APPENDIX 8.0

TRACK ANALYSIS

8.1 Delivery Vehicle
8.2 Drive Thru Lane



ADL TRAFFIC & HIGHWAYS

Title: TRACK ANALYSIS: DELIVERY VEHICLE

Scale: 1:1000@A3

APPENDIX 8.1

B&M

Burger King

McDonald's Restaurant NG100

Entrance

Deliveries

Corral

Totem

Passenger

Fast Exit

Fast Lane

Wrexham Foyer

CAR WASH

RECYCLING

Proposed new vehicular access link to existing Tesco overflow car park. Adjacent development plot link and layout to be confirmed by Tesco.

N

S

E

W

ADL TRAFFIC & HIGHWAYS

Title

TRACK ANALYSIS:
DRIVE THRU LANE

Scale

1:500@A3

APPENDIX 8.2

APPENDIX 9.0

SUMMARY OF McDONALD'S SURVEY INFORMATION

McDonald's survey data -: Vehicle and Pedestrian counts

Traffic flows

Friday

Time	Skelton In	Skelton Out	Wolverton In	Wolverton Out	Kirkby In	Kirkby Out	Average In	Average Out
16:00 - 17:00	101	102	92	88	84	80	92	90
17:00 - 18:00	107	110	92	92	111	111	103	104
18:00 - 19:00	85	88	95	99	87	87	89	91
Total	**293**	**300**	**279**	**279**	**282**	**278**	285	286

Saturday

Time	Skelton In	Skelton Out	Wolverton In	Wolverton Out	Kirkby In	Kirkby Out	Average In	Average Out
11:00 - 12:00	110	97	97	89	64	62	90	83
12:00 - 13:00	137	132	92	87	86	84	105	101
13:00 - 14:00	124	136	104	115	86	79	105	110
14:00 - 15:00	121	124	78	75	72	86	90	95
Total	**492**	**489**	**371**	**366**	**308**	**311**	390	389

Pedestrians

Friday

Time	Skelton In	Skelton Out	Wolverton In	Wolverton Out	Kirkby In	Kirkby Out	Average In	Average Out
16:00	9	8	38	39	16	7	21	18
17:00	5	16	33	37	10	13	16	22
18:00	9	9	29	31	6	9	15	16
Total	**23**	**33**	**100**	**107**	**32**	**29**	52	56

Saturday

Time	Skelton In	Skelton Out	Wolverton In	Wolverton Out	Kirkby In	Kirkby Out	Average In	Average Out
11:00	35	21	13	11	72	64	40	32
12:00	64	51	29	23	93	103	62	59
13:00	25	42	50	45	92	101	56	63
14:00	11	15	33	36	100	105	48	52
Total	**135**	**129**	**125**	**115**	**357**	**373**	206	206

Parking

Spaces occupied
(Recorded by beat survey)

Friday

Time	Skelton Occupied	Wolverton Occupied	Kirkby Occupied	Average Occupied
16:00	24	15	13	17
16:15	23	10	12	15
16:30	25	10	12	16
16:45	21	12	15	16
17:00	27	12	17	19
17:15	25	17	13	18
17:30	23	15	16	18
17:45	24	16	22	21
18:00	23	14	17	18
18:15	23	21	18	21
18:30	21	19	18	19
18:45	19	10	14	14
19:00	20	-	12	16

Average of all sites

Parking demand	
Minimum	14
Maximum	21
Average	18

Saturday

Time	Skelton Occupied	Wolverton Occupied	Kirkby Occupied	Average Occupied
11:00	24	12	17	17
11:15	31	12	14	17
11:30	33	14	19	14
11:45	33	18	18	17
12:00	34	17	19	15
12:15	31	16	14	18
12:30	33	20	13	21
12:45	34	16	11	19
13:00	32	22	16	13
13:15	31	19	19	19
13:30	33	16	15	17
13:45	33	15	18	16
14:00	34	16	15	20
14:15	33	15	16	17
14:30	29	15	9	19
14:45	31	12	11	10
15:00	25	-	8	10

Average of all sites

Parking demand	
Minimum	10
Maximum	21
Average	16

McDonald's Survey Data: Customer Trip Type analysis

Customer trips

		Skelton Friday	Skelton Saturday	Wolverton Friday	Wolverton Saturday	Kirkby Friday	Kirkby Saturday	Average Friday	Average Saturday	Friday	Saturday
Additional	Same origin/destination, McDonald Same Purpose	6	11	17	24	10	5	11	13	23%	23%
Existing	Different O/D *or* Same O/D McDonald's not sole purpose	11	12	57	49	25	8	31	23	64%	40%
Shared	Shared with foodstore	**3**	**6**	8	32	**8**	**26**	6	21	13%	37%
Total		**20**	**29**	**82**	**105**	**43**	**39**	48	58	100%	100%

APPENDIX 9.0
SUMMARY OF McDONALDS SURVEY INFORMATION

FRIDAY

Skelton

TIME	QUEUE LENGTHS DRIVE THRU
16:00	5
16:02	4
16:04	10
16:06	10
16:08	3
16:10	0
16:12	4
16:14	4
16:16	2
16:18	2
16:20	3
16:22	1
16:24	3
16:26	3
16:28	6
16:30	6
16:32	9
16:34	6
16:36	8
16:38	7
16:40	8
16:42	4
16:44	4
16:46	5
16:48	4
16:50	2
16:52	2
16:54	3
16:56	3
16:58	1
17:00	3
17:02	4
17:04	5
17:06	6
17:08	7
17:10	6
17:12	4
17:14	7
17:16	8
17:18	10
17:20	12
17:22	8
17:24	5
17:26	3
17:28	4
17:30	2
17:32	4
17:34	4
17:36	1
17:38	4
17:40	2
17:42	4
17:44	3
17:46	4
17:48	5
17:50	10
17:52	6
17:54	8
17:56	6
17:58	3
18:00	4
18:02	2
18:04	6
18:06	3
18:08	2
18:10	3
18:12	3
18:14	6
18:16	4
18:18	2
18:20	2
18:22	4
18:24	4
18:26	4
18:28	6
18:30	4
18:32	4
18:34	1
18:36	2
18:38	1
18:40	3
18:42	3
18:44	5
18:46	1
18:48	4
18:50	5
18:52	4
18:54	2
18:56	0
18:58	0
19:00	0

Wolverton

TIME	QUEUE LENGTHS DRIVE THRU
16:00	2
16:02	2
16:04	1
16:06	1
16:08	4
16:10	6
16:12	6
16:14	5
16:16	5
16:18	2
16:20	2
16:22	4
16:24	4
16:26	2
16:28	3
16:30	4
16:32	4
16:34	4
16:36	6
16:38	4
16:40	3
16:42	3
16:44	4
16:46	4
16:48	4
16:50	4
16:52	3
16:54	3
16:56	3
16:58	3
17:00	5
17:02	3
17:04	4
17:06	7
17:08	5
17:10	2
17:12	1
17:14	3
17:16	1
17:18	1
17:20	3
17:22	4
17:24	2
17:26	2
17:28	2
17:30	2
17:32	3
17:34	5
17:36	5
17:38	6
17:40	5
17:42	6
17:44	4
17:46	2
17:48	3
17:50	3
17:52	2
17:54	2
17:56	4
17:58	6
18:00	5
18:02	4
18:04	4
18:06	5
18:08	5
18:10	5
18:12	5
18:14	6
18:16	6
18:18	6
18:20	6
18:22	5
18:24	6
18:26	6
18:28	7
18:30	9
18:32	6
18:34	4
18:36	3
18:38	4
18:40	3
18:42	2
18:44	4
18:46	4
18:48	4
18:50	1
18:52	2
18:54	3
18:56	5
18:58	8
19:00	8

Kirkby

TIME	QUEUE LENGTHS DRIVE THRU
16:00	6
16:02	6
16:04	7
16:06	8
16:08	8
16:10	10
16:12	8
16:14	4
16:16	1
16:18	1
16:20	4
16:22	3
16:24	5
16:26	5
16:28	8
16:30	9
16:32	7
16:34	5
16:36	4
16:38	5
16:40	6
16:42	9
16:44	8
16:46	8
16:48	9
16:50	9
16:52	6
16:54	5
16:56	7
16:58	8
17:00	6
17:02	5
17:04	6
17:06	9
17:08	8
17:10	4
17:12	5
17:14	8
17:16	8
17:18	7
17:20	9
17:22	7
17:24	7
17:26	7
17:28	9
17:30	12
17:32	8
17:34	10
17:36	10
17:38	9
17:40	9
17:42	9
17:44	11
17:46	7
17:48	6
17:50	9
17:52	7
17:54	7
17:56	11
17:58	9
18:00	11
18:02	8
18:04	6
18:06	6
18:08	5
18:10	8
18:12	10
18:14	9
18:16	11
18:18	7
18:20	9
18:22	9
18:24	7
18:26	6
18:28	7
18:30	8
18:32	8
18:34	6
18:36	3
18:38	7
18:40	9
18:42	7
18:44	8
18:46	6
18:48	8
18:50	8
18:52	10
18:54	12
18:56	14
18:58	10
19:00	7

Average
4
4
6
6
5
5
6
4
3
2
3
3
4
3
6
6
7
5
6
5
6
5
4
5
6
6
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4
4
3
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6
8
8
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5
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5
5
5
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6
6
4
5
7
5
6
7
5
5
6
6
5

Summary

Min	2
Max	8
Average	5

SATURDAY

Skelton

TIME	QUEUE LENGTHS DRIVE THRU
11:00	6
11:02	5
11:04	6
11:06	6
11:08	8
11:10	9
11:12	11
11:14	6
11:16	10
11:18	11
11:20	2
11:22	7
11:24	6
11:26	3
11:28	4
11:30	5
11:32	0
11:34	2
11:36	2
11:38	0
11:40	3
11:42	2
11:44	4
11:46	4
11:48	7
11:50	8
11:52	10
11:54	9
11:56	9
11:58	10
12:00	15
12:02	12
12:04	10
12:06	12
12:08	7
12:10	7
12:12	7
12:14	9
12:16	5
12:18	4
12:20	4
12:22	0
12:24	4
12:26	6
12:28	6
12:30	6
12:32	8
12:34	10
12:36	11
12:38	14
12:40	10
12:42	5
12:44	11
12:46	8
12:48	15
12:50	8
12:52	11
12:54	8
12:56	12
12:58	11
13:00	14
13:02	12
13:04	16
13:06	15
13:08	9
13:10	9
13:12	11
13:14	9
13:16	9
13:18	7
13:20	6
13:22	5
13:24	6
13:26	6
13:28	3
13:30	12
13:32	12
13:34	11
13:36	15
13:38	11
13:40	13
13:42	11
13:44	5
13:46	9
13:48	9
13:50	9
13:52	5
13:54	2
13:56	0
13:58	5
14:00	2
14:02	7
14:04	14
14:06	5
14:08	10
14:10	12
14:12	11
14:14	12
14:16	12
14:18	11
14:20	13
14:22	10
14:24	5
14:26	6
14:28	2
14:30	4
14:32	5
14:34	6
14:36	6
14:38	8
14:40	7
14:42	6
14:44	4
14:46	6
14:48	8
14:50	8
14:52	6
14:54	10
14:56	10
14:58	7
15:00	8

Wolverton

TIME	QUEUE LENGTHS DRIVE THRU
11:00	4
11:02	2
11:04	2
11:06	2
11:08	2
11:10	2
11:12	3
11:14	6
11:16	7
11:18	6
11:20	6
11:22	5
11:24	3
11:26	3
11:28	3
11:30	5
11:32	8
11:34	9
11:36	6
11:38	6
11:40	6
11:42	5
11:44	3
11:46	4
11:48	3
11:50	2
11:52	2
11:54	3
11:56	3
11:58	4
12:00	6
12:02	6
12:04	6
12:06	3
12:08	0
12:10	1
12:12	3
12:14	2
12:16	2
12:18	2
12:20	3
12:22	6
12:24	7
12:26	6
12:28	3
12:30	5
12:32	5
12:34	5
12:36	5
12:38	3
12:40	3
12:42	4
12:44	1
12:46	1
12:48	1
12:50	2
12:52	3
12:54	9
12:56	9
12:58	7
13:00	5
13:02	5
13:04	6
13:06	6
13:08	6
13:10	5
13:12	3
13:14	2
13:16	3
13:18	4
13:20	5
13:22	4
13:24	5
13:26	7
13:28	11
13:30	12
13:32	12
13:34	10
13:36	10
13:38	6
13:40	4
13:42	3
13:44	5
13:46	8
13:48	8
13:50	5
13:52	5
13:54	4
13:56	2
13:58	2
14:00	2
14:02	2
14:04	2
14:06	4
14:08	4
14:10	5
14:12	5
14:14	3
14:16	3
14:18	2
14:20	3
14:22	3
14:24	2
14:26	2
14:28	3
14:30	3
14:32	2
14:34	2
14:36	3
14:38	2
14:40	1
14:42	1
14:44	4
14:46	5
14:48	4
14:50	2
14:52	3
14:54	3
14:56	1
14:58	1
15:00	2

Kirkby

TIME	QUEUE LENGTHS DRIVE THRU
11:00	5
11:02	10
11:04	11
11:06	12
11:08	12
11:10	10
11:12	9
11:14	9
11:16	8
11:18	8
11:20	9
11:22	9
11:24	8
11:26	9
11:28	7
11:30	9
11:32	8
11:34	5
11:36	2
11:38	0
11:40	2
11:42	1
11:44	5
11:46	9
11:48	11
11:50	9
11:52	9
11:54	9
11:56	9
11:58	8
12:00	10
12:02	9
12:04	8
12:06	6
12:08	5
12:10	4
12:12	2
12:14	7
12:16	7
12:18	5
12:20	4
12:22	7
12:24	7
12:26	5
12:28	7
12:30	5
12:32	5
12:34	7
12:36	6
12:38	7
12:40	7
12:42	7
12:44	11
12:46	13
12:48	16
12:50	13
12:52	12
12:54	11
12:56	11
12:58	11
13:00	15
13:02	16
13:04	15
13:06	18
13:08	18
13:10	14
13:12	18
13:14	16
13:16	16
13:18	13
13:20	15
13:22	14
13:24	13
13:26	13
13:28	10
13:30	10
13:32	10
13:34	5
13:36	4
13:38	7
13:40	6
13:42	4
13:44	6
13:46	11
13:48	15
13:50	11
13:52	12
13:54	14
13:56	15
13:58	16
14:00	12
14:02	14
14:04	10
14:06	12
14:08	13
14:10	14
14:12	14
14:14	17
14:16	16
14:18	14
14:20	15
14:22	15
14:24	16
14:26	15
14:28	12
14:30	13
14:32	12
14:34	12
14:36	12
14:38	9
14:40	7
14:42	9
14:44	8
14:46	9
14:48	10
14:50	13
14:52	12
14:54	11
14:56	10
14:58	9
15:00	9

Average
5
6
6
7
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7
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7
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5
5
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5
5
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9
10
9
8
8
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7
6
5
9
5
5
7
7
8
6

Summary

Min	2
Max	13
Average	7

DAILY TRAFFIC PROFILE

	Friday				Saturday			
	Total In	DT	Car Park	McDelivery	Total In	DT	Car Park	McDelivery
00:00	16	10	4	2	23	18	5	0
01:00	6	3	2	1	13	8	5	0
02:00	4	2	2	0	6	3	3	0
03:00	5	3	2	0	7	5	2	0
04:00	3	3	0	0	3	2	1	0
05:00	10	9	1	0	9	4	4	1
06:00	22	14	7	1	16	9	4	3
07:00	43	29	9	4	35	19	12	4
08:00	**76**	**46**	**14**	**16**	55	31	11	13
09:00	78	46	17	15	78	42	17	19
10:00	71	39	23	9	78	42	25	11
11:00	62	34	15	13	88	49	27	12
12:00	107	54	40	13	103	56	28	19
13:00	90	49	32	9	**105**	**56**	**36**	**13**
14:00	61	34	14	13	96	52	30	14
15:00	91	52	25	14	88	51	25	12
16:00	92	51	28	13	82	44	25	13
17:00	**103**	**60**	**26**	**17**	98	58	25	15
18:00	89	45	34	10	83	46	23	14
19:00	92	49	29	14	68	39	24	5
20:00	70	43	10	17	53	20	29	4
21:00	59	33	15	11	44	16	23	5
22:00	42	22	12	8	40	15	18	7
23:00	32	18	10	4	32	17	15	0
Total	1323	748	371	204	1303	702	417	184

APPENDIX 10.0

TRICS DATA: DRIVE THRU RESTAURANTS

10.1 Weekday
10.2 Saturday

Calculation Reference: AUDIT-733701-240618-0659

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	IW	ISLE OF WIGHT	1 days
03	SOUTH WEST		
	NS	NORTH SOMERSET	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	BY	BARNSLEY	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days
11	SCOTLAND		
	AD	ABERDEEN CITY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

APPENDIX 10.1
TRICS DATA: DRIVE THRU RESTAURANTS WEEKDAY

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	230 to 472 (units: sqm)
Range Selected by User:	182 to 800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 25/05/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	1 days
Thursday	1 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	1
Retail Zone	1
Built-Up Zone	3
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	8 days - Selected

Secondary Filtering selection:

Use Class:
Not Known 10 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

15,001 to 20,000	4 days
20,001 to 25,000	1 days
25,001 to 50,000	4 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	10 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	10 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 AD-06-D-01 MCDONALD ' S ABERDEEN CITY
BEDFORD ROAD
ABERDEEN
KITTYBREWSTER RET. PK
Edge of Town Centre
Retail Zone
Total Gross floor area: 472 sqm
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

2 BY-06-D-02 MCDONALD'S BARNSLEY
UPPER NEW STREET
BARNSLEY

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 415 sqm
Survey date: TUESDAY *08/09/20* *Survey Type: MANUAL*

3 CA-06-D-02 MCDONALD'S CAMBRIDGESHIRE
NEWMARKET ROAD
CAMBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 435 sqm
Survey date: TUESDAY *19/09/17* *Survey Type: MANUAL*

4 IW-06-D-01 KFC ISLE OF WIGHT
FURRLONGS
NEWPORT

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 310 sqm
Survey date: MONDAY *22/05/23* *Survey Type: MANUAL*

5 LN-06-D-01 MCDONALD'S LINCOLNSHIRE
RUSTON WAY
LINCOLN

Edge of Town Centre
Built-Up Zone
Total Gross floor area: 435 sqm
Survey date: FRIDAY *28/06/19* *Survey Type: MANUAL*

6 MS-06-D-01 MCDONALD'S MERSEYSIDE
SAINT HELENS LINKWAY
SAINT HELENS

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 463 sqm
Survey date: FRIDAY *16/04/21* *Survey Type: MANUAL*

7 NS-06-D-01 KFC NORTH SOMERSET
MARCHFIELDS WAY
WESTON-SUPER-MARE

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 230 sqm
Survey date: THURSDAY *15/09/22* *Survey Type: MANUAL*

8 TV-06-D-01 MCDONALD'S TEES VALLEY
BURN ROAD
HARTLEPOOL

Edge of Town Centre
Industrial Zone
Total Gross floor area: 400 sqm
Survey date: FRIDAY *04/09/20* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	WM-06-D-04	BIG JOHN'S		WEST MIDLANDS
	LANGDON STREET			
	BIRMINGHAM			
	BORDESLEY GREEN			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:		360 sqm	
	Survey date: WEDNESDAY		*19/10/22*	*Survey Type: MANUAL*
10	WO-06-D-01	KFC		WORCESTERSHIRE
	CLEWS ROAD			
	REDDITCH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		436 sqm	
	Survey date: FRIDAY		*02/10/20*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	5	396	6.465	5	396	5.808	5	396	12.273
07:00 - 08:00	6	403	10.269	6	403	8.861	6	403	19.130
08:00 - 09:00	6	403	12.257	6	403	11.594	6	403	23.851
09:00 - 10:00	6	403	13.292	6	403	13.292	6	403	26.584
10:00 - 11:00	10	396	11.299	10	396	10.693	10	396	21.992
11:00 - 12:00	10	396	12.437	10	396	11.678	10	396	24.115
12:00 - 13:00	10	396	19.060	10	396	17.796	10	396	36.856
13:00 - 14:00	10	396	17.189	10	396	17.872	10	396	35.061
14:00 - 15:00	10	396	13.296	10	396	13.751	10	396	27.047
15:00 - 16:00	10	396	15.672	10	396	15.369	10	396	31.041
16:00 - 17:00	10	396	16.759	10	396	17.189	10	396	33.948
17:00 - 18:00	10	396	18.428	10	396	18.504	10	396	36.932
18:00 - 19:00	10	396	19.464	10	396	20.248	10	396	39.712
19:00 - 20:00	10	396	17.063	10	396	17.290	10	396	34.353
20:00 - 21:00	10	396	14.636	10	396	15.723	10	396	30.359
21:00 - 22:00	10	396	12.184	10	396	12.538	10	396	24.722
22:00 - 23:00	8	381	10.758	8	381	10.725	8	381	21.483
23:00 - 24:00	8	381	5.772	8	381	6.822	8	381	12.594
Total Rates:			246.300			245.753			492.053

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	230 - 472 (units: sqm)
Survey date date range:	01/01/16 - 25/05/23
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-733701-240618-0656

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	TB	TORBAY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	KS	KIRKLEES	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

APPENDIX 10.2
TRICS DATA: DRIVE THRU RESTAURANTS SATURDAY

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	420 to 447 (units: sqm)
Range Selected by User:	182 to 800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 25/05/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Saturday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Suburban Area (PPS6 Out of Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Retail Zone	1
Built-Up Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included
Population within 1 mile:

20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Secondary Filtering selection (Cont.):

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	2 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	KS-06-D-01 NORTHGATE HECKMONDWIKE	MCDONALD'S		KIRKLEES
	Town Centre Built-Up Zone Total Gross floor area:		420 sqm	
	Survey date: SATURDAY		*20/05/17*	*Survey Type: MANUAL*
2	TB-06-D-01 HELE ROAD TORQUAY	MCDONALD'S		TORBAY
	Suburban Area (PPS6 Out of Centre) Retail Zone Total Gross floor area:		447 sqm	
	Survey date: SATURDAY		*30/03/19*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/D - FAST FOOD - DRIVE THROUGH
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	447	19.016	1	447	18.121	1	447	37.137
08:00 - 09:00	1	447	22.371	1	447	22.371	1	447	44.742
09:00 - 10:00	1	447	27.293	1	447	24.385	1	447	51.678
10:00 - 11:00	2	434	16.378	2	434	17.993	2	434	34.371
11:00 - 12:00	2	434	20.069	2	434	18.685	2	434	38.754
12:00 - 13:00	2	434	26.874	2	434	25.375	2	434	52.249
13:00 - 14:00	2	434	25.952	2	434	26.298	2	434	52.250
14:00 - 15:00	2	434	23.414	2	434	24.567	2	434	47.981
15:00 - 16:00	2	434	19.723	2	434	20.877	2	434	40.600
16:00 - 17:00	2	434	23.645	2	434	22.376	2	434	46.021
17:00 - 18:00	2	434	23.760	2	434	24.683	2	434	48.443
18:00 - 19:00	2	434	23.299	2	434	23.299	2	434	46.598
19:00 - 20:00	2	434	18.800	2	434	19.839	2	434	38.639
20:00 - 21:00	2	434	15.340	2	434	15.686	2	434	31.026
21:00 - 22:00	2	434	12.687	2	434	11.765	2	434	24.452
22:00 - 23:00	2	434	7.612	2	434	8.304	2	434	15.916
23:00 - 24:00	2	434	6.459	2	434	6.113	2	434	12.572
Total Rates:			332.692			330.737			663.429

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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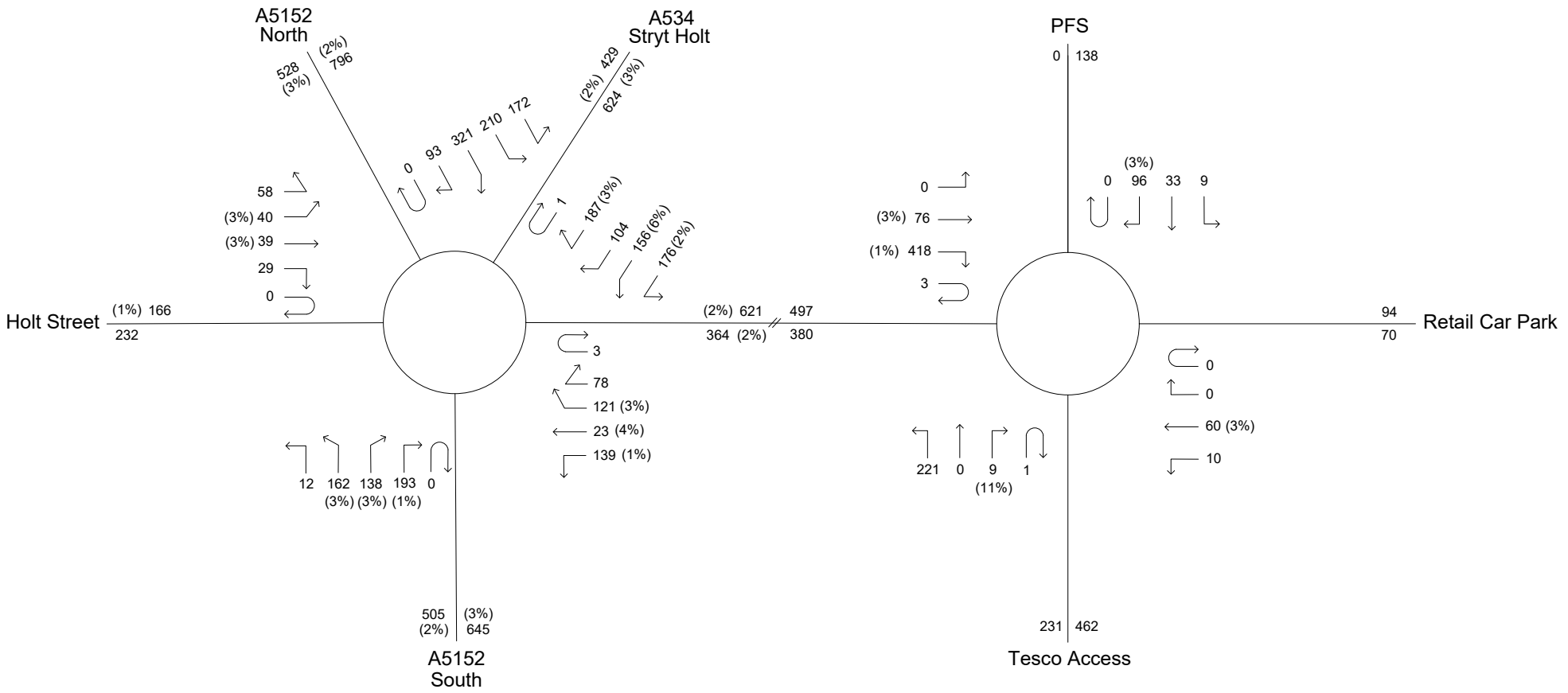
Parameter summary

Trip rate parameter range selected:	420 - 447 (units: sqm)
Survey date date range:	01/01/16 - 25/05/23
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

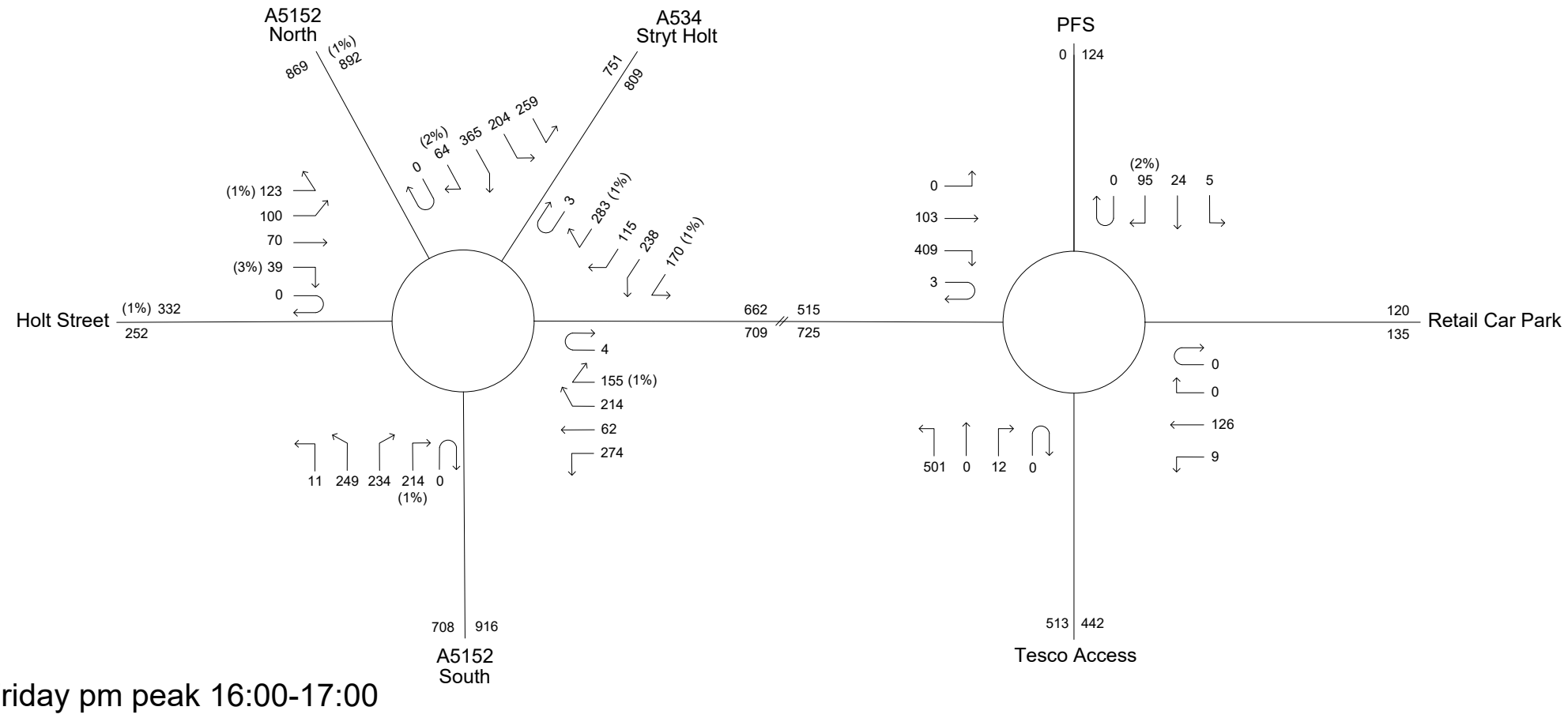
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

SURVEYED TRAFFIC FLOWS

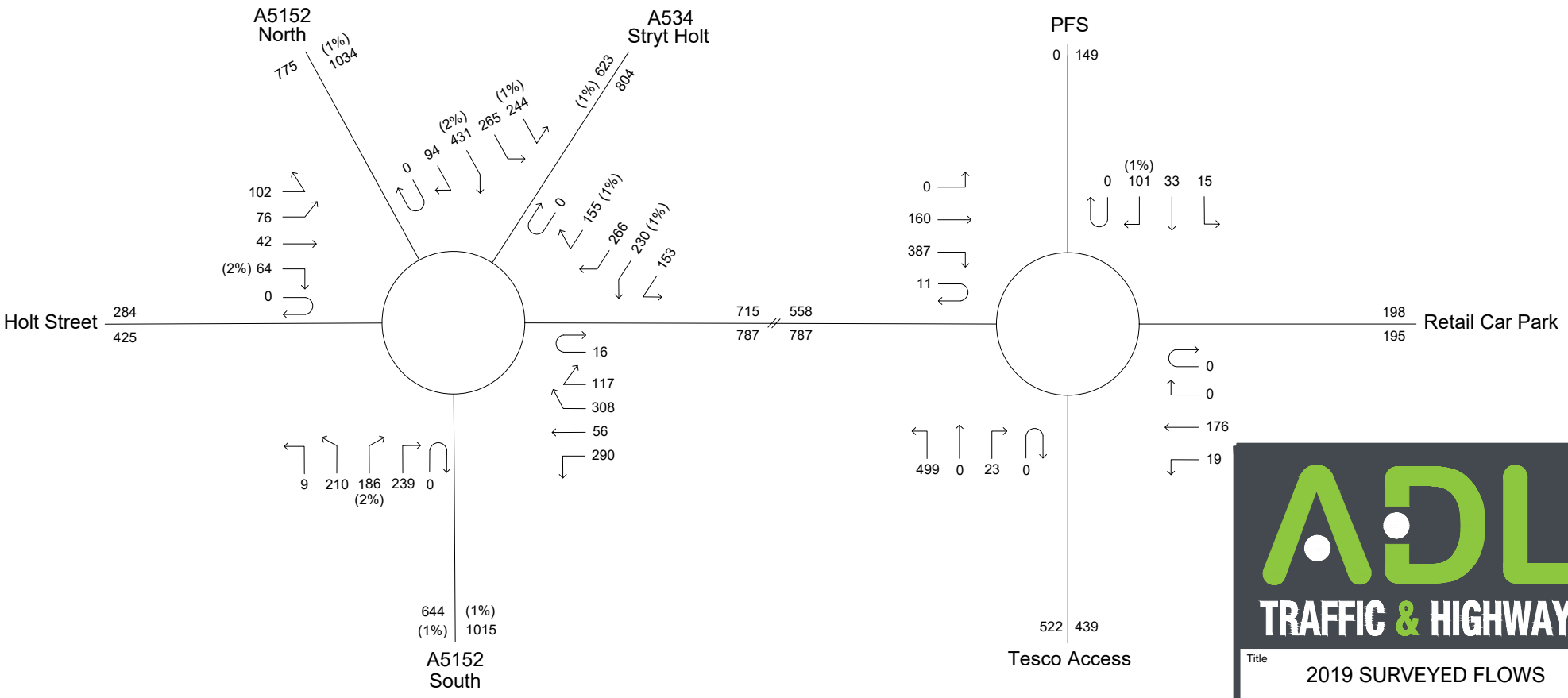
11.1 2019 Surveyed Flows
11.2 2024 Surveyed Flows



