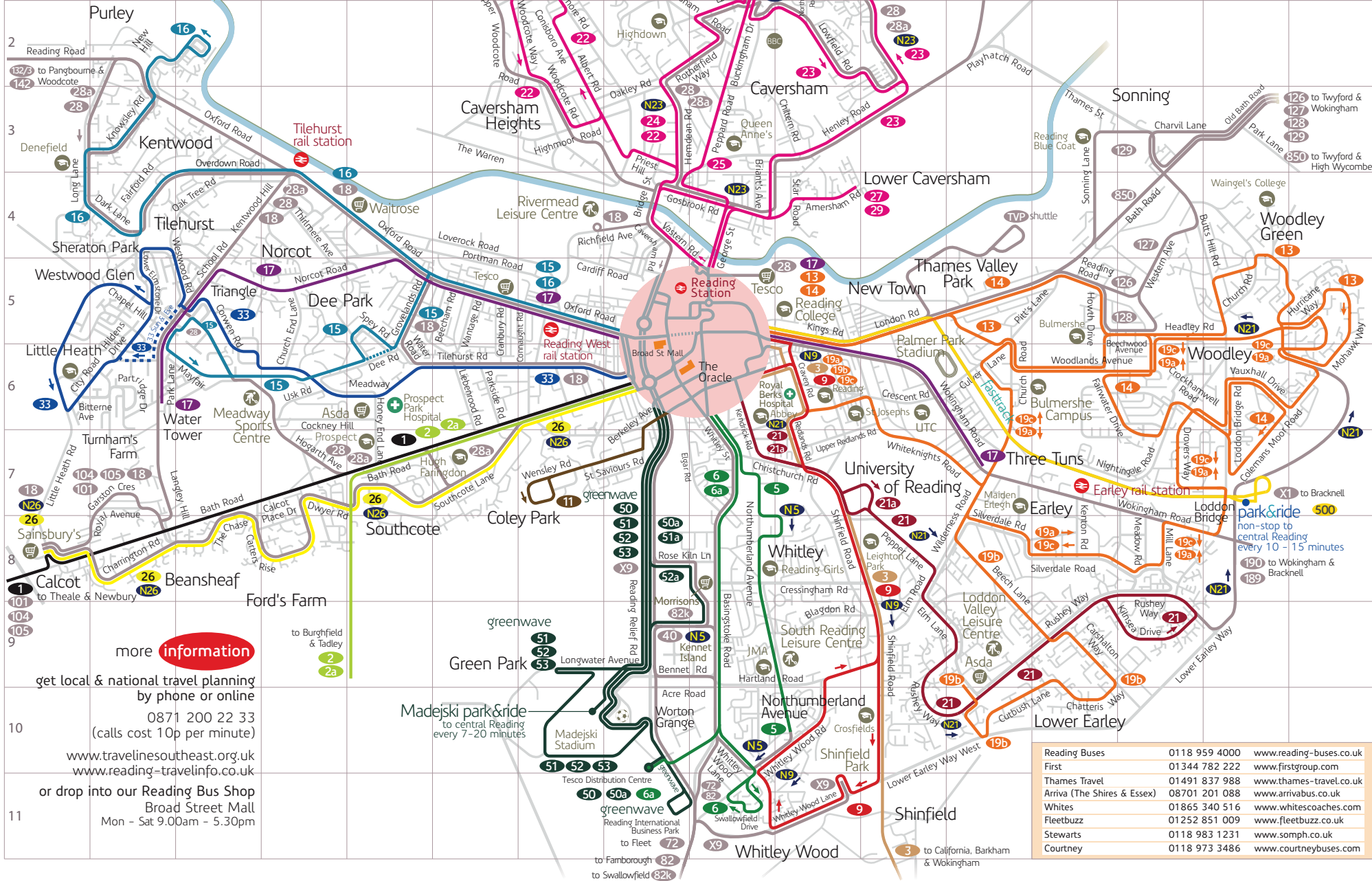


Appendix F

Bus Service Network

quality travel for Reading
from July 2014



more **information**

get local & national travel planning
by phone or online

0871 200 22 33
(calls cost 10p per minute)

