17	0.28	9.427	A	A
D-C	1.15	0.08	12.859	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.66	0.11	4.289	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.82	0.19	11.477	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.75	0.45	5.179	A	A
AB-C	-	-	-	-	-
D-AB	5.75	0.38	10.705	B	B
D-C	1.68	0.11	15.482	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.75	0.18	4.174	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.93	0.20	11.508	B	B
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	6.73	0.45	5.109	A	A
AB-C	-	-	-	-	-
D-AB	5.97	0.40	10.729	B	B
D-C	1.76	0.12	15.511	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	2.79	0.19	4.177	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	2.10	0.14	9.572	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	4.07	0.27	5.210	A	A
AB-C	-	-	-	-	-
D-AB	4.52	0.30	9.457	A	A
D-C	1.27	0.08	12.889	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.71	0.11	4.301	A	A
CD-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.56	0.10	8.542	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
A-D	-	-	-	-	-
AB-CD	2.76	0.18	5.431	A	A
AB-C	-	-	-	-	-
D-AB	3.47	0.23	8.703	A	A
D-C	0.94	0.06	11.479	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-
C-B	-	-	-	-	-
CD-AB	1.09	0.07	4.454	A	A
CD-A	-	-	-	-	-



APPENDIX TA5

Junctions 9														
ARCADY 9 - Roundabout Module														
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017														
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Filename: B5070_A5.j9

Path: Q:\2151-2200\2197-01 OSB Facility\Background Information\Traffic\Junction Assessments

Report generation date: 29/08/2017 17:00:50

- »Opening Year, AM
- »Opening Year, PM
- »Opening Year + Development, AM
- »Opening Year + Development, PM
- »Future Year, AM
- »Future Year, PM
- »Future Year + Development, AM
- »Future Year + Development, PM

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Opening Year													
Arm 1	0.5	3.22	0.31	A	3.77	A	111 %	0.5	3.44	0.33	A	4.14	A	90 %
Arm 2	0.7	4.53	0.39	A			[Arm 2]	0.8	4.74	0.43	A			[Arm 3]
Arm 3	0.5	3.49	0.30	A			0.8	4.15	0.43	A				
	Opening Year + Development													
Arm 1	0.5	3.29	0.31	A	3.91	A	103 %	0.5	3.51	0.34	A	4.21	A	89 %
Arm 2	0.8	4.78	0.41	A			[Arm 2]	0.8	4.86	0.44	A			[Arm 2]
Arm 3	0.5	3.56	0.30	A			0.8	4.19	0.43	A				
	Future Year													
Arm 1	0.5	3.33	0.33	A	3.93	A	100 %	0.6	3.60	0.36	A	4.37	A	80 %
Arm 2	0.8	4.75	0.41	A			[Arm 2]	0.9	5.02	0.46	A			[Arm 3]
Arm 3	0.5	3.63	0.32	A			0.9	4.40	0.46	A				
	Future Year + Development													
Arm 1	0.5	3.41	0.33	A	4.08	A	92 %	0.6	3.67	0.36	A	4.45	A	79 %
Arm 2	0.8	5.03	0.43	A			[Arm 2]	0.9	5.15	0.47	A			[Arm 2]
Arm 3	0.5	3.70	0.33	A			0.9	4.45	0.46	A				

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	(untitled)
Location	
Site number	
Date	21/08/2017
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AXISPED\Traffic
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Opening Year	AM	ONE HOUR	07:30	09:00	15	✓
D2	Opening Year	PM	ONE HOUR	16:15	17:45	15	✓
D3	Opening Year + Development	AM	ONE HOUR	07:30	09:00	15	✓
D4	Opening Year + Development	PM	ONE HOUR	16:15	17:45	15	✓
D5	Future Year	AM	ONE HOUR	07:30	09:00	15	✓
D6	Future Year	PM	ONE HOUR	16:15	17:45	15	✓
D7	Future Year + Development	AM	ONE HOUR	07:30	09:00	15	✓
D8	Future Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	3.77	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	Arm 2

Arms

Arms

Arm	Name	Description
1	A5 (E)	
2	B5070	
3	A5 (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.10	8.20	10.0	51.5	31.6	16.5	
2	4.00	7.10	18.3	4.9	31.6	25.4	
3	3.70	6.40	14.4	101.0	31.6	14.7	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.724	1916
2	0.589	1576
3	0.702	1783

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Opening Year	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	447	100.000

2		ONE HOUR	✓	453	100.000
3		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	230	217
	2	256	0	197
	3	203	199	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	11	6
	2	12	0	8
	3	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	3.22	0.5	A	445	668
2	0.39	4.53	0.7	A	459	688
3	0.30	3.49	0.5	A	391	587

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	365	91	157	1803	0.203	364	378	0.0	0.3	2.717	A
2	376	94	173	1474	0.255	375	349	0.0	0.4	3.610	A
3	321	80	215	1632	0.197	320	333	0.0	0.3	2.905	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	436	109	188	1780	0.245	436	453	0.3	0.4	2.908	A
2	449	112	207	1454	0.309	449	417	0.4	0.5	3.951	A
3	383	96	257	1602	0.239	383	398	0.3	0.3	3.131	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	534	134	230	1750	0.305	534	554	0.4	0.5	3.213	A
2	550	138	253	1427	0.386	550	511	0.5	0.7	4.527	A
3	469	117	315	1562	0.301	469	487	0.3	0.5	3.491	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	534	134	230	1749	0.305	534	555	0.5	0.5	3.216	A
2	550	138	253	1427	0.386	550	511	0.7	0.7	4.534	A
3	469	117	316	1562	0.301	469	488	0.5	0.5	3.495	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	436	109	188	1780	0.245	437	454	0.5	0.4	2.910	A
2	449	112	207	1454	0.309	450	418	0.7	0.5	3.963	A
3	383	96	258	1602	0.239	384	399	0.5	0.3	3.137	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	365	91	158	1802	0.203	366	380	0.4	0.3	2.723	A
2	376	94	173	1474	0.255	377	350	0.5	0.4	3.623	A
3	321	80	216	1631	0.197	321	334	0.3	0.3	2.916	A

Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	4.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	90	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Opening Year	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	476	100.000
2		ONE HOUR	✓	525	100.000
3		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1	2	3
	1	2	236	238
	2	261	2	262
	3	261	331	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1	2	3	
	1	0	6	4	
	2	8	0	3	
	3	4	2	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	3.44	0.5	A	458	686
2	0.43	4.74	0.8	A	509	764
3	0.43	4.15	0.8	A	559	839

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	375	94	255	1731	0.217	374	417	0.0	0.3	2.776	A
2	418	104	188	1465	0.285	416	441	0.0	0.4	3.622	A
3	459	115	214	1633	0.281	457	390	0.0	0.4	3.144	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	448	112	305	1695	0.264	448	499	0.3	0.4	3.024	A
2	499	125	225	1443	0.346	498	528	0.4	0.6	4.027	A
3	548	137	257	1603	0.342	547	467	0.4	0.5	3.503	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	549	137	374	1645	0.334	548	611	0.4	0.5	3.436	A
2	611	153	276	1413	0.432	610	647	0.6	0.8	4.731	A
3	671	168	314	1563	0.429	670	571	0.5	0.8	4.142	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	549	137	374	1645	0.334	549	611	0.5	0.5	3.440	A
2	611	153	276	1413	0.432	611	648	0.8	0.8	4.744	A
3	671	168	315	1562	0.430	671	572	0.8	0.8	4.152	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	448	112	306	1694	0.265	449	500	0.5	0.4	3.031	A
2	499	125	226	1443	0.346	500	530	0.8	0.6	4.041	A
3	548	137	257	1602	0.342	549	468	0.8	0.5	3.517	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	375	94	256	1731	0.217	376	419	0.4	0.3	2.786	A
2	418	104	189	1465	0.285	418	443	0.6	0.4	3.639	A
3	459	115	216	1632	0.281	459	392	0.5	0.4	3.159	A

Opening Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	3.91	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	103	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Opening Year + Development	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	453	100.000
2		ONE HOUR	✓	466	100.000
3		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	236	217
	2	269	0	197
	3	203	199	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	13	6
	2	16	0	8
	3	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	3.29	0.5	A	456	685
2	0.41	4.78	0.8	A	482	723
3	0.30	3.56	0.5	A	391	587

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	374	94	157	1803	0.208	373	397	0.0	0.3	2.762	A
2	395	99	173	1474	0.268	394	358	0.0	0.4	3.752	A
3	321	80	234	1619	0.198	320	333	0.0	0.3	2.936	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	447	112	188	1780	0.251	447	475	0.3	0.4	2.964	A
2	472	118	207	1454	0.325	472	428	0.4	0.5	4.129	A
3	383	96	280	1586	0.242	383	398	0.3	0.3	3.172	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	548	137	230	1750	0.313	547	582	0.4	0.5	3.284	A
2	578	145	253	1427	0.405	577	524	0.5	0.8	4.773	A
3	469	117	343	1542	0.304	469	487	0.3	0.5	3.554	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	548	137	230	1749	0.313	548	583	0.5	0.5	3.287	A
2	578	145	253	1427	0.405	578	525	0.8	0.8	4.783	A
3	469	117	344	1542	0.304	469	488	0.5	0.5	3.558	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	447	112	188	1780	0.251	448	477	0.5	0.4	2.967	A
2	472	118	207	1454	0.325	473	429	0.8	0.5	4.142	A
3	383	96	281	1586	0.242	384	399	0.5	0.3	3.176	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	374	94	158	1802	0.208	375	399	0.4	0.3	2.771	A
2	395	99	173	1474	0.268	396	359	0.5	0.4	3.766	A
3	321	80	235	1618	0.198	321	334	0.3	0.3	2.944	A

Opening Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	4.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	89	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Opening Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	481	100.000
2		ONE HOUR	✓	530	100.000
3		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	2	241	238
	2	266	2	262
	3	261	331	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	8	4
	2	10	0	3
	3	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.34	3.51	0.5	A	467	700
2	0.44	4.86	0.8	A	519	779
3	0.43	4.19	0.8	A	559	839