Friday am peak 09:00-10:00



Friday pm peak 16:00-17:00



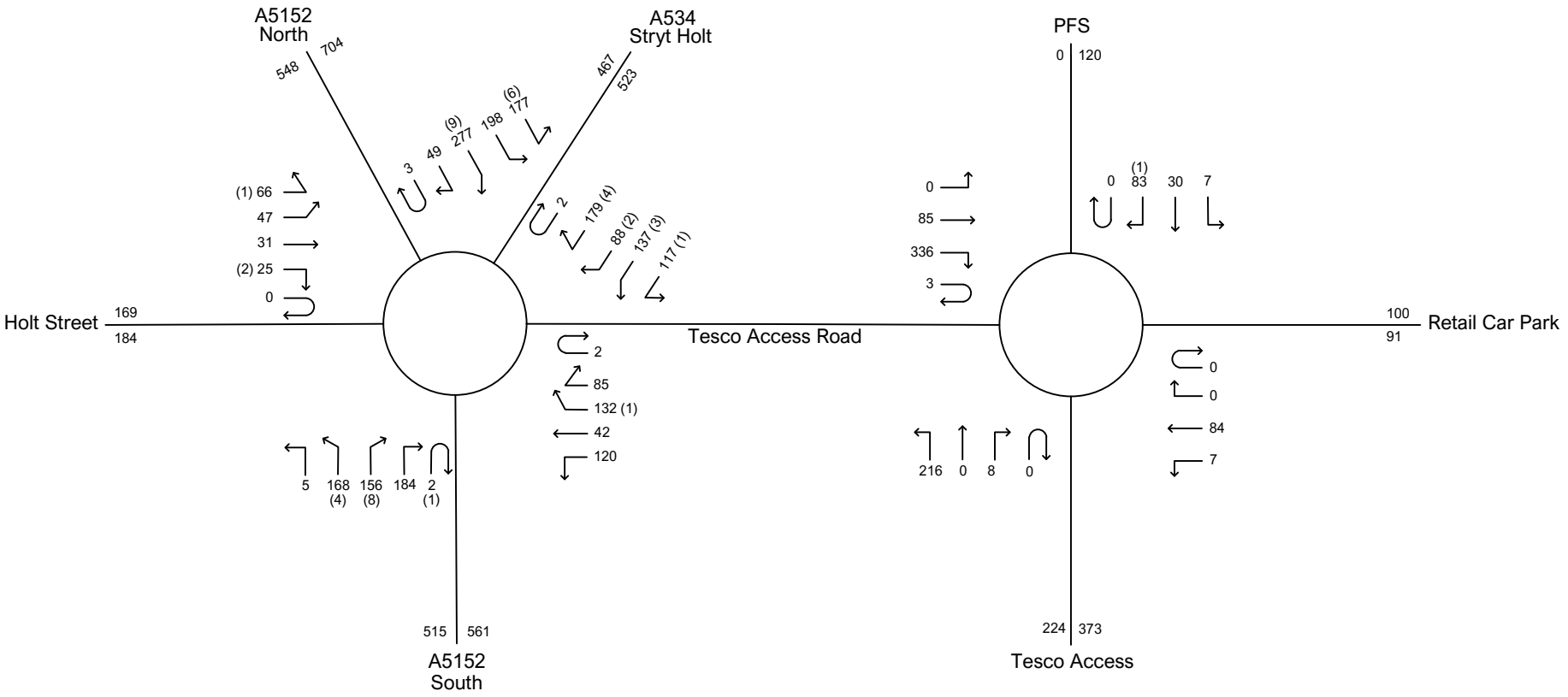
Saturday peak 12:00-13:00

ADL TRAFFIC & HIGHWAYS

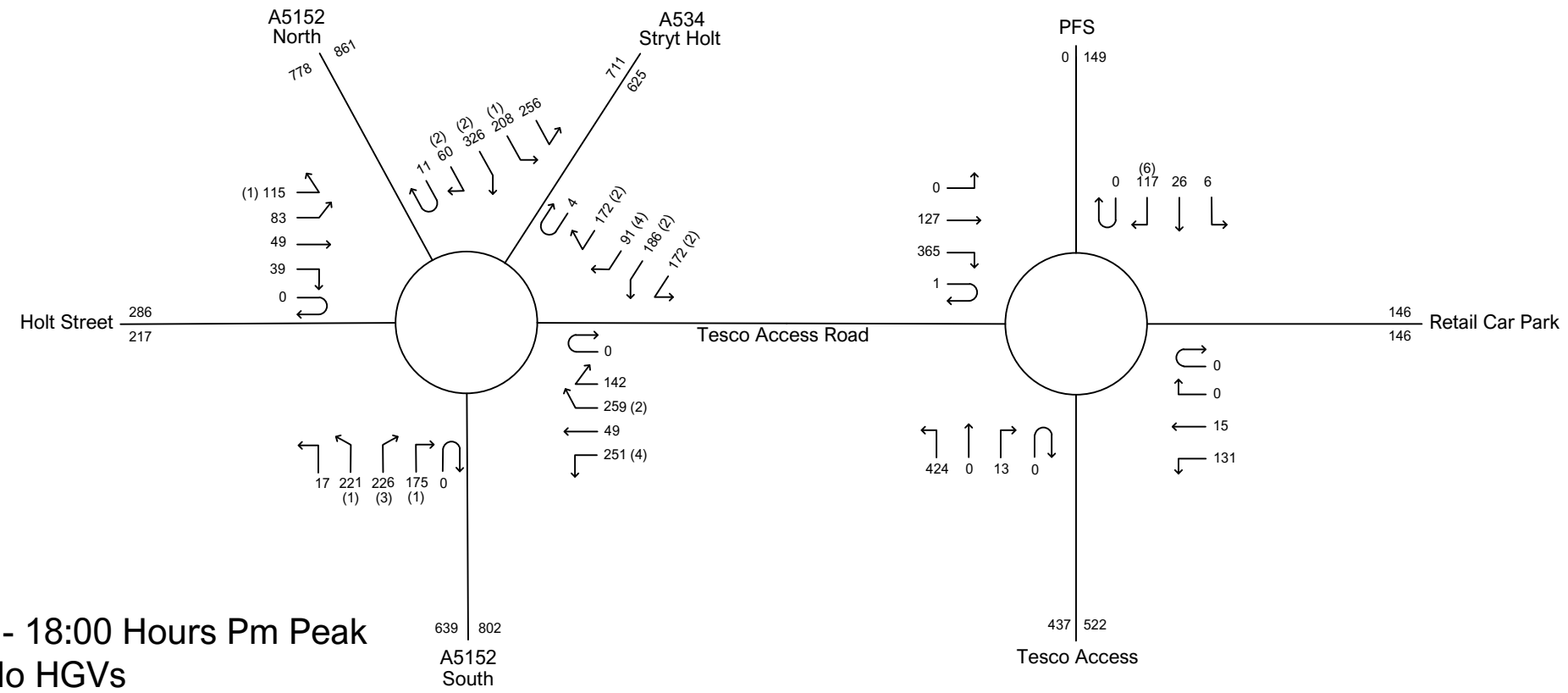
Title: 2019 SURVEYED FLOWS

Scale: NTS@A3

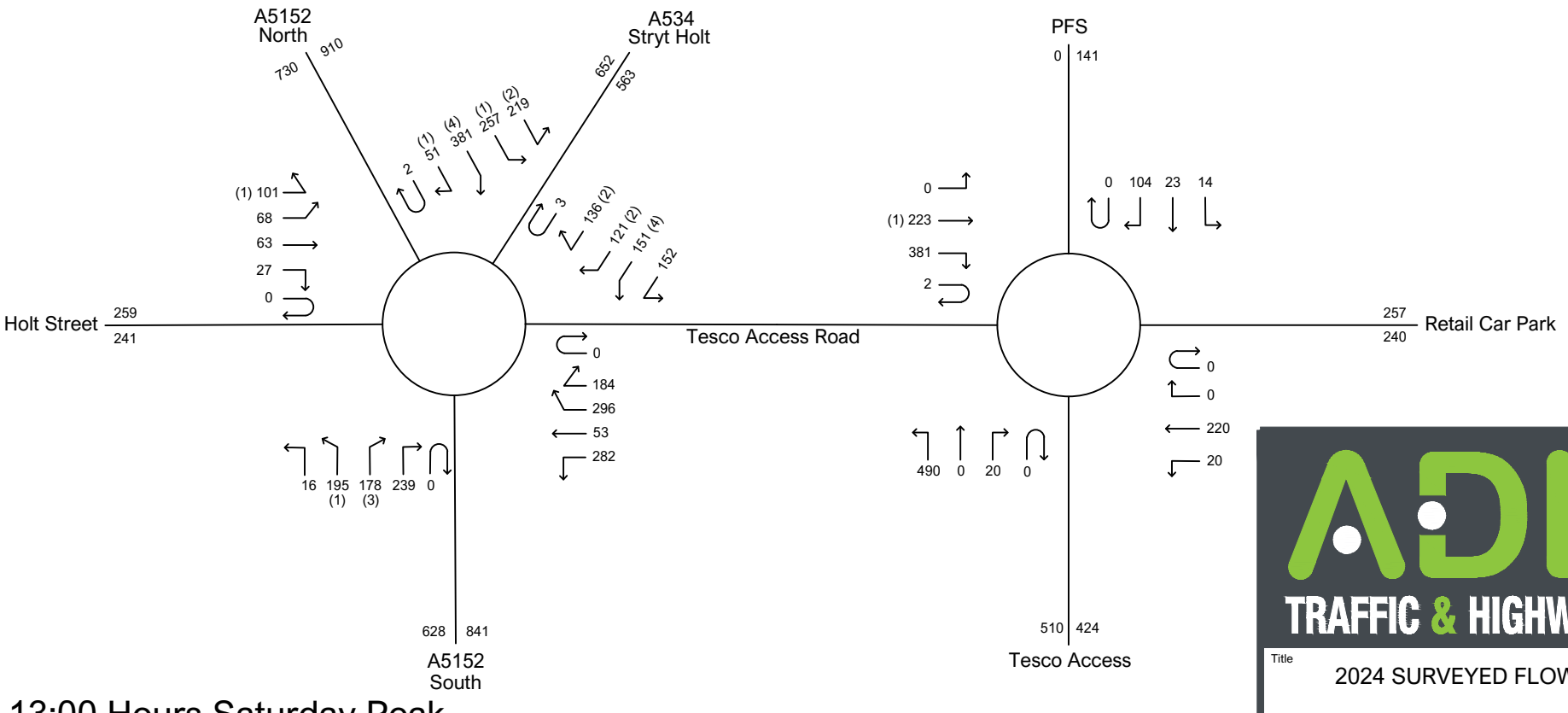
APPENDIX 11.1



09:00 - 10:00 Hours Am Peak
( ) = No HGVs



17:00 - 18:00 Hours Pm Peak
( ) = No HGVs



12:00 - 13:00 Hours Saturday Peak
( ) = No HGVs

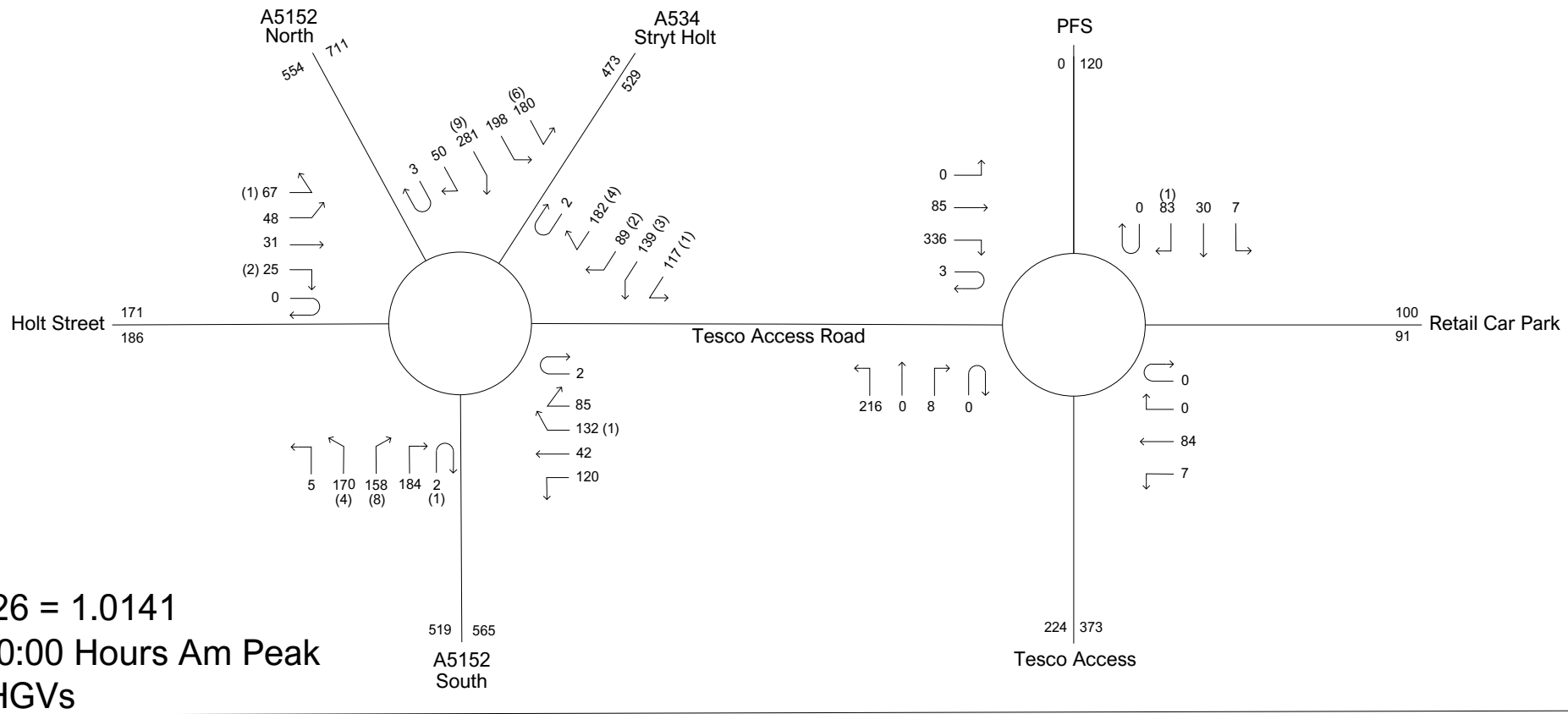
ADL TRAFFIC & HIGHWAYS

Title	
2024 SURVEYED FLOWS	
Scale: NTS@A3	APPENDIX 11.2

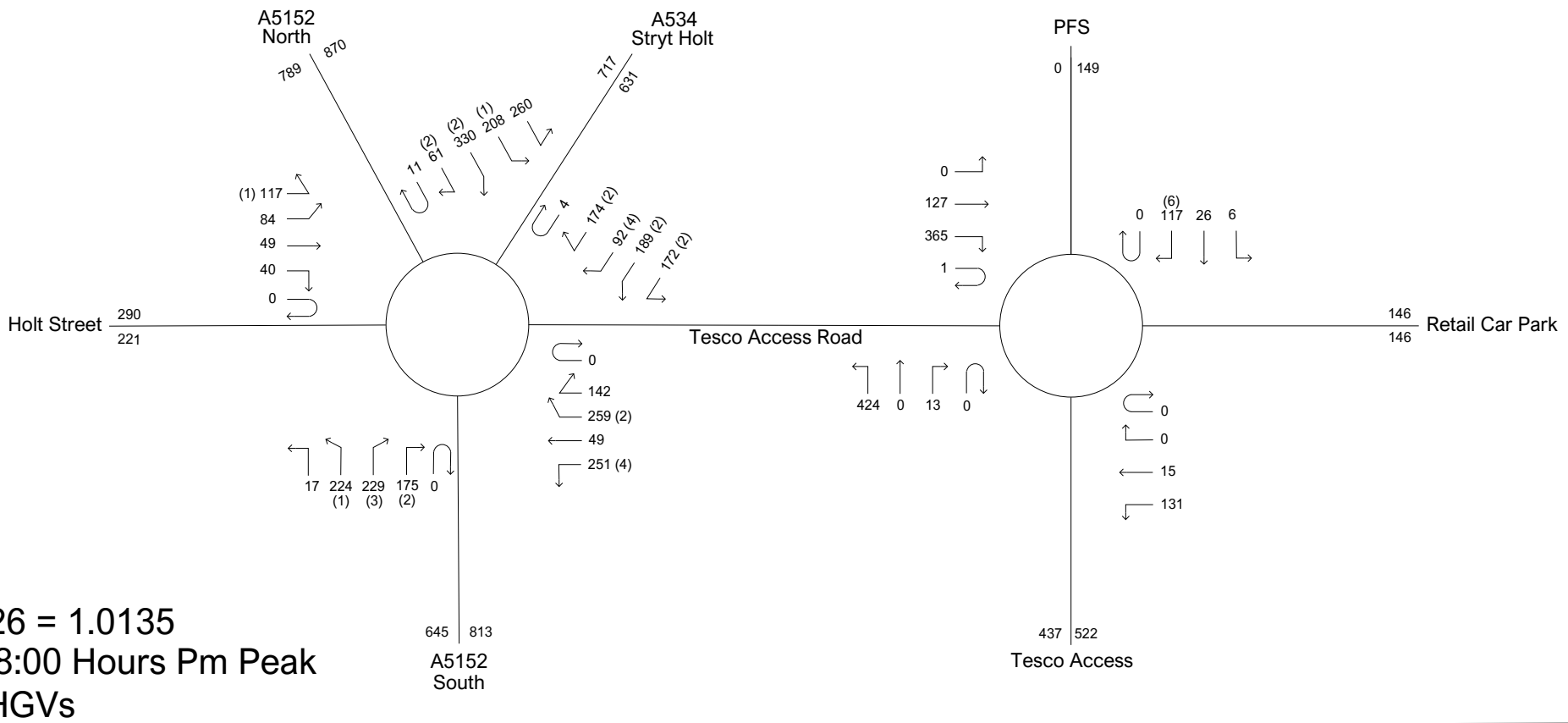
APPENDIX 12.0

BASE FLOWS

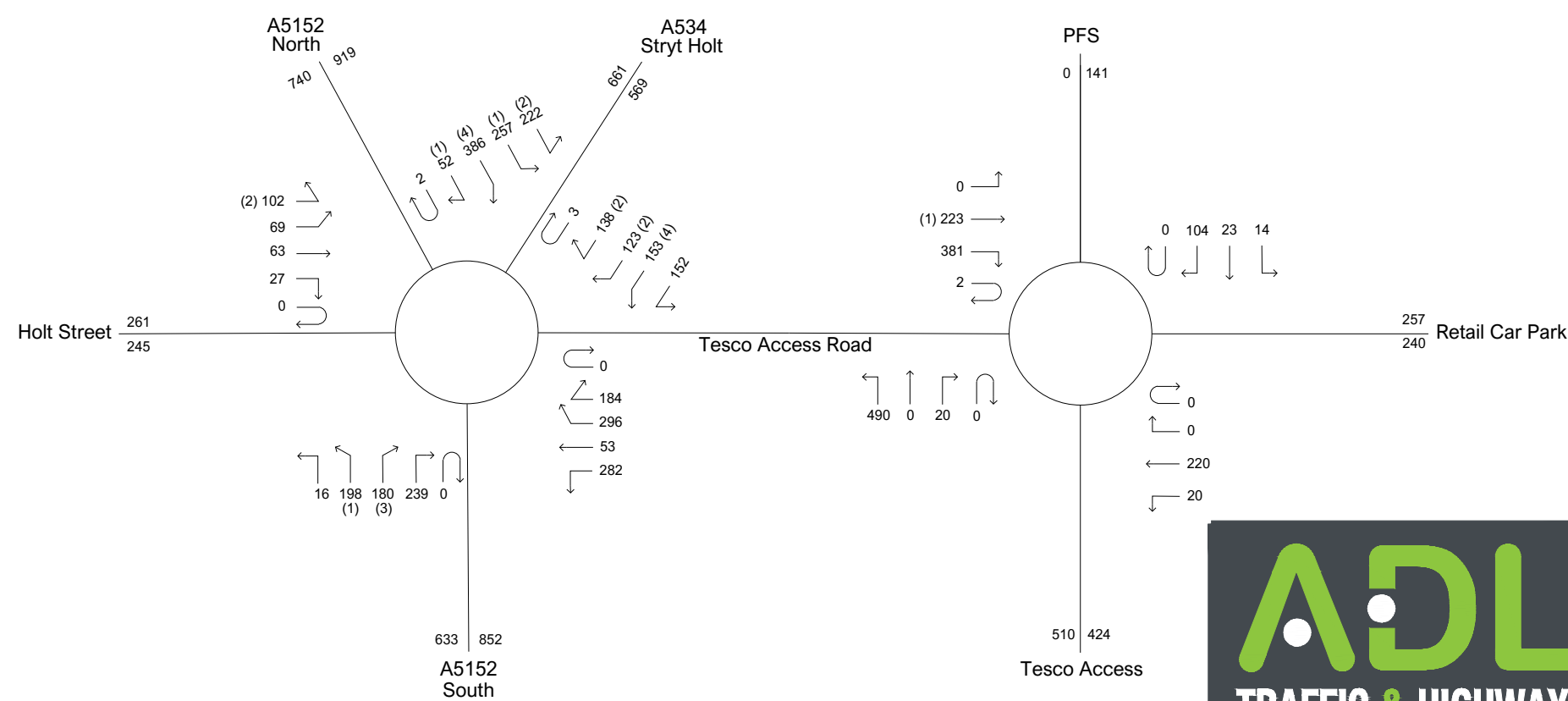
12.1	2026 Base Flows
12.2	2031 Base Flows
12.3	2036 Base Flows



2024-2026 = 1.0141
09:00 - 10:00 Hours Am Peak
( ) = No HGVs



2024-2026 = 1.0135
17:00 - 18:00 Hours Pm Peak
( ) = No HGVs



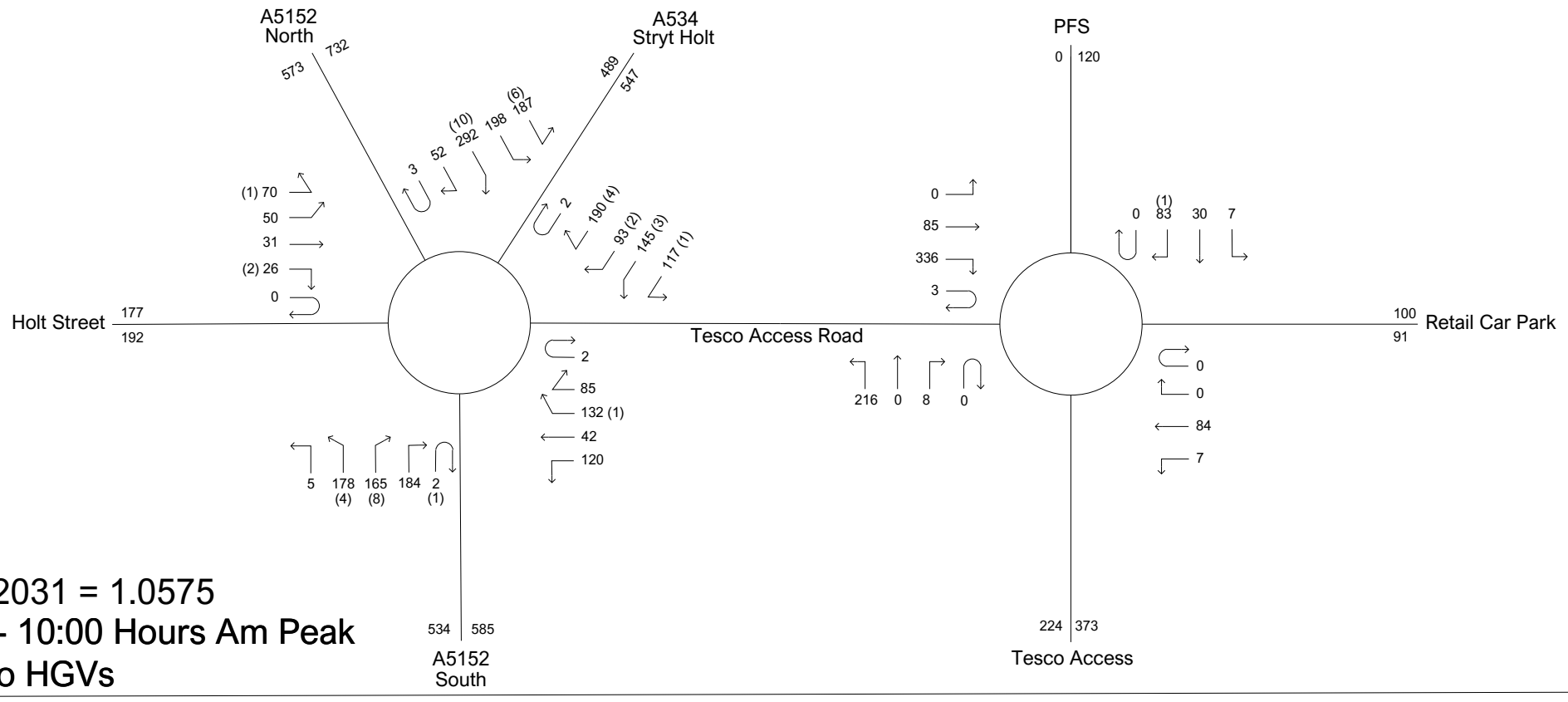
2024-2026 = 1.0136
12:00 - 13:00 Hours Saturday Peak
( ) = No HGVs

TRAFFIC & HIGHWAYS

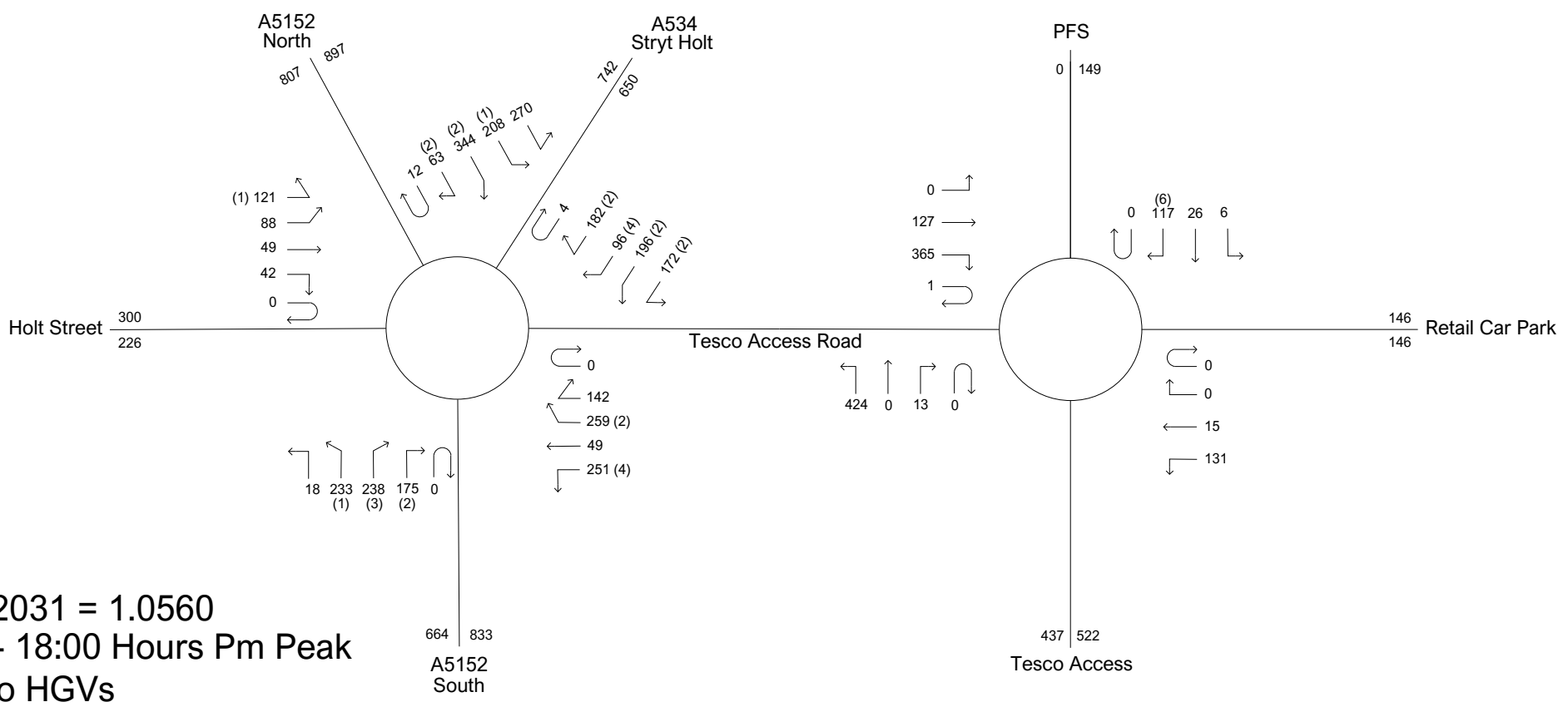
Title: 2026 BASE FLOWS

Scale: NTS@A3

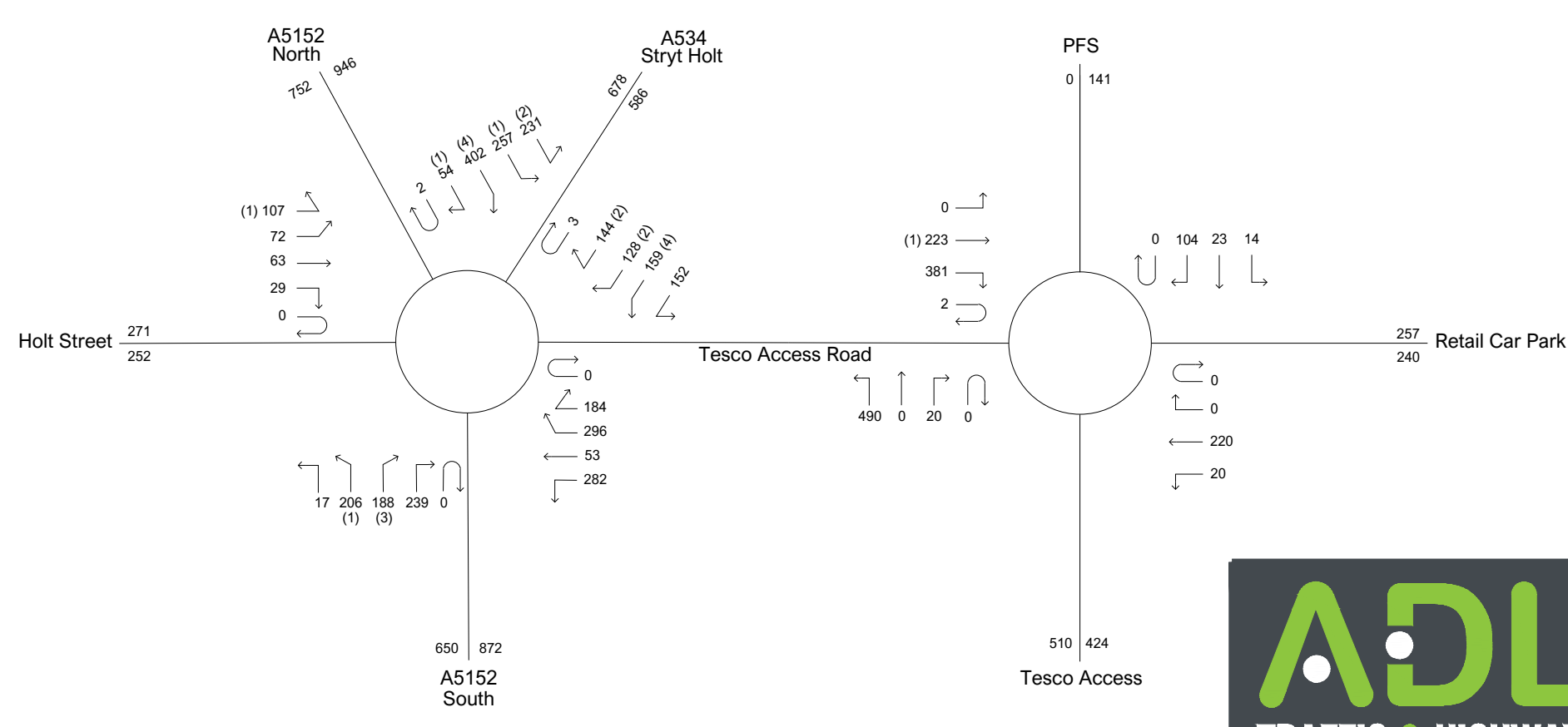
APPENDIX 12.1



2024-2031 = 1.0575
09:00 - 10:00 Hours Am Peak
( ) = No HGVs



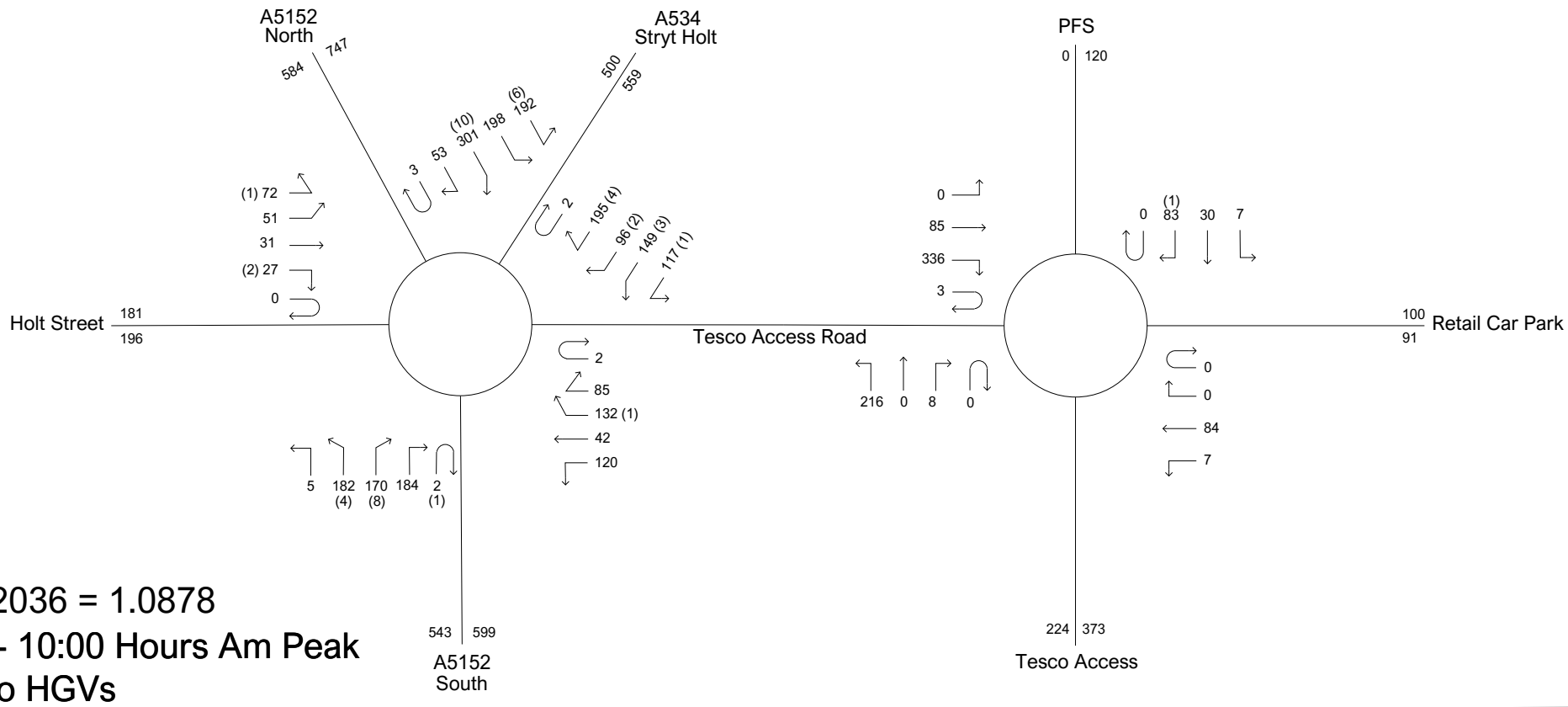
2024-2031 = 1.0560
17:00 - 18:00 Hours Pm Peak
( ) = No HGVs



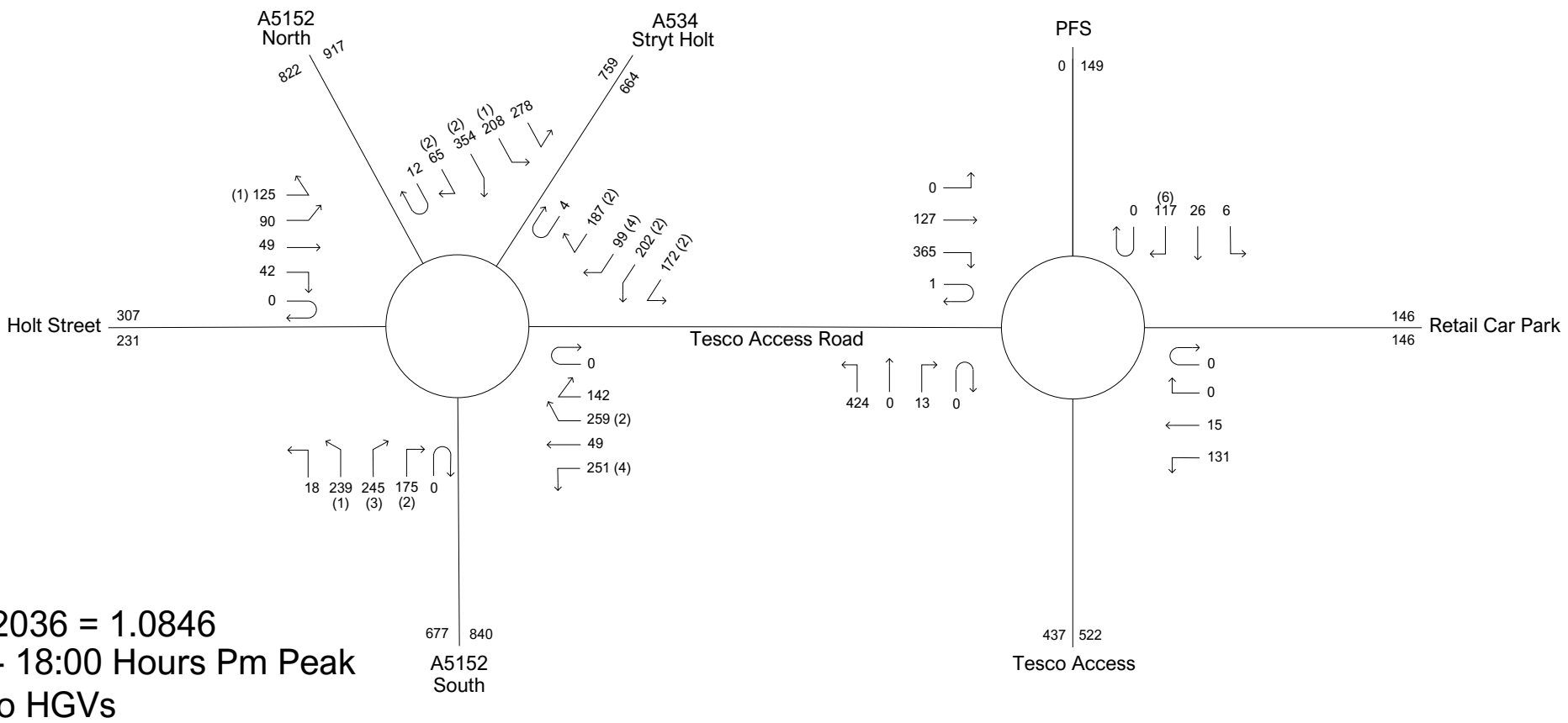
2024-2031 = 1.0561
12:00 - 13:00 Hours Saturday Peak
( ) = No HGVs