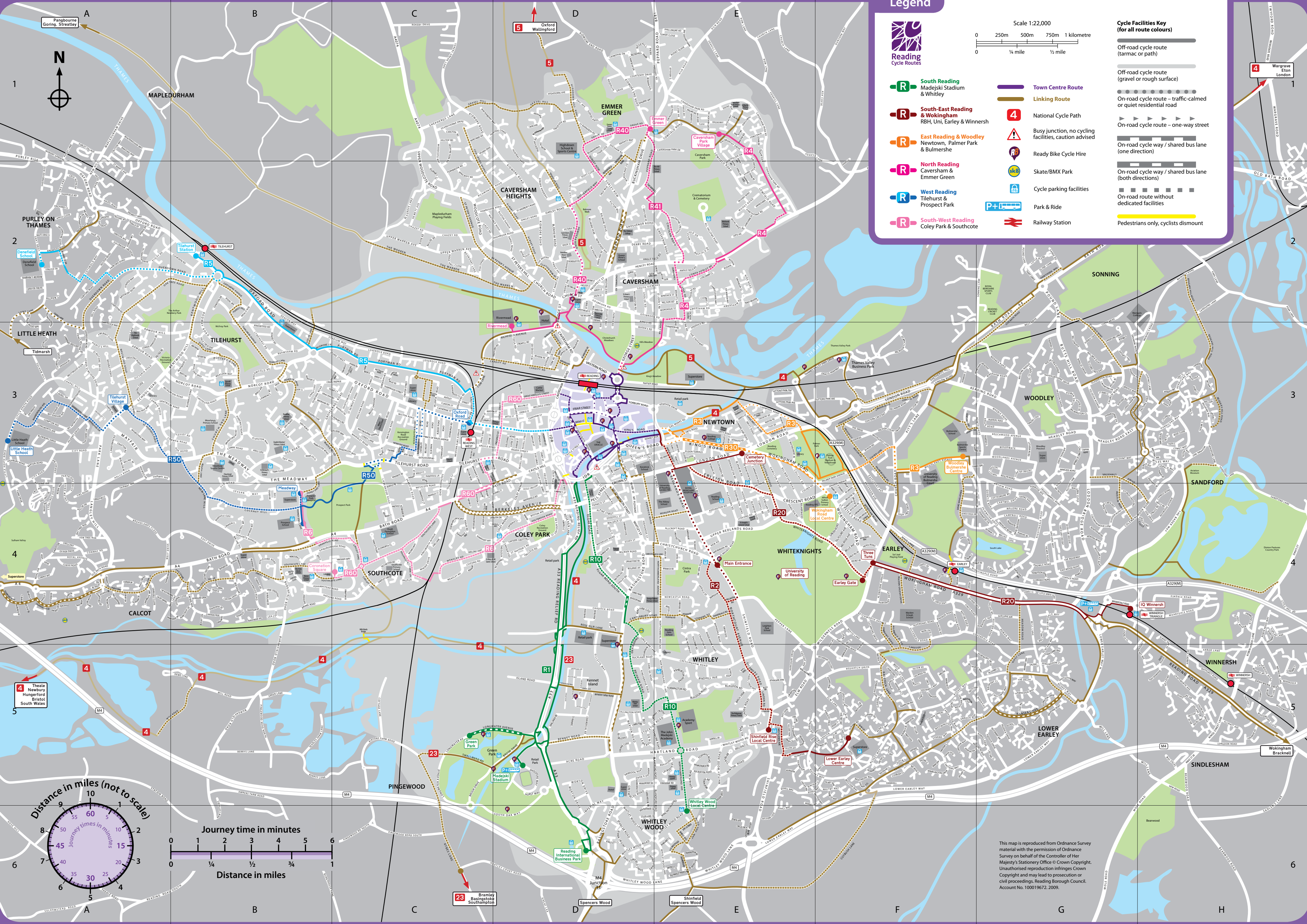
www.travelinesoutheast.org.uk
www.reading-travelinfo.co.uk

or drop into our Reading Bus Shop
Broad Street Mall
Mon - Sat 9.00am - 5.30pm

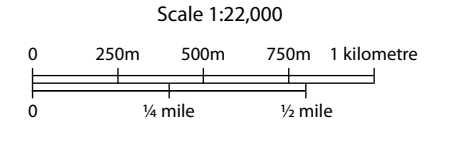
Reading Buses	0118 959 4000	www.reading-buses.co.uk
First	01344 782 222	www.firstgroup.com
Thames Travel	01491 837 988	www.thames-travel.co.uk
Arriva (The Shires & Essex)	08701 201 088	www.arrivabus.co.uk
Whites	01865 340 516	www.whitescoaches.com
Fleetbuzz	01252 851 009	www.fleetbuzz.co.uk
Stewarts	0118 983 1231	www.somph.co.uk
Courtney	0118 973 3486	www.courtneybuses.com