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	383	96	255	1731	0.221	382	425	0.0	0.3	2.818	A
2	426	106	188	1465	0.291	424	449	0.0	0.4	3.685	A
3	459	115	222	1627	0.282	457	390	0.0	0.4	3.159	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	457	114	305	1695	0.270	457	508	0.3	0.4	3.075	A
2	509	127	225	1443	0.352	508	537	0.4	0.6	4.106	A
3	548	137	266	1596	0.343	547	467	0.4	0.5	3.526	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	560	140	374	1645	0.340	559	622	0.4	0.5	3.503	A
2	623	156	276	1413	0.441	622	658	0.6	0.8	4.849	A
3	671	168	326	1554	0.432	670	571	0.5	0.8	4.181	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	560	140	374	1645	0.340	560	623	0.5	0.5	3.507	A
2	623	156	276	1413	0.441	623	659	0.8	0.8	4.861	A
3	671	168	327	1554	0.432	671	572	0.8	0.8	4.191	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	457	114	306	1694	0.270	458	510	0.5	0.4	3.079	A
2	509	127	226	1443	0.352	510	539	0.8	0.6	4.123	A
3	548	137	267	1596	0.343	549	468	0.8	0.5	3.540	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	383	96	256	1731	0.221	383	427	0.4	0.3	2.825	A
2	426	106	189	1465	0.291	426	451	0.6	0.4	3.703	A
3	459	115	224	1626	0.282	459	392	0.5	0.4	3.172	A

Future Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	3.93	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	100	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Future Year	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	474	100.000
2		ONE HOUR	✓	479	100.000
3		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1	2	3
	1	0	244	230
	2	271	0	208
	3	215	211	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1	2	3	
	1	0	11	6	
	2	12	0	8	
	3	7	5	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	3.33	0.5	A	472	708
2	0.41	4.75	0.8	A	485	728
3	0.32	3.63	0.5	A	415	622

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	387	97	166	1796	0.216	386	400	0.0	0.3	2.770	A
2	398	100	183	1468	0.271	396	370	0.0	0.4	3.703	A
3	340	85	228	1623	0.210	339	352	0.0	0.3	2.970	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	463	116	199	1772	0.261	462	479	0.3	0.4	2.984	A
2	475	119	219	1447	0.329	475	443	0.4	0.5	4.086	A
3	406	102	273	1592	0.255	406	421	0.3	0.4	3.219	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	567	142	244	1740	0.326	566	587	0.4	0.5	3.329	A
2	582	146	268	1418	0.411	581	542	0.5	0.8	4.744	A
3	497	124	334	1549	0.321	497	516	0.4	0.5	3.627	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	567	142	244	1739	0.326	567	587	0.5	0.5	3.332	A
2	582	146	268	1418	0.411	582	542	0.8	0.8	4.755	A
3	497	124	334	1549	0.321	497	516	0.5	0.5	3.631	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	463	116	200	1772	0.261	463	480	0.5	0.4	2.990	A
2	475	119	219	1446	0.329	476	443	0.8	0.5	4.098	A
3	406	102	273	1591	0.255	407	422	0.5	0.4	3.226	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	387	97	167	1795	0.216	388	402	0.4	0.3	2.779	A
2	398	100	184	1468	0.271	399	371	0.5	0.4	3.720	A
3	340	85	229	1623	0.210	340	353	0.4	0.3	2.980	A

Future Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	4.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	80	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	Future Year	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	504	100.000
2		ONE HOUR	✓	555	100.000
3		ONE HOUR	✓	627	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1	2	3
	1	2	250	252
	2	276	2	277
	3	276	350	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1	2	3
	1	0	6	4
	2	8	0	3
	3	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	3.60	0.6	A	485	727
2	0.46	5.02	0.9	A	538	808
3	0.46	4.40	0.9	A	591	887

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	398	99	270	1721	0.231	396	440	0.0	0.3	2.844	A
2	442	110	199	1459	0.303	440	467	0.0	0.5	3.730	A
3	485	121	226	1624	0.299	483	412	0.0	0.4	3.240	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	475	119	323	1683	0.282	474	527	0.3	0.4	3.121	A
2	527	132	238	1435	0.367	527	559	0.5	0.6	4.186	A
3	579	145	271	1593	0.364	579	494	0.4	0.6	3.647	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	581	145	395	1630	0.357	581	645	0.4	0.6	3.592	A
2	646	162	292	1404	0.460	645	684	0.6	0.9	5.006	A
3	710	177	332	1550	0.458	708	604	0.6	0.9	4.391	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	581	145	396	1630	0.357	581	646	0.6	0.6	3.596	A
2	646	162	292	1404	0.460	646	685	0.9	0.9	5.021	A
3	710	177	333	1550	0.458	710	605	0.9	0.9	4.404	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	475	119	324	1682	0.282	475	529	0.6	0.4	3.129	A
2	527	132	239	1435	0.368	529	560	0.9	0.6	4.204	A
3	579	145	272	1592	0.364	580	495	0.9	0.6	3.660	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	398	99	271	1720	0.231	398	443	0.4	0.3	2.852	A
2	442	110	200	1458	0.303	442	469	0.6	0.5	3.751	A
3	485	121	228	1623	0.299	486	414	0.6	0.4	3.254	A

Future Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	4.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	92	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	Future Year + Development	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	480	100.000
2		ONE HOUR	✓	492	100.000
3		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	250	230
	2	284	0	208
	3	215	211	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	13	6
	2	16	0	8
	3	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.33	3.41	0.5	A	483	725
2	0.43	5.03	0.8	A	509	763
3	0.33	3.70	0.5	A	415	622