ADL TRAFFIC & HIGHWAYS

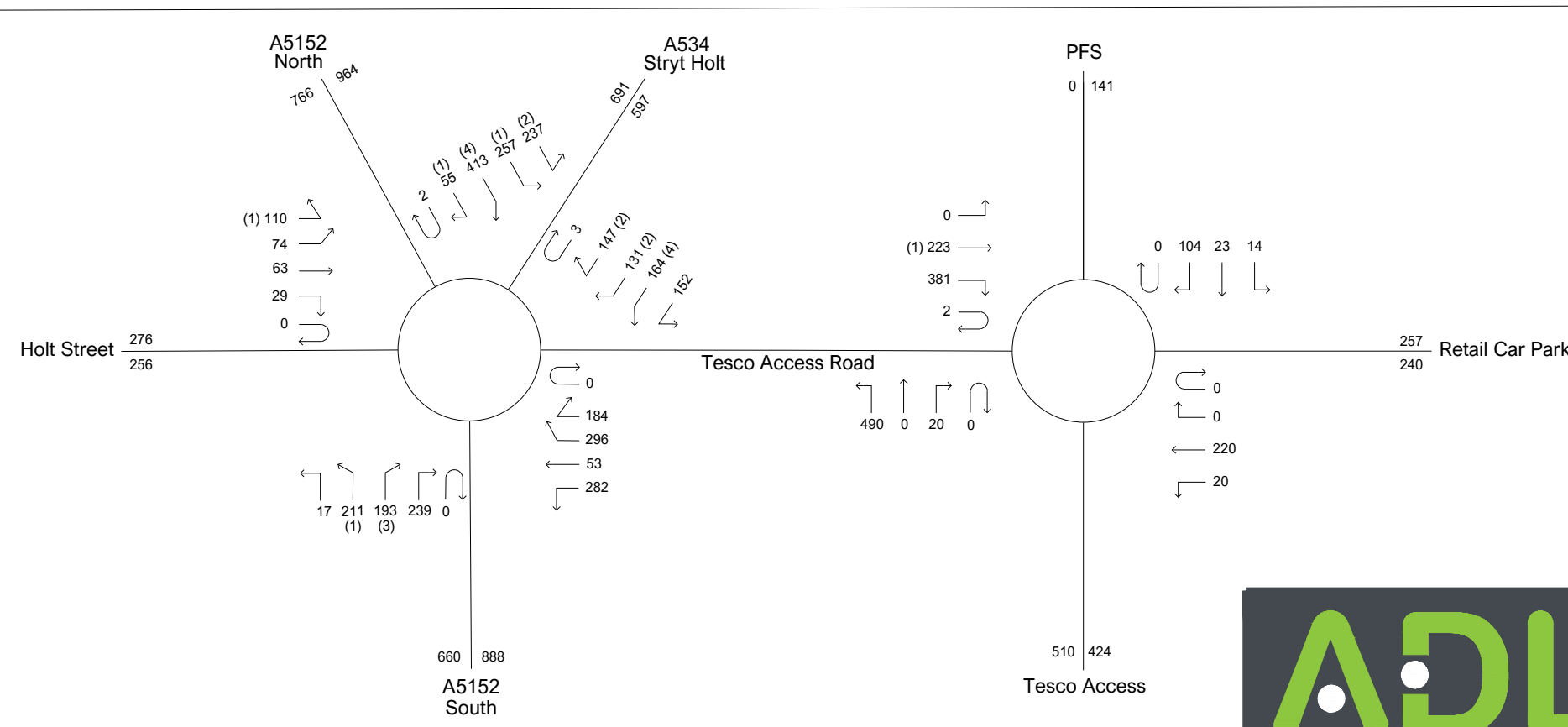
Title	2031 BASE FLOWS
Scale	NTS@A3
	APPENDIX 12.2



2024-2036 = 1.0878
09:00 - 10:00 Hours Am Peak
( ) = No HGVs



2024-2036 = 1.0846
17:00 - 18:00 Hours Pm Peak
( ) = No HGVs



2024-2036 = 1.0844
12:00 - 13:00 Hours Saturday Peak
( ) = No HGVs

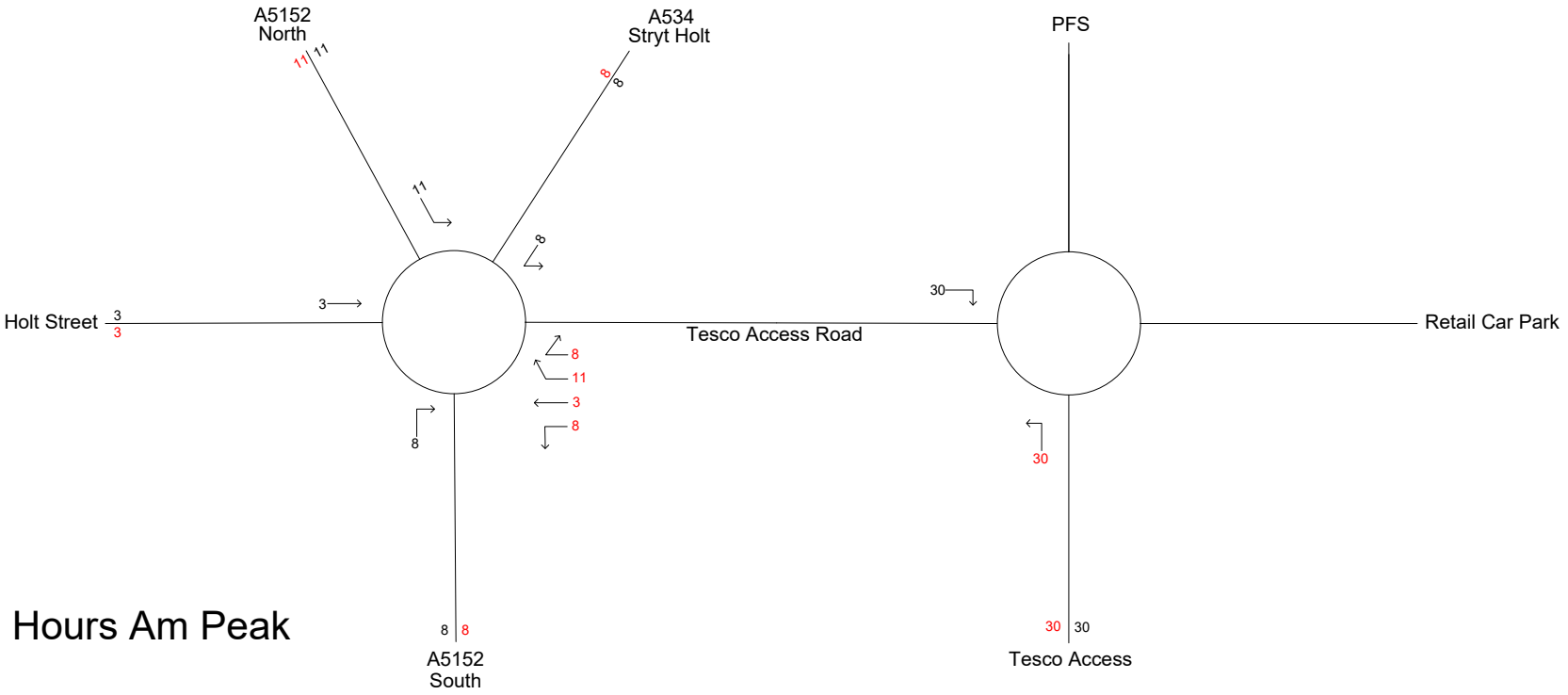
ADL TRAFFIC & HIGHWAYS

Title	2036 BASE FLOWS
Scale	NTS@A3
	APPENDIX 12.3

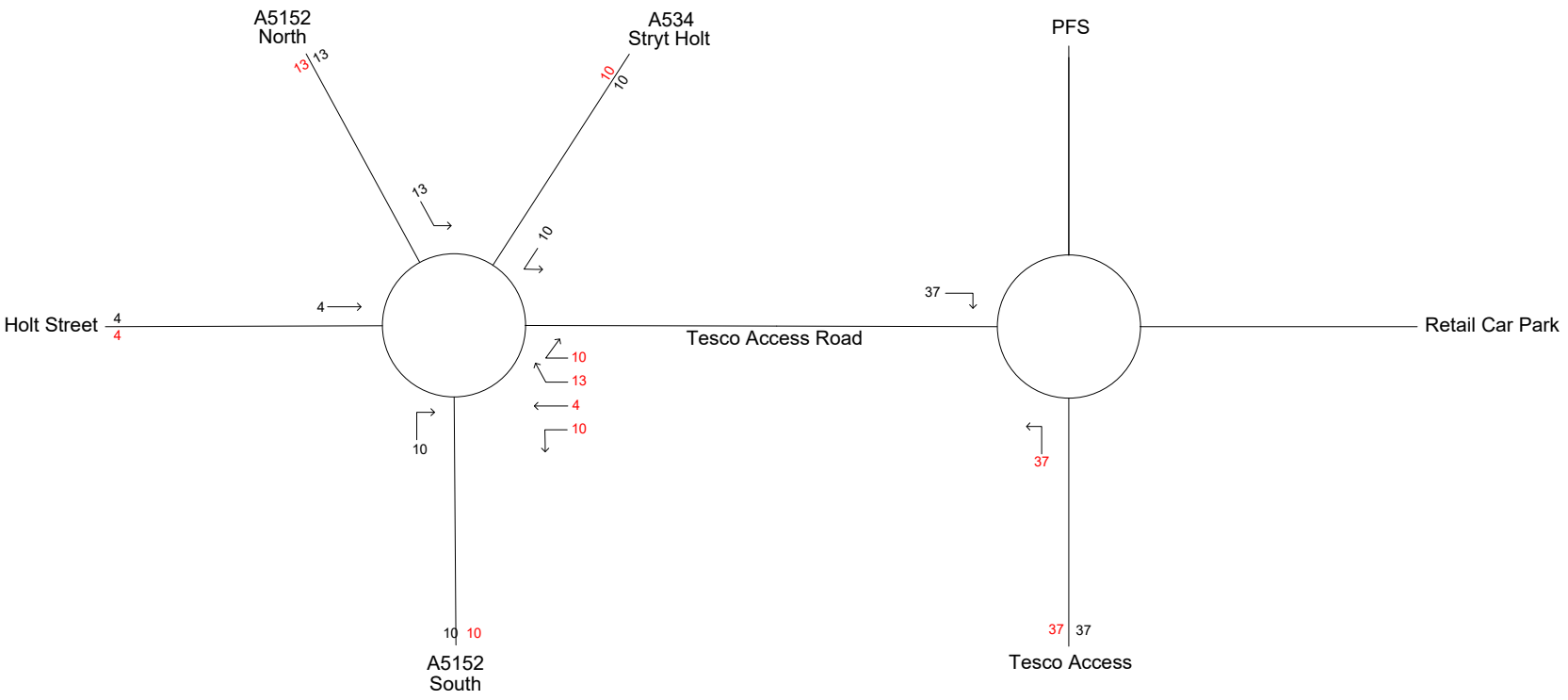
APPENDIX 13.0

PROPOSED McDONALD'S TRAFFIC

13.1	Additional Trips
13.2	Existing Trips
13.3	Shared Trips
13.4	Total McDonald's Trips



09:00 - 10:00 Hours Am Peak
Inbound
Outbound

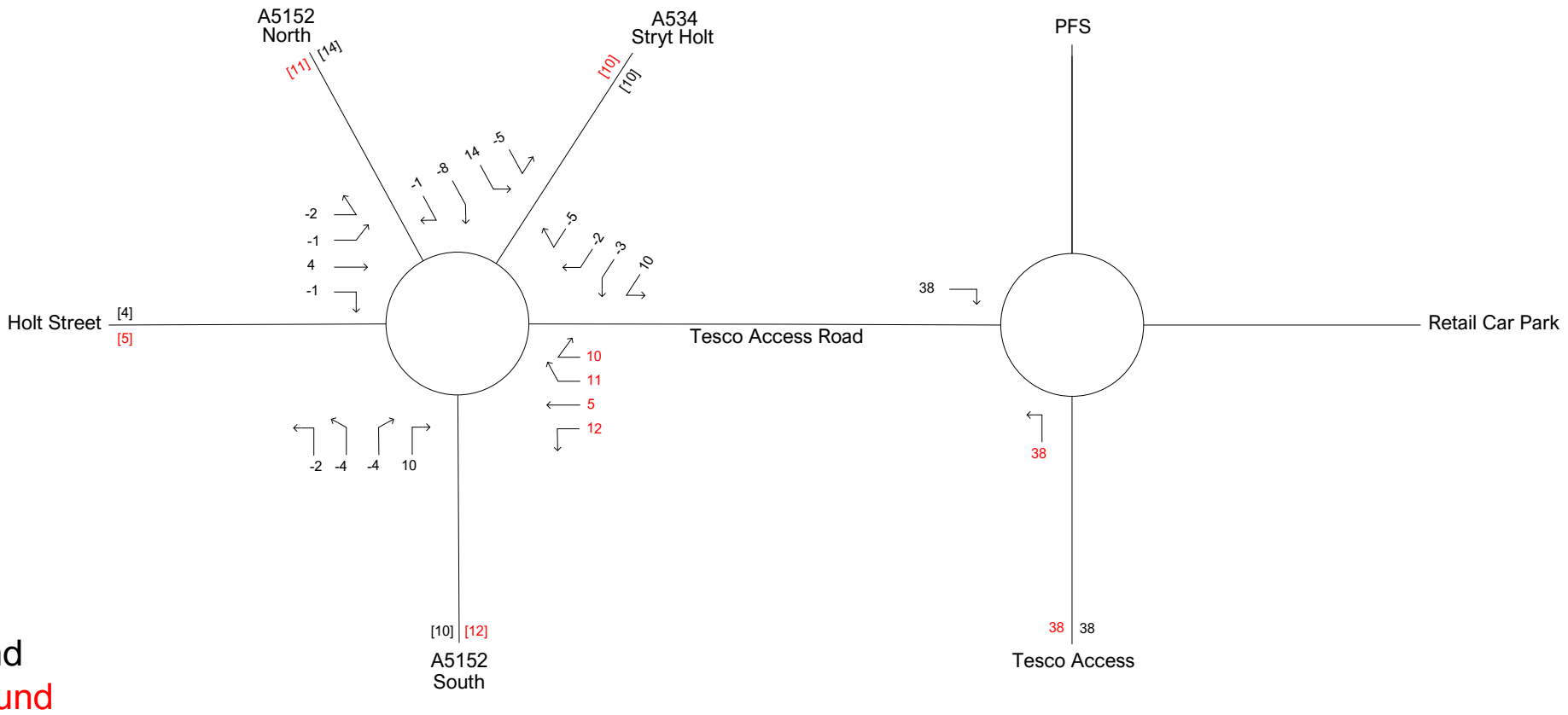


17:00 - 18:00 Hours Pm Peak
Inbound
Outbound

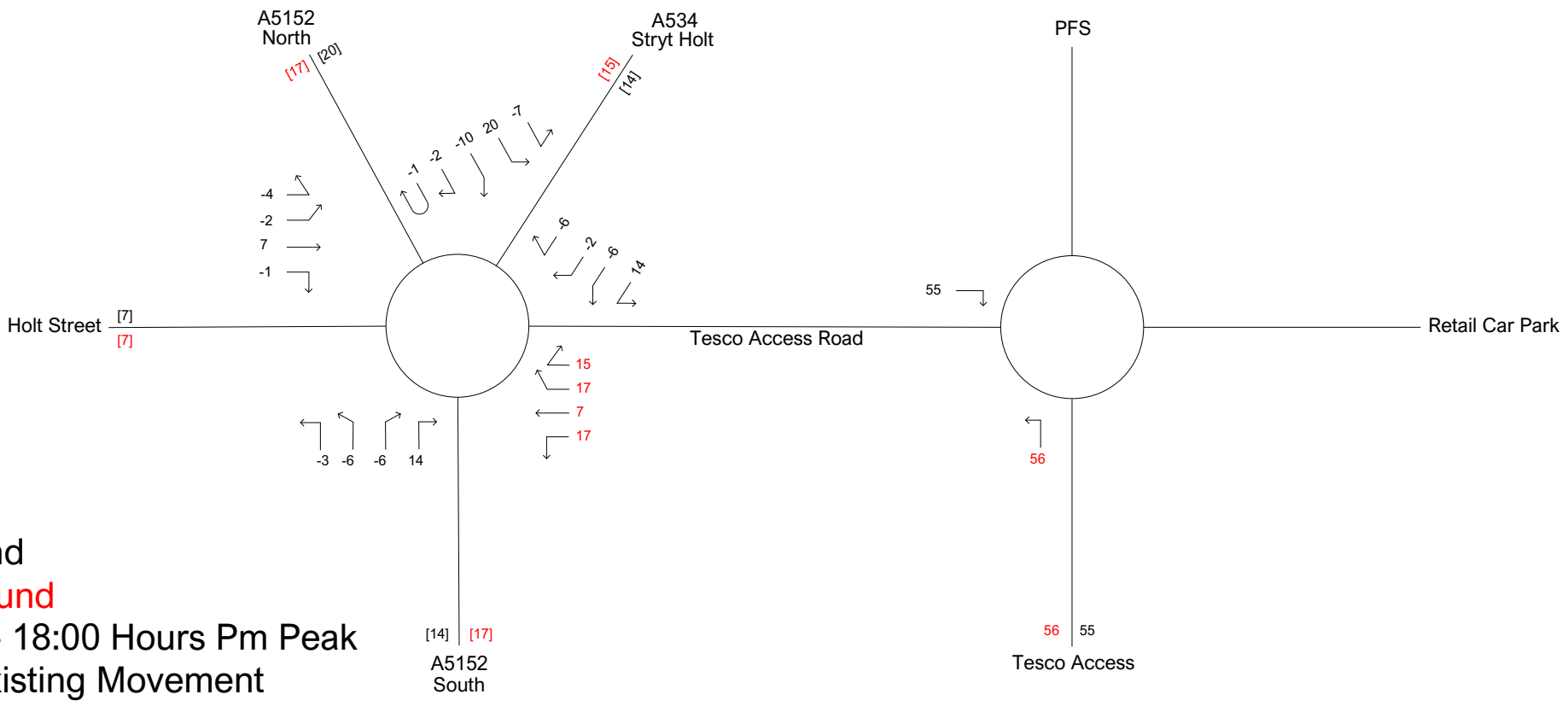
12:00 - 13:00 Hours
Saturday Peak
Inbound
Outbound

ADL TRAFFIC & HIGHWAYS

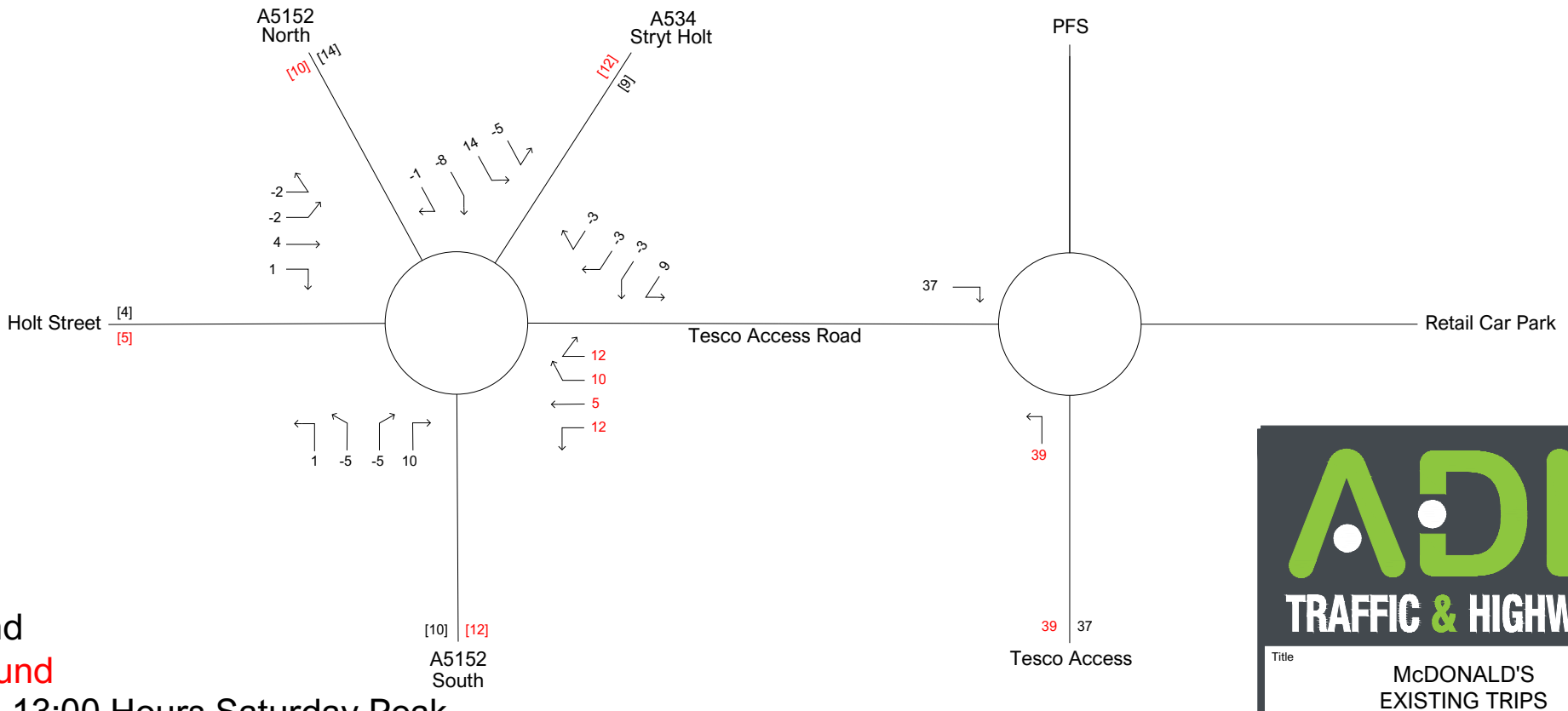
Title	MCDONALD'S ADDITIONAL TRIPS
Scale	NTS@A3
	APPENDIX 13.1



Inbound
Outbound
09:00 - 10:00 Hours Am Peak
[ ] = Existing Movement



Inbound
Outbound
17:00 - 18:00 Hours Pm Peak
[ ] = Existing Movement



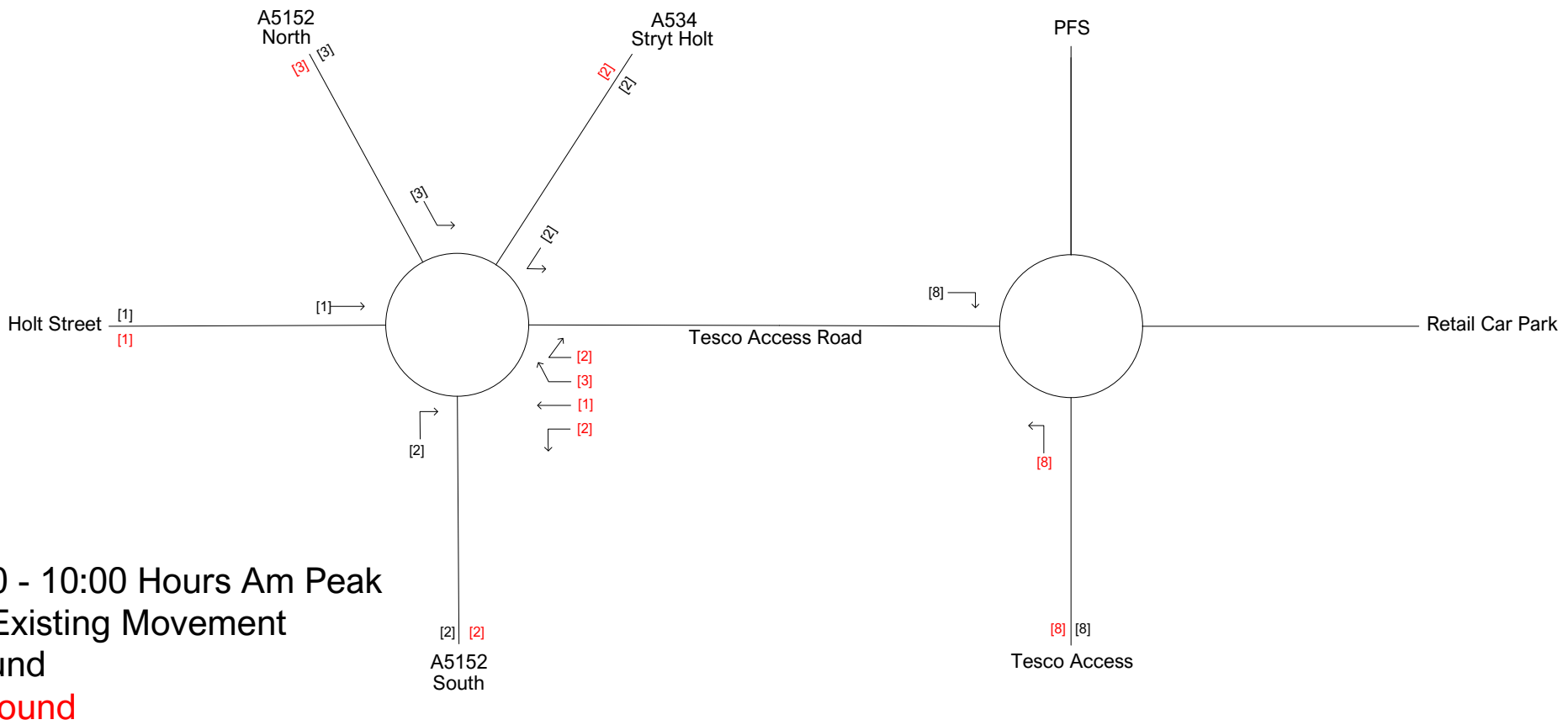
Inbound
Outbound
12:00 - 13:00 Hours Saturday Peak
[ ] = Existing Movement

TRAFFIC & HIGHWAYS

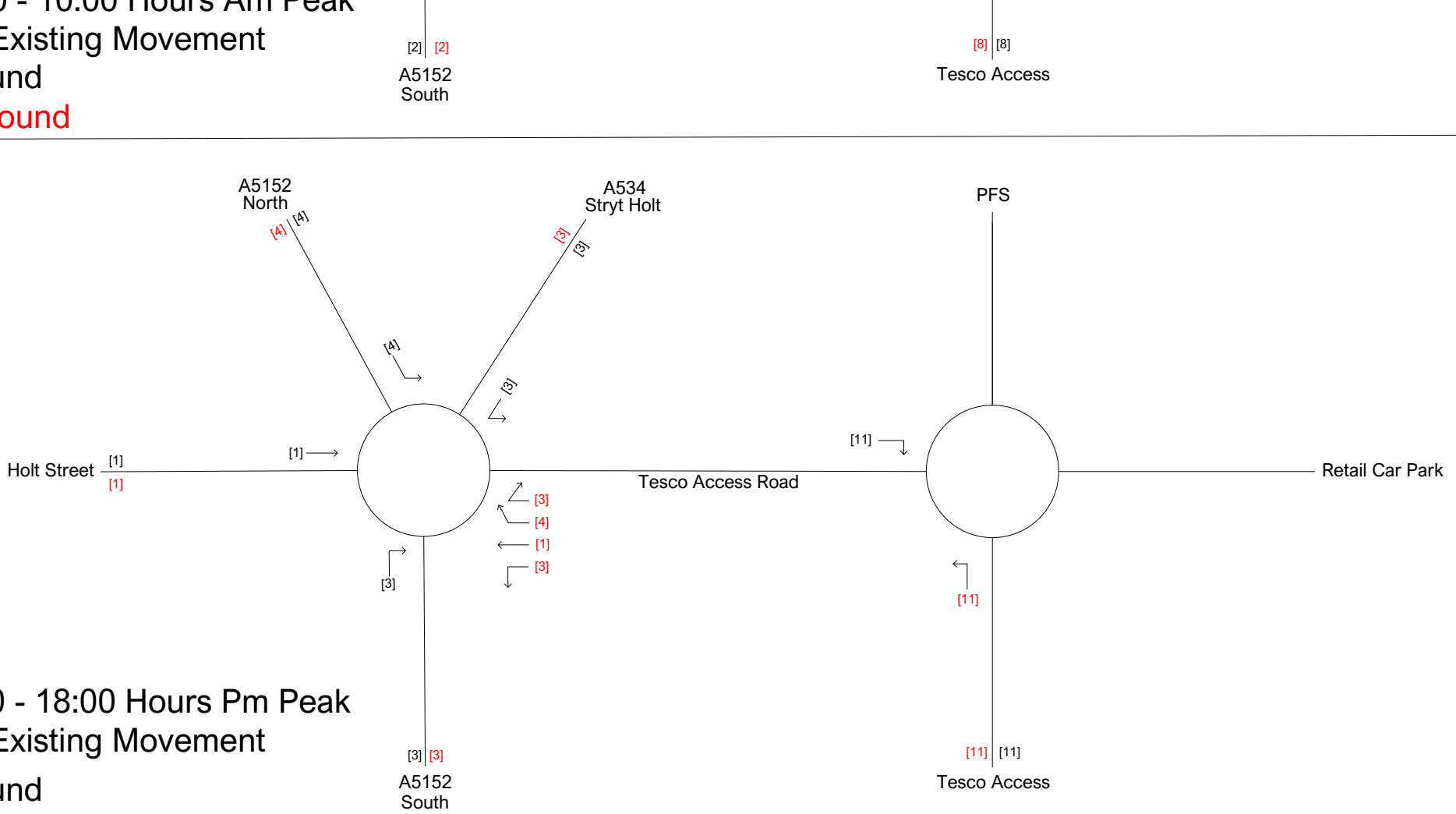
Title
McDONALD'S
EXISTING TRIPS

Scale
NTS@A3

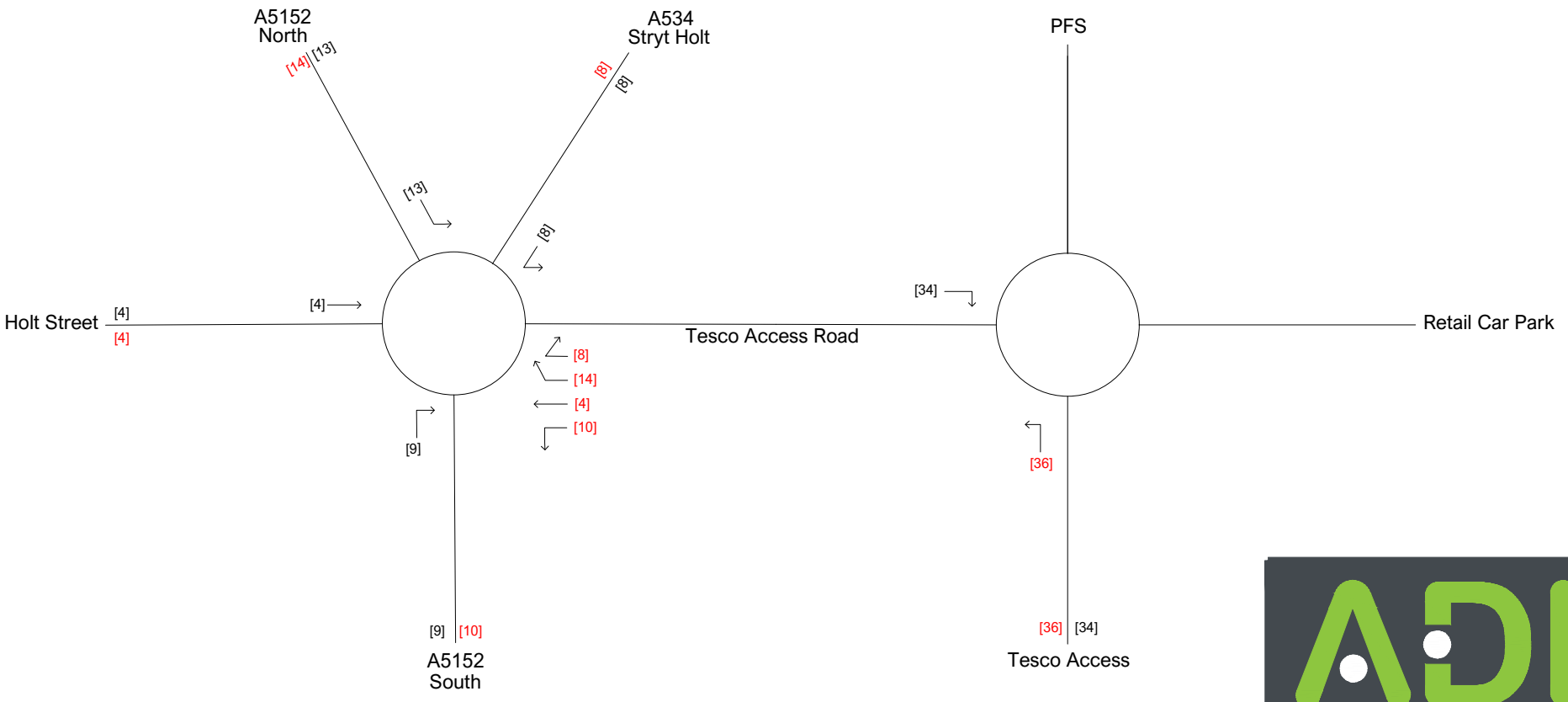
APPENDIX 13.2



09:00 - 10:00 Hours Am Peak
[ ] = Existing Movement
Inbound
Outbound



17:00 - 18:00 Hours Pm Peak
[ ] = Existing Movement
Inbound
Outbound



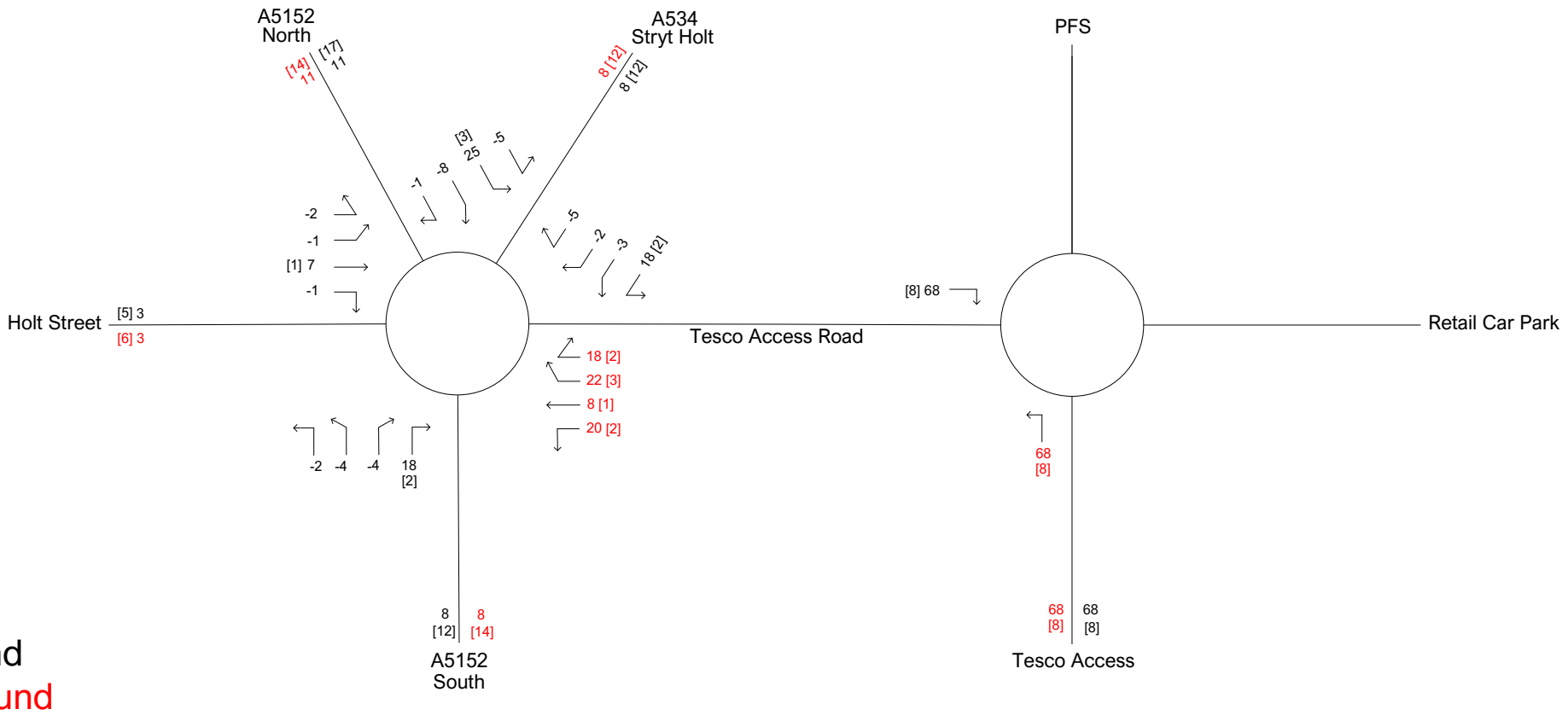
12:00 - 13:00 Hours Saturday Peak
[ ] = Existing Movement
Inbound
Outbound