Appendix G

Cycle Network



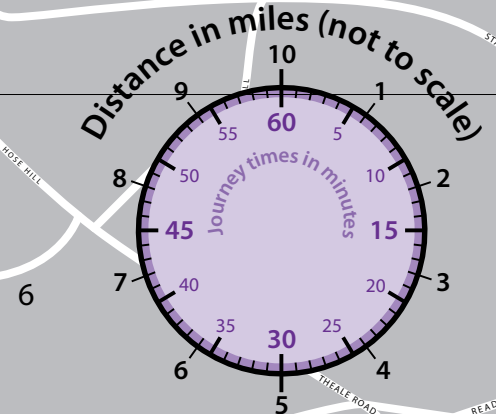
Legend



- R** South Reading
Madejski Stadium & Whitley
- R** South-East Reading & Wokingham
RBH, Uni, Earley & Winnersh
- R** East Reading & Woodley
Newtown, Palmer Park & Bulmershe
- R** North Reading
Caversham & Emmer Green
- R** West Reading
Tilehurst & Prospect Park
- R** South-West Reading
Coley Park & Southcote

- 4** National Cycle Path
- Busy junction, no cycling facilities, caution advised
- Ready Bike Cycle Hire
- Skate/BMX Park
- Cycle parking facilities
- Park & Ride
- Railway Station

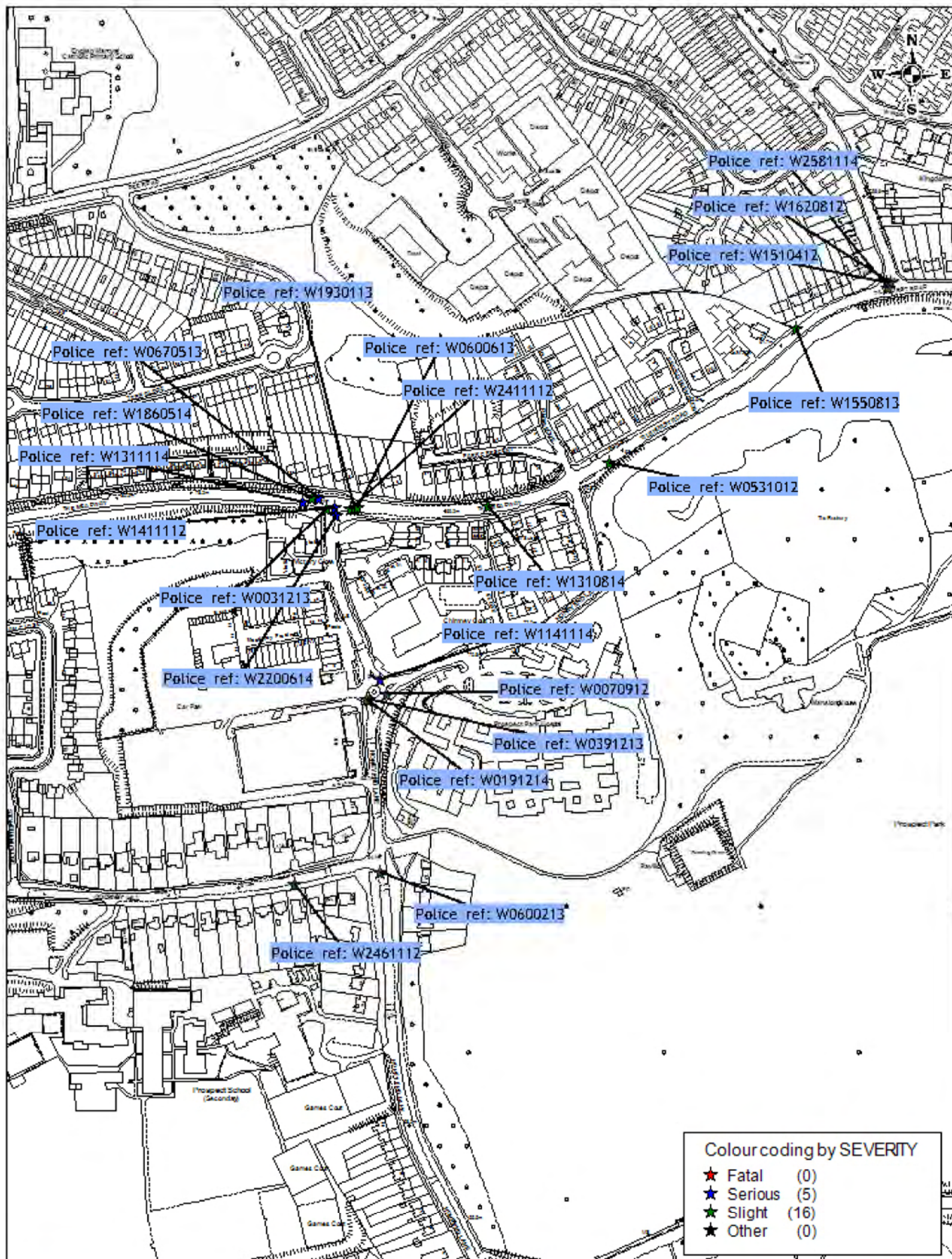
- Cycle Facilities Key (for all route colours)**
- Off-road cycle route (tarmac or path)
 - Off-road cycle route (gravel or rough surface)
 - On-road cycle route - traffic-calmed or quiet residential road
 - On-road cycle route - one-way street
 - On-road cycle way / shared bus lane (one direction)
 - On-road cycle way / shared bus lane (both directions)
 - On-road route without dedicated facilities
 - Pedestrians only, cyclists dismount