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	397	99	166	1796	0.221	395	420	0.0	0.3	2.818	A
2	418	104	183	1468	0.284	416	379	0.0	0.4	3.850	A
3	340	85	247	1610	0.211	339	352	0.0	0.3	3.001	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	473	118	199	1772	0.267	473	502	0.3	0.4	3.041	A
2	499	125	219	1447	0.345	498	453	0.4	0.6	4.274	A
3	406	102	296	1576	0.258	406	421	0.3	0.4	3.264	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	580	145	244	1740	0.333	579	615	0.4	0.5	3.402	A
2	611	153	268	1418	0.431	610	555	0.6	0.8	5.015	A
3	497	124	362	1529	0.325	497	516	0.4	0.5	3.697	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	580	145	244	1739	0.333	580	616	0.5	0.5	3.405	A
2	611	153	268	1418	0.431	611	556	0.8	0.8	5.028	A
3	497	124	363	1529	0.325	497	516	0.5	0.5	3.701	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	473	118	200	1772	0.267	474	504	0.5	0.4	3.044	A
2	499	125	219	1446	0.345	500	454	0.8	0.6	4.291	A
3	406	102	297	1575	0.258	407	422	0.5	0.4	3.271	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	397	99	167	1795	0.221	397	422	0.4	0.3	2.824	A
2	418	104	184	1468	0.285	418	380	0.6	0.5	3.870	A
3	340	85	248	1609	0.211	340	353	0.4	0.3	3.012	A

Future Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3	4.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	79	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	Future Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	509	100.000
2		ONE HOUR	✓	560	100.000
3		ONE HOUR	✓	627	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	2	255	252
	2	281	2	277
	3	276	350	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	7	4
	2	10	0	3
	3	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	3.67	0.6	A	494	741
2	0.47	5.15	0.9	A	549	823
3	0.46	4.45	0.9	A	591	887

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	405	101	270	1721	0.235	404	449	0.0	0.3	2.886	A
2	450	113	199	1459	0.309	448	474	0.0	0.5	3.797	A
3	485	121	235	1618	0.300	483	412	0.0	0.4	3.257	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	484	121	323	1683	0.287	483	537	0.3	0.4	3.173	A
2	537	134	238	1435	0.374	537	568	0.5	0.6	4.273	A
3	579	145	281	1586	0.365	579	494	0.4	0.6	3.672	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	592	148	395	1630	0.363	592	657	0.4	0.6	3.663	A
2	658	165	292	1404	0.469	657	695	0.6	0.9	5.135	A
3	710	177	344	1542	0.460	708	604	0.6	0.9	4.436	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	592	148	396	1630	0.363	592	659	0.6	0.6	3.667	A
2	658	165	292	1404	0.469	658	696	0.9	0.9	5.152	A
3	710	177	345	1541	0.460	710	605	0.9	0.9	4.449	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	484	121	324	1682	0.288	484	539	0.6	0.4	3.181	A
2	537	134	239	1435	0.374	539	569	0.9	0.6	4.291	A
3	579	145	282	1585	0.366	580	495	0.9	0.6	3.686	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	405	101	271	1720	0.235	405	451	0.4	0.3	2.894	A
2	450	113	200	1458	0.309	451	477	0.6	0.5	3.816	A
3	485	121	236	1617	0.300	486	414	0.6	0.4	3.273	A



APPENDIX TA6

Junctions 9														
ARCADY 9 - Roundabout Module														
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017														
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk														
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Filename: A483_A5.j9

Path: Q:\2151-2200\2197-01 OSB Facility\Background Information\Traffic\Junction Assessments

Report generation date: 30/08/2017 16:18:22

»Opening Year, AM
 »Opening Year, PM
 »Opening Year + Development, AM
 »Opening Year + Development, PM
 »Future Year, AM
 »Future Year, PM
 »Future Year + Development, AM
 »Future Year + Development, PM

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Opening Year													
Arm 1	11.1	29.08	0.92	D	16.48	C	2 % [Arm 1]	9.9	27.19	0.92	D	15.35	C	2 % [Arm 1]
Arm 2	0.2	6.20	0.17	A				0.2	6.21	0.19	A			
Arm 3	2.3	6.82	0.67	A				2.4	7.03	0.70	A			
Arm 4	1.0	6.70	0.49	A				1.3	7.43	0.55	A			
	Opening Year + Development													
Arm 1	12.2	31.85	0.93	D	17.75	C	1 % [Arm 1]	10.5	28.57	0.92	D	15.98	C	2 % [Arm 1]
Arm 2	0.2	6.32	0.17	A				0.2	6.26	0.19	A			
Arm 3	2.3	6.96	0.68	A				2.5	7.15	0.70	A			
Arm 4	1.2	7.19	0.51	A				1.3	7.58	0.55	A			
	Future Year													
Arm 1	22.7	54.40	0.98	F	28.11	D	-4 % [Arm 1]	20.6	51.81	0.98	F	26.21	D	-3 % [Arm 1]
Arm 2	0.2	6.77	0.19	A				0.3	6.80	0.21	A			
Arm 3	2.8	8.00	0.72	A				3.0	8.35	0.74	A			
Arm 4	1.2	7.62	0.53	A				1.6	8.67	0.60	A			
	Future Year + Development													
Arm 1	26.0	60.90	0.99	F	30.94	D	-5 % [Arm 1]	22.3	55.49	0.98	F	27.80	D	-4 % [Arm 1]
Arm 2	0.3	6.89	0.20	A				0.3	6.86	0.21	A			
Arm 3	2.9	8.18	0.73	A				3.1	8.54	0.75	A			
Arm 4	1.4	8.24	0.56	A				1.6	8.87	0.61	A			

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	(untitled)
-------	------------