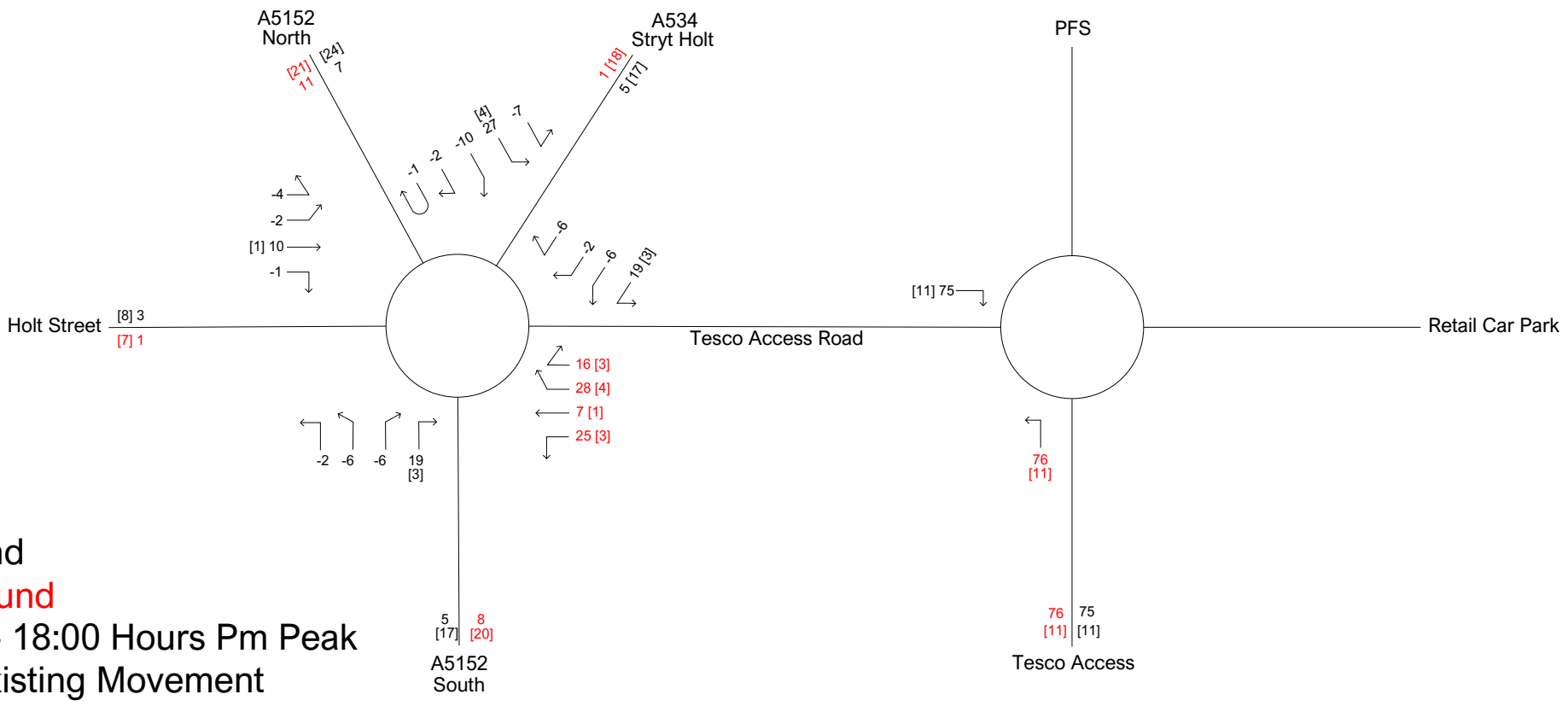
TRAFFIC & HIGHWAYS

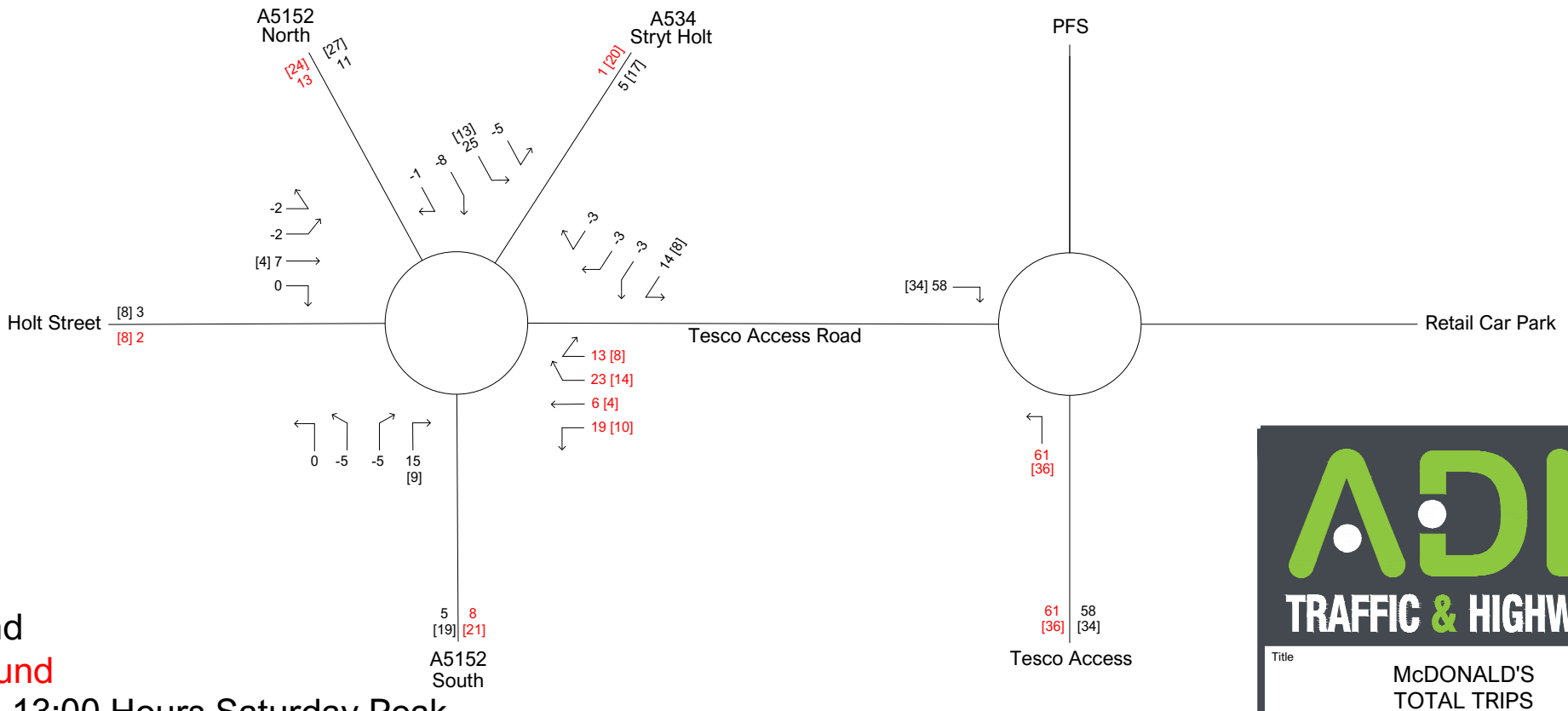
Title: MCDONALD'S
SHARED TRIPS

Scale: NTS@A3

APPENDIX 13.3







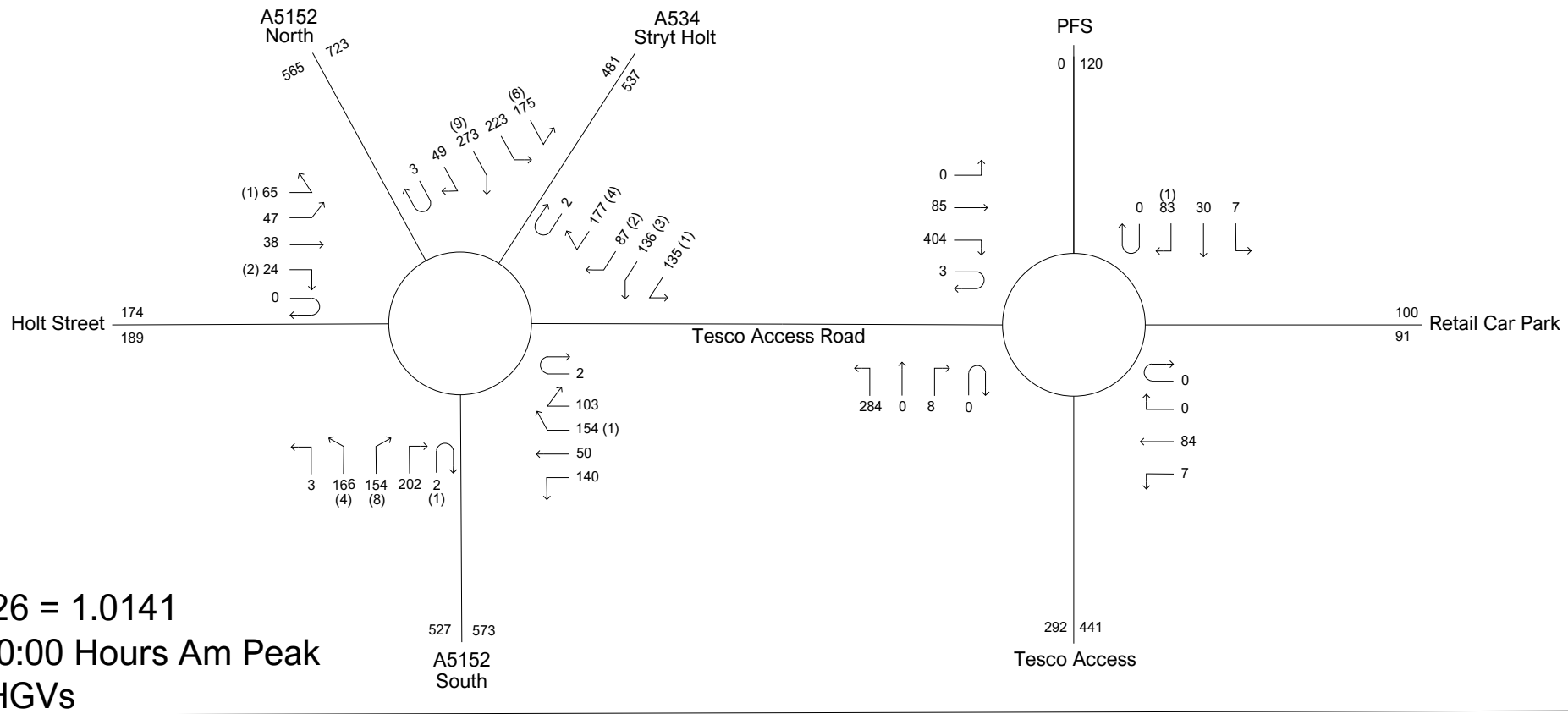
ADL TRAFFIC & HIGHWAYS

Title	McDONALD'S TOTAL TRIPS
Scale	NTS@A3
	APPENDIX 13.4

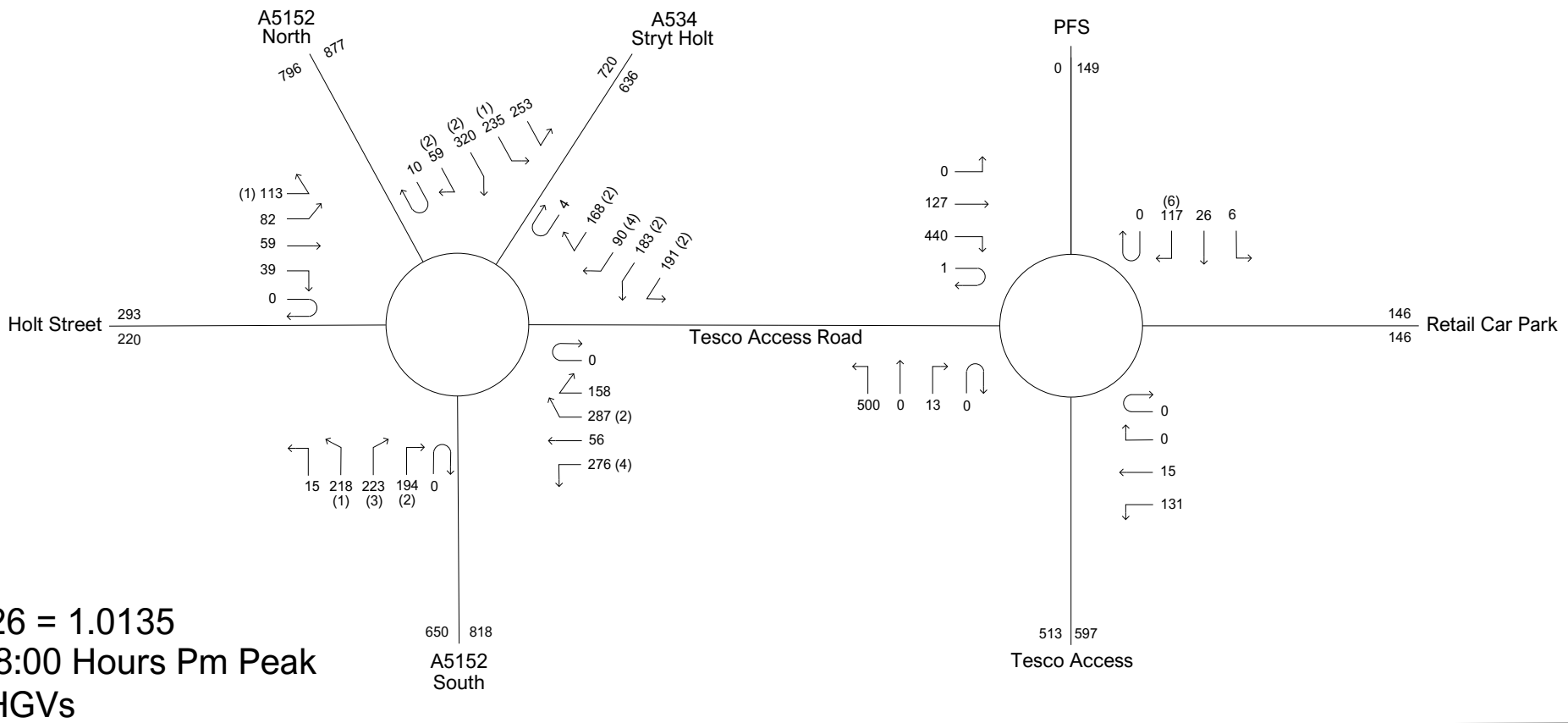
APPENDIX 14.0

TOTAL FLOWS

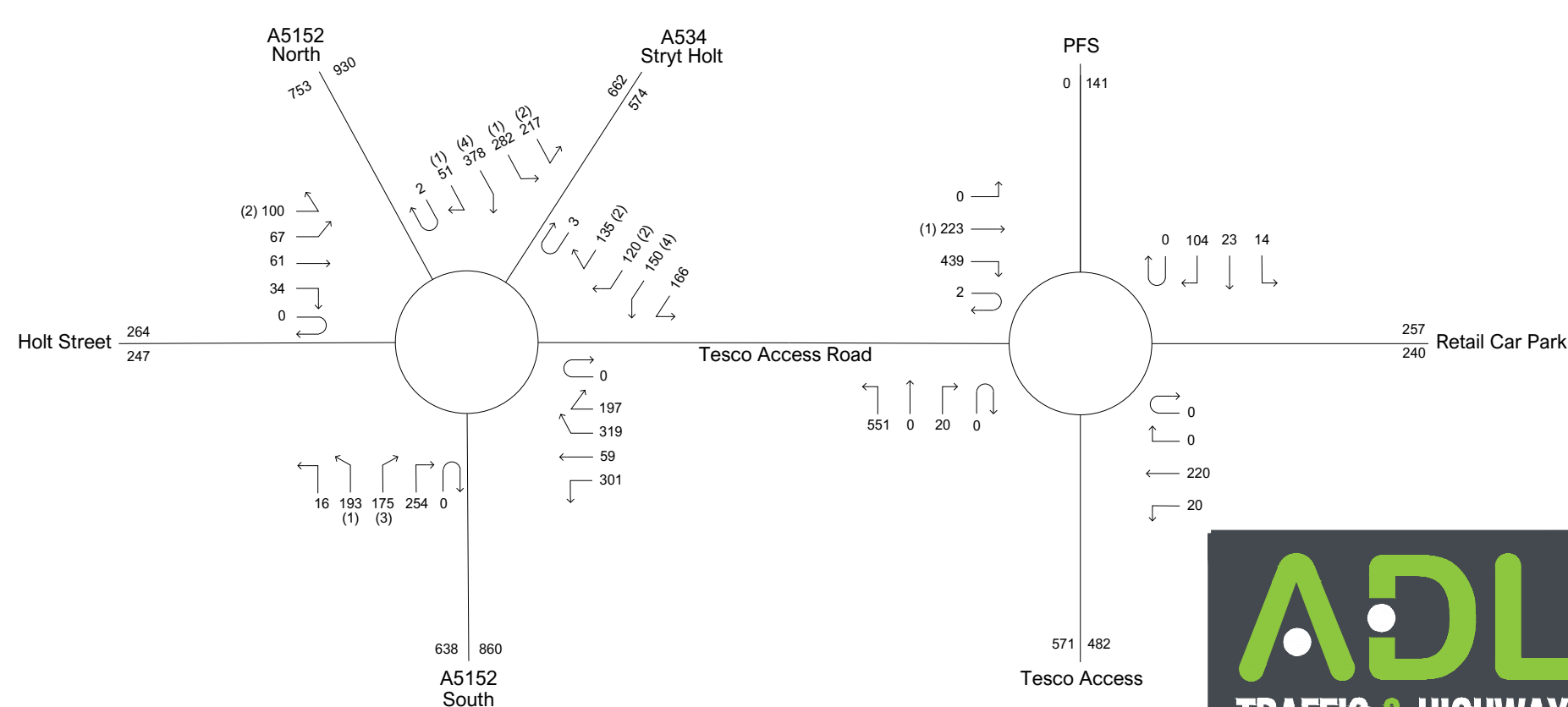
14.1	2026 Total Flows
14.2	2031 Total Flows
14.3	2036 Total Flows



2024-2026 = 1.0141
09:00 - 10:00 Hours Am Peak
( ) = No HGVs



2024-2026 = 1.0135
17:00 - 18:00 Hours Pm Peak
( ) = No HGVs



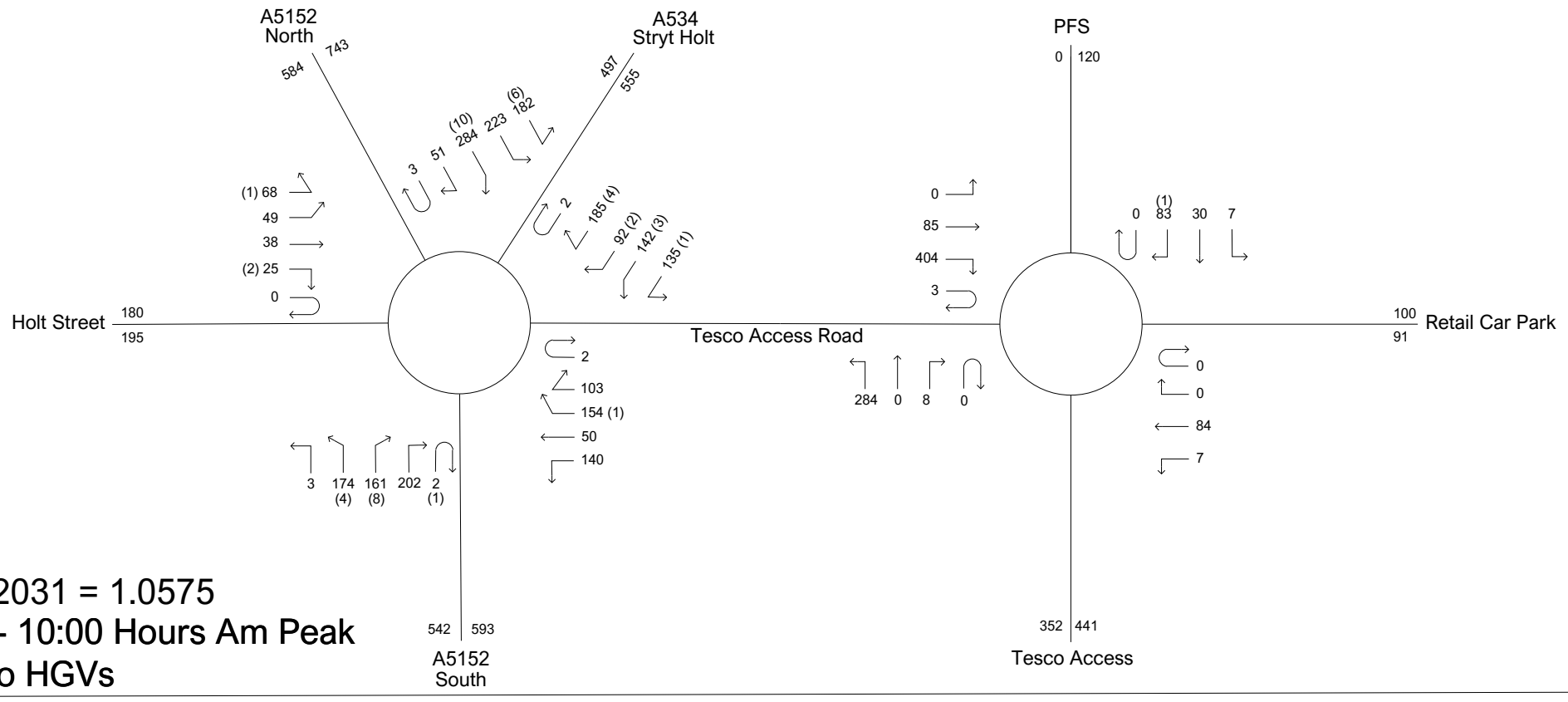
2024-2026 = 1.0136
12:00 - 13:00 Hours Saturday Peak
( ) = No HGVs