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Appendix H

Collision Data Search Area Map



Appendix J

Proposed Site Layout Plan

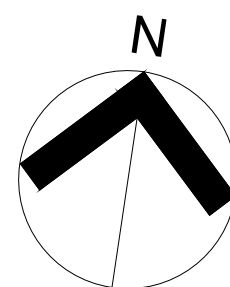
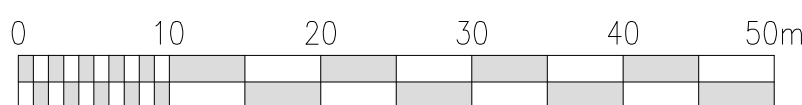
NOTES

Use figured dimensions only. Scale drawing only when a scale bar is present. All dimensions to be checked by user and any discrepancies, error or omissions to be reported to the architect before work commences. Read this drawing with all relevant materials.

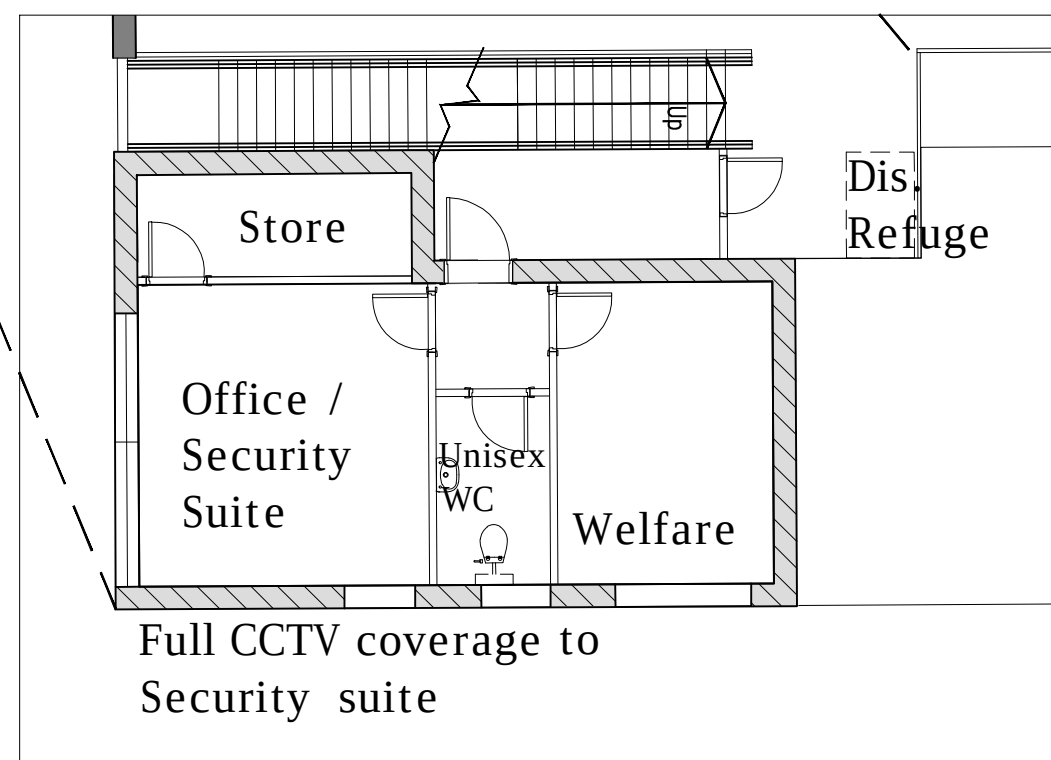
Key

- Proposed Banking - additional trees - large canopy
- Existing Banking / Precinct Trees Retained
- Existing Tree to be Removed - Precinct
- New Car Park trees - large canopy species - set in grilles
- New Frontage trees - large canopy species. All new frontage trees to be set in Grilles
- 1.- 600 x 300 Concrete block paving Paving Indian Granite
- 2.- 600 x 300 Concrete block paving Indian Granite & light granite colour
- Permeable Paving - Resin Bond Gravel raised surface as agreed with RBC tree officer - incorporating play equipment
- Tactile directional paving
- Cross Bonding
- Resin Bonded Gravel (to delivery area)
- Cycle Spaces
- Protective Bollards
- Proposed gates with access controls