Location	
Site number	
Date	21/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AXISPED\Traffic
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Opening Year	AM	ONE HOUR	07:30	09:00	15	✓
D2	Opening Year	PM	ONE HOUR	16:15	17:45	15	✓
D3	Opening Year + Development	AM	ONE HOUR	07:30	09:00	15	✓
D4	Opening Year + Development	PM	ONE HOUR	16:15	17:45	15	✓
D5	Future Year	AM	ONE HOUR	07:30	09:00	15	✓
D6	Future Year	PM	ONE HOUR	16:15	17:45	15	✓
D7	Future Year + Development	AM	ONE HOUR	07:30	09:00	15	✓
D8	Future Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	16.48	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Arm 1

Arms

Arms

Arm	Name	Description
1	A483 (N)	
2	Unnamed Road	
3	A5 (S)	
4	A5 (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.60	7.90	13.1	20.0	54.8	31.0	
2	3.90	7.30	7.6	32.2	54.8	29.0	
3	5.30	7.80	9.8	36.9	54.8	30.0	
4	4.40	7.90	12.1	20.0	54.8	45.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.588	1720
2	0.581	1641
3	0.659	2068
4	0.587	1786

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Opening Year	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1192	100.000
2		ONE HOUR	✓	109	100.000
3		ONE HOUR	✓	992	100.000
4		ONE HOUR	✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	55	861	275
	2	39	0	46	24
	3	824	24	1	143
	4	323	17	126	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	9	13	9
	2	5	0	2	8
	3	11	21	0	9
	4	6	6	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.92	29.08	11.1	D	1224	1836
2	0.17	6.20	0.2	A	105	157
3	0.67	6.82	2.3	A	1013	1519
4	0.49	6.70	1.0	A	467	700

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1004	251	148	1633	0.615	997	976	0.0	1.8	6.270	A
2	86	21	1065	1022	0.084	85	80	0.0	0.1	4.020	A
3	831	208	276	1887	0.440	827	875	0.0	0.9	3.767	A
4	383	96	743	1350	0.284	381	360	0.0	0.4	4.047	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1199	300	177	1616	0.742	1194	1168	1.8	3.1	9.421	A
2	103	26	1275	900	0.114	102	96	0.1	0.1	4.722	A
3	992	248	330	1851	0.536	990	1048	0.9	1.3	4.645	A

4	457	114	889	1264	0.362	457	431	0.4	0.6	4.860	A
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08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1469	367	217	1593	0.922	1442	1429	3.1	9.9	23.313	C
2	126	31	1542	745	0.168	125	117	0.1	0.2	6.072	A
3	1215	304	399	1805	0.673	1211	1268	1.3	2.2	6.696	A
4	560	140	1087	1148	0.488	558	523	0.6	1.0	6.644	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1469	367	217	1592	0.922	1464	1433	9.9	11.1	29.079	D
2	126	31	1563	733	0.171	126	118	0.2	0.2	6.203	A
3	1215	304	405	1802	0.674	1215	1285	2.2	2.3	6.818	A
4	560	140	1090	1146	0.489	560	529	1.0	1.0	6.702	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1199	300	178	1616	0.742	1230	1175	11.1	3.4	11.232	B
2	103	26	1311	880	0.117	103	98	0.2	0.1	4.853	A
3	992	248	338	1845	0.538	996	1075	2.3	1.3	4.737	A
4	457	114	894	1261	0.362	459	441	1.0	0.6	4.905	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1004	251	149	1633	0.615	1010	982	3.4	1.8	6.539	A
2	86	21	1078	1015	0.085	86	81	0.1	0.1	4.058	A
3	831	208	279	1885	0.441	833	886	1.3	0.9	3.814	A
4	383	96	747	1348	0.284	384	364	0.6	0.4	4.081	A

Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	15.35	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Opening Year	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1207	100.000
2		ONE HOUR	✓	122	100.000
3		ONE HOUR	✓	1063	100.000
4		ONE HOUR	✓	530	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	69	861	276
	2	55	0	44	23
	3	832	50	1	180
	4	308	30	189	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	100	3	6	5
	2	0	0	7	4
	3	8	2	0	5
	4	5	3	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.92	27.19	9.9	D	1169	1753
2	0.19	6.21	0.2	A	116	174
3	0.70	7.03	2.4	A	1042	1564
4	0.55	7.43	1.3	A	518	777

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	959	240	221	1591	0.603	953	955	0.0	1.6	5.901	A
2	95	24	1059	1026	0.093	94	115	0.0	0.1	3.992	A
3	855	214	280	1884	0.454	852	873	0.0	0.9	3.716	A
4	425	106	753	1344	0.316	423	379	0.0	0.5	4.154	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1145	286	264	1565	0.732	1140	1143	1.6	2.8	8.849	A
2	113	28	1267	905	0.125	113	137	0.1	0.1	4.697	A
3	1021	255	335	1847	0.553	1020	1045	0.9	1.3	4.638	A
4	507	127	901	1257	0.404	507	454	0.5	0.7	5.101	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1403	351	323	1530	0.917	1378	1398	2.8	8.9	22.078	C
2	139	35	1534	750	0.185	138	167	0.1	0.2	6.082	A
3	1251	313	406	1801	0.695	1247	1267	1.3	2.4	6.889	A
4	622	155	1102	1140	0.545	619	551	0.7	1.3	7.339	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1403	351	324	1530	0.917	1398	1403	8.9	9.9	27.189	D
2	139	35	1554	738	0.188	139	168	0.2	0.2	6.205	A
3	1251	313	411	1798	0.696	1251	1282	2.4	2.4	7.031	A
4	622	155	1105	1137	0.546	621	557	1.3	1.3	7.427	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1145	286	266	1564	0.732	1173	1150	9.9	3.0	10.362	B
2	113	28	1299	886	0.128	114	139	0.2	0.2	4.818	A
3	1021	255	343	1842	0.554	1026	1070	2.4	1.3	4.736	A
4	507	127	906	1254	0.405	510	462	1.3	0.7	5.165	A