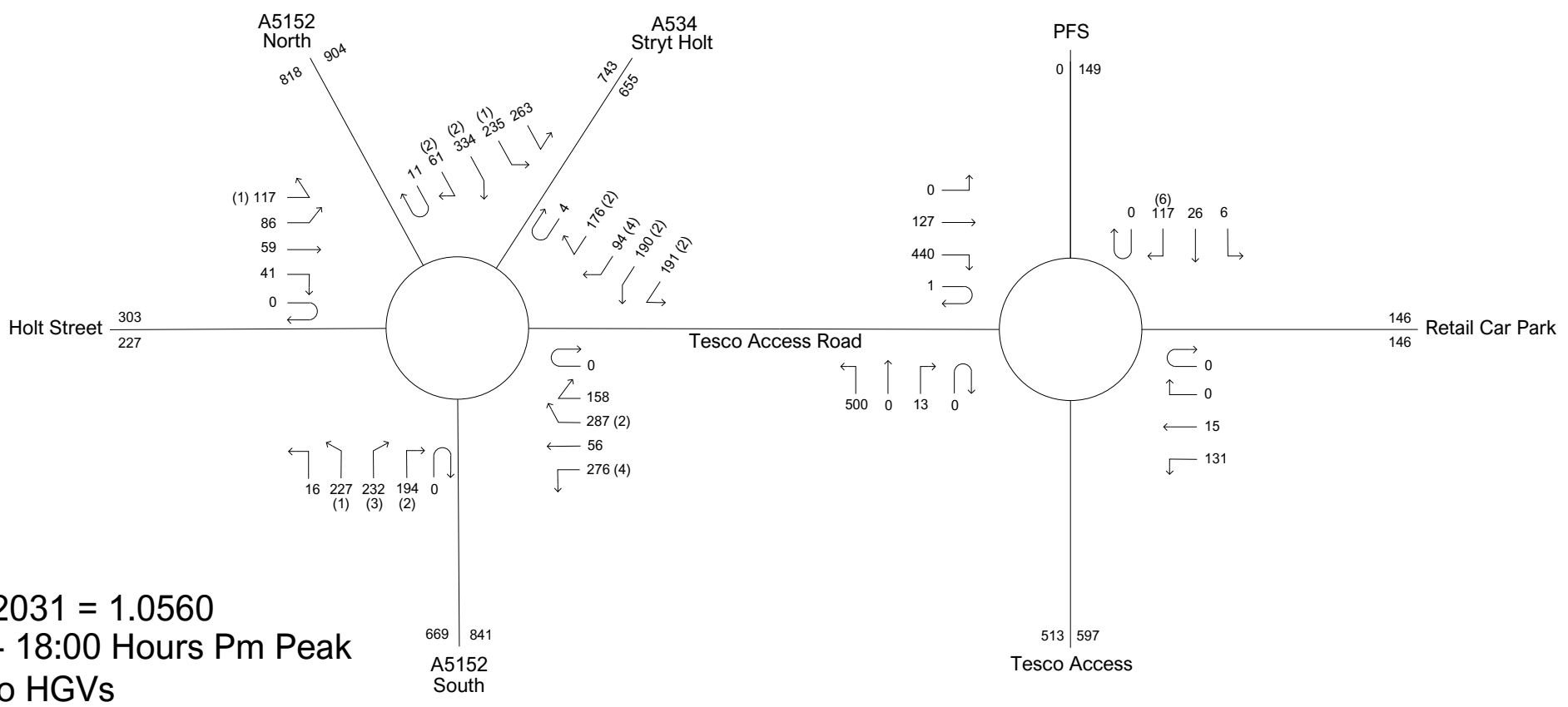
ADL TRAFFIC & HIGHWAYS

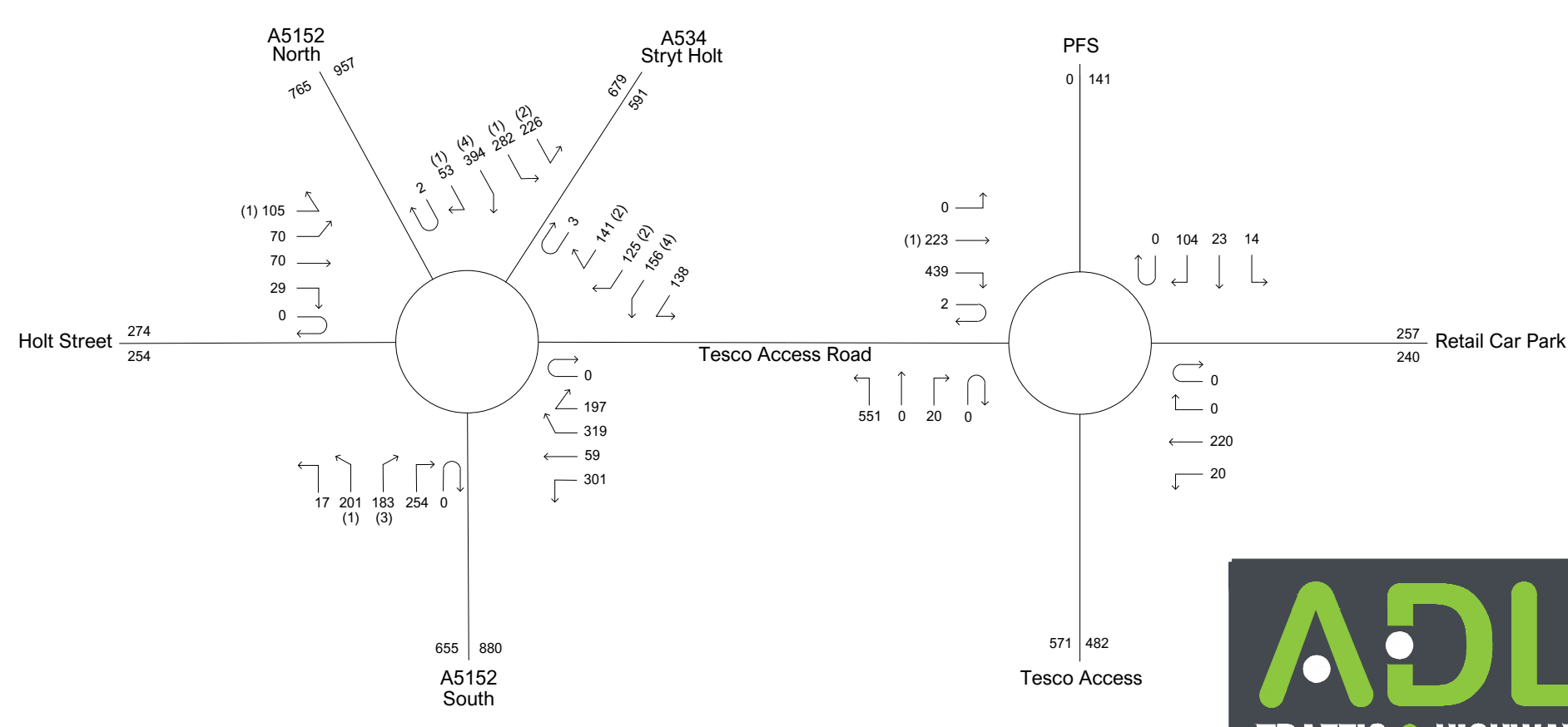
Title: 2026 TOTAL FLOWS

Scale: NTS@A3

APPENDIX 14.1





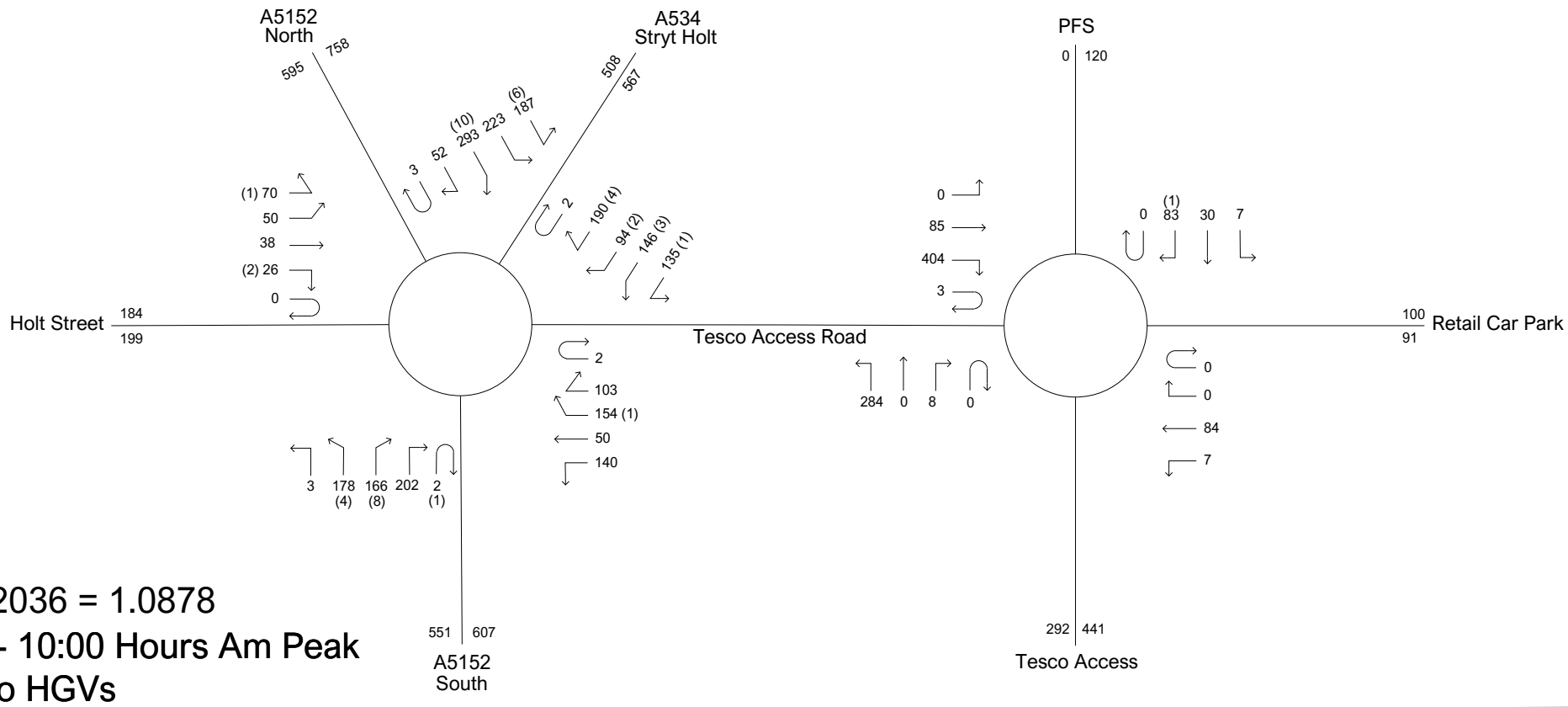


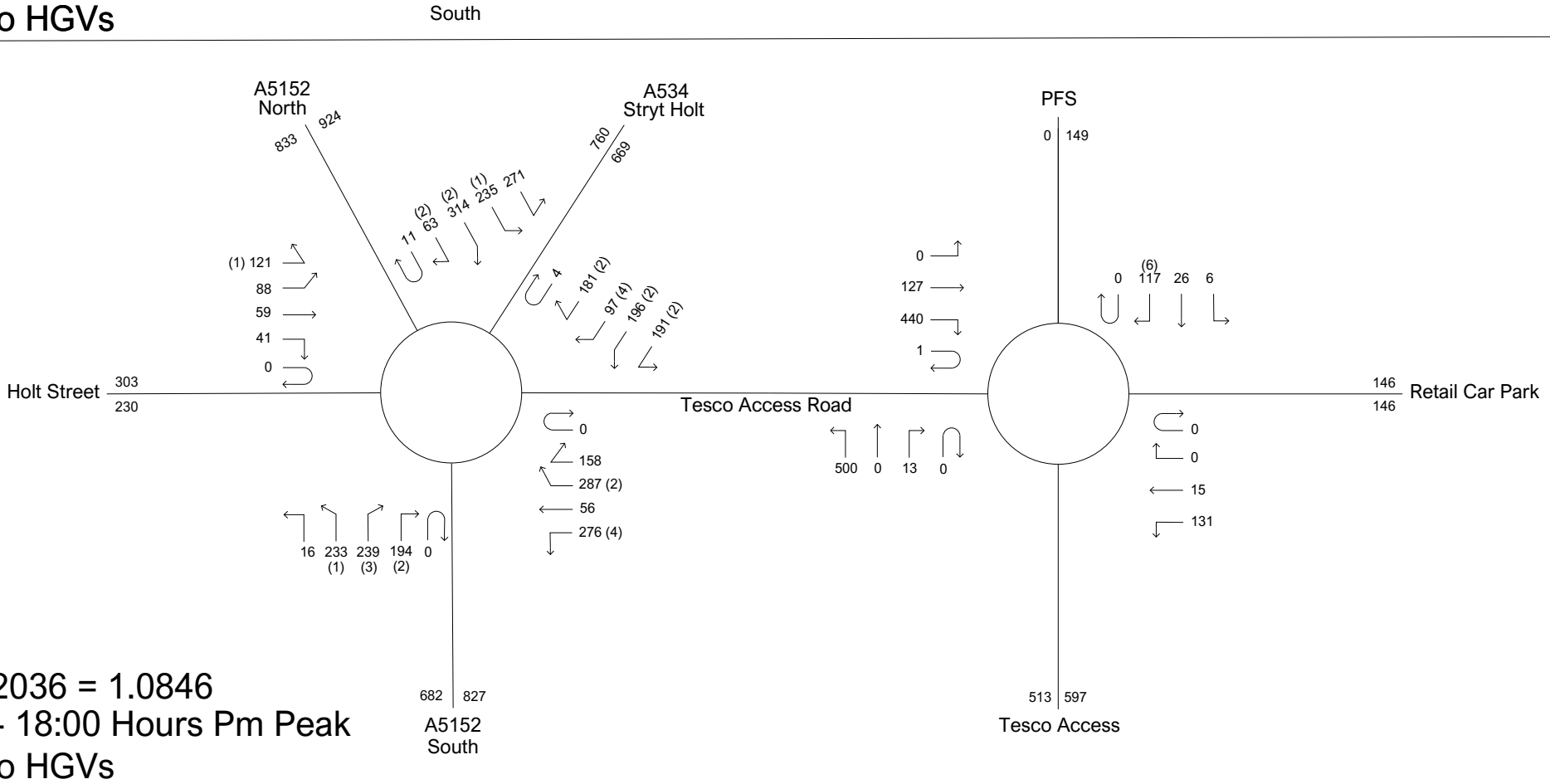
TRAFFIC & HIGHWAYS

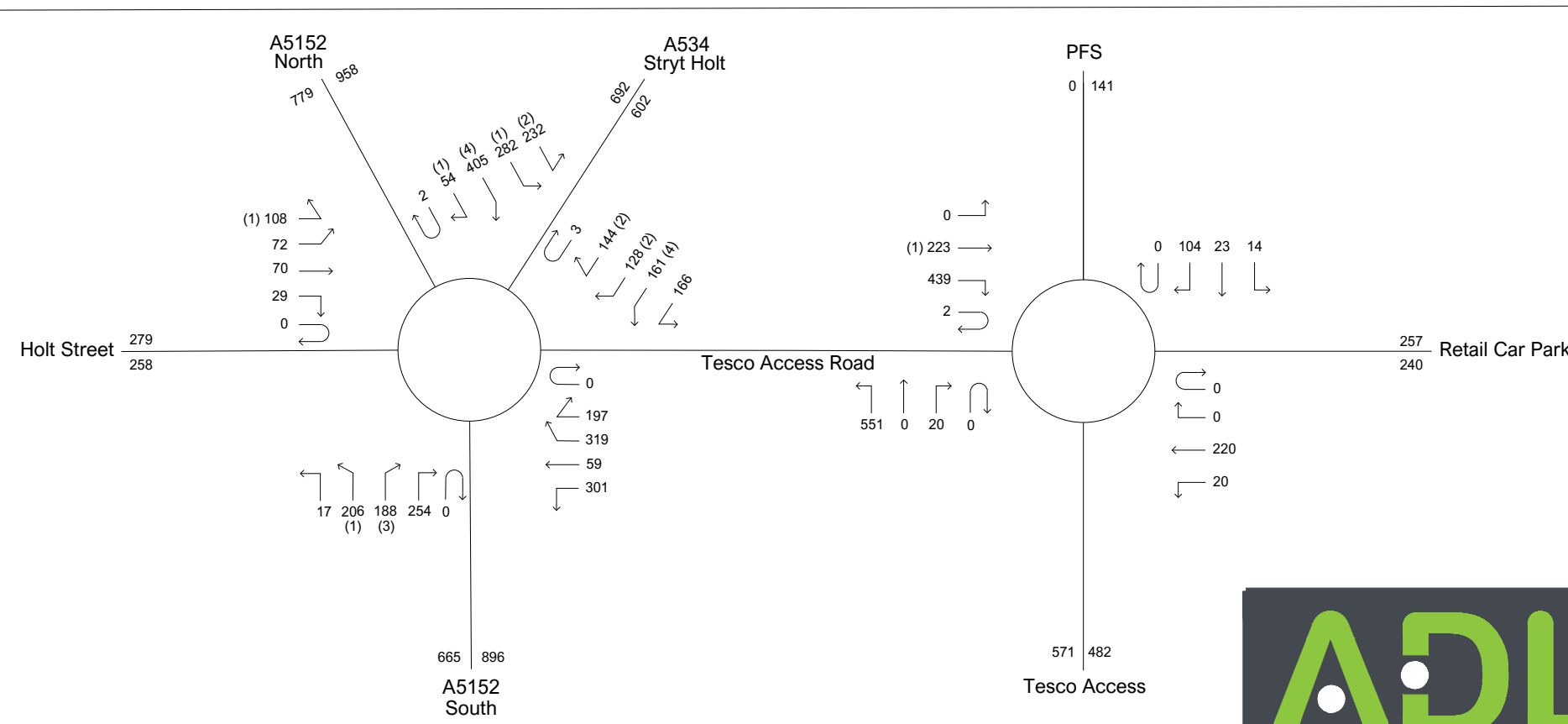
Title: 2031 TOTAL FLOWS

Scale: NTS@A3

APPENDIX 14.2







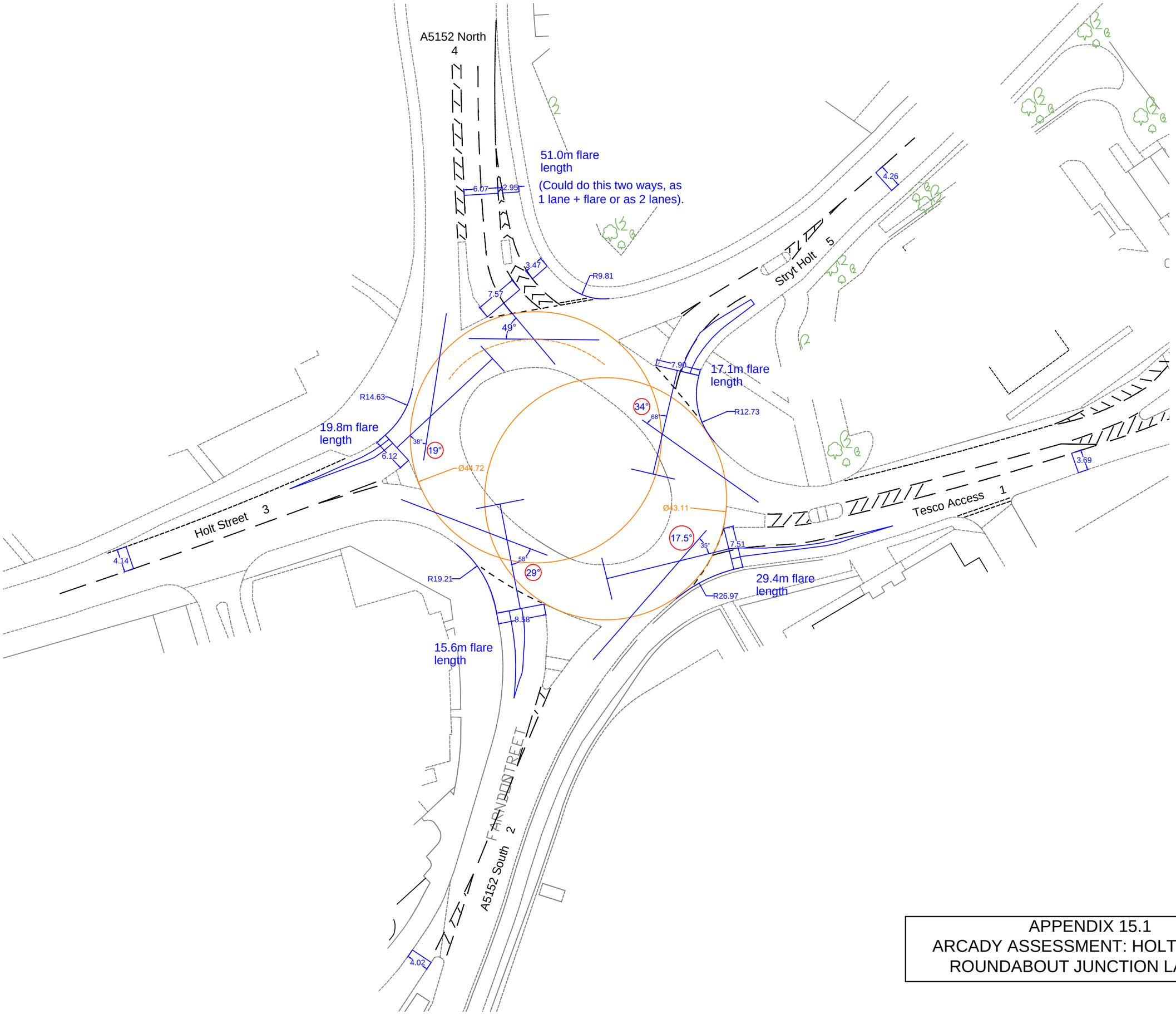
TRAFFIC & HIGHWAYS

Title	2036 TOTAL FLOWS
Scale	NTS@A3
	APPENDIX 14.3

APPENDIX 15.0

ARCADY ASSESSMENT: HOLT STREET ROUNDABOUT

15.1 Junction Layout
15.2 Output Results



APPENDIX 15.1
ARCADY ASSESSMENT: HOLT STREET
ROUNDABOUT JUNCTION LAYOUT

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.4.1693
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

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: Holt Street Roundabout.j10
Path: T:\4000-4099\4024 McD's Wrexham (Tesco Extra)\2024 Work\Modelling
Report generation date: 19/08/2024 16:39:25

» 2024 Surveyed Flows, AM
»2024 Surveyed Flows, PM
»2024 Surveyed Flows, Saturday
» 2026 Base Flows, AM
»2026 Base Flows, PM
»2026 Base Flows, Saturday
»2026 Total Flows , AM
»2026 Total Flows , PM
»2026 Total Flows, Saturday
»2031 Base Flows, AM
»2031 Base Flows, PM
»2031 Base Flows, Saturday
»2031 Total Flows, AM
»2031 Total Flows, PM
»2031 Total Flows, Saturday
»2036 Base Flows, AM
»2036 Base Flows, PM
»2036 Base Flows, Saturday
»2036 Total Flows, AM
»2036 Total Flows, PM
»2036 Total Flows, Saturday

Summary of junction performance

	AM					PM					Saturday				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2024 Surveyed Flows														
Arm 1		0.5	2.33	0.33	A		0.8	2.90	0.43	A		0.9	3.13	0.47	A
Arm 2		0.8	5.11	0.45	A		1.3	6.85	0.57	A		1.3	7.36	0.56	A
Arm 3	D1	0.4	3.59	0.30	A	D2	1.4	6.60	0.59	A	D3	2.0	8.07	0.67	A
Arm 4		0.6	4.03	0.39	A		1.1	5.80	0.53	A		1.2	6.06	0.54	A
Arm 5		0.2	4.10	0.17	A		0.6	6.42	0.36	A		0.5	6.29	0.33	A
	2026 Base Flows														
Arm 1		0.5	2.34	0.34	A		0.8	2.94	0.44	A		0.9	3.17	0.47	A
Arm 2		0.8	5.19	0.46	A		1.3	7.00	0.57	A		1.3	7.53	0.57	A
Arm 3	D4	0.4	3.62	0.30	A	D5	1.4	6.72	0.59	A	D6	2.0	8.25	0.67	A
Arm 4		0.6	4.07	0.39	A		1.2	5.89	0.54	A		1.2	6.16	0.54	A
Arm 5		0.2	4.13	0.18	A		0.6	6.55	0.37	A		0.5	6.37	0.34	A
	2026 Total Flows														
Arm 1		0.5	2.41	0.35	A		0.8	3.04	0.45	A		0.9	3.27	0.48	A
Arm 2		0.9	5.48	0.47	A		1.4	7.46	0.59	A		1.4	8.04	0.59	A
Arm 3	D7	0.5	3.85	0.35	A	D8	1.8	7.51	0.64	A	D9	2.5	9.51	0.72	A
Arm 4		0.7	4.25	0.41	A		1.2	6.25	0.55	A		1.3	6.50	0.56	A
Arm 5		0.2	4.30	0.19	A		0.6	6.97	0.38	A		0.5	6.69	0.35	A
	2031 Base Flows														
Arm 1		0.5	2.39	0.35	A		0.8	3.04	0.46	A		0.9	3.29	0.49	A
Arm 2		0.9	5.43	0.48	A		1.5	7.45	0.60	A		1.4	8.03	0.59	A
Arm 3	D10	0.4	3.72	0.30	A	D11	1.5	7.12	0.60	A	D12	2.2	8.81	0.69	A
Arm 4		0.7	4.20	0.41	A		1.2	6.17	0.56	A		1.3	6.46	0.56	A
Arm 5		0.2	4.23	0.19	A		0.6	6.89	0.39	A		0.5	6.62	0.35	A
	2031 Total Flows														
Arm 1		0.6	2.48	0.36	A		0.9	3.13	0.46	A		1.0	3.40	0.50	A
Arm 2		1.4	6.97	0.58	A		1.6	8.01	0.62	A		1.4	8.08	0.58	A
Arm 3	D13	0.5	3.97	0.35	A	D14	1.9	8.02	0.66	A	D15	2.7	10.12	0.73	B
Arm 4		0.7	4.39	0.42	A		1.3	6.57	0.57	A		1.4	6.84	0.58	A
Arm 5		0.2	4.42	0.20	A		0.7	7.38	0.41	A		0.6	7.01	0.37	A
	2036 Base Flows														
Arm 1		0.6	2.43	0.36	A		0.9	3.11	0.47	A		1.0	3.37	0.50	A
Arm 2		1.0	5.60	0.49	A		1.6	7.81	0.61	A		1.5	8.38	0.60	A
Arm 3	D16	0.4	3.79	0.31	A	D17	1.6	7.42	0.61	A	D18	2.3	9.21	0.70	A
Arm 4		0.7	4.29	0.42	A		1.3	6.41	0.57	A		1.3	6.66	0.57	A
Arm 5		0.2	4.29	0.19	A		0.7	7.16	0.40	A		0.6	6.81	0.37	A
	2036 Total Flows														
Arm 1		0.6	2.50	0.37	A		0.9	3.22	0.48	A		1.0	3.49	0.51	A
Arm 2		1.0	5.94	0.51	A		1.7	8.46	0.63	A		1.7	9.12	0.63	A
Arm 3	D19	0.6	4.05	0.36	A	D20	1.9	8.31	0.66	A	D21	2.9	10.99	0.75	B
Arm 4		0.8	4.48	0.43	A		1.4	6.84	0.59	A		1.4	7.06	0.59	A
Arm 5		0.3	4.48	0.20	A		0.7	7.69	0.42	A		0.6	7.22	0.38	A

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

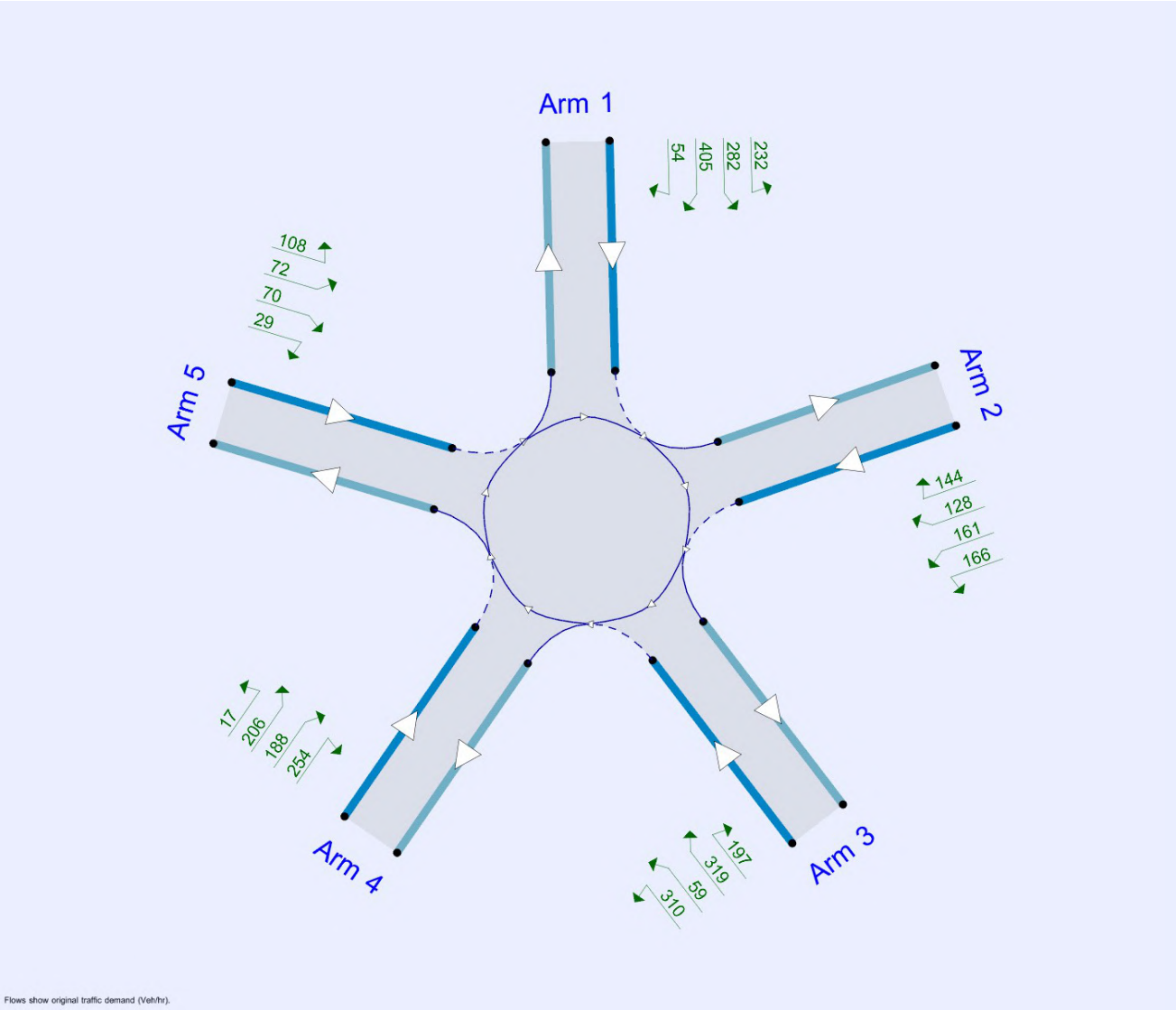
File summary

File Description

Title	
Location	
Site number	
Date	26/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADL\Peter
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	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

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	2024 Surveyed Flows	AM	ONE HOUR	08:45	10:15	15	✓
D2	2024 Surveyed Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Surveyed Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D4	2026 Base Flows	AM	ONE HOUR	08:45	10:15	15	✓
D5	2026 Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D6	2026 Base Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D7	2026 Total Flows	AM	ONE HOUR	08:45	10:15	15	✓
D8	2026 Total Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Total Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D10	2031 Base Flows	AM	ONE HOUR	08:45	10:15	15	✓
D11	2031 Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D12	2031 Base Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D13	2031 Total Flows	AM	ONE HOUR	08:45	10:15	15	✓
D14	2031 Total Flows	PM	ONE HOUR	16:45	18:15	15	✓
D15	2031 Total Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D16	2036 Base Flows	AM	ONE HOUR	08:45	10:15	15	✓
D17	2036 Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D18	2036 Base Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D19	2036 Total Flows	AM	ONE HOUR	08:45	10:15	15	✓
D20	2036 Total Flows	PM	ONE HOUR	16:45	18:15	15	✓
D21	2036 Total Flows	Saturday	ONE HOUR	11:45	13:15	15	✓

Analysis Set Details

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

2024 Surveyed Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.69	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.69	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A5152 (N)		
2	Stryt Holt		
3	Tesco Access		
4	A5152 (S)		
5	Holt Street		

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)	Entry only	Exit only
1	9.02	11.04	30.0	9.8	44.7	49.0		
2	4.26	7.90	17.1	12.7	43.1	34.0		
3	3.69	7.51	29.4	27.0	43.1	17.5		
4	4.02	8.58	15.6	19.2	43.1	29.0		
5	4.14	6.12	19.8	14.6	44.7	19.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.821	2859
2	0.654	1865
3	0.718	2044
4	0.680	1935
5	0.643	1743

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	2024 Surveyed Flows	AM	ONE HOUR	08:45	10:15	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	✓	704	100.000
2		ONE HOUR	✓	523	100.000
3		ONE HOUR	✓	381	100.000
4		ONE HOUR	✓	515	100.000
5		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	177	198	277	49
	2	179	2	117	137	88
	3	132	85	2	120	42
	4	168	156	184	2	5
	5	66	47	31	25	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.25	0.28	0.39	0.07
	2	0.34	0.00	0.22	0.26	0.17
	3	0.35	0.22	0.01	0.31	0.11
	4	0.33	0.30	0.36	0.00	0.01
	5	0.39	0.28	0.18	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	2	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.020	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	530	540
	09:00-09:15	633	645
	09:15-09:30	775	790
	09:30-09:45	775	790
	09:45-10:00	633	645
	10:00-10:15	530	540
2	08:45-09:00	394	401
	09:00-09:15	470	478
	09:15-09:30	576	586
	09:30-09:45	576	586
	09:45-10:00	470	478
	10:00-10:15	394	401
3	08:45-09:00	287	288
	09:00-09:15	343	344
	09:15-09:30	419	421
	09:30-09:45	419	421
	09:45-10:00	343	344
	10:00-10:15	287	288
4	08:45-09:00	388	397
	09:00-09:15	463	474
	09:15-09:30	567	580
	09:30-09:45	567	580
	09:45-10:00	463	474
	10:00-10:15	388	397
5	08:45-09:00	127	130
	09:00-09:15	152	155
	09:15-09:30	186	190
	09:30-09:45	186	190
	09:45-10:00	152	155
	10:00-10:15	127	130

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.33	2.33	0.5	A	646	969
2	0.45	5.11	0.8	A	480	720
3	0.30	3.59	0.4	A	350	524
4	0.39	4.03	0.6	A	473	709
5	0.17	4.10	0.2	A	155	233

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	401	2475	0.214	529	411	0.0	0.3	1.849	A
2	394	98	579	1456	0.271	392	351	0.0	0.4	3.381	A
3	287	72	572	1617	0.177	286	399	0.0	0.2	2.703	A
4	388	97	437	1597	0.243	386	421	0.0	0.3	2.972	A
5	127	32	685	1270	0.100	127	138	0.0	0.1	3.150	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	633	158	480	2411	0.263	633	492	0.3	0.4	2.024	A
2	470	118	693	1381	0.340	470	420	0.4	0.5	3.945	A
3	343	86	684	1535	0.223	342	478	0.2	0.3	3.019	A
4	463	116	523	1539	0.301	463	504	0.3	0.4	3.343	A
5	152	38	820	1183	0.128	152	165	0.1	0.1	3.490	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	775	194	587	2322	0.334	775	602	0.4	0.5	2.326	A
2	576	144	848	1280	0.450	575	514	0.5	0.8	5.094	A
3	419	105	838	1422	0.295	419	585	0.3	0.4	3.587	A
4	567	142	640	1460	0.388	566	617	0.4	0.6	4.024	A
5	186	47	1004	1065	0.175	186	202	0.1	0.2	4.094	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	775	194	588	2322	0.334	775	603	0.5	0.5	2.327	A
2	576	144	849	1280	0.450	576	514	0.8	0.8	5.114	A
3	419	105	839	1421	0.295	419	586	0.4	0.4	3.593	A
4	567	142	641	1459	0.389	567	618	0.6	0.6	4.034	A
5	186	47	1005	1064	0.175	186	203	0.2	0.2	4.100	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	633	158	481	2410	0.263	633	494	0.5	0.4	2.028	A
2	470	118	694	1381	0.341	471	420	0.8	0.5	3.965	A
3	343	86	686	1533	0.223	343	479	0.4	0.3	3.027	A
4	463	116	524	1538	0.301	464	505	0.6	0.4	3.356	A
5	152	38	822	1181	0.129	152	166	0.2	0.1	3.500	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	530	133	402	2474	0.214	530	413	0.4	0.3	1.854	A
2	394	98	581	1454	0.271	394	352	0.5	0.4	3.399	A
3	287	72	574	1615	0.178	287	401	0.3	0.2	2.710	A
4	388	97	439	1595	0.243	388	423	0.4	0.3	2.985	A
5	127	32	688	1268	0.100	127	139	0.1	0.1	3.156	A

2024 Surveyed Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.45	A

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	2024 Surveyed Flows	PM	ONE HOUR	16:45	18:15	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	✓	861	100.000
2		ONE HOUR	✓	625	100.000
3		ONE HOUR	✓	701	100.000
4		ONE HOUR	✓	639	100.000
5		ONE HOUR	✓	286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	11	256	208	326	60
	2	172	4	172	186	91
	3	259	142	0	251	49
	4	221	226	175	0	17
	5	115	83	49	39	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.30	0.24	0.38	0.07
	2	0.28	0.01	0.28	0.30	0.15
	3	0.37	0.20	0.00	0.36	0.07
	4	0.35	0.35	0.27	0.00	0.03
	5	0.40	0.29	0.17	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	1	1	3
	2	1	0	2	1	4
	3	1	0	0	2	0
	4	1	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.010	1.010	1.030
	2	1.010	1.000	1.020	1.010	1.040
	3	1.010	1.000	1.000	1.020	1.000
	4	1.010	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	648	654
	17:00-17:15	774	780
	17:15-17:30	948	956
	17:30-17:45	948	956
	17:45-18:00	774	780
	18:00-18:15	648	654
2	16:45-17:00	471	479
	17:00-17:15	562	571
	17:15-17:30	688	700
	17:30-17:45	688	700
	17:45-18:00	562	571
	18:00-18:15	471	479
3	16:45-17:00	528	533
	17:00-17:15	630	637
	17:15-17:30	772	780
	17:30-17:45	772	780
	17:45-18:00	630	637
	18:00-18:15	528	533
4	16:45-17:00	481	486
	17:00-17:15	574	580
	17:15-17:30	704	710
	17:30-17:45	704	710
	17:45-18:00	574	580
	18:00-18:15	481	486
5	16:45-17:00	215	216
	17:00-17:15	257	258
	17:15-17:30	315	316
	17:30-17:45	315	316
	17:45-18:00	257	258
	18:00-18:15	215	216

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.43	2.90	0.8	A	790	1185
2	0.57	6.85	1.3	A	574	860
3	0.59	6.60	1.4	A	643	965
4	0.53	5.80	1.1	A	586	880
5	0.36	6.42	0.6	A	262	394

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	648	162	538	2395	0.271	647	583	0.0	0.4	2.057	A
2	471	118	652	1411	0.333	469	533	0.0	0.5	3.812	A
3	528	132	667	1542	0.342	526	453	0.0	0.5	3.536	A
4	481	120	591	1513	0.318	479	602	0.0	0.5	3.476	A
5	215	54	907	1150	0.187	214	163	0.0	0.2	3.844	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	774	194	645	2308	0.335	773	698	0.4	0.5	2.346	A
2	562	140	780	1328	0.423	561	638	0.5	0.7	4.688	A
3	630	158	798	1447	0.435	629	542	0.5	0.8	4.396	A
4	574	144	707	1434	0.401	574	720	0.5	0.7	4.183	A
5	257	64	1086	1035	0.249	257	195	0.2	0.3	4.626	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	948	237	788	2190	0.433	947	854	0.5	0.8	2.893	A
2	688	172	954	1214	0.567	686	781	0.7	1.3	6.783	A
3	772	193	977	1319	0.585	769	664	0.8	1.4	6.524	A
4	704	176	865	1326	0.531	702	881	0.7	1.1	5.751	A
5	315	79	1328	878	0.359	314	238	0.3	0.6	6.371	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	948	237	790	2188	0.433	948	857	0.8	0.8	2.901	A
2	688	172	956	1213	0.567	688	783	1.3	1.3	6.851	A
3	772	193	979	1317	0.586	772	665	1.4	1.4	6.599	A
4	704	176	868	1324	0.531	704	883	1.1	1.1	5.799	A
5	315	79	1332	876	0.360	315	239	0.6	0.6	6.419	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	774	194	648	2305	0.336	775	702	0.8	0.5	2.353	A
2	562	140	782	1326	0.424	564	641	1.3	0.7	4.737	A
3	630	158	801	1445	0.436	633	544	1.4	0.8	4.447	A
4	574	144	711	1431	0.401	576	723	1.1	0.7	4.219	A
5	257	64	1092	1031	0.249	258	196	0.6	0.3	4.663	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	648	162	542	2392	0.271	649	587	0.5	0.4	2.065	A
2	471	118	654	1409	0.334	471	536	0.7	0.5	3.843	A
3	528	132	670	1539	0.343	529	455	0.8	0.5	3.565	A
4	481	120	594	1511	0.318	482	605	0.7	0.5	3.504	A
5	215	54	913	1147	0.188	216	164	0.3	0.2	3.868	A

2024 Surveyed Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.98	A

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	2024 Surveyed Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	910	100.000
2		ONE HOUR	✓	563	100.000
3		ONE HOUR	✓	815	100.000
4		ONE HOUR	✓	628	100.000
5		ONE HOUR	✓	259	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	219	257	381	51
	2	136	3	152	151	121
	3	296	184	0	282	53
	4	195	178	239	0	16
	5	101	68	63	27	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.28	0.42	0.06
	2	0.24	0.01	0.27	0.27	0.21
	3	0.36	0.23	0.00	0.35	0.07
	4	0.31	0.28	0.38	0.00	0.03
	5	0.39	0.26	0.24	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	2	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	2	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.020	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.020	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	685	690
	12:00-12:15	818	824
	12:15-12:30	1002	1010
	12:30-12:45	1002	1010
	12:45-13:00	818	824
	13:00-13:15	685	690
2	11:45-12:00	424	431
	12:00-12:15	506	515
	12:15-12:30	620	631
	12:30-12:45	620	631
	12:45-13:00	506	515
	13:00-13:15	424	431
3	11:45-12:00	614	614
	12:00-12:15	733	733
	12:15-12:30	897	897
	12:30-12:45	897	897
	12:45-13:00	733	733
	13:00-13:15	614	614
4	11:45-12:00	473	477
	12:00-12:15	565	570
	12:15-12:30	691	698
	12:30-12:45	691	698
	12:45-13:00	565	570
	13:00-13:15	473	477
5	11:45-12:00	195	197
	12:00-12:15	233	235
	12:15-12:30	285	287
	12:30-12:45	285	287
	12:45-13:00	233	235
	13:00-13:15	195	197

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.47	3.13	0.9	A	835	1253
2	0.56	7.36	1.3	A	517	775
3	0.67	8.07	2.0	A	748	1122
4	0.54	6.06	1.2	A	576	864
5	0.33	6.29	0.5	A	238	356

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	685	171	571	2369	0.289	683	547	0.0	0.4	2.133	A
2	424	106	766	1339	0.316	422	489	0.0	0.5	3.916	A
3	614	153	654	1566	0.392	611	533	0.0	0.6	3.760	A
4	473	118	634	1487	0.318	471	631	0.0	0.5	3.537	A
5	195	49	924	1136	0.172	194	181	0.0	0.2	3.818	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	818	205	684	2277	0.359	817	655	0.4	0.6	2.464	A
2	506	127	916	1242	0.407	505	585	0.5	0.7	4.878	A
3	733	183	783	1472	0.498	731	638	0.6	1.0	4.849	A
4	565	141	759	1402	0.403	564	755	0.5	0.7	4.289	A
5	233	58	1107	1019	0.229	232	216	0.2	0.3	4.575	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1002	250	836	2153	0.465	1001	801	0.6	0.9	3.123	A
2	620	155	1121	1110	0.559	618	716	0.7	1.2	7.280	A
3	897	224	958	1345	0.667	893	781	1.0	2.0	7.910	A
4	691	173	928	1288	0.537	690	923	0.7	1.1	6.000	A
5	285	71	1353	861	0.331	284	264	0.3	0.5	6.239	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1002	250	839	2150	0.466	1002	804	0.9	0.9	3.133	A
2	620	155	1123	1109	0.559	620	718	1.2	1.3	7.361	A
3	897	224	960	1343	0.668	897	783	2.0	2.0	8.069	A
4	691	173	931	1285	0.538	691	926	1.1	1.2	6.062	A
5	285	71	1357	858	0.332	285	265	0.5	0.5	6.285	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	818	205	688	2274	0.360	819	659	0.9	0.6	2.475	A
2	506	127	919	1240	0.408	508	588	1.3	0.7	4.933	A
3	733	183	786	1470	0.498	737	641	2.0	1.0	4.934	A
4	565	141	764	1399	0.404	566	759	1.2	0.7	4.334	A
5	233	58	1113	1015	0.229	234	218	0.5	0.3	4.614	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	685	171	575	2367	0.289	686	551	0.6	0.4	2.142	A
2	424	106	769	1337	0.317	425	492	0.7	0.5	3.948	A
3	614	153	657	1564	0.392	615	536	1.0	0.7	3.798	A
4	473	118	638	1484	0.319	474	634	0.7	0.5	3.564	A
5	195	49	930	1132	0.172	195	182	0.3	0.2	3.843	A

2026 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.73	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.73	A

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	2026 Base Flows	AM	ONE HOUR	08:45	10:15	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	✓	712	100.000
2		ONE HOUR	✓	529	100.000
3		ONE HOUR	✓	381	100.000
4		ONE HOUR	✓	519	100.000
5		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	180	198	281	50
	2	182	2	117	139	89
	3	132	85	2	120	42
	4	170	158	184	2	5
	5	67	48	31	25	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.25	0.28	0.39	0.07
	2	0.34	0.00	0.22	0.26	0.17
	3	0.35	0.22	0.01	0.31	0.11
	4	0.33	0.30	0.35	0.00	0.01
	5	0.39	0.28	0.18	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	2	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.020	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	536	546
	09:00-09:15	640	653
	09:15-09:30	784	799
	09:30-09:45	784	799
	09:45-10:00	640	653
	10:00-10:15	536	546
2	08:45-09:00	398	405
	09:00-09:15	476	484
	09:15-09:30	582	593
	09:30-09:45	582	593
	09:45-10:00	476	484
	10:00-10:15	398	405
3	08:45-09:00	287	288
	09:00-09:15	343	344
	09:15-09:30	419	421
	09:30-09:45	419	421
	09:45-10:00	343	344
	10:00-10:15	287	288
4	08:45-09:00	391	400
	09:00-09:15	467	478
	09:15-09:30	571	585
	09:30-09:45	571	585
	09:45-10:00	467	478
	10:00-10:15	391	400
5	08:45-09:00	129	131
	09:00-09:15	154	157
	09:15-09:30	188	192
	09:30-09:45	188	192
	09:45-10:00	154	157
	10:00-10:15	129	131

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	2.34	0.5	A	653	980
2	0.46	5.19	0.8	A	485	728
3	0.30	3.62	0.4	A	350	524
4	0.39	4.07	0.6	A	476	714
5	0.18	4.13	0.2	A	157	235

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	536	134	403	2473	0.217	535	416	0.0	0.3	1.857	A
2	398	100	583	1453	0.274	397	355	0.0	0.4	3.404	A
3	287	72	580	1611	0.178	286	399	0.0	0.2	2.715	A
4	391	98	440	1594	0.245	389	426	0.0	0.3	2.986	A
5	129	32	690	1266	0.102	128	140	0.0	0.1	3.161	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	640	160	482	2408	0.266	640	498	0.3	0.4	2.035	A
2	476	119	697	1378	0.345	475	425	0.4	0.5	3.982	A
3	343	86	694	1527	0.224	342	478	0.2	0.3	3.037	A
4	467	117	527	1536	0.304	466	509	0.3	0.4	3.364	A
5	154	38	826	1179	0.130	154	167	0.1	0.1	3.510	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	784	196	590	2319	0.338	783	609	0.4	0.5	2.344	A
2	582	146	854	1277	0.456	581	520	0.5	0.8	5.168	A
3	419	105	850	1413	0.297	419	585	0.3	0.4	3.618	A
4	571	143	645	1456	0.392	571	624	0.4	0.6	4.062	A
5	188	47	1011	1060	0.178	188	204	0.1	0.2	4.127	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	784	196	591	2319	0.338	784	610	0.5	0.5	2.345	A
2	582	146	854	1276	0.456	582	521	0.8	0.8	5.190	A
3	419	105	851	1412	0.297	419	586	0.4	0.4	3.625	A
4	571	143	646	1455	0.393	571	624	0.6	0.6	4.071	A
5	188	47	1013	1059	0.178	188	205	0.2	0.2	4.134	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	640	160	484	2407	0.266	641	499	0.5	0.4	2.038	A
2	476	119	698	1378	0.345	477	426	0.8	0.5	4.002	A
3	343	86	696	1526	0.224	343	479	0.4	0.3	3.043	A
4	467	117	529	1535	0.304	467	510	0.6	0.4	3.377	A
5	154	38	829	1178	0.131	154	168	0.2	0.2	3.520	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	536	134	405	2472	0.217	536	418	0.4	0.3	1.859	A
2	398	100	585	1452	0.274	399	356	0.5	0.4	3.420	A
3	287	72	583	1609	0.178	287	401	0.3	0.2	2.722	A
4	391	98	442	1593	0.245	391	427	0.4	0.3	2.997	A
5	129	32	693	1264	0.102	129	140	0.2	0.1	3.170	A