Proposed Site Plan
Scale - 1:500



1st Floor Management / Security Suite.
(Accessed via ambulant disabled staircase)
Scale - 1:100



D 06.10.16 AK IP Proposed Residential Units & Green roof omitted
- retail to "balance" with increased parking provision - public toilets relocated

Rev Date Dm Chkd Description

Purpose of Issue:
PLANNING
client:
Chillingham Ltd
project:
Tilehurst, Reading
drawing title:
Proposed Site Plan

scale at A1: VARIES date: Sep 2016 drawn by: SLH checked by: -
drawing number: 1364-PL.1110 revision: D

accord
architecture
www.accordarchitecture.com
Compton House, Walnut Tree Close, Guildford, Surrey, GU1 4TX
(t) 01483 455100 (f) 01483 455210 (e) design@accordarchitecture.com

New security gates with pass gate, secure covered plus (16) staff cycling

Proposed Public Conveniences

Bio-diversity 'zone' (shown hatched) to remain untouched

Delivery tracking and turning

Substation relocated

New concrete retaining wall

Existing Tree to be retained and managed to avoid canopy

Boots to be retained insitu

Kiosks Zone

Bollards to protect perimeter walkways

12 no. proposed new trees

Extent of Banking to be retained

Metal framework mesh planting screens

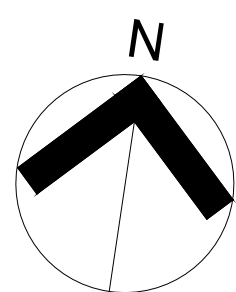
Tactile paving to all pedestrian crossings

Proposed extent of new retaining concrete wall

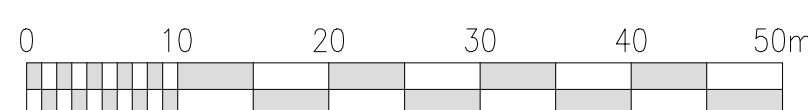
Raised pedestrian crossing to Asda

4 no. motor bike parking spaces minimum

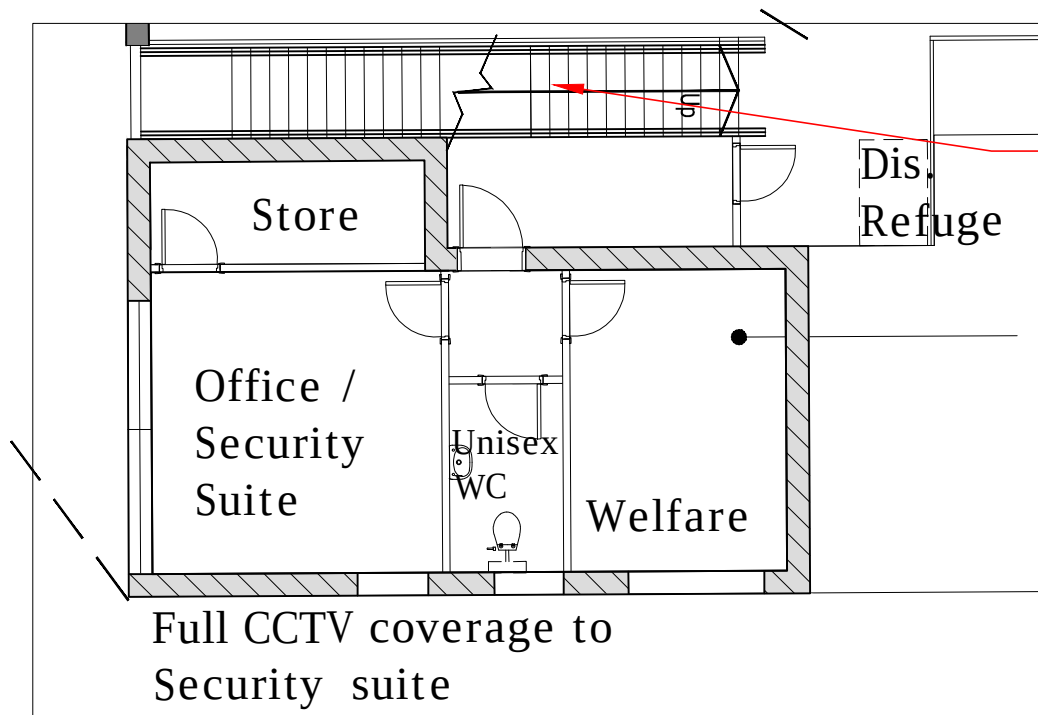
Proposed Masterplan
Annotated
Scale - 1:500