17:30 - 17:45

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	959	240	222	1590	0.603	965	961	3.0	1.6	6.131	A
2	95	24	1071	1019	0.093	95	116	0.2	0.1	4.029	A
3	855	214	283	1882	0.455	857	883	1.3	0.9	3.763	A
4	425	106	757	1342	0.317	426	383	0.7	0.5	4.191	A

Opening Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	17.75	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Opening Year + Development	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1195	100.000
2		ONE HOUR	✓	109	100.000
3		ONE HOUR	✓	995	100.000
4		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	55	861	278
	2	39	0	46	24
	3	824	24	1	146
	4	329	17	132	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	9	13	10
	2	5	0	2	8
	3	11	21	0	10
	4	8	6	23	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.93	31.85	12.2	D	1230	1844
2	0.17	6.32	0.2	A	105	157
3	0.68	6.96	2.3	A	1018	1527
4	0.51	7.19	1.2	A	490	734

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1009	252	157	1628	0.620	1002	985	0.0	1.8	6.375	A
2	86	21	1079	1014	0.085	85	80	0.0	0.1	4.054	A
3	835	209	280	1884	0.443	832	884	0.0	0.9	3.803	A
4	402	100	742	1350	0.297	400	369	0.0	0.5	4.218	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1205	301	188	1610	0.748	1199	1179	1.8	3.2	9.699	A
2	103	26	1291	891	0.115	102	96	0.1	0.1	4.776	A
3	997	249	335	1847	0.540	996	1058	0.9	1.3	4.702	A
4	480	120	889	1264	0.379	479	442	0.5	0.7	5.109	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1475	369	230	1585	0.931	1445	1442	3.2	10.7	24.855	C
2	126	31	1559	735	0.171	125	116	0.1	0.2	6.173	A
3	1222	305	405	1801	0.678	1218	1279	1.3	2.3	6.828	A
4	587	147	1087	1148	0.512	586	536	0.7	1.2	7.116	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1475	369	231	1584	0.931	1469	1447	10.7	12.2	31.854	D
2	126	31	1583	722	0.174	126	118	0.2	0.2	6.318	A
3	1222	305	411	1798	0.680	1221	1297	2.3	2.3	6.962	A
4	587	147	1090	1146	0.512	587	542	1.2	1.2	7.189	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1205	301	189	1609	0.749	1240	1186	12.2	3.5	11.874	B
2	103	26	1331	868	0.118	103	98	0.2	0.1	4.928	A
3	997	249	345	1841	0.542	1001	1089	2.3	1.3	4.804	A
4	480	120	894	1261	0.380	482	452	1.2	0.7	5.165	A

08:45 - 09:00

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1009	252	158	1627	0.620	1015	991	3.5	1.9	6.665	A
2	86	21	1093	1006	0.085	86	81	0.1	0.1	4.096	A
3	835	209	283	1882	0.444	837	895	1.3	0.9	3.849	A
4	402	100	747	1348	0.298	403	373	0.7	0.5	4.255	A

Opening Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	15.98	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Opening Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1209	100.000
2		ONE HOUR	✓	122	100.000
3		ONE HOUR	✓	1065	100.000
4		ONE HOUR	✓	535	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	69	861	278
	2	55	0	44	23
	3	832	50	1	182
	4	311	30	191	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	100	3	6	6
	2	0	0	7	4
	3	8	2	0	6
	4	5	3	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.92	28.57	10.5	D	1173	1760
2	0.19	6.26	0.2	A	116	174
3	0.70	7.15	2.5	A	1047	1570
4	0.55	7.58	1.3	A	525	787

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	962	241	224	1589	0.606	956	957	0.0	1.6	5.960	A
2	95	24	1065	1022	0.093	94	115	0.0	0.1	4.008	A
3	859	215	283	1882	0.456	855	877	0.0	0.9	3.744	A
4	431	108	753	1344	0.320	429	386	0.0	0.5	4.194	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1149	287	268	1563	0.735	1144	1146	1.6	2.8	8.993	A
2	113	28	1275	900	0.126	113	137	0.1	0.1	4.725	A
3	1025	256	339	1845	0.556	1024	1049	0.9	1.3	4.685	A
4	514	129	901	1257	0.409	513	462	0.5	0.7	5.168	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1408	352	328	1527	0.921	1382	1401	2.8	9.3	22.874	C
2	139	35	1543	745	0.186	138	167	0.1	0.2	6.131	A
3	1256	314	411	1798	0.699	1251	1270	1.3	2.4	7.001	A
4	630	157	1102	1140	0.553	628	561	0.7	1.3	7.485	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1408	352	329	1527	0.922	1403	1406	9.3	10.5	28.568	D
2	139	35	1564	733	0.189	139	168	0.2	0.2	6.262	A
3	1256	314	416	1794	0.700	1256	1287	2.4	2.5	7.151	A
4	630	157	1105	1138	0.554	630	566	1.3	1.3	7.579	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1149	287	270	1562	0.736	1179	1153	10.5	3.1	10.662	B
2	113	28	1309	881	0.129	114	140	0.2	0.2	4.854	A
3	1025	256	348	1839	0.557	1030	1075	2.5	1.4	4.788	A
4	514	129	906	1254	0.410	517	471	1.3	0.8	5.234	A