2026 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.54	A

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	2026 Base Flows	PM	ONE HOUR	16:45	18:15	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	✓	870	100.000
2		ONE HOUR	✓	631	100.000
3		ONE HOUR	✓	701	100.000
4		ONE HOUR	✓	645	100.000
5		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	11	260	208	330	61
	2	174	4	172	189	92
	3	259	142	0	251	49
	4	224	229	175	0	17
	5	117	84	50	40	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.30	0.24	0.38	0.07
	2	0.28	0.01	0.27	0.30	0.15
	3	0.37	0.20	0.00	0.36	0.07
	4	0.35	0.36	0.27	0.00	0.03
	5	0.40	0.29	0.17	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	1	1	3
	2	1	0	2	1	4
	3	1	0	0	2	0
	4	1	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.010	1.010	1.030
	2	1.010	1.000	1.020	1.010	1.040
	3	1.010	1.000	1.000	1.020	1.000
	4	1.010	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	655	660
	17:00-17:15	782	789
	17:15-17:30	958	966
	17:30-17:45	958	966
	17:45-18:00	782	789
	18:00-18:15	655	660
2	16:45-17:00	475	483
	17:00-17:15	567	577
	17:15-17:30	695	707
	17:30-17:45	695	707
	17:45-18:00	567	577
	18:00-18:15	475	483
3	16:45-17:00	528	533
	17:00-17:15	630	637
	17:15-17:30	772	780
	17:30-17:45	772	780
	17:45-18:00	630	637
	18:00-18:15	528	533
4	16:45-17:00	486	490
	17:00-17:15	580	585
	17:15-17:30	710	717
	17:30-17:45	710	717
	17:45-18:00	580	585
	18:00-18:15	486	490
5	16:45-17:00	219	220
	17:00-17:15	262	263
	17:15-17:30	320	322
	17:30-17:45	320	322
	17:45-18:00	262	263
	18:00-18:15	219	220

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.44	2.94	0.8	A	798	1197
2	0.57	7.00	1.3	A	579	869
3	0.59	6.72	1.4	A	643	965
4	0.54	5.89	1.2	A	592	888
5	0.37	6.55	0.6	A	267	401

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	655	164	543	2391	0.274	653	589	0.0	0.4	2.070	A
2	475	119	657	1408	0.338	473	539	0.0	0.5	3.845	A
3	528	132	676	1535	0.344	526	454	0.0	0.5	3.558	A
4	486	121	594	1511	0.321	484	608	0.0	0.5	3.499	A
5	219	55	913	1146	0.191	218	164	0.0	0.2	3.874	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	782	196	650	2303	0.340	782	705	0.4	0.5	2.366	A
2	567	142	786	1324	0.429	566	646	0.5	0.7	4.747	A
3	630	158	809	1439	0.438	629	543	0.5	0.8	4.438	A
4	580	145	711	1431	0.405	579	727	0.5	0.7	4.222	A
5	262	65	1093	1030	0.254	261	197	0.2	0.3	4.681	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	958	239	795	2185	0.438	957	862	0.5	0.8	2.929	A
2	695	174	962	1209	0.574	692	790	0.7	1.3	6.930	A
3	772	193	990	1309	0.590	769	665	0.8	1.4	6.636	A
4	710	178	869	1323	0.537	708	890	0.7	1.1	5.838	A
5	320	80	1337	872	0.367	319	240	0.3	0.6	6.500	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	958	239	797	2183	0.439	958	864	0.8	0.8	2.938	A
2	695	174	963	1208	0.575	695	792	1.3	1.3	7.003	A
3	772	193	992	1307	0.590	772	666	1.4	1.4	6.717	A
4	710	178	872	1321	0.537	710	892	1.1	1.2	5.890	A
5	320	80	1341	870	0.368	320	241	0.6	0.6	6.550	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	782	196	653	2301	0.340	783	708	0.8	0.5	2.373	A
2	567	142	788	1322	0.429	570	648	1.3	0.8	4.798	A
3	630	158	812	1437	0.439	633	545	1.4	0.8	4.490	A
4	580	145	715	1429	0.406	582	730	1.2	0.7	4.260	A
5	262	65	1099	1026	0.255	263	198	0.6	0.3	4.720	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	655	164	546	2388	0.274	656	592	0.5	0.4	2.077	A
2	475	119	659	1406	0.338	476	542	0.8	0.5	3.877	A
3	528	132	679	1533	0.344	529	456	0.8	0.5	3.591	A
4	486	121	597	1509	0.322	486	611	0.7	0.5	3.526	A
5	219	55	919	1143	0.192	220	165	0.3	0.2	3.902	A

2026 Base Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.09	A

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	2026 Base Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	919	100.000
2		ONE HOUR	✓	569	100.000
3		ONE HOUR	✓	815	100.000
4		ONE HOUR	✓	633	100.000
5		ONE HOUR	✓	261	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	222	257	386	52
	2	138	3	152	153	123
	3	296	184	0	282	53
	4	198	180	239	0	16
	5	102	69	63	27	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.28	0.42	0.06
	2	0.24	0.01	0.27	0.27	0.22
	3	0.36	0.23	0.00	0.35	0.07
	4	0.31	0.28	0.38	0.00	0.03
	5	0.39	0.26	0.24	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	2	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	2	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.020	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.020	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	692	697
	12:00-12:15	826	833
	12:15-12:30	1012	1020
	12:30-12:45	1012	1020
	12:45-13:00	826	833
	13:00-13:15	692	697
2	11:45-12:00	428	436
	12:00-12:15	512	520
	12:15-12:30	626	637
	12:30-12:45	626	637
	12:45-13:00	512	520
	13:00-13:15	428	436
3	11:45-12:00	614	614
	12:00-12:15	733	733
	12:15-12:30	897	897
	12:30-12:45	897	897
	12:45-13:00	733	733
	13:00-13:15	614	614
4	11:45-12:00	477	481
	12:00-12:15	569	574
	12:15-12:30	697	703
	12:30-12:45	697	703
	12:45-13:00	569	574
	13:00-13:15	477	481
5	11:45-12:00	196	198
	12:00-12:15	235	236
	12:15-12:30	287	290
	12:30-12:45	287	290
	12:45-13:00	235	236
	13:00-13:15	196	198

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.47	3.17	0.9	A	843	1265
2	0.57	7.53	1.3	A	522	783
3	0.67	8.25	2.0	A	748	1122
4	0.54	6.16	1.2	A	581	871
5	0.34	6.37	0.5	A	239	359

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	692	173	574	2367	0.292	690	552	0.0	0.4	2.144	A
2	428	107	770	1336	0.321	426	494	0.0	0.5	3.948	A
3	614	153	663	1560	0.393	611	533	0.0	0.6	3.786	A
4	477	119	638	1484	0.321	475	636	0.0	0.5	3.560	A
5	196	49	930	1133	0.173	196	183	0.0	0.2	3.839	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	826	207	687	2275	0.363	826	661	0.4	0.6	2.482	A
2	512	128	921	1239	0.413	511	591	0.5	0.7	4.938	A
3	733	183	794	1464	0.500	731	638	0.6	1.0	4.901	A
4	569	142	764	1399	0.407	568	761	0.5	0.7	4.328	A
5	235	59	1113	1015	0.231	234	219	0.2	0.3	4.609	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1012	253	840	2150	0.471	1011	807	0.6	0.9	3.157	A
2	626	157	1128	1106	0.567	624	722	0.7	1.3	7.443	A
3	897	224	971	1335	0.672	893	781	1.0	2.0	8.076	A
4	697	174	933	1284	0.543	695	931	0.7	1.2	6.092	A
5	287	72	1360	856	0.336	287	268	0.3	0.5	6.314	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1012	253	842	2148	0.471	1012	810	0.9	0.9	3.168	A
2	626	157	1130	1104	0.567	626	724	1.3	1.3	7.530	A
3	897	224	973	1333	0.673	897	783	2.0	2.0	8.248	A
4	697	174	937	1281	0.544	697	934	1.2	1.2	6.159	A
5	287	72	1365	853	0.337	287	269	0.5	0.5	6.365	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	826	207	690	2272	0.364	827	665	0.9	0.6	2.495	A
2	512	128	924	1237	0.414	514	594	1.3	0.7	4.996	A
3	733	183	797	1462	0.501	737	641	2.0	1.0	4.990	A
4	569	142	769	1395	0.408	571	765	1.2	0.7	4.378	A
5	235	59	1120	1011	0.232	235	220	0.5	0.3	4.648	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	692	173	577	2365	0.293	693	555	0.6	0.4	2.155	A
2	428	107	773	1334	0.321	429	496	0.7	0.5	3.983	A
3	614	153	667	1557	0.394	615	536	1.0	0.7	3.825	A
4	477	119	642	1482	0.322	477	639	0.7	0.5	3.587	A
5	196	49	935	1129	0.174	197	184	0.3	0.2	3.865	A

2026 Total Flows , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.90	A

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	2026 Total Flows	AM	ONE HOUR	08:45	10:15	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	✓	723	100.000
2		ONE HOUR	✓	537	100.000
3		ONE HOUR	✓	449	100.000
4		ONE HOUR	✓	527	100.000
5		ONE HOUR	✓	174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	175	223	273	49
	2	177	2	135	136	87
	3	154	103	2	140	50
	4	166	154	202	2	3
	5	65	47	38	24	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.31	0.38	0.07
	2	0.33	0.00	0.25	0.25	0.16
	3	0.34	0.23	0.00	0.31	0.11
	4	0.31	0.29	0.38	0.00	0.01
	5	0.37	0.27	0.22	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	2	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.020	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	544	554
	09:00-09:15	650	662
	09:15-09:30	796	811
	09:30-09:45	796	811
	09:45-10:00	650	662
	10:00-10:15	544	554
2	08:45-09:00	404	411
	09:00-09:15	483	491
	09:15-09:30	591	602
	09:30-09:45	591	602
	09:45-10:00	483	491
	10:00-10:15	404	411
3	08:45-09:00	338	339
	09:00-09:15	404	405
	09:15-09:30	494	496
	09:30-09:45	494	496
	09:45-10:00	404	405
	10:00-10:15	338	339
4	08:45-09:00	397	406
	09:00-09:15	474	485
	09:15-09:30	580	593
	09:30-09:45	580	593
	09:45-10:00	474	485
	10:00-10:15	397	406
5	08:45-09:00	131	133
	09:00-09:15	156	159
	09:15-09:30	192	195
	09:30-09:45	192	195
	09:45-10:00	156	159
	10:00-10:15	131	133

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.35	2.41	0.5	A	663	995
2	0.47	5.48	0.9	A	493	739
3	0.35	3.85	0.5	A	412	618
4	0.41	4.25	0.7	A	484	725
5	0.19	4.30	0.2	A	160	239

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	544	136	431	2453	0.222	543	424	0.0	0.3	1.884	A
2	404	101	613	1434	0.282	403	361	0.0	0.4	3.485	A
3	338	85	565	1622	0.208	337	450	0.0	0.3	2.798	A
4	397	99	470	1575	0.252	395	432	0.0	0.3	3.049	A
5	131	33	724	1246	0.105	131	142	0.0	0.1	3.224	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	650	162	516	2384	0.273	650	507	0.3	0.4	2.076	A
2	483	121	733	1356	0.356	482	432	0.4	0.5	4.117	A
3	404	101	676	1541	0.262	403	539	0.3	0.4	3.165	A
4	474	118	563	1513	0.313	473	516	0.3	0.5	3.460	A
5	156	39	867	1155	0.135	156	170	0.1	0.2	3.604	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	796	199	631	2289	0.348	795	621	0.4	0.5	2.409	A
2	591	148	897	1249	0.473	590	529	0.5	0.9	5.452	A
3	494	124	828	1430	0.346	494	660	0.4	0.5	3.844	A
4	580	145	689	1428	0.406	579	632	0.5	0.7	4.236	A
5	192	48	1061	1030	0.186	191	208	0.2	0.2	4.291	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	796	199	632	2288	0.348	796	622	0.5	0.5	2.412	A
2	591	148	898	1248	0.474	591	530	0.9	0.9	5.478	A
3	494	124	829	1429	0.346	494	661	0.5	0.5	3.853	A
4	580	145	690	1427	0.407	580	633	0.7	0.7	4.249	A
5	192	48	1062	1029	0.186	192	208	0.2	0.2	4.298	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	650	162	517	2382	0.273	651	509	0.5	0.4	2.080	A
2	483	121	734	1355	0.356	484	433	0.9	0.6	4.141	A
3	404	101	678	1539	0.262	404	540	0.5	0.4	3.173	A
4	474	118	565	1512	0.313	475	518	0.7	0.5	3.473	A
5	156	39	869	1153	0.136	157	170	0.2	0.2	3.613	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	544	136	433	2452	0.222	545	426	0.4	0.3	1.890	A
2	404	101	615	1433	0.282	405	362	0.6	0.4	3.503	A
3	338	85	568	1620	0.209	338	452	0.4	0.3	2.810	A
4	397	99	473	1574	0.252	397	433	0.5	0.3	3.060	A
5	131	33	727	1244	0.105	131	142	0.2	0.1	3.236	A

2026 Total Flows , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.99	A

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	2026 Total Flows	PM	ONE HOUR	16:45	18:15	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	✓	877	100.000
2		ONE HOUR	✓	636	100.000
3		ONE HOUR	✓	777	100.000
4		ONE HOUR	✓	650	100.000
5		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	10	253	235	320	59
	2	168	4	191	183	90
	3	287	158	0	276	56
	4	218	223	194	0	15
	5	113	82	59	39	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.29	0.27	0.36	0.07
	2	0.26	0.01	0.30	0.29	0.14
	3	0.37	0.20	0.00	0.36	0.07
	4	0.34	0.34	0.30	0.00	0.02
	5	0.39	0.28	0.20	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	1	1	3
	2	1	0	1	1	4
	3	1	0	0	1	0
	4	1	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.010	1.010	1.030
	2	1.010	1.000	1.010	1.010	1.040
	3	1.010	1.000	1.000	1.010	1.000
	4	1.010	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	660	666
	17:00-17:15	788	795
	17:15-17:30	966	974
	17:30-17:45	966	974
	17:45-18:00	788	795
	18:00-18:15	660	666
2	16:45-17:00	479	486
	17:00-17:15	572	580
	17:15-17:30	700	710
	17:30-17:45	700	710
	17:45-18:00	572	580
	18:00-18:15	479	486
3	16:45-17:00	585	589
	17:00-17:15	699	704
	17:15-17:30	855	862
	17:30-17:45	855	862
	17:45-18:00	699	704
	18:00-18:15	585	589
4	16:45-17:00	489	494
	17:00-17:15	584	590
	17:15-17:30	716	723
	17:30-17:45	716	723
	17:45-18:00	584	590
	18:00-18:15	489	494
5	16:45-17:00	221	221
	17:00-17:15	263	264
	17:15-17:30	323	324
	17:30-17:45	323	324
	17:45-18:00	263	264
	18:00-18:15	221	221

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.45	3.04	0.8	A	805	1207
2	0.59	7.46	1.4	A	584	875
3	0.64	7.51	1.8	A	713	1069
4	0.55	6.25	1.2	A	596	895
5	0.38	6.97	0.6	A	269	403

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	660	165	569	2369	0.279	659	597	0.0	0.4	2.102	A
2	479	120	688	1392	0.344	477	540	0.0	0.5	3.926	A
3	585	146	655	1556	0.376	583	509	0.0	0.6	3.689	A
4	489	122	624	1491	0.328	487	614	0.0	0.5	3.583	A
5	221	55	946	1125	0.196	220	165	0.0	0.2	3.971	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	788	197	681	2278	0.346	788	714	0.4	0.5	2.416	A
2	572	143	823	1304	0.439	571	646	0.5	0.8	4.905	A
3	699	175	784	1463	0.478	697	610	0.6	0.9	4.695	A
4	584	146	747	1407	0.415	583	734	0.5	0.7	4.367	A
5	263	66	1133	1005	0.262	263	197	0.2	0.4	4.849	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	966	241	833	2153	0.448	964	873	0.5	0.8	3.025	A
2	700	175	1007	1184	0.592	698	791	0.8	1.4	7.366	A
3	855	214	959	1336	0.640	852	746	0.9	1.7	7.385	A
4	716	179	913	1294	0.553	714	898	0.7	1.2	6.183	A
5	323	81	1385	842	0.383	322	241	0.4	0.6	6.906	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	966	241	836	2151	0.449	966	876	0.8	0.8	3.035	A
2	700	175	1009	1183	0.592	700	793	1.4	1.4	7.459	A
3	855	214	961	1334	0.641	855	748	1.7	1.8	7.512	A
4	716	179	916	1291	0.554	716	901	1.2	1.2	6.251	A
5	323	81	1389	839	0.385	323	242	0.6	0.6	6.972	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	788	197	685	2275	0.347	790	719	0.8	0.5	2.425	A
2	572	143	825	1302	0.439	574	649	1.4	0.8	4.966	A
3	699	175	787	1460	0.478	702	612	1.8	0.9	4.767	A
4	584	146	751	1404	0.416	586	738	1.2	0.7	4.414	A
5	263	66	1139	1001	0.263	264	199	0.6	0.4	4.898	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	660	165	573	2367	0.279	661	601	0.5	0.4	2.112	A
2	479	120	690	1390	0.345	480	543	0.8	0.5	3.960	A
3	585	146	658	1553	0.377	586	512	0.9	0.6	3.729	A
4	489	122	628	1488	0.329	490	617	0.7	0.5	3.610	A
5	221	55	952	1122	0.197	221	166	0.4	0.2	4.001	A

2026 Total Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.67	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Total Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	930	100.000
2		ONE HOUR	✓	574	100.000
3		ONE HOUR	✓	876	100.000
4		ONE HOUR	✓	638	100.000
5		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	217	282	378	51
	2	135	3	166	150	120
	3	319	197	0	301	59
	4	193	175	254	0	16
	5	100	67	61	34	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.23	0.30	0.41	0.05
	2	0.24	0.01	0.29	0.26	0.21
	3	0.36	0.22	0.00	0.34	0.07
	4	0.30	0.27	0.40	0.00	0.03
	5	0.38	0.26	0.23	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	2	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	2	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.020	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.020	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	700	705
	12:00-12:15	836	842
	12:15-12:30	1024	1032
	12:30-12:45	1024	1032
	12:45-13:00	836	842
	13:00-13:15	700	705
2	11:45-12:00	432	439
	12:00-12:15	516	525
	12:15-12:30	632	643
	12:30-12:45	632	643
	12:45-13:00	516	525
	13:00-13:15	432	439
3	11:45-12:00	659	659
	12:00-12:15	788	788
	12:15-12:30	964	964
	12:30-12:45	964	964
	12:45-13:00	788	788
	13:00-13:15	659	659
4	11:45-12:00	480	484
	12:00-12:15	574	578
	12:15-12:30	702	708
	12:30-12:45	702	708
	12:45-13:00	574	578
	13:00-13:15	480	484
5	11:45-12:00	197	199
	12:00-12:15	236	237
	12:15-12:30	288	291
	12:30-12:45	288	291
	12:45-13:00	236	237
	13:00-13:15	197	199

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.48	3.27	0.9	A	853	1280
2	0.59	8.04	1.4	A	527	790
3	0.72	9.51	2.5	A	804	1206
4	0.56	6.50	1.3	A	585	878
5	0.35	6.69	0.5	A	240	361

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	700	175	593	2352	0.298	698	561	0.0	0.4	2.175	A
2	432	108	797	1320	0.327	430	494	0.0	0.5	4.037	A
3	659	165	655	1566	0.421	657	572	0.0	0.7	3.946	A
4	480	120	664	1467	0.327	478	647	0.0	0.5	3.635	A
5	197	49	958	1115	0.177	196	184	0.0	0.2	3.917	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	836	209	710	2257	0.370	835	672	0.4	0.6	2.531	A
2	516	129	954	1219	0.423	515	592	0.5	0.7	5.109	A
3	788	197	784	1472	0.535	786	685	0.7	1.1	5.235	A
4	574	143	795	1378	0.416	573	775	0.5	0.7	4.463	A
5	236	59	1147	994	0.237	235	221	0.2	0.3	4.745	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1024	256	868	2128	0.481	1023	821	0.6	0.9	3.253	A
2	632	158	1167	1081	0.585	629	723	0.7	1.4	7.929	A
3	964	241	959	1344	0.718	959	838	1.1	2.5	9.228	A
4	702	176	971	1259	0.558	700	947	0.7	1.2	6.420	A
5	288	72	1401	830	0.348	288	270	0.3	0.5	6.625	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1024	256	871	2125	0.482	1024	825	0.9	0.9	3.268	A
2	632	158	1169	1079	0.585	632	726	1.4	1.4	8.042	A
3	964	241	961	1342	0.719	964	840	2.5	2.5	9.509	A
4	702	176	975	1256	0.559	702	950	1.2	1.3	6.504	A
5	288	72	1407	826	0.349	288	271	0.5	0.5	6.690	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	836	209	714	2253	0.371	837	677	0.9	0.6	2.546	A
2	516	129	957	1217	0.424	519	595	1.4	0.7	5.176	A
3	788	197	787	1469	0.536	793	688	2.5	1.2	5.363	A
4	574	143	801	1374	0.417	576	779	1.3	0.7	4.522	A
5	236	59	1155	988	0.238	236	222	0.5	0.3	4.793	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	700	175	597	2349	0.298	701	565	0.6	0.4	2.186	A
2	432	108	801	1318	0.328	433	497	0.7	0.5	4.074	A
3	659	165	658	1563	0.422	661	575	1.2	0.7	3.999	A
4	480	120	669	1464	0.328	481	651	0.7	0.5	3.664	A
5	197	49	964	1111	0.178	198	186	0.3	0.2	3.943	A

2031 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.85	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2031 Base Flows	AM	ONE HOUR	08:45	10:15	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	✓	732	100.000
2		ONE HOUR	✓	547	100.000
3		ONE HOUR	✓	381	100.000
4		ONE HOUR	✓	534	100.000
5		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	187	198	292	52
	2	190	2	117	145	93
	3	132	85	2	120	42
	4	178	165	184	2	5
	5	70	50	31	26	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.26	0.27	0.40	0.07
	2	0.35	0.00	0.21	0.27	0.17
	3	0.35	0.22	0.01	0.31	0.11
	4	0.33	0.31	0.34	0.00	0.01
	5	0.40	0.28	0.18	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	1	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.010	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	551	562
	09:00-09:15	658	671
	09:15-09:30	806	822
	09:30-09:45	806	822
	09:45-10:00	658	671
	10:00-10:15	551	562
2	08:45-09:00	412	419
	09:00-09:15	492	500
	09:15-09:30	602	613
	09:30-09:45	602	613
	09:45-10:00	492	500
	10:00-10:15	412	419
3	08:45-09:00	287	288
	09:00-09:15	343	344
	09:15-09:30	419	421
	09:30-09:45	419	421
	09:45-10:00	343	344
	10:00-10:15	287	288
4	08:45-09:00	402	412
	09:00-09:15	480	492
	09:15-09:30	588	602
	09:30-09:45	588	602
	09:45-10:00	480	492
	10:00-10:15	402	412
5	08:45-09:00	133	135
	09:00-09:15	159	162
	09:15-09:30	195	198
	09:30-09:45	195	198
	09:45-10:00	159	162
	10:00-10:15	133	135

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.35	2.39	0.5	A	672	1008
2	0.48	5.43	0.9	A	502	753
3	0.30	3.72	0.4	A	350	524
4	0.41	4.20	0.7	A	490	735
5	0.19	4.23	0.2	A	162	244

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	551	138	410	2467	0.223	550	430	0.0	0.3	1.878	A
2	412	103	593	1446	0.285	410	367	0.0	0.4	3.472	A
3	287	72	604	1594	0.180	286	399	0.0	0.2	2.752	A
4	402	101	451	1586	0.253	401	439	0.0	0.3	3.034	A
5	133	33	708	1260	0.106	133	144	0.0	0.1	3.192	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	658	165	491	2400	0.274	658	515	0.3	0.4	2.066	A
2	492	123	710	1370	0.359	491	439	0.4	0.6	4.093	A
3	343	86	723	1506	0.227	342	478	0.2	0.3	3.092	A
4	480	120	540	1527	0.314	480	525	0.3	0.5	3.436	A
5	159	40	847	1170	0.136	159	172	0.1	0.2	3.560	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	806	201	601	2310	0.349	805	630	0.4	0.5	2.391	A
2	602	151	869	1266	0.476	601	538	0.6	0.9	5.400	A
3	419	105	885	1388	0.302	419	585	0.3	0.4	3.715	A
4	588	147	661	1445	0.407	587	643	0.5	0.7	4.189	A
5	195	49	1037	1048	0.186	195	211	0.2	0.2	4.219	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	806	201	602	2309	0.349	806	631	0.5	0.5	2.394	A
2	602	151	870	1266	0.476	602	538	0.9	0.9	5.425	A
3	419	105	886	1386	0.303	419	586	0.4	0.4	3.721	A
4	588	147	662	1445	0.407	588	644	0.7	0.7	4.201	A
5	195	49	1038	1047	0.186	195	211	0.2	0.2	4.226	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	658	165	493	2399	0.274	659	516	0.5	0.4	2.070	A
2	492	123	711	1369	0.359	493	440	0.9	0.6	4.115	A
3	343	86	725	1505	0.228	343	479	0.4	0.3	3.101	A
4	480	120	541	1526	0.315	481	527	0.7	0.5	3.448	A
5	159	40	849	1168	0.136	159	173	0.2	0.2	3.568	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	551	138	412	2465	0.224	551	432	0.4	0.3	1.883	A
2	412	103	595	1445	0.285	412	369	0.6	0.4	3.491	A
3	287	72	607	1592	0.180	287	401	0.3	0.2	2.759	A
4	402	101	453	1585	0.254	403	441	0.5	0.3	3.045	A
5	133	33	711	1258	0.106	133	145	0.2	0.1	3.203	A

2031 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.83	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2031 Base Flows	PM	ONE HOUR	16:45	18:15	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	✓	897	100.000
2		ONE HOUR	✓	650	100.000
3		ONE HOUR	✓	701	100.000
4		ONE HOUR	✓	664	100.000
5		ONE HOUR	✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	12	270	208	344	63
	2	182	4	172	196	96
	3	259	142	0	251	49
	4	233	238	175	0	18
	5	121	88	49	42	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.30	0.23	0.38	0.07
	2	0.28	0.01	0.26	0.30	0.15
	3	0.37	0.20	0.00	0.36	0.07
	4	0.35	0.36	0.26	0.00	0.03
	5	0.40	0.29	0.16	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	1	1	3
	2	1	0	1	1	4
	3	1	0	0	2	0
	4	0	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.010	1.010	1.030
	2	1.010	1.000	1.010	1.010	1.040
	3	1.010	1.000	1.000	1.020	1.000
	4	1.000	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	675	681
	17:00-17:15	806	813
	17:15-17:30	988	996
	17:30-17:45	988	996
	17:45-18:00	806	813
	18:00-18:15	675	681
2	16:45-17:00	489	496
	17:00-17:15	584	593
	17:15-17:30	716	726
	17:30-17:45	716	726
	17:45-18:00	584	593
	18:00-18:15	489	496
3	16:45-17:00	528	533
	17:00-17:15	630	637
	17:15-17:30	772	780
	17:30-17:45	772	780
	17:45-18:00	630	637
	18:00-18:15	528	533
4	16:45-17:00	500	503
	17:00-17:15	597	601
	17:15-17:30	731	736
	17:30-17:45	731	736
	17:45-18:00	597	601
	18:00-18:15	500	503
5	16:45-17:00	226	227
	17:00-17:15	270	271
	17:15-17:30	330	332
	17:30-17:45	330	332
	17:45-18:00	270	271
	18:00-18:15	226	227

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.46	3.04	0.8	A	823	1235
2	0.60	7.45	1.5	A	596	895
3	0.60	7.12	1.5	A	643	965
4	0.56	6.17	1.2	A	609	914
5	0.39	6.89	0.6	A	275	413

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	675	169	553	2382	0.283	674	605	0.0	0.4	2.105	A
2	489	122	670	1402	0.349	487	557	0.0	0.5	3.925	A
3	528	132	704	1515	0.348	526	453	0.0	0.5	3.632	A
4	500	125	605	1508	0.331	498	625	0.0	0.5	3.557	A
5	226	56	934	1134	0.199	225	170	0.0	0.2	3.954	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	806	202	662	2293	0.352	806	724	0.4	0.5	2.419	A
2	584	146	802	1317	0.444	583	666	0.5	0.8	4.901	A
3	630	158	843	1415	0.445	629	542	0.5	0.8	4.577	A
4	597	149	724	1427	0.418	596	748	0.5	0.7	4.328	A
5	270	67	1117	1016	0.266	269	203	0.2	0.4	4.819	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	988	247	810	2172	0.455	986	886	0.5	0.8	3.033	A
2	716	179	982	1200	0.596	713	815	0.8	1.4	7.356	A
3	772	193	1031	1279	0.603	769	663	0.8	1.5	7.019	A
4	731	183	885	1316	0.555	729	915	0.7	1.2	6.105	A
5	330	83	1366	855	0.386	329	248	0.4	0.6	6.832	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	988	247	812	2170	0.455	988	888	0.8	0.8	3.043	A
2	716	179	983	1199	0.597	716	817	1.4	1.5	7.448	A
3	772	193	1034	1277	0.604	772	665	1.5	1.5	7.117	A
4	731	183	888	1314	0.556	731	917	1.2	1.2	6.170	A
5	330	83	1371	852	0.388	330	249	0.6	0.6	6.895	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	806	202	666	2290	0.352	808	728	0.8	0.5	2.431	A
2	584	146	804	1315	0.444	587	669	1.5	0.8	4.961	A
3	630	158	847	1412	0.446	633	545	1.5	0.8	4.638	A
4	597	149	729	1424	0.419	599	751	1.2	0.7	4.375	A
5	270	67	1124	1012	0.267	271	204	0.6	0.4	4.864	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	675	169	557	2380	0.284	676	609	0.5	0.4	2.114	A
2	489	122	673	1401	0.349	490	559	0.8	0.5	3.960	A
3	528	132	708	1512	0.349	529	455	0.8	0.5	3.667	A
4	500	125	609	1506	0.332	501	628	0.7	0.5	3.586	A
5	226	56	939	1131	0.200	226	170	0.4	0.3	3.982	A

2031 Base Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.42	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2031 Base Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	946	100.000
2		ONE HOUR	✓	585	100.000
3		ONE HOUR	✓	815	100.000
4		ONE HOUR	✓	650	100.000
5		ONE HOUR	✓	271	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	231	257	402	54
	2	144	2	152	159	128
	3	296	184	0	282	53
	4	206	188	239	0	17
	5	107	72	63	29	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.27	0.42	0.06
	2	0.25	0.00	0.26	0.27	0.22
	3	0.36	0.23	0.00	0.35	0.07
	4	0.32	0.29	0.37	0.00	0.03
	5	0.39	0.27	0.23	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	1	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.010	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	712	718
	12:00-12:15	850	857
	12:15-12:30	1042	1050
	12:30-12:45	1042	1050
	12:45-13:00	850	857
	13:00-13:15	712	718
2	11:45-12:00	440	447
	12:00-12:15	526	534
	12:15-12:30	644	654
	12:30-12:45	644	654
	12:45-13:00	526	534
	13:00-13:15	440	447
3	11:45-12:00	614	614
	12:00-12:15	733	733
	12:15-12:30	897	897
	12:30-12:45	897	897
	12:45-13:00	733	733
	13:00-13:15	614	614
4	11:45-12:00	489	494
	12:00-12:15	584	590
	12:15-12:30	716	722
	12:30-12:45	716	722
	12:45-13:00	584	590
	13:00-13:15	489	494
5	11:45-12:00	204	205
	12:00-12:15	244	245
	12:15-12:30	298	300
	12:30-12:45	298	300
	12:45-13:00	244	245
	13:00-13:15	204	205

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.49	3.29	0.9	A	868	1302
2	0.59	8.03	1.4	A	537	805
3	0.69	8.81	2.2	A	748	1122
4	0.56	6.46	1.3	A	596	895
5	0.35	6.62	0.5	A	249	373

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	712	178	583	2360	0.302	710	566	0.0	0.4	2.181	A
2	440	110	785	1330	0.331	438	508	0.0	0.5	4.030	A
3	614	153	690	1541	0.398	611	533	0.0	0.7	3.861	A
4	489	122	647	1479	0.331	487	654	0.0	0.5	3.623	A
5	204	51	945	1127	0.181	203	189	0.0	0.2	3.892	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	850	213	697	2266	0.375	850	678	0.4	0.6	2.540	A
2	526	131	939	1230	0.428	525	608	0.5	0.7	5.099	A
3	733	183	826	1442	0.508	731	638	0.7	1.0	5.056	A
4	584	146	774	1392	0.420	583	783	0.5	0.7	4.446	A
5	244	61	1132	1007	0.242	243	226	0.2	0.3	4.709	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1042	260	853	2139	0.487	1040	828	0.6	0.9	3.272	A
2	644	161	1150	1094	0.589	641	743	0.7	1.4	7.913	A
3	897	224	1010	1307	0.686	893	781	1.0	2.1	8.593	A
4	716	179	946	1276	0.561	714	957	0.7	1.3	6.377	A
5	298	75	1383	845	0.353	297	276	0.3	0.5	6.559	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1042	260	855	2137	0.487	1042	831	0.9	0.9	3.286	A
2	644	161	1152	1092	0.590	644	745	1.4	1.4	8.026	A
3	897	224	1013	1306	0.687	897	783	2.1	2.2	8.808	A
4	716	179	950	1273	0.562	716	960	1.3	1.3	6.457	A
5	298	75	1388	842	0.354	298	277	0.5	0.5	6.620	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	850	213	701	2263	0.376	852	682	0.9	0.6	2.553	A
2	526	131	942	1228	0.428	529	611	1.4	0.8	5.169	A
3	733	183	830	1439	0.509	737	641	2.2	1.0	5.160	A
4	584	146	780	1388	0.421	586	787	1.3	0.7	4.502	A
5	244	61	1139	1003	0.243	245	228	0.5	0.3	4.755	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	712	178	586	2357	0.302	713	570	0.6	0.4	2.190	A
2	440	110	788	1327	0.332	441	511	0.8	0.5	4.067	A
3	614	153	694	1538	0.399	615	536	1.0	0.7	3.906	A
4	489	122	651	1476	0.332	490	658	0.7	0.5	3.658	A
5	204	51	951	1124	0.182	204	190	0.3	0.2	3.919	A

2031 Total Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.42	A

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
D13	2031 Total Flows	AM	ONE HOUR	08:45	10:15	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	✓	743	100.000
2		ONE HOUR	✓	655	100.000
3		ONE HOUR	✓	449	100.000
4		ONE HOUR	✓	542	100.000
5		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	182	223	284	51
	2	185	2	235	142	91
	3	154	103	2	140	50
	4	174	161	202	2	3
	5	68	49	38	25	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.30	0.38	0.07
	2	0.28	0.00	0.36	0.22	0.14
	3	0.34	0.23	0.00	0.31	0.11
	4	0.32	0.30	0.37	0.00	0.01
	5	0.38	0.27	0.21	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	4	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	2	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.040	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.020	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	559	572
	09:00-09:15	668	683
	09:15-09:30	818	837
	09:30-09:45	818	837
	09:45-10:00	668	683
	10:00-10:15	559	572
2	08:45-09:00	493	501
	09:00-09:15	589	598
	09:15-09:30	721	733
	09:30-09:45	721	733
	09:45-10:00	589	598
	10:00-10:15	493	501
3	08:45-09:00	338	339
	09:00-09:15	404	405
	09:15-09:30	494	496
	09:30-09:45	494	496
	09:45-10:00	404	405
	10:00-10:15	338	339
4	08:45-09:00	408	417
	09:00-09:15	487	499
	09:15-09:30	597	611
	09:30-09:45	597	611
	09:45-10:00	487	499
	10:00-10:15	408	417
5	08:45-09:00	136	138
	09:00-09:15	162	165
	09:15-09:30	198	202
	09:30-09:45	198	202
	09:45-10:00	162	165
	10:00-10:15	136	138

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	2.48	0.6	A	682	1023
2	0.58	6.97	1.4	A	601	902
3	0.35	3.97	0.5	A	412	618
4	0.42	4.39	0.7	A	497	746
5	0.20	4.42	0.2	A	165	248