1:500



1st Floor Management / Security Suite. (Accessed via ambulant disabled staircase)
Scale - 1:100



Area reconfigured as residential + retail parking (14 spaces) including 2 disabled; walls demolished and deliveries to perimeter

Gated secure access

Proposed upgrade to flat entrance for security and DDA compliance (including cycles)

Access to delivery area & residential car parking only (appropriate signage at entrance)

New paving to Honey End Lane frontage

Boundary line - site ownership

Proposed extended units to precinct-with new glazed canopy

8 No. New trees set in grilles (pit) to retail frontage

Existing tree to be removed

New Visibility marker (Totem)

34 Covered Cycle Spaces (Customers)

Spill Out / Seating Areas

Children's Play Area with permeable paving area

Existing trees to be set in raised permeable paving

Proposed gates with access controls

Proposed upgrade to flat entrance for security and DDA compliance (including cycles)

New Directional entry signage

Existing access to car park area with pedestrian crossing delineation

New security sliding gates

Car Parking reconfigured

D 06.10.16 AK IP Proposed Residential Units & Green roof omitted - retail to "balance" with increased parking provision - public toilets relocated

C 08.04.16 RS - Revised to incorporate comments

B 02.03.16 SB - Revised to incorporate comments

A 30.10.15 AP RS Replacement drawing

Rev Date Dm Chkd Description

Purpose of Issue: PLANNING

Client: Chillingham Ltd

Project: Tilehurst, Reading

Drawing title: Proposed Master Plan Annotated

Scale at A1: 1:500

Date: Feb 15

Drawn by: SLH

Checked by: -

Drawing number: 1364.PL.1111

Revision: D

accord architecture

www.accordarchitecture.com

Compton House, Walnut Tree Close, Guildford, Surrey, GU1 4TX

(t) 01483 455100 (f) 01483 455210 (e) design@accordarchitecture.com

Appendix K

TRICS Report (Large Retail)

Calculation Reference: AUDIT-744001-160915-0903

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : A - FOOD SUPERSTORE
 VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
14	LEINSTER	
	LU LOUTH	1 days

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

Filtering Stage 2 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: 1150 to 8101 (units: sqm)
 Range Selected by User: 800 to 12642 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 25/09/15

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:

Thursday	1 days
Friday	5 days

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

Selected survey types:

Manual count	6 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Neighbourhood Centre (PPS6 Local 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:

Development Zone	1
Residential Zone	3
Retail Zone	1
No Sub Category	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.

Filtering Stage 3 selection:

Use Class:

A1

6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	1 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:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	3 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	3 days
1.1 to 1.5	3 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.

Petrol filling station:

PFS is present at the site and is included in the count	1 days
PFS is present at the site but is excluded from the count	2 days
There is no PFS at the site	3 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No

6 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.

LIST OF SITES relevant to selection parameters

1	CB-01-A-07	SOMERFIELD	CUMBRIA
	WIGTON ROAD		
	NEWTOWN		
	CARLISLE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	1700 sqm	
	Survey date: FRIDAY	05/02/10	Survey Type: MANUAL
2	DV-01-A-21	MORRISONS	DEVON
	TORR LANE		
	PENNYCROSS		
	PLYMOUTH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	5000 sqm	
	Survey date: FRIDAY	23/10/09	Survey Type: MANUAL
3	LU-01-A-01	EUROSPAR	LOUTH
	BREDIN STREET		
	EAST DROGHEDA		
	DROGHEDA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	1150 sqm	
	Survey date: FRIDAY	19/06/15	Survey Type: MANUAL
4	NR-01-A-03	SAINSBURYS	NORTHAMPTONSHIRE
	WEEDON ROAD		
	SIXFIELDS		
	NORTHAMPTON		
	Suburban Area (PPS6 Out of Centre)		
	Development Zone		
	Total Gross floor area:	7012 sqm	
	Survey date: FRIDAY	07/10/11	Survey Type: MANUAL
5	NT-01-A-05	SAINSBURYS	NOTTINGHAMSHIRE
	CASTLE BRIDGE ROAD		
	CASTLE BOULEVARD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	Retail Zone		
	Total Gross floor area:	8101 sqm	
	Survey date: FRIDAY	07/10/11	Survey Type: MANUAL
6	SH-01-A-02	MORRISONS	SHROPSHIRE
	WHITCHURCH ROAD		
	DITHERINGTON		
	SHREWSBURY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	6800 sqm	
	Survey date: THURSDAY	11/06/09	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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DS-01-A-01	too large
LE-01-A-02	too large
SM-01-A-01	too large and on a mixed site