17:30 - 17:45

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	962	241	225	1588	0.606	968	964	3.1	1.7	6.197	A
2	95	24	1078	1015	0.094	95	116	0.2	0.1	4.046	A
3	859	215	287	1880	0.457	860	886	1.4	0.9	3.792	A
4	431	108	757	1342	0.321	432	390	0.8	0.5	4.236	A

Future Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	28.11	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Future Year	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1262	100.000
2		ONE HOUR	✓	115	100.000
3		ONE HOUR	✓	1052	100.000
4		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	58	912	291
	2	41	0	48	26
	3	873	26	1	152
	4	342	18	133	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	9	13	9
	2	5	0	2	8
	3	11	21	0	9
	4	6	6	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.98	54.40	22.7	F	1296	1944
2	0.19	6.77	0.2	A	110	166
3	0.72	8.00	2.8	A	1074	1611
4	0.53	7.62	1.2	A	494	741

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1063	266	157	1628	0.653	1055	1033	0.0	2.1	6.935	A
2	91	23	1127	987	0.092	90	85	0.0	0.1	4.203	A
3	881	220	292	1876	0.470	877	925	0.0	1.0	3.994	A
4	405	101	787	1324	0.306	403	382	0.0	0.5	4.257	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1270	317	188	1610	0.789	1262	1237	2.1	4.0	11.342	B
2	108	27	1348	858	0.126	108	102	0.1	0.2	5.023	A
3	1052	263	349	1838	0.572	1050	1107	1.0	1.5	5.068	A
4	484	121	942	1233	0.392	483	457	0.5	0.7	5.228	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1555	389	229	1585	0.981	1502	1512	4.0	17.3	35.311	E
2	133	33	1608	707	0.188	132	123	0.2	0.2	6.554	A
3	1289	322	417	1793	0.719	1283	1323	1.5	2.8	7.774	A
4	592	148	1151	1111	0.533	590	550	0.7	1.2	7.522	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1555	389	230	1585	0.981	1533	1517	17.3	22.7	54.405	F
2	133	33	1639	689	0.192	133	124	0.2	0.2	6.773	A
3	1289	322	425	1789	0.720	1288	1347	2.8	2.8	7.997	A
4	592	148	1155	1108	0.535	592	558	1.2	1.2	7.616	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1270	317	189	1609	0.789	1343	1245	22.7	4.5	18.701	C
2	108	27	1426	813	0.133	109	106	0.2	0.2	5.353	A
3	1052	263	367	1826	0.576	1057	1167	2.8	1.5	5.243	A
4	484	121	948	1230	0.393	486	477	1.2	0.7	5.296	A

08:45 - 09:00

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1063	266	158	1627	0.653	1073	1040	4.5	2.2	7.380	A
2	91	23	1144	976	0.093	91	86	0.2	0.1	4.258	A
3	881	220	296	1873	0.470	883	939	1.5	1.0	4.055	A
4	405	101	792	1321	0.307	406	387	0.7	0.5	4.297	A

Future Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	26.21	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	Future Year	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1278	100.000
2		ONE HOUR	✓	129	100.000
3		ONE HOUR	✓	1125	100.000
4		ONE HOUR	✓	561	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	73	912	292
	2	58	0	46	25
	3	881	53	1	190
	4	326	32	200	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	100	3	6	5
	2	0	0	7	4
	3	8	2	0	5
	4	5	3	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.98	51.81	20.6	F	1238	1857
2	0.21	6.80	0.3	A	122	183
3	0.74	8.35	3.0	A	1103	1655
4	0.60	8.67	1.6	A	548	822

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1015	254	233	1583	0.641	1008	1011	0.0	1.9	6.529	A
2	100	25	1120	990	0.101	100	121	0.0	0.1	4.176	A
3	905	226	296	1873	0.483	901	924	0.0	1.0	3.943	A
4	450	112	797	1319	0.341	448	401	0.0	0.5	4.392	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1213	303	280	1556	0.779	1206	1210	1.9	3.5	10.647	B
2	120	30	1340	863	0.139	120	145	0.1	0.2	5.005	A
3	1081	270	354	1835	0.589	1079	1105	1.0	1.5	5.074	A
4	537	134	954	1226	0.438	536	480	0.5	0.8	5.544	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1485	371	342	1519	0.977	1436	1478	3.5	15.8	33.917	D
2	147	37	1602	711	0.207	146	176	0.2	0.3	6.589	A
3	1324	331	425	1789	0.740	1318	1324	1.5	2.9	8.078	A
4	658	164	1165	1102	0.597	655	578	0.8	1.5	8.515	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1485	371	343	1519	0.978	1466	1485	15.8	20.6	51.813	F
2	147	37	1631	693	0.212	147	178	0.3	0.3	6.804	A
3	1324	331	432	1784	0.742	1324	1346	2.9	3.0	8.346	A
4	658	164	1170	1100	0.598	658	586	1.5	1.6	8.670	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1213	303	282	1555	0.780	1279	1219	20.6	4.0	16.758	C
2	120	30	1411	822	0.146	120	150	0.3	0.2	5.306	A
3	1081	270	372	1824	0.593	1087	1159	3.0	1.6	5.260	A
4	537	134	960	1222	0.439	540	498	1.6	0.8	5.641	A

17:30 - 17:45

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1015	254	235	1582	0.642	1024	1018	4.0	1.9	6.903	A
2	100	25	1136	981	0.102	101	123	0.2	0.1	4.227	A
3	905	226	300	1871	0.484	907	936	1.6	1.0	4.004	A
4	450	112	802	1315	0.342	451	406	0.8	0.6	4.441	A