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	559	140	438	2437	0.230	558	438	0.0	0.3	1.916	A
2	493	123	623	1428	0.345	491	373	0.0	0.5	3.835	A
3	338	85	589	1603	0.211	337	525	0.0	0.3	2.840	A
4	408	102	481	1568	0.260	407	445	0.0	0.4	3.096	A
5	136	34	741	1235	0.110	135	146	0.0	0.1	3.270	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	668	167	524	2367	0.282	668	524	0.3	0.4	2.118	A
2	589	147	746	1347	0.437	588	446	0.5	0.8	4.733	A
3	404	101	705	1518	0.266	403	629	0.3	0.4	3.230	A
4	487	122	576	1504	0.324	487	533	0.4	0.5	3.536	A
5	162	40	887	1141	0.142	162	175	0.1	0.2	3.674	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	818	205	642	2271	0.360	817	642	0.4	0.6	2.476	A
2	721	180	913	1238	0.583	719	546	0.8	1.4	6.902	A
3	494	124	862	1402	0.353	494	769	0.4	0.5	3.960	A
4	597	149	704	1418	0.421	596	652	0.5	0.7	4.375	A
5	198	50	1086	1014	0.196	198	214	0.2	0.2	4.412	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	818	205	643	2270	0.360	818	643	0.6	0.6	2.479	A
2	721	180	914	1237	0.583	721	547	1.4	1.4	6.970	A
3	494	124	864	1400	0.353	494	771	0.5	0.5	3.972	A
4	597	149	706	1417	0.421	597	653	0.7	0.7	4.391	A
5	198	50	1088	1012	0.196	198	215	0.2	0.2	4.421	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	668	167	526	2365	0.282	669	526	0.6	0.4	2.122	A
2	589	147	747	1346	0.437	591	448	1.4	0.8	4.783	A
3	404	101	708	1516	0.266	404	631	0.5	0.4	3.240	A
4	487	122	578	1503	0.324	488	534	0.7	0.5	3.551	A
5	162	40	890	1139	0.142	162	176	0.2	0.2	3.687	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	559	140	440	2436	0.230	560	440	0.4	0.3	1.921	A
2	493	123	625	1426	0.346	494	375	0.8	0.5	3.866	A
3	338	85	592	1601	0.211	338	528	0.4	0.3	2.851	A
4	408	102	483	1566	0.261	409	447	0.5	0.4	3.113	A
5	136	34	745	1233	0.110	136	147	0.2	0.1	3.281	A

2031 Total Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

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
D14	2031 Total Flows	PM	ONE HOUR	16:45	18:15	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	✓	904	100.000
2		ONE HOUR	✓	655	100.000
3		ONE HOUR	✓	777	100.000
4		ONE HOUR	✓	669	100.000
5		ONE HOUR	✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	11	263	235	334	61
	2	176	4	191	190	94
	3	287	158	0	276	56
	4	227	232	194	0	16
	5	117	86	59	41	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.29	0.26	0.37	0.07
	2	0.27	0.01	0.29	0.29	0.14
	3	0.37	0.20	0.00	0.36	0.07
	4	0.34	0.35	0.29	0.00	0.02
	5	0.39	0.28	0.19	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	0	1	3
	2	1	0	1	1	4
	3	1	0	0	1	0
	4	0	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.010	1.030
	2	1.010	1.000	1.010	1.010	1.040
	3	1.010	1.000	1.000	1.010	1.000
	4	1.000	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	681	684
	17:00-17:15	813	817
	17:15-17:30	995	1001
	17:30-17:45	995	1001
	17:45-18:00	813	817
	18:00-18:15	681	684
2	16:45-17:00	493	500
	17:00-17:15	589	597
	17:15-17:30	721	731
	17:30-17:45	721	731
	17:45-18:00	589	597
	18:00-18:15	493	500
3	16:45-17:00	585	589
	17:00-17:15	699	704
	17:15-17:30	855	862
	17:30-17:45	855	862
	17:45-18:00	699	704
	18:00-18:15	585	589
4	16:45-17:00	504	507
	17:00-17:15	601	605
	17:15-17:30	737	741
	17:30-17:45	737	741
	17:45-18:00	601	605
	18:00-18:15	504	507
5	16:45-17:00	228	229
	17:00-17:15	272	273
	17:15-17:30	334	335
	17:30-17:45	334	335
	17:45-18:00	272	273
	18:00-18:15	228	229

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.46	3.13	0.9	A	830	1244
2	0.62	8.01	1.6	A	601	902
3	0.66	8.02	1.9	A	713	1069
4	0.57	6.57	1.3	A	614	921
5	0.41	7.38	0.7	A	278	417

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	681	170	580	2366	0.288	679	613	0.0	0.4	2.131	A
2	493	123	702	1383	0.356	491	557	0.0	0.6	4.024	A
3	585	146	683	1535	0.381	583	509	0.0	0.6	3.769	A
4	504	126	635	1488	0.338	502	631	0.0	0.5	3.642	A
5	228	57	966	1113	0.205	227	170	0.0	0.3	4.058	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	813	203	695	2273	0.358	812	734	0.4	0.6	2.463	A
2	589	147	840	1294	0.455	588	667	0.6	0.8	5.090	A
3	699	175	818	1438	0.486	697	610	0.6	0.9	4.850	A
4	601	150	760	1402	0.429	600	755	0.5	0.7	4.483	A
5	272	68	1157	990	0.275	272	204	0.3	0.4	5.007	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	995	249	849	2146	0.464	994	897	0.6	0.9	3.123	A
2	721	180	1028	1172	0.615	718	816	0.8	1.6	7.885	A
3	855	214	1000	1306	0.655	852	746	0.9	1.9	7.861	A
4	737	184	929	1287	0.572	734	923	0.7	1.3	6.486	A
5	334	83	1414	824	0.405	332	249	0.4	0.7	7.298	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	995	249	852	2143	0.464	995	901	0.9	0.9	3.135	A
2	721	180	1029	1171	0.616	721	818	1.6	1.6	8.005	A
3	855	214	1003	1304	0.656	855	748	1.9	1.9	8.016	A
4	737	184	932	1284	0.573	737	926	1.3	1.3	6.567	A
5	334	83	1419	821	0.406	334	250	0.7	0.7	7.381	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	813	203	699	2269	0.358	814	739	0.9	0.6	2.475	A
2	589	147	842	1292	0.456	592	670	1.6	0.8	5.162	A
3	699	175	822	1435	0.487	702	612	1.9	1.0	4.935	A
4	601	150	765	1399	0.430	604	759	1.3	0.8	4.541	A
5	272	68	1164	986	0.276	274	205	0.7	0.4	5.062	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	681	170	584	2363	0.288	681	617	0.6	0.4	2.140	A
2	493	123	705	1381	0.357	494	560	0.8	0.6	4.064	A
3	585	146	687	1533	0.382	586	512	1.0	0.6	3.808	A
4	504	126	639	1485	0.339	505	634	0.8	0.5	3.673	A
5	228	57	972	1109	0.206	229	171	0.4	0.3	4.091	A

2031 Total Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.94	A

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
D15	2031 Total Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	957	100.000
2		ONE HOUR	✓	563	100.000
3		ONE HOUR	✓	876	100.000
4		ONE HOUR	✓	655	100.000
5		ONE HOUR	✓	274	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	226	282	394	53
	2	141	3	138	156	125
	3	319	197	0	301	59
	4	201	183	254	0	17
	5	105	70	70	29	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.29	0.41	0.06
	2	0.25	0.01	0.25	0.28	0.22
	3	0.36	0.22	0.00	0.34	0.07
	4	0.31	0.28	0.39	0.00	0.03
	5	0.38	0.26	0.26	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	1	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.010	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	720	726
	12:00-12:15	860	867
	12:15-12:30	1054	1062
	12:30-12:45	1054	1062
	12:45-13:00	860	867
	13:00-13:15	720	726
2	11:45-12:00	424	430
	12:00-12:15	506	514
	12:15-12:30	620	629
	12:30-12:45	620	629
	12:45-13:00	506	514
	13:00-13:15	424	430
3	11:45-12:00	659	659
	12:00-12:15	788	788
	12:15-12:30	964	964
	12:30-12:45	964	964
	12:45-13:00	788	788
	13:00-13:15	659	659
4	11:45-12:00	493	497
	12:00-12:15	589	594
	12:15-12:30	721	727
	12:30-12:45	721	727
	12:45-13:00	589	594
	13:00-13:15	493	497
5	11:45-12:00	206	207
	12:00-12:15	246	247
	12:15-12:30	302	303
	12:30-12:45	302	303
	12:45-13:00	246	247
	13:00-13:15	206	207

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	3.40	1.0	A	878	1317
2	0.58	8.08	1.4	A	517	775
3	0.73	10.12	2.7	B	804	1206
4	0.58	6.84	1.4	A	601	902
5	0.37	7.01	0.6	A	251	377

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	720	180	604	2343	0.308	719	576	0.0	0.4	2.215	A
2	424	106	814	1311	0.323	422	509	0.0	0.5	4.041	A
3	659	165	677	1550	0.425	657	558	0.0	0.7	4.016	A
4	493	123	674	1461	0.338	491	660	0.0	0.5	3.703	A
5	206	52	975	1109	0.186	205	190	0.0	0.2	3.980	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	860	215	723	2245	0.383	860	689	0.4	0.6	2.596	A
2	506	127	973	1208	0.419	505	609	0.5	0.7	5.117	A
3	788	197	811	1453	0.542	786	668	0.7	1.2	5.381	A
4	589	147	807	1371	0.429	588	790	0.5	0.7	4.590	A
5	246	62	1166	985	0.250	246	228	0.2	0.3	4.867	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1054	263	884	2114	0.498	1052	842	0.6	1.0	3.386	A
2	620	155	1191	1067	0.581	617	745	0.7	1.4	7.964	A
3	964	241	991	1321	0.730	959	817	1.2	2.6	9.781	A
4	721	180	985	1250	0.577	719	966	0.7	1.3	6.745	A
5	302	75	1425	819	0.368	301	279	0.3	0.6	6.936	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1054	263	887	2111	0.499	1054	845	1.0	1.0	3.403	A
2	620	155	1193	1065	0.582	620	748	1.4	1.4	8.079	A
3	964	241	994	1319	0.731	964	819	2.6	2.7	10.124	B
4	721	180	990	1247	0.578	721	969	1.3	1.4	6.844	A
5	302	75	1431	815	0.370	302	280	0.6	0.6	7.014	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	860	215	728	2242	0.384	862	694	1.0	0.6	2.611	A
2	506	127	977	1205	0.420	509	613	1.4	0.7	5.185	A
3	788	197	815	1450	0.543	793	671	2.7	1.2	5.529	A
4	589	147	813	1366	0.431	591	795	1.4	0.8	4.659	A
5	246	62	1175	980	0.251	247	229	0.6	0.3	4.922	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	720	180	608	2340	0.308	721	580	0.6	0.4	2.224	A
2	424	106	817	1309	0.324	425	512	0.7	0.5	4.077	A
3	659	165	681	1548	0.426	661	561	1.2	0.7	4.071	A
4	493	123	679	1458	0.338	494	664	0.8	0.5	3.738	A
5	206	52	981	1105	0.187	207	192	0.3	0.2	4.011	A

2036 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.94	A

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
D16	2036 Base Flows	AM	ONE HOUR	08:45	10:15	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	✓	747	100.000
2		ONE HOUR	✓	559	100.000
3		ONE HOUR	✓	381	100.000
4		ONE HOUR	✓	543	100.000
5		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	192	198	301	53
	2	195	2	117	149	96
	3	132	85	2	120	42
	4	182	170	184	2	5
	5	72	51	31	27	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.26	0.27	0.40	0.07
	2	0.35	0.00	0.21	0.27	0.17
	3	0.35	0.22	0.01	0.31	0.11
	4	0.34	0.31	0.34	0.00	0.01
	5	0.40	0.28	0.17	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	1	0	0	7	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.010	1.000	1.000	1.070	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	562	574
	09:00-09:15	672	685
	09:15-09:30	822	839
	09:30-09:45	822	839
	09:45-10:00	672	685
	10:00-10:15	562	574
2	08:45-09:00	421	428
	09:00-09:15	503	511
	09:15-09:30	615	626
	09:30-09:45	615	626
	09:45-10:00	503	511
	10:00-10:15	421	428
3	08:45-09:00	287	288
	09:00-09:15	343	344
	09:15-09:30	419	421
	09:30-09:45	419	421
	09:45-10:00	343	344
	10:00-10:15	287	288
4	08:45-09:00	409	419
	09:00-09:15	488	500
	09:15-09:30	598	612
	09:30-09:45	598	612
	09:45-10:00	488	500
	10:00-10:15	409	419
5	08:45-09:00	136	138
	09:00-09:15	163	165
	09:15-09:30	199	202
	09:30-09:45	199	202
	09:45-10:00	163	165
	10:00-10:15	136	138

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	2.43	0.6	A	685	1028
2	0.49	5.60	1.0	A	513	769
3	0.31	3.79	0.4	A	350	524
4	0.42	4.29	0.7	A	498	747
5	0.19	4.29	0.2	A	166	249

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	562	141	416	2462	0.228	561	438	0.0	0.3	1.894	A
2	421	105	602	1441	0.292	419	375	0.0	0.4	3.518	A
3	287	72	621	1581	0.181	286	399	0.0	0.2	2.778	A
4	409	102	458	1581	0.259	407	450	0.0	0.3	3.062	A
5	136	34	718	1255	0.109	136	147	0.0	0.1	3.215	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	672	168	498	2395	0.280	671	524	0.3	0.4	2.088	A
2	503	126	720	1364	0.369	502	449	0.4	0.6	4.173	A
3	343	86	744	1491	0.230	342	478	0.2	0.3	3.132	A
4	488	122	548	1521	0.321	488	538	0.3	0.5	3.482	A
5	163	41	859	1163	0.140	163	176	0.1	0.2	3.597	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	822	206	609	2303	0.357	822	642	0.4	0.6	2.429	A
2	615	154	881	1258	0.489	614	550	0.6	0.9	5.574	A
3	419	105	910	1369	0.306	419	585	0.3	0.4	3.786	A
4	598	149	670	1438	0.416	597	659	0.5	0.7	4.273	A
5	199	50	1052	1039	0.192	199	215	0.2	0.2	4.285	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	822	206	610	2302	0.357	822	643	0.6	0.6	2.432	A
2	615	154	882	1258	0.489	615	551	0.9	1.0	5.604	A
3	419	105	912	1368	0.307	419	586	0.4	0.4	3.793	A
4	598	149	672	1438	0.416	598	660	0.7	0.7	4.286	A
5	199	50	1054	1038	0.192	199	216	0.2	0.2	4.293	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	672	168	499	2393	0.281	672	526	0.6	0.4	2.093	A
2	503	126	721	1363	0.369	504	450	1.0	0.6	4.200	A
3	343	86	746	1490	0.230	343	479	0.4	0.3	3.140	A
4	488	122	550	1520	0.321	489	539	0.7	0.5	3.498	A
5	163	41	862	1162	0.140	163	177	0.2	0.2	3.605	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	562	141	418	2460	0.229	563	440	0.4	0.3	1.899	A
2	421	105	604	1439	0.292	422	377	0.6	0.4	3.538	A
3	287	72	624	1579	0.182	287	401	0.3	0.2	2.788	A
4	409	102	460	1580	0.259	409	451	0.5	0.4	3.078	A
5	136	34	721	1252	0.109	136	148	0.2	0.1	3.225	A

2036 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.06	A

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
D17	2036 Base Flows	PM	ONE HOUR	16:45	18:15	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	✓	917	100.000
2		ONE HOUR	✓	664	100.000
3		ONE HOUR	✓	701	100.000
4		ONE HOUR	✓	677	100.000
5		ONE HOUR	✓	306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	12	278	208	354	65
	2	187	4	172	202	99
	3	259	142	0	251	49
	4	239	245	175	0	18
	5	125	90	49	42	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.30	0.23	0.39	0.07
	2	0.28	0.01	0.26	0.30	0.15
	3	0.37	0.20	0.00	0.36	0.07
	4	0.35	0.36	0.26	0.00	0.03
	5	0.41	0.29	0.16	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	0	1	3
	2	1	0	1	1	4
	3	1	0	0	2	0
	4	0	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.010	1.030
	2	1.010	1.000	1.010	1.010	1.040
	3	1.010	1.000	1.000	1.020	1.000
	4	1.000	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	690	694
	17:00-17:15	824	829
	17:15-17:30	1010	1016
	17:30-17:45	1010	1016
	17:45-18:00	824	829
	18:00-18:15	690	694
2	16:45-17:00	500	507
	17:00-17:15	597	606
	17:15-17:30	731	742
	17:30-17:45	731	742
	17:45-18:00	597	606
	18:00-18:15	500	507
3	16:45-17:00	528	533
	17:00-17:15	630	637
	17:15-17:30	772	780
	17:30-17:45	772	780
	17:45-18:00	630	637
	18:00-18:15	528	533
4	16:45-17:00	510	513
	17:00-17:15	609	612
	17:15-17:30	745	750
	17:30-17:45	745	750
	17:45-18:00	609	612
	18:00-18:15	510	513
5	16:45-17:00	230	231
	17:00-17:15	275	276
	17:15-17:30	337	338
	17:30-17:45	337	338
	17:45-18:00	275	276
	18:00-18:15	230	231

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.47	3.11	0.9	A	841	1262
2	0.61	7.81	1.6	A	609	914
3	0.61	7.42	1.6	A	643	965
4	0.57	6.41	1.3	A	621	932
5	0.40	7.16	0.7	A	281	421

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	690	173	560	2382	0.290	689	616	0.0	0.4	2.124	A
2	500	125	679	1398	0.358	498	569	0.0	0.6	3.991	A
3	528	132	724	1501	0.352	526	453	0.0	0.5	3.685	A
4	510	127	613	1503	0.339	508	637	0.0	0.5	3.607	A
5	230	58	947	1126	0.205	229	173	0.0	0.3	4.013	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	824	206	670	2292	0.360	824	738	0.4	0.6	2.451	A
2	597	149	813	1311	0.455	596	681	0.6	0.8	5.028	A
3	630	158	866	1398	0.451	629	542	0.5	0.8	4.675	A
4	609	152	733	1421	0.428	608	762	0.5	0.7	4.423	A
5	275	69	1134	1005	0.274	275	207	0.3	0.4	4.924	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1010	252	820	2169	0.465	1008	902	0.6	0.9	3.099	A
2	731	183	995	1193	0.613	728	834	0.8	1.6	7.702	A
3	772	193	1060	1259	0.613	769	663	0.8	1.6	7.305	A
4	745	186	896	1309	0.569	743	932	0.7	1.3	6.336	A
5	337	84	1386	842	0.400	336	254	0.4	0.7	7.089	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1010	252	822	2167	0.466	1010	905	0.9	0.9	3.109	A
2	731	183	996	1192	0.614	731	836	1.6	1.6	7.813	A
3	772	193	1062	1257	0.614	772	665	1.6	1.6	7.420	A
4	745	186	899	1307	0.570	745	935	1.3	1.3	6.410	A
5	337	84	1390	840	0.401	337	254	0.7	0.7	7.161	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	824	206	674	2289	0.360	826	742	0.9	0.6	2.464	A
2	597	149	815	1309	0.456	600	684	1.6	0.8	5.094	A
3	630	158	870	1395	0.452	633	545	1.6	0.8	4.742	A
4	609	152	738	1418	0.429	611	766	1.3	0.8	4.473	A
5	275	69	1140	1001	0.275	276	208	0.7	0.4	4.974	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	690	173	564	2379	0.290	691	620	0.6	0.4	2.134	A
2	500	125	682	1396	0.358	501	572	0.8	0.6	4.030	A
3	528	132	728	1498	0.352	529	455	0.8	0.5	3.721	A
4	510	127	616	1501	0.340	511	640	0.8	0.5	3.641	A
5	230	58	953	1122	0.205	231	174	0.4	0.3	4.044	A

2036 Base Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.65	A

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
D18	2036 Base Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	964	100.000
2		ONE HOUR	✓	597	100.000
3		ONE HOUR	✓	815	100.000
4		ONE HOUR	✓	660	100.000
5		ONE HOUR	✓	276	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	237	257	413	55
	2	147	3	152	164	131
	3	296	184	0	282	53
	4	211	193	239	0	17
	5	110	74	63	29	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.25	0.27	0.43	0.06
	2	0.25	0.01	0.25	0.27	0.22
	3	0.36	0.23	0.00	0.35	0.07
	4	0.32	0.29	0.36	0.00	0.03
	5	0.40	0.27	0.23	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	1	0	0	2	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.010	1.000	1.000	1.020	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	726	731
	12:00-12:15	867	873
	12:15-12:30	1061	1070
	12:30-12:45	1061	1070
	12:45-13:00	867	873
	13:00-13:15	726	731
2	11:45-12:00	449	455
	12:00-12:15	537	543
	12:15-12:30	657	665
	12:30-12:45	657	665
	12:45-13:00	537	543
	13:00-13:15	449	455
3	11:45-12:00	614	614
	12:00-12:15	733	733
	12:15-12:30	897	897
	12:30-12:45	897	897
	12:45-13:00	733	733
	13:00-13:15	614	614
4	11:45-12:00	497	501
	12:00-12:15	593	599
	12:15-12:30	727	733
	12:30-12:45	727	733
	12:45-13:00	593	599
	13:00-13:15	497	501
5	11:45-12:00	208	209
	12:00-12:15	248	249
	12:15-12:30	304	305
	12:30-12:45	304	305
	12:45-13:00	248	249
	13:00-13:15	208	209

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	3.37	1.0	A	885	1327
2	0.60	8.38	1.5	A	548	822
3	0.70	9.21	2.3	A	748	1122
4	0.57	6.66	1.3	A	606	908
5	0.37	6.81	0.6	A	253	380

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	726	181	589	2355	0.308	724	574	0.0	0.4	2.205	A
2	449	112	794	1327	0.339	447	518	0.0	0.5	4.083	A
3	614	153	708	1529	0.401	611	533	0.0	0.7	3.912	A
4	497	124	653	1475	0.337	495	666	0.0	0.5	3.667	A
5	208	52	956	1121	0.185	207	192	0.0	0.2	3.935	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	867	217	704	2260	0.383	866	687	0.4	0.6	2.581	A
2	537	134	950	1226	0.438	536	620	0.5	0.8	5.207	A
3	733	183	847	1427	0.513	731	638	0.7	1.0	5.160	A
4	593	148	781	1387	0.428	592	797	0.5	0.7	4.523	A
5	248	62	1144	999	0.248	248	230	0.2	0.3	4.788	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1061	265	861	2132	0.498	1060	840	0.6	1.0	3.354	A
2	657	164	1163	1088	0.604	654	758	0.8	1.5	8.247	A
3	897	224	1036	1290	0.696	893	781	1.0	2.2	8.961	A
4	727	182	954	1270	0.572	724	975	0.7	1.3	6.571	A
5	304	76	1398	836	0.364	303	281	0.3	0.6	6.745	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1061	265	864	2129	0.498	1061	843	1.0	1.0	3.370	A
2	657	164	1165	1087	0.605	657	761	1.5	1.5	8.380	A
3	897	224	1039	1288	0.697	897	783	2.2	2.3	9.210	A
4	727	182	959	1267	0.574	727	978	1.3	1.3	6.659	A
5	304	76	1404	832	0.365	304	282	0.6	0.6	6.815	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	867	217	709	2256	0.384	868	692	1.0	0.6	2.597	A
2	537	134	953	1224	0.439	540	624	1.5	0.8	5.282	A
3	733	183	852	1424	0.514	737	641	2.3	1.1	5.276	A
4	593	148	788	1383	0.429	596	801	1.3	0.8	4.583	A
5	248	62	1152	994	0.250	249	231	0.6	0.3	4.838	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	726	181	592	2352	0.309	726	578	0.6	0.4	2.217	A
2	449	112	798	1325	0.339	451	521	0.8	0.5	4.123	A
3	614	153	712	1526	0.402	615	536	1.1	0.7	3.961	A
4	497	124	657	1472	0.338	498	670	0.8	0.5	3.702	A
5	208	52	962	1117	0.186	208	193	0.3	0.2	3.966	A

2036 Total Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.14	A

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
D19	2036 Total Flows	AM	ONE HOUR	08:45	10:15	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	✓	758	100.000
2		ONE HOUR	✓	567	100.000
3		ONE HOUR	✓	449	100.000
4		ONE HOUR	✓	551	100.000
5		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	3	187	223	293	52
	2	190	2	135	146	94
	3	154	103	2	140	50
	4	178	166	202	2	3
	5	70	50	38	26	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.25	0.29	0.39	0.07
	2	0.34	0.00	0.24	0.26	0.17
	3	0.34	0.23	0.00	0.31	0.11
	4	0.32	0.30	0.37	0.00	0.01
	5	0.38	0.27	0.21	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	3	0	3	0
	2	2	0	1	2	2
	3	1	0	0	0	0
	4	2	5	0	50	0
	5	1	0	0	8	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.030	1.000	1.030	1.000
	2	1.020	1.000	1.010	1.020	1.020
	3	1.010	1.000	1.000	1.000	1.000
	4	1.020	1.050	1.000	1.500	1.000
	5	1.010	1.000	1.000	1.080	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	571	582
	09:00-09:15	681	694
	09:15-09:30	835	850
	09:30-09:45	835	850
	09:45-10:00	681	694
	10:00-10:15	571	582
2	08:45-09:00	427	434
	09:00-09:15	510	519
	09:15-09:30	624	635
	09:30-09:45	624	635
	09:45-10:00	510	519
	10:00-10:15	427	434
3	08:45-09:00	338	339
	09:00-09:15	404	405
	09:15-09:30	494	496
	09:30-09:45	494	496
	09:45-10:00	404	405
	10:00-10:15	338	339
4	08:45-09:00	415	425
	09:00-09:15	495	507
	09:15-09:30	607	621
	09:30-09:45	607	621
	09:45-10:00	495	507
	10:00-10:15	415	425
5	08:45-09:00	139	141
	09:00-09:15	165	168
	09:15-09:30	203	206
	09:30-09:45	203	206
	09:45-10:00	165	168
	10:00-10:15	139	141

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.37	2.50	0.6	A	696	1043
2	0.51	5.94	1.0	A	520	780
3	0.36	4.05	0.6	A	412	618
4	0.43	4.48	0.8	A	506	758
5	0.20	4.48	0.3	A	169	253

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	571	143	443	2441	0.234	569	446	0.0	0.3	1.922	A
2	427	107	632	1422	0.300	425	381	0.0	0.4	3.606	A
3	338	85	606	1592	0.212	337	450	0.0	0.3	2.865	A
4	415	104	488	1563	0.265	413	456	0.0	0.4	3.127	A
5	139	35	752	1233	0.112	138	149	0.0	0.1	3.287	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	681	170	531	2370	0.288	681	534	0.3	0.4	2.131	A
2	510	127	755	1341	0.380	509	456	0.4	0.6	4.323	A
3	404	101	726	1504	0.268	403	539	0.3	0.4	3.269	A
4	495	124	584	1498	0.331	495	545	0.4	0.5	3.585	A
5	165	41	900	1137	0.145	165	179	0.1	0.2	3.704	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	835	209	650	2272	0.367	834	654	0.4	0.6	2.501	A
2	624	156	925	1231	0.507	623	559	0.6	1.0	5.907	A
3	494	124	888	1385	0.357	494	660	0.4	0.6	4.034	A
4	607	152	714	1410	0.430	606	667	0.5	0.7	4.467	A
5	203	51	1101	1007	0.201	202	219	0.2	0.3	4.471	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	835	209	651	2271	0.367	835	655	0.6	0.6	2.505	A
2	624	156	926	1230	0.508	624	559	1.0	1.0	5.943	A
3	494	124	890	1384	0.357	494	661	0.6	0.6	4.045	A
4	607	152	716	1410	0.430	607	668	0.7	0.8	4.483	A
5	203	51	1103	1006	0.201	203	219	0.3	0.3	4.481	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	681	170	532	2368	0.288	682	536	0.6	0.4	2.137	A
2	510	127	757	1340	0.380	511	457	1.0	0.6	4.354	A
3	404	101	728	1503	0.269	404	540	0.6	0.4	3.281	A
4	495	124	586	1497	0.331	496	547	0.8	0.5	3.600	A
5	165	41	903	1135	0.146	166	179	0.3	0.2	3.714	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	571	143	445	2440	0.234	571	449	0.4	0.3	1.928	A
2	427	107	634	1420	0.301	428	383	0.6	0.4	3.631	A
3	338	85	609	1590	0.213	338	452	0.4	0.3	2.878	A
4	415	104	490	1561	0.266	415	457	0.5	0.4	3.144	A
5	139	35	755	1230	0.113	139	150	0.2	0.1	3.298	A

2036 Total Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.59	A

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
D20	2036 Total Flows	PM	ONE HOUR	16:45	18:15	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	✓	924	100.000
2		ONE HOUR	✓	669	100.000
3		ONE HOUR	✓	777	100.000
4		ONE HOUR	✓	682	100.000
5		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	11	271	235	344	63
	2	181	4	191	196	97
	3	287	158	0	276	56
	4	233	239	194	0	16
	5	121	88	59	41	0

Proportions

		To				
		1	2	3	4	5
From	1	0.01	0.29	0.25	0.37	0.07
	2	0.27	0.01	0.29	0.29	0.14
	3	0.37	0.20	0.00	0.36	0.07
	4	0.34	0.35	0.28	0.00	0.02
	5	0.39	0.28	0.19	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	0	0	1	3
	2	1	0	1	1	4
	3	1	0	0	0	0
	4	0	1	1	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.010	1.030
	2	1.010	1.000	1.010	1.010	1.040
	3	1.010	1.000	1.000	1.000	1.000
	4	1.000	1.010	1.010	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	696	700
	17:00-17:15	831	835
	17:15-17:30	1017	1023
	17:30-17:45	1017	1023
	17:45-18:00	831	835
	18:00-18:15	696	700
2	16:45-17:00	504	511
	17:00-17:15	601	610
	17:15-17:30	737	747
	17:30-17:45	737	747
	17:45-18:00	601	610
	18:00-18:15	504	511
3	16:45-17:00	585	587
	17:00-17:15	699	701
	17:15-17:30	855	859
	17:30-17:45	855	859
	17:45-18:00	699	701
	18:00-18:15	585	587
4	16:45-17:00	513	517
	17:00-17:15	613	617
	17:15-17:30	751	756
	17:30-17:45	751	756
	17:45-18:00	613	617
	18:00-18:15	513	517
5	16:45-17:00	233	234
	17:00-17:15	278	279
	17:15-17:30	340	342
	17:30-17:45	340	342
	17:45-18:00	278	279
	18:00-18:15	233	234

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.48	3.22	0.9	A	848	1272
2	0.63	8.46	1.7	A	614	921
3	0.66	8.31	1.9	A	713	1069
4	0.59	6.84	1.4	A	626	939
5	0.42	7.69	0.7	A	284	425

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	587	2361	0.295	694	624	0.0	0.4	2.158	A
2	504	126	711	1377	0.366	501	570	0.0	0.6	4.098	A
3	585	146	703	1527	0.383	583	509	0.0	0.6	3.804	A
4	513	128	643	1483	0.346	511	643	0.0	0.5	3.698	A
5	233	58	980	1105	0.211	232	174	0.0	0.3	4.118	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	831	208	703	2266	0.367	830	747	0.4	0.6	2.505	A
2	601	150	850	1287	0.467	600	682	0.6	0.9	5.236	A
3	699	175	841	1426	0.490	697	610	0.6	0.9	4.929	A
4	613	153	769	1396	0.439	612	769	0.5	0.8	4.585	A
5	278	69	1173	980	0.283	277	208	0.3	0.4	5.120	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1017	254	859	2138	0.476	1016	913	0.6	0.9	3.207	A
2	737	184	1041	1163	0.633	733	834	0.9	1.7	8.311	A
3	855	214	1029	1290	0.663	852	745	0.9	1.9	8.136	A
4	751	188	940	1280	0.587	748	941	0.8	1.4	6.748	A
5	340	85	1433	812	0.419	339	255	0.4	0.7	7.592	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1017	254	862	2135	0.476	1017	917	0.9	0.9	3.220	A
2	737	184	1043	1162	0.634	736	837	1.7	1.7	8.457	A
3	855	214	1032	1288	0.664	855	748	1.9	1.9	8.313	A
4	751	188	943	1277	0.588	751	943	1.4	1.4	6.840	A
5	340	85	1439	808	0.421	340	255	0.7	0.7	7.687	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	831	208	707	2262	0.367	832	753	0.9	0.6	2.518	A
2	601	150	853	1285	0.468	605	686	1.7	0.9	5.319	A
3	699	175	845	1423	0.491	702	613	1.9	1.0	5.023	A
4	613	153	774	1393	0.440	616	773	1.4	0.8	4.647	A
5	278	69	1181	975	0.285	279	209	0.7	0.4	5.183	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	591	2358	0.295	696	629	0.6	0.4	2.169	A
2	504	126	714	1375	0.366	505	573	0.9	0.6	4.140	A
3	585	146	707	1524	0.384	586	512	1.0	0.6	3.847	A
4	513	128	647	1480	0.347	514	646	0.8	0.5	3.734	A
5	233	58	986	1100	0.211	233	175	0.4	0.3	4.152	A

2036 Total Flows, Saturday

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.43	A

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
D21	2036 Total Flows	Saturday	ONE HOUR	11:45	13:15	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	✓	975	100.000
2		ONE HOUR	✓	602	100.000
3		ONE HOUR	✓	885	100.000
4		ONE HOUR	✓	665	100.000
5		ONE HOUR	✓	279	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1	2	3	4	5
From	1	2	232	282	405	54
	2	144	3	166	161	128
	3	319	197	0	310	59
	4	206	188	254	0	17
	5	108	72	70	29	0

Proportions

		To				
		1	2	3	4	5
From	1	0.00	0.24	0.29	0.42	0.06
	2	0.24	0.00	0.28	0.27	0.21
	3	0.36	0.22	0.00	0.35	0.07
	4	0.31	0.28	0.38	0.00	0.03
	5	0.39	0.26	0.25	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1	2	3	4	5
From	1	0	1	0	1	2
	2	1	0	0	3	2
	3	0	0	0	0	0
	4	1	2	0	0	0
	5	1	0	0	0	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.010	1.000	1.010	1.020
	2	1.010	1.000	1.000	1.030	1.020
	3	1.000	1.000	1.000	1.000	1.000
	4	1.010	1.020	1.000	1.000	1.000
	5	1.010	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	734	740
	12:00-12:15	877	883
	12:15-12:30	1073	1082
	12:30-12:45	1073	1082
	12:45-13:00	877	883
	13:00-13:15	734	740
2	11:45-12:00	453	460
	12:00-12:15	541	549
	12:15-12:30	663	673
	12:30-12:45	663	673
	12:45-13:00	541	549
	13:00-13:15	453	460
3	11:45-12:00	666	666
	12:00-12:15	796	796
	12:15-12:30	974	974
	12:30-12:45	974	974
	12:45-13:00	796	796
	13:00-13:15	666	666
4	11:45-12:00	501	505
	12:00-12:15	598	603
	12:15-12:30	732	739
	12:30-12:45	732	739
	12:45-13:00	598	603
	13:00-13:15	501	505
5	11:45-12:00	210	211
	12:00-12:15	251	252
	12:15-12:30	307	308
	12:30-12:45	307	308
	12:45-13:00	251	252
	13:00-13:15	210	211

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.51	3.49	1.0	A	895	1342
2	0.63	9.12	1.7	A	552	829
3	0.75	10.99	2.9	B	812	1218
4	0.59	7.06	1.4	A	610	915
5	0.38	7.22	0.6	A	256	384

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	734	184	609	2338	0.314	732	584	0.0	0.5	2.239	A
2	453	113	823	1306	0.347	451	519	0.0	0.5	4.201	A
3	666	167	695	1538	0.433	663	579	0.0	0.8	4.104	A
4	501	125	679	1457	0.344	499	679	0.0	0.5	3.747	A
5	210	53	984	1103	0.190	209	193	0.0	0.2	4.024	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	877	219	730	2240	0.391	876	699	0.5	0.6	2.637	A
2	541	135	984	1201	0.451	540	621	0.5	0.8	5.436	A
3	796	199	831	1438	0.553	794	693	0.8	1.2	5.572	A
4	598	149	813	1367	0.437	597	812	0.5	0.8	4.670	A
5	251	63	1178	978	0.257	250	232	0.2	0.3	4.945	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1073	268	891	2108	0.509	1072	853	0.6	1.0	3.471	A
2	663	166	1204	1059	0.626	660	759	0.8	1.6	8.942	A
3	974	244	1016	1303	0.748	968	847	1.2	2.8	10.545	B
4	732	183	992	1245	0.588	730	993	0.8	1.4	6.946	A
5	307	77	1439	810	0.379	306	283	0.3	0.6	7.132	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1073	268	895	2105	0.510	1073	858	1.0	1.0	3.489	A
2	663	166	1207	1057	0.627	663	762	1.6	1.7	9.119	A
3	974	244	1019	1301	0.749	974	850	2.8	2.9	10.994	B
4	732	183	997	1242	0.590	732	996	1.4	1.4	7.064	A
5	307	77	1445	806	0.381	307	284	0.6	0.6	7.223	A