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	7557	0.225	2	7557	0.026	2	7557	0.251
07:00 - 08:00	5	5723	1.471	5	5723	0.608	5	5723	2.079
08:00 - 09:00	6	4961	3.326	6	4961	2.322	6	4961	5.648
09:00 - 10:00	6	4961	4.687	6	4961	3.639	6	4961	8.326
10:00 - 11:00	6	4961	5.225	6	4961	4.616	6	4961	9.841
11:00 - 12:00	6	4961	5.971	6	4961	5.661	6	4961	11.632
12:00 - 13:00	6	4961	6.333	6	4961	6.276	6	4961	12.609
13:00 - 14:00	6	4961	6.827	6	4961	6.616	6	4961	13.443
14:00 - 15:00	6	4961	5.362	6	4961	5.813	6	4961	11.175
15:00 - 16:00	6	4961	5.299	6	4961	5.369	6	4961	10.668
16:00 - 17:00	6	4961	5.759	6	4961	5.819	6	4961	11.578
17:00 - 18:00	6	4961	6.091	6	4961	6.169	6	4961	12.260
18:00 - 19:00	6	4961	5.043	6	4961	6.212	6	4961	11.255
19:00 - 20:00	6	4961	3.867	6	4961	4.448	6	4961	8.315
20:00 - 21:00	6	4961	2.244	6	4961	2.836	6	4961	5.080
21:00 - 22:00	6	4961	0.662	6	4961	1.344	6	4961	2.006
22:00 - 23:00	2	7557	0.073	2	7557	0.344	2	7557	0.417
23:00 - 24:00									
Total Rates:		68.465			68.118			136.583	

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.

Parameter summary

Trip rate parameter range selected:	1150 - 8101 (units: sqm)
Survey date range:	01/01/08 - 25/09/15
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	7557	0.007	2	7557	0.000	2	7557	0.007
07:00 - 08:00	5	5723	0.042	5	5723	0.031	5	5723	0.073
08:00 - 09:00	6	4961	0.030	6	4961	0.024	6	4961	0.054
09:00 - 10:00	6	4961	0.097	6	4961	0.067	6	4961	0.164
10:00 - 11:00	6	4961	0.101	6	4961	0.087	6	4961	0.188
11:00 - 12:00	6	4961	0.148	6	4961	0.148	6	4961	0.296
12:00 - 13:00	6	4961	0.101	6	4961	0.104	6	4961	0.205
13:00 - 14:00	6	4961	0.148	6	4961	0.134	6	4961	0.282
14:00 - 15:00	6	4961	0.131	6	4961	0.138	6	4961	0.269
15:00 - 16:00	6	4961	0.077	6	4961	0.091	6	4961	0.168
16:00 - 17:00	6	4961	0.094	6	4961	0.111	6	4961	0.205
17:00 - 18:00	6	4961	0.141	6	4961	0.118	6	4961	0.259
18:00 - 19:00	6	4961	0.091	6	4961	0.114	6	4961	0.205
19:00 - 20:00	6	4961	0.054	6	4961	0.077	6	4961	0.131
20:00 - 21:00	6	4961	0.047	6	4961	0.047	6	4961	0.094
21:00 - 22:00	6	4961	0.030	6	4961	0.034	6	4961	0.064
22:00 - 23:00	2	7557	0.000	2	7557	0.000	2	7557	0.000
23:00 - 24:00									
Total Rates:			1.339			1.325			2.664

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.

Parameter summary

Trip rate parameter range selected:	1150 - 8101 (units: sqm)
Survey date range:	01/01/08 - 25/09/15
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	7557	0.000	2	7557	0.000	2	7557	0.000
07:00 - 08:00	5	5723	0.024	5	5723	0.017	5	5723	0.041
08:00 - 09:00	6	4961	0.040	6	4961	0.037	6	4961	0.077
09:00 - 10:00	6	4961	0.024	6	4961	0.030	6	4961	0.054
10:00 - 11:00	6	4961	0.030	6	4961	0.027	6	4961	0.057
11:00 - 12:00	6	4961	0.024	6	4961	0.027	6	4961	0.051
12:00 - 13:00	6	4961	0.010	6	4961	0.020	6	4961	0.030
13:00 - 14:00	6	4961	0.027	6	4961	0.027	6	4961	0.054
14:00 - 15:00	6	4961	0.010	6	4961	0.010	6	4961	0.020
15:00 - 16:00	6	4961	0.007	6	4961	0.017	6	4961	0.024
16:00 - 17:00	6	4961	0.020	6	4961	0.013	6	4961	0.033
17:00 - 18:00	6	4961	0.010	6	4961	0.013	6	4961	0.023
18:00 - 19:00	6	4961	0.017	6	4961	0.013	6	4961	0.030
19:00 - 20:00	6	4961	0.024	6	4961	0.020	6	4961	0.044
20:00 - 21:00	6	4961	0.007	6	4961	0.013	6	4961	0.020
21:00 - 22:00	6	4961	0.003	6	4961	0.003	6	4961	0.006
22:00 - 23:00	2	7557	0.007	2	7557	0.007	2	7557	0.014
23:00 - 24:00									
Total Rates:			0.284			0.294			0.578

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.

Parameter summary

Trip rate parameter range selected:	1150 - 8101 (units: sqm)
Survey date range:	01/01/08 - 25/09/15
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	7557	0.000	2	7557	0.000	2	7557	0.000
07:00 - 08:00	5	5723	0.000	5	5723	0.000	5	5723	0.000
08:00 - 09:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
09:00 - 10:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
10:00 - 11:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
11:00 - 12:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
12:00 - 13:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
13:00 - 14:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
14:00 - 15:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
15:00 - 16:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
16:00 - 17:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
17:00 - 18:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
18:00 - 19:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
19:00 - 20:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
20:00 - 21:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
21:00 - 22:00	6	4961	0.000	6	4961	0.000	6	4961	0.000
22:00 - 23:00	2	7557	0.000	2	7557	0.000	2	7557	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

Parameter summary

Trip rate parameter range selected: 1150 - 8101 (units: sqm)
 Survey date range: 01/01/08 - 25/09/15
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 3

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	7557	0.000	2	7557	0.000	2	7557	0.000
07:00 - 08:00	5	5723	0.014	5	5723	0.017	5	5723	0.031
08:00 - 09:00	6	4961	0.044	6	4961	0.034	6	4961	0.078
09:00 - 10:00	6	4961	0.027	6	4961	0.027	6	4961	0.054
10:00 - 11:00	6	4961	0.017	6	4961	0.017	6	4961	0.034
11:00 - 12:00	6	4961	0.030	6	4961	0.024	6	4961	0.054
12:00 - 13:00	6	4961	0.024	6	4961	0.013	6	4961	0.037
13:00 - 14:00	6	4961	0.037	6	4961	0.034	6	4961	0.071
14:00 - 15:00	6	4961	0.047	6	4961	0.013	6	4961	0.060
15:00 - 16:00	6	4961	0.030	6	4961	0.037	6	4961	0.067
16:00 - 17:00	6	4961	0.091	6	4961	0.064	6	4961	0.155
17:00 - 18:00	6	4961	0.040	6	4961	0.064	6	4961	0.104
18:00 - 19:00	6	4961	0.017	6	4961	0.037	6	4961	0.054
19:00 - 20:00	6	4961	0.013	6	4961	0.034	6	4961	0.047
20:00 - 21:00	6	4961	0.013	6	4961	0.024	6	4961	0.037
21:00 - 22:00	6	4961	0.003	6	4961	0.003	6	4961	0.006
22:00 - 23:00	2	7557	0.000	2	7557	0.000	2	7557	0.000
23:00 - 24:00									
Total Rates:			0.447			0.442			0.889

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.

Parameter summary

Trip rate parameter range selected:	1150 - 8101 (units: sqm)
Survey date range:	01/01/08 - 25/09/15
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 shown. 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-744001-160913-0921

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : A - FOOD SUPERSTORE
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
	HF HERTFORDSHIRE	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	1 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days

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

Filtering Stage 2 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: 3000 to 7012 (units: sqm)
 Range Selected by User: 3000 to 7012 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 29/03/14

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 5 days

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

Selected survey types:

Manual count 5 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 3
 Edge of Town 2

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:

Development Zone 1
 Residential Zone 2
 Retail Zone 1
 No Sub Category 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.

Filtering Stage 3 selection:

Use Class:

A1	5 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
20,001 to 25,000	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
100,001 to 125,000	2 days
125,001 to 250,000	2 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	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.

Petrol filling station:

PFS is present at the site and is included in the count	5 days
PFS is present at the site but is excluded from the count	0 days
There is no PFS at the site	0 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	5 days
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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.

LIST OF SITES relevant to selection parameters

1	DC-01-A-20	MORRISONS