Future Year + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	30.94	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	Future Year + Development	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1265	100.000
2		ONE HOUR	✓	115	100.000
3		ONE HOUR	✓	1055	100.000
4		ONE HOUR	✓	506	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	58	912	294
	2	41	0	48	26
	3	873	26	1	155
	4	348	18	140	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	9	13	10
	2	5	0	2	8
	3	11	21	0	10
	4	7	6	22	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.99	60.90	26.0	F	1302	1952
2	0.20	6.89	0.3	A	110	166
3	0.73	8.18	2.9	A	1079	1619
4	0.56	8.24	1.4	A	518	777

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1068	267	167	1622	0.658	1059	1042	0.0	2.1	7.070	A
2	91	23	1141	978	0.093	90	85	0.0	0.1	4.243	A
3	886	221	296	1873	0.473	882	935	0.0	1.0	4.032	A
4	425	106	787	1324	0.321	423	391	0.0	0.5	4.441	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1275	319	200	1603	0.796	1267	1248	2.1	4.1	11.747	B
2	108	27	1365	848	0.128	108	102	0.1	0.2	5.091	A
3	1058	264	354	1835	0.576	1055	1119	1.0	1.5	5.136	A
4	507	127	942	1233	0.411	506	468	0.5	0.8	5.511	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1562	390	244	1577	0.991	1502	1525	4.1	19.1	38.003	E
2	133	33	1624	698	0.190	132	122	0.2	0.2	6.657	A
3	1295	324	422	1790	0.724	1290	1334	1.5	2.8	7.938	A
4	621	155	1151	1111	0.559	619	561	0.8	1.4	8.116	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1562	390	245	1576	0.991	1534	1531	19.1	26.0	60.901	F
2	133	33	1655	680	0.195	133	124	0.2	0.3	6.888	A
3	1295	324	430	1785	0.726	1295	1358	2.8	2.9	8.177	A
4	621	155	1155	1108	0.561	621	569	1.4	1.4	8.239	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1275	319	201	1602	0.796	1360	1257	26.0	4.7	21.595	C
2	108	27	1455	796	0.136	109	106	0.3	0.2	5.487	A
3	1058	264	376	1821	0.581	1063	1188	2.9	1.6	5.334	A
4	507	127	948	1230	0.412	510	490	1.4	0.8	5.593	A

08:45 - 09:00

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1068	267	168	1621	0.659	1078	1050	4.7	2.2	7.557	A
2	91	23	1160	967	0.094	91	86	0.2	0.1	4.300	A
3	886	221	301	1870	0.474	888	950	1.6	1.0	4.094	A
4	425	106	792	1321	0.321	426	396	0.8	0.5	4.489	A

Future Year + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	27.80	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	Future Year + Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1281	100.000
2		ONE HOUR	✓	129	100.000
3		ONE HOUR	✓	1128	100.000
4		ONE HOUR	✓	566	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	1	73	912	295
	2	58	0	46	25
	3	881	53	1	193
	4	329	32	202	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	100	3	6	6
	2	0	0	7	4
	3	8	2	0	6
	4	5	3	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.98	55.49	22.3	F	1243	1864
2	0.21	6.86	0.3	A	122	183
3	0.75	8.54	3.1	A	1108	1663
4	0.61	8.87	1.6	A	555	833

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1020	255	237	1581	0.645	1012	1013	0.0	1.9	6.606	A
2	100	25	1127	986	0.102	100	121	0.0	0.1	4.196	A
3	909	227	300	1870	0.486	905	927	0.0	1.0	3.977	A
4	456	114	797	1319	0.345	453	409	0.0	0.6	4.436	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1218	304	284	1554	0.784	1211	1213	1.9	3.6	10.873	B
2	120	30	1349	858	0.140	120	145	0.1	0.2	5.039	A
3	1086	271	359	1832	0.593	1084	1109	1.0	1.5	5.140	A
4	544	136	953	1227	0.444	543	490	0.6	0.8	5.620	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1491	373	346	1517	0.983	1438	1482	3.6	16.8	35.458	E
2	147	37	1609	706	0.208	146	175	0.2	0.3	6.641	A
3	1330	332	430	1785	0.745	1324	1326	1.5	3.0	8.253	A
4	666	167	1165	1102	0.604	663	589	0.8	1.6	8.702	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1491	373	348	1516	0.984	1469	1488	16.8	22.3	55.489	F
2	147	37	1639	689	0.213	147	177	0.3	0.3	6.862	A
3	1330	332	437	1780	0.747	1330	1349	3.0	3.1	8.538	A
4	666	167	1170	1100	0.606	666	597	1.6	1.6	8.872	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1218	304	286	1552	0.784	1291	1222	22.3	4.1	18.125	C
2	120	30	1426	813	0.147	120	150	0.3	0.2	5.373	A
3	1086	271	378	1819	0.597	1092	1168	3.1	1.6	5.344	A
4	544	136	961	1222	0.445	547	510	1.6	0.9	5.723	A

17:30 - 17:45

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	1020	255	239	1580	0.645	1028	1020	4.1	2.0	7.000	A
2	100	25	1144	976	0.103	101	123	0.2	0.1	4.249	A
3	909	227	305	1868	0.487	912	940	1.6	1.0	4.041	A
4	456	114	802	1315	0.346	457	414	0.9	0.6	4.490	A