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	877	219	735	2236	0.392	878	705	1.0	0.6	2.655	A
2	541	135	988	1199	0.451	544	625	1.7	0.8	5.527	A
3	796	199	836	1435	0.555	802	697	2.9	1.3	5.748	A
4	598	149	820	1362	0.439	600	818	1.4	0.8	4.744	A
5	251	63	1187	972	0.258	252	233	0.6	0.4	5.007	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	734	184	613	2335	0.314	735	588	0.6	0.5	2.250	A
2	453	113	826	1304	0.348	454	522	0.8	0.5	4.245	A
3	666	167	698	1535	0.434	668	582	1.3	0.8	4.164	A
4	501	125	684	1454	0.344	502	683	0.8	0.5	3.783	A
5	210	53	991	1098	0.191	210	195	0.4	0.2	4.058	A

APPENDIX 16.0

ARCADY ASSESSMENT: TESCO/ BORDER RETAIL PARK ROUNDABOUT

16.1 Junction Layout
16.2 Output Results

Car Wash

No flare length

8.74

8.15

2.1

3.21

11.1

1.1m flare length

10.09

4.24

5.10

1.2m flare length

4.7

7.51

12.16

3.43

11.1

0.7m flare length

3.60

3.25

APPENDIX 16.1
ARCADY ASSESSMENT: TESCO/BORDER RETAIL PARK
ROUNDABOUT JUNCTION LAYOUT

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: Tesco Mini Roundabout.j10
Path: \\svr-adl-fs\Traffic\4000-4099\4024 McD's Wrexham (Tesco Extra)\2024 Work\Modelling
Report generation date: 20/08/2024 11:05:07

»2024 Surveyed Flows, AM
»2024 Surveyed Flows, PM
»2024 Surveyed Flows, Saturday
»2026 Base Flows, AM
»2026 Base Flows , PM
»2026 Base Flows , Saturday
»2026 Total Flows, AM
»2026 Total Flows, PM
»2026 Total Flows, Saturday

Summary of junction performance

	AM					PM					Saturday				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2024 Surveyed Flows														
Arm 1	D1	0.2	7.65	0.18	A	D2	0.4	9.76	0.30	A	D3	1.0	13.38	0.50	B
Arm 2		0.5	6.81	0.32	A		1.5	11.40	0.60	B		4.6	30.92	0.83	D
Arm 3		0.9	7.01	0.48	A		1.2	8.29	0.56	A		2.1	11.78	0.69	B
Arm 4		0.6	16.24	0.37	C		1.2	27.08	0.55	D		1.9	46.90	0.67	E
	2026 Base Flows														
Arm 1	D4	0.2	7.65	0.18	A	D5	0.4	9.76	0.30	A	D6	1.0	13.38	0.50	B
Arm 2		0.5	6.81	0.32	A		1.5	11.40	0.60	B		4.6	30.92	0.83	D
Arm 3		0.9	7.01	0.48	A		1.2	8.29	0.56	A		2.1	11.78	0.69	B
Arm 4		0.6	16.24	0.37	C		1.2	27.08	0.55	D		1.9	46.90	0.67	E
	2026 Total Flows														
Arm 1	D7	0.2	8.46	0.19	A	D8	0.5	11.27	0.33	B	D9	1.1	15.54	0.53	C
Arm 2		0.7	7.93	0.41	A		2.4	15.47	0.71	C		9.4	57.87	0.93	F
Arm 3		1.2	8.20	0.55	A		1.8	10.23	0.64	B		2.9	14.84	0.75	B
Arm 4		0.7	20.24	0.43	C		1.8	41.39	0.66	E		3.3	83.91	0.81	F

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

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

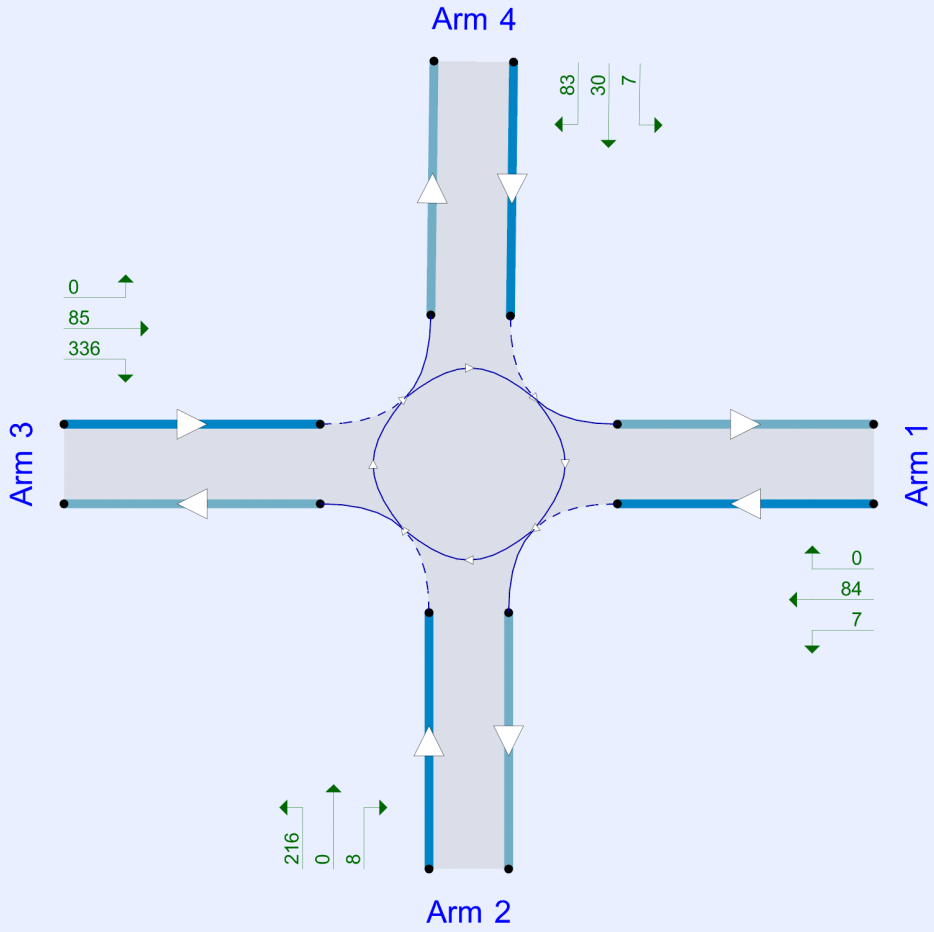
File summary

File Description

Title	
Location	
Site number	
Date	29/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADL\Peter
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	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
JUNCTIONS 9	5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Surveyed Flows	AM	ONE HOUR	08:45	10:15	15	✓
D2	2024 Surveyed Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Surveyed Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D4	2026 Base Flows	AM	ONE HOUR	08:45	10:15	15	✓
D5	2026 Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D6	2026 Base Flows	Saturday	ONE HOUR	11:45	13:15	15	✓
D7	2026 Total Flows	AM	ONE HOUR	08:45	10:15	15	✓
D8	2026 Total Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2026 Total Flows	Saturday	ONE HOUR	11:45	13:15	15	✓

Analysis Set Details

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

2024 Surveyed Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 75% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	8.32	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		8.32	A

Arms

Arms

Arm	Name	Description
1	RETAIL CAR PARK	
2	TESCO ACCESS	
3	Tesco Access Road	
4	PFS EGRESS	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.21	3.00	5.10	1.2	7.51	4.70	0.0	
2	3.25	3.00	3.43	0.7	12.16	11.10	0.0	
3	3.60	3.00	4.24	1.1	10.09	11.10	0.0	
4	8.74	3.00	8.15	0.0	5.90	2.10	0.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1	Percentage		100.00
2	Percentage		100.00
3	None		
4	Percentage		110.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.602	871
2	0.599	888
3	0.604	986
4	0.590	637

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	2024 Surveyed Flows	AM	ONE HOUR	08:45	10:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	91	100.000
2		ONE HOUR	✓	224	100.000
3		ONE HOUR	✓	424	100.000
4		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	7	84	0
	2	8	0	216	0
	3	85	336	3	0
	4	7	30	83	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.04	0.00	0.96	0.00
	3	0.20	0.79	0.01	0.00
	4	0.06	0.25	0.69	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	1	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.010	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	69	69
	09:00-09:15	82	82
	09:15-09:30	100	100
	09:30-09:45	100	100
	09:45-10:00	82	82
	10:00-10:15	69	69
2	08:45-09:00	169	169
	09:00-09:15	201	201
	09:15-09:30	247	247
	09:30-09:45	247	247
	09:45-10:00	201	201
	10:00-10:15	169	169
3	08:45-09:00	319	319
	09:00-09:15	381	381
	09:15-09:30	467	467
	09:30-09:45	467	467
	09:45-10:00	381	381
	10:00-10:15	319	319
4	08:45-09:00	90	91
	09:00-09:15	108	109
	09:15-09:30	132	133
	09:30-09:45	132	133
	09:45-10:00	108	109
	10:00-10:15	90	91

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.18	7.65	0.2	A	84	125
2	0.32	6.81	0.5	A	206	308
3	0.48	7.01	0.9	A	389	584
4	0.37	16.24	0.6	C	110	165

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	338	667	0.103	68	75	0.0	0.1	6.007	A
2	169	42	127	812	0.208	168	279	0.0	0.3	5.581	A
3	319	80	6	982	0.325	317	288	0.0	0.5	5.401	A
4	90	23	323	443	0.204	89	0	0.0	0.3	10.152	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	405	626	0.131	82	90	0.1	0.1	6.609	A
2	201	50	152	796	0.253	201	335	0.3	0.3	6.046	A
3	381	95	7	981	0.388	381	346	0.5	0.6	5.986	A
4	108	27	388	405	0.266	107	0	0.3	0.4	12.074	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	496	572	0.175	100	110	0.1	0.2	7.630	A
2	247	62	186	776	0.318	246	410	0.3	0.5	6.791	A
3	467	117	9	980	0.476	466	424	0.6	0.9	6.983	A
4	132	33	475	354	0.373	131	0	0.4	0.6	16.072	C

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	498	571	0.176	100	110	0.2	0.2	7.652	A
2	247	62	187	775	0.318	247	411	0.5	0.5	6.808	A
3	467	117	9	980	0.476	467	425	0.9	0.9	7.010	A
4	132	33	476	354	0.374	132	0	0.6	0.6	16.237	C

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	408	625	0.131	82	90	0.2	0.2	6.636	A
2	201	50	154	795	0.253	202	336	0.5	0.3	6.069	A
3	381	95	7	981	0.388	382	348	0.9	0.6	6.022	A
4	108	27	389	404	0.267	109	0	0.6	0.4	12.219	B

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	341	665	0.103	69	75	0.2	0.1	6.040	A
2	169	42	128	811	0.208	169	281	0.3	0.3	5.614	A
3	319	80	6	982	0.325	320	291	0.6	0.5	5.441	A
4	90	23	326	441	0.205	91	0	0.4	0.3	10.280	B

2024 Surveyed Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 75% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	11.93	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		11.93	B

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	2024 Surveyed Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	146	100.000
2		ONE HOUR	✓	437	100.000
3		ONE HOUR	✓	493	100.000
4		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	131	15	0
	2	13	0	424	0
	3	127	365	1	0
	4	6	26	117	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.90	0.10	0.00
	2	0.03	0.00	0.97	0.00
	3	0.26	0.74	0.00	0.00
	4	0.04	0.17	0.79	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	5	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.050	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	110	110
	17:00-17:15	131	131
	17:15-17:30	161	161
	17:30-17:45	161	161
	17:45-18:00	131	131
	18:00-18:15	110	110
2	16:45-17:00	329	329
	17:00-17:15	393	393
	17:15-17:30	481	481
	17:30-17:45	481	481
	17:45-18:00	393	393
	18:00-18:15	329	329
3	16:45-17:00	371	371
	17:00-17:15	443	443
	17:15-17:30	543	543
	17:30-17:45	543	543
	17:45-18:00	443	443
	18:00-18:15	371	371
4	16:45-17:00	112	117
	17:00-17:15	134	139
	17:15-17:30	164	170
	17:30-17:45	164	170
	17:45-18:00	134	139
	18:00-18:15	112	117

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	9.76	0.4	A	134	201
2	0.60	11.40	1.5	B	401	601
3	0.56	8.29	1.2	A	452	679
4	0.55	27.08	1.2	D	137	205

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	380	639	0.172	109	109	0.0	0.2	6.779	A
2	329	82	99	826	0.398	326	390	0.0	0.7	7.166	A
3	371	93	10	980	0.379	369	416	0.0	0.6	5.871	A
4	112	28	378	398	0.282	111	0	0.0	0.4	12.470	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	456	593	0.221	131	131	0.2	0.3	7.787	A
2	393	98	119	814	0.483	392	468	0.7	0.9	8.512	A
3	443	111	12	979	0.453	442	499	0.6	0.8	6.702	A
4	134	33	454	355	0.377	133	0	0.4	0.6	16.168	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	557	532	0.302	160	160	0.3	0.4	9.678	A
2	481	120	145	798	0.603	479	573	0.9	1.5	11.218	B
3	543	136	14	977	0.556	541	609	0.8	1.2	8.229	A
4	164	41	555	297	0.552	162	0	0.6	1.2	26.115	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	560	530	0.304	161	161	0.4	0.4	9.760	A
2	481	120	146	796	0.604	481	575	1.5	1.5	11.403	B
3	543	136	14	977	0.556	543	613	1.2	1.2	8.288	A
4	164	41	557	296	0.553	164	0	1.2	1.2	27.081	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	461	590	0.222	132	132	0.4	0.3	7.866	A
2	393	98	121	812	0.484	395	471	1.5	1.0	8.680	A
3	443	111	12	978	0.453	445	505	1.2	0.8	6.767	A
4	134	33	457	354	0.379	136	0	1.2	0.6	16.734	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	385	636	0.173	110	110	0.3	0.2	6.847	A
2	329	82	101	825	0.399	330	394	1.0	0.7	7.292	A
3	371	93	10	980	0.379	372	421	0.8	0.6	5.933	A
4	112	28	382	396	0.283	113	0	0.6	0.4	12.769	B

2024 Surveyed Flows, Saturday

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 74% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	21.86	C

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		21.86	C

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	2024 Surveyed Flows	Saturday	ONE HOUR	11:45	13:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	240	100.000
2		ONE HOUR	✓	510	100.000
3		ONE HOUR	✓	606	100.000
4		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	220	0
	2	20	0	490	0
	3	223	381	2	0
	4	14	23	104	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.04	0.00	0.96	0.00
	3	0.37	0.63	0.00	0.00
	4	0.10	0.16	0.74	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	181	181
	12:00-12:15	216	216
	12:15-12:30	264	264
	12:30-12:45	264	264
	12:45-13:00	216	216
	13:00-13:15	181	181
2	11:45-12:00	384	384
	12:00-12:15	458	458
	12:15-12:30	562	562
	12:30-12:45	562	562
	12:45-13:00	458	458
	13:00-13:15	384	384
3	11:45-12:00	456	456
	12:00-12:15	545	545
	12:15-12:30	667	667
	12:30-12:45	667	667
	12:45-13:00	545	545
	13:00-13:15	456	456
4	11:45-12:00	106	106
	12:00-12:15	127	127
	12:15-12:30	155	155
	12:30-12:45	155	155
	12:45-13:00	127	127
	13:00-13:15	106	106

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	13.38	1.0	B	220	330
2	0.83	30.92	4.6	D	468	702
3	0.69	11.78	2.1	B	556	834
4	0.67	46.90	1.9	E	129	194

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	380	642	0.282	179	192	0.0	0.4	7.756	A
2	384	96	243	742	0.517	380	317	0.0	1.0	9.816	A
3	456	114	15	977	0.467	453	608	0.0	0.9	6.828	A
4	106	27	468	361	0.294	105	0	0.0	0.4	13.961	B

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	457	596	0.362	215	230	0.4	0.6	9.436	A
2	458	115	292	713	0.643	456	380	1.0	1.7	13.828	B
3	545	136	18	975	0.559	543	729	0.9	1.2	8.312	A
4	127	32	561	306	0.415	126	0	0.4	0.7	19.875	C

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	555	536	0.493	263	281	0.6	0.9	13.081	B
2	562	140	354	676	0.831	552	464	1.7	4.2	27.069	D
3	667	167	22	973	0.686	664	884	1.2	2.1	11.528	B
4	155	39	685	232	0.668	151	0	0.7	1.8	42.169	E

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	561	533	0.496	264	283	0.9	1.0	13.380	B
2	562	140	358	673	0.834	560	467	4.2	4.6	30.922	D
3	667	167	22	972	0.686	667	897	2.1	2.1	11.775	B
4	155	39	689	230	0.674	155	0	1.8	1.9	46.897	E

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	465	591	0.365	217	233	1.0	0.6	9.674	A
2	458	115	298	709	0.646	469	384	4.6	1.9	15.577	C
3	545	136	18	974	0.559	548	749	2.1	1.3	8.510	A
4	127	32	567	302	0.419	131	0	1.9	0.7	21.572	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	386	638	0.283	181	194	0.6	0.4	7.894	A
2	384	96	247	740	0.519	387	320	1.9	1.1	10.294	B
3	456	114	15	976	0.467	458	619	1.3	0.9	6.965	A
4	106	27	473	358	0.297	107	0	0.7	0.4	14.456	B

2026 Base Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 75% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	8.32	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		8.32	A

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	2026 Base Flows	AM	ONE HOUR	08:45	10:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	91	100.000
2		ONE HOUR	✓	224	100.000
3		ONE HOUR	✓	424	100.000
4		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	7	84	0
	2	8	0	216	0
	3	85	336	3	0
	4	7	30	83	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.04	0.00	0.96	0.00
	3	0.20	0.79	0.01	0.00
	4	0.06	0.25	0.69	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	1	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.010	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	69	69
	09:00-09:15	82	82
	09:15-09:30	100	100
	09:30-09:45	100	100
	09:45-10:00	82	82
	10:00-10:15	69	69
2	08:45-09:00	169	169
	09:00-09:15	201	201
	09:15-09:30	247	247
	09:30-09:45	247	247
	09:45-10:00	201	201
	10:00-10:15	169	169
3	08:45-09:00	319	319
	09:00-09:15	381	381
	09:15-09:30	467	467
	09:30-09:45	467	467
	09:45-10:00	381	381
	10:00-10:15	319	319
4	08:45-09:00	90	91
	09:00-09:15	108	109
	09:15-09:30	132	133
	09:30-09:45	132	133
	09:45-10:00	108	109
	10:00-10:15	90	91

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.18	7.65	0.2	A	84	125
2	0.32	6.81	0.5	A	206	308
3	0.48	7.01	0.9	A	389	584
4	0.37	16.24	0.6	C	110	165

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	338	667	0.103	68	75	0.0	0.1	6.007	A
2	169	42	127	812	0.208	168	279	0.0	0.3	5.581	A
3	319	80	6	982	0.325	317	288	0.0	0.5	5.401	A
4	90	23	323	443	0.204	89	0	0.0	0.3	10.152	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	405	626	0.131	82	90	0.1	0.1	6.609	A
2	201	50	152	796	0.253	201	335	0.3	0.3	6.046	A
3	381	95	7	981	0.388	381	346	0.5	0.6	5.986	A
4	108	27	388	405	0.266	107	0	0.3	0.4	12.074	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	496	572	0.175	100	110	0.1	0.2	7.630	A
2	247	62	186	776	0.318	246	410	0.3	0.5	6.791	A
3	467	117	9	980	0.476	466	424	0.6	0.9	6.983	A
4	132	33	475	354	0.373	131	0	0.4	0.6	16.072	C

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	498	571	0.176	100	110	0.2	0.2	7.652	A
2	247	62	187	775	0.318	247	411	0.5	0.5	6.808	A
3	467	117	9	980	0.476	467	425	0.9	0.9	7.010	A
4	132	33	476	354	0.374	132	0	0.6	0.6	16.237	C

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	408	625	0.131	82	90	0.2	0.2	6.636	A
2	201	50	154	795	0.253	202	336	0.5	0.3	6.069	A
3	381	95	7	981	0.388	382	348	0.9	0.6	6.022	A
4	108	27	389	404	0.267	109	0	0.6	0.4	12.219	B

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	341	665	0.103	69	75	0.2	0.1	6.040	A
2	169	42	128	811	0.208	169	281	0.3	0.3	5.614	A
3	319	80	6	982	0.325	320	291	0.6	0.5	5.441	A
4	90	23	326	441	0.205	91	0	0.4	0.3	10.280	B

2026 Base Flows , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 75% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	11.93	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		11.93	B

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	2026 Base Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	146	100.000
2		ONE HOUR	✓	437	100.000
3		ONE HOUR	✓	493	100.000
4		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	131	15	0
	2	13	0	424	0
	3	127	365	1	0
	4	6	26	117	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.90	0.10	0.00
	2	0.03	0.00	0.97	0.00
	3	0.26	0.74	0.00	0.00
	4	0.04	0.17	0.79	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	5	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.050	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	110	110
	17:00-17:15	131	131
	17:15-17:30	161	161
	17:30-17:45	161	161
	17:45-18:00	131	131
	18:00-18:15	110	110
2	16:45-17:00	329	329
	17:00-17:15	393	393
	17:15-17:30	481	481
	17:30-17:45	481	481
	17:45-18:00	393	393
	18:00-18:15	329	329
3	16:45-17:00	371	371
	17:00-17:15	443	443
	17:15-17:30	543	543
	17:30-17:45	543	543
	17:45-18:00	443	443
	18:00-18:15	371	371
4	16:45-17:00	112	117
	17:00-17:15	134	139
	17:15-17:30	164	170
	17:30-17:45	164	170
	17:45-18:00	134	139
	18:00-18:15	112	117

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	9.76	0.4	A	134	201
2	0.60	11.40	1.5	B	401	601
3	0.56	8.29	1.2	A	452	679
4	0.55	27.08	1.2	D	137	205

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	380	639	0.172	109	109	0.0	0.2	6.779	A
2	329	82	99	826	0.398	326	390	0.0	0.7	7.166	A
3	371	93	10	980	0.379	369	416	0.0	0.6	5.871	A
4	112	28	378	398	0.282	111	0	0.0	0.4	12.470	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	456	593	0.221	131	131	0.2	0.3	7.787	A
2	393	98	119	814	0.483	392	468	0.7	0.9	8.512	A
3	443	111	12	979	0.453	442	499	0.6	0.8	6.702	A
4	134	33	454	355	0.377	133	0	0.4	0.6	16.168	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	557	532	0.302	160	160	0.3	0.4	9.678	A
2	481	120	145	798	0.603	479	573	0.9	1.5	11.218	B
3	543	136	14	977	0.556	541	609	0.8	1.2	8.229	A
4	164	41	555	297	0.552	162	0	0.6	1.2	26.115	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	560	530	0.304	161	161	0.4	0.4	9.760	A
2	481	120	146	796	0.604	481	575	1.5	1.5	11.403	B
3	543	136	14	977	0.556	543	613	1.2	1.2	8.288	A
4	164	41	557	296	0.553	164	0	1.2	1.2	27.081	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	461	590	0.222	132	132	0.4	0.3	7.866	A
2	393	98	121	812	0.484	395	471	1.5	1.0	8.680	A
3	443	111	12	978	0.453	445	505	1.2	0.8	6.767	A
4	134	33	457	354	0.379	136	0	1.2	0.6	16.734	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	385	636	0.173	110	110	0.3	0.2	6.847	A
2	329	82	101	825	0.399	330	394	1.0	0.7	7.292	A
3	371	93	10	980	0.379	372	421	0.8	0.6	5.933	A
4	112	28	382	396	0.283	113	0	0.6	0.4	12.769	B

2026 Base Flows , Saturday

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 74% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	21.86	C

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		21.86	C

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	2026 Base Flows	Saturday	ONE HOUR	11:45	13:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	240	100.000
2		ONE HOUR	✓	510	100.000
3		ONE HOUR	✓	606	100.000
4		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	220	0
	2	20	0	490	0
	3	223	381	2	0
	4	14	23	104	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.04	0.00	0.96	0.00
	3	0.37	0.63	0.00	0.00
	4	0.10	0.16	0.74	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	181	181
	12:00-12:15	216	216
	12:15-12:30	264	264
	12:30-12:45	264	264
	12:45-13:00	216	216
	13:00-13:15	181	181
2	11:45-12:00	384	384
	12:00-12:15	458	458
	12:15-12:30	562	562
	12:30-12:45	562	562
	12:45-13:00	458	458
	13:00-13:15	384	384
3	11:45-12:00	456	456
	12:00-12:15	545	545
	12:15-12:30	667	667
	12:30-12:45	667	667
	12:45-13:00	545	545
	13:00-13:15	456	456
4	11:45-12:00	106	106
	12:00-12:15	127	127
	12:15-12:30	155	155
	12:30-12:45	155	155
	12:45-13:00	127	127
	13:00-13:15	106	106

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	13.38	1.0	B	220	330
2	0.83	30.92	4.6	D	468	702
3	0.69	11.78	2.1	B	556	834
4	0.67	46.90	1.9	E	129	194

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	380	642	0.282	179	192	0.0	0.4	7.756	A
2	384	96	243	742	0.517	380	317	0.0	1.0	9.816	A
3	456	114	15	977	0.467	453	608	0.0	0.9	6.828	A
4	106	27	468	361	0.294	105	0	0.0	0.4	13.961	B

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	457	596	0.362	215	230	0.4	0.6	9.436	A
2	458	115	292	713	0.643	456	380	1.0	1.7	13.828	B
3	545	136	18	975	0.559	543	729	0.9	1.2	8.312	A
4	127	32	561	306	0.415	126	0	0.4	0.7	19.875	C

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	555	536	0.493	263	281	0.6	0.9	13.081	B
2	562	140	354	676	0.831	552	464	1.7	4.2	27.069	D
3	667	167	22	973	0.686	664	884	1.2	2.1	11.528	B
4	155	39	685	232	0.668	151	0	0.7	1.8	42.169	E

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	561	533	0.496	264	283	0.9	1.0	13.380	B
2	562	140	358	673	0.834	560	467	4.2	4.6	30.922	D
3	667	167	22	972	0.686	667	897	2.1	2.1	11.775	B
4	155	39	689	230	0.674	155	0	1.8	1.9	46.897	E

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	465	591	0.365	217	233	1.0	0.6	9.674	A
2	458	115	298	709	0.646	469	384	4.6	1.9	15.577	C
3	545	136	18	974	0.559	548	749	2.1	1.3	8.510	A
4	127	32	567	302	0.419	131	0	1.9	0.7	21.572	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	386	638	0.283	181	194	0.6	0.4	7.894	A
2	384	96	247	740	0.519	387	320	1.9	1.1	10.294	B
3	456	114	15	976	0.467	458	619	1.3	0.9	6.965	A
4	106	27	473	358	0.297	107	0	0.7	0.4	14.456	B

2026 Total Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 78% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	9.61	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		9.61	A

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	2026 Total Flows	AM	ONE HOUR	08:45	10:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	91	100.000
2		ONE HOUR	✓	292	100.000
3		ONE HOUR	✓	492	100.000
4		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	7	84	0
	2	8	0	284	0
	3	85	404	3	0
	4	7	30	83	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.03	0.00	0.97	0.00
	3	0.17	0.82	0.01	0.00
	4	0.06	0.25	0.69	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	1	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.010	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	08:45-09:00	69	69
	09:00-09:15	82	82
	09:15-09:30	100	100
	09:30-09:45	100	100
	09:45-10:00	82	82
	10:00-10:15	69	69
2	08:45-09:00	220	220
	09:00-09:15	263	263
	09:15-09:30	321	321
	09:30-09:45	321	321
	09:45-10:00	263	263
	10:00-10:15	220	220
3	08:45-09:00	370	370
	09:00-09:15	442	442
	09:15-09:30	542	542
	09:30-09:45	542	542
	09:45-10:00	442	442
	10:00-10:15	370	370
4	08:45-09:00	90	91
	09:00-09:15	108	109
	09:15-09:30	132	133
	09:30-09:45	132	133
	09:45-10:00	108	109
	10:00-10:15	90	91

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.19	8.46	0.2	A	84	125
2	0.41	7.93	0.7	A	268	402
3	0.55	8.20	1.2	A	451	677
4	0.43	20.24	0.7	C	110	165

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	388	636	0.108	68	75	0.0	0.1	6.327	A
2	220	55	127	812	0.271	218	330	0.0	0.4	6.053	A
3	370	93	6	982	0.377	368	339	0.0	0.6	5.842	A
4	90	23	374	413	0.219	89	0	0.0	0.3	11.074	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	466	590	0.139	82	90	0.1	0.2	7.086	A
2	263	66	152	796	0.330	262	396	0.4	0.5	6.733	A
3	442	111	7	981	0.451	441	407	0.6	0.8	6.658	A
4	108	27	449	369	0.292	107	0	0.3	0.4	13.705	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	570	527	0.190	100	110	0.2	0.2	8.423	A
2	321	80	186	776	0.414	321	484	0.5	0.7	7.891	A
3	542	135	9	980	0.553	540	498	0.8	1.2	8.148	A
4	132	33	549	311	0.425	131	0	0.4	0.7	19.876	C

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	100	25	572	526	0.191	100	110	0.2	0.2	8.463	A
2	321	80	187	775	0.415	321	485	0.7	0.7	7.932	A
3	542	135	9	980	0.553	542	500	1.2	1.2	8.205	A
4	132	33	550	310	0.426	132	0	0.7	0.7	20.235	C

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	82	20	470	587	0.139	82	90	0.2	0.2	7.130	A
2	263	66	154	795	0.330	263	398	0.7	0.5	6.777	A
3	442	111	7	981	0.451	444	410	1.2	0.8	6.718	A
4	108	27	451	368	0.293	109	0	0.7	0.4	13.964	B

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	69	17	393	634	0.108	69	75	0.2	0.1	6.372	A
2	220	55	129	811	0.271	220	333	0.5	0.4	6.105	A
3	370	93	6	982	0.377	371	343	0.8	0.6	5.903	A
4	90	23	377	411	0.220	91	0	0.4	0.3	11.256	B

2026 Total Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 78% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	15.78	C

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		15.78	C

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	2026 Total Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	146	100.000
2		ONE HOUR	✓	513	100.000
3		ONE HOUR	✓	568	100.000
4		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	131	15	0
	2	13	0	500	0
	3	127	440	1	0
	4	6	26	117	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.90	0.10	0.00
	2	0.03	0.00	0.97	0.00
	3	0.22	0.77	0.00	0.00
	4	0.04	0.17	0.79	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	5	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.050	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	16:45-17:00	110	110
	17:00-17:15	131	131
	17:15-17:30	161	161
	17:30-17:45	161	161
	17:45-18:00	131	131
	18:00-18:15	110	110
2	16:45-17:00	386	386
	17:00-17:15	461	461
	17:15-17:30	565	565
	17:30-17:45	565	565
	17:45-18:00	461	461
	18:00-18:15	386	386
3	16:45-17:00	428	428
	17:00-17:15	511	511
	17:15-17:30	625	625
	17:30-17:45	625	625
	17:45-18:00	511	511
	18:00-18:15	428	428
4	16:45-17:00	112	117
	17:00-17:15	134	139
	17:15-17:30	164	170
	17:30-17:45	164	170
	17:45-18:00	134	139
	18:00-18:15	112	117

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.33	11.27	0.5	B	134	201
2	0.71	15.47	2.4	C	471	706
3	0.64	10.23	1.8	B	521	782
4	0.66	41.39	1.8	E	137	205

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	436	606	0.181	109	109	0.0	0.2	7.235	A
2	386	97	99	826	0.467	383	446	0.0	0.9	8.058	A
3	428	107	10	980	0.436	425	472	0.0	0.8	6.451	A
4	112	28	434	366	0.306	110	0	0.0	0.4	13.987	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	523	553	0.237	131	131	0.2	0.3	8.528	A
2	461	115	119	814	0.567	460	535	0.9	1.3	10.114	B
3	511	128	12	979	0.522	509	567	0.8	1.1	7.652	A
4	134	33	521	317	0.423	133	0	0.4	0.7	19.442	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	637	483	0.333	160	160	0.3	0.5	11.110	B
2	565	141	143	798	0.707	561	654	1.3	2.3	14.893	B
3	625	156	14	977	0.640	623	690	1.1	1.7	10.085	B
4	164	41	637	251	0.653	160	0	0.7	1.7	38.066	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	161	40	642	480	0.335	161	161	0.5	0.5	11.273	B
2	565	141	146	797	0.709	565	657	2.3	2.4	15.466	C
3	625	156	14	977	0.640	625	696	1.7	1.8	10.229	B
4	164	41	640	250	0.657	164	0	1.7	1.8	41.393	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	131	33	531	548	0.240	132	132	0.5	0.3	8.673	A
2	461	115	123	811	0.569	465	540	2.4	1.4	10.528	B
3	511	128	12	978	0.522	513	576	1.8	1.1	7.781	A
4	134	33	525	315	0.426	138	0	1.8	0.8	20.824	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	110	27	442	602	0.183	110	110	0.3	0.2	7.325	A
2	386	97	101	825	0.468	388	451	1.4	0.9	8.278	A
3	428	107	10	980	0.437	429	479	1.1	0.8	6.554	A
4	112	28	439	364	0.309	113	0	0.8	0.5	14.459	B

2026 Total Flows, Saturday

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 76% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	36.17	E

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		36.17	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Total Flows	Saturday	ONE HOUR	11:45	13:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	240	100.000
2		ONE HOUR	✓	571	100.000
3		ONE HOUR	✓	664	100.000
4		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	20	220	0
	2	20	0	551	0
	3	223	439	2	0
	4	14	23	104	0

Proportions

		To			
		1	2	3	4
From	1	0.00	0.08	0.92	0.00
	2	0.04	0.00	0.96	0.00
	3	0.34	0.66	0.00	0.00
	4	0.10	0.16	0.74	0.00

Vehicle Mix

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

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Average PCU Per Veh

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
1	11:45-12:00	181	181
	12:00-12:15	216	216
	12:15-12:30	264	264
	12:30-12:45	264	264
	12:45-13:00	216	216
	13:00-13:15	181	181
2	11:45-12:00	430	430
	12:00-12:15	513	513
	12:15-12:30	629	629
	12:30-12:45	629	629
	12:45-13:00	513	513
	13:00-13:15	430	430
3	11:45-12:00	500	500
	12:00-12:15	597	597
	12:15-12:30	731	731
	12:30-12:45	731	731
	12:45-13:00	597	597
	13:00-13:15	500	500
4	11:45-12:00	106	106
	12:00-12:15	127	127
	12:15-12:30	155	155
	12:30-12:45	155	155
	12:45-13:00	127	127
	13:00-13:15	106	106

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.53	15.54	1.1	C	220	330
2	0.93	57.87	9.4	F	524	786
3	0.75	14.84	2.9	B	609	914
4	0.81	83.91	3.3	F	129	194

Main Results for each time segment

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	423	616	0.293	179	192	0.0	0.4	8.211	A
2	430	107	243	743	0.579	425	360	0.0	1.3	11.141	B
3	500	125	15	977	0.512	496	652	0.0	1.0	7.426	A
4	106	27	511	335	0.316	104	0	0.0	0.5	15.461	C

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	508	565	0.382	215	230	0.4	0.6	10.263	B
2	513	128	291	713	0.719	509	432	1.3	2.4	17.242	C
3	597	149	18	975	0.612	595	782	1.0	1.5	9.423	A
4	127	32	613	275	0.461	125	0	0.5	0.8	23.779	C

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	615	501	0.528	262	280	0.6	1.1	14.988	B
2	629	157	351	678	0.928	607	526	2.4	7.7	42.263	E
3	731	183	21	973	0.752	726	937	1.5	2.9	14.276	B
4	155	39	747	196	0.792	147	0	0.8	2.8	65.747	F

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	264	66	623	495	0.533	264	282	1.1	1.1	15.541	C
2	629	157	357	674	0.933	622	530	7.7	9.4	57.870	F
3	731	183	22	972	0.752	731	957	2.9	2.9	14.839	B
4	155	39	753	193	0.806	153	0	2.8	3.3	83.914	F

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	523	556	0.388	218	235	1.1	0.6	10.696	B
2	513	128	302	707	0.726	540	438	9.4	2.8	24.266	C
3	597	149	19	974	0.613	602	823	2.9	1.6	9.810	A
4	127	32	621	270	0.469	136	0	3.3	0.9	28.544	D

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	181	45	431	611	0.296	182	195	0.6	0.4	8.393	A
2	430	107	248	740	0.581	436	365	2.8	1.4	12.051	B
3	500	125	15	976	0.512	502	668	1.6	1.1	7.628	A
4	106	27	517	331	0.320	108	0	0.9	0.5	16.227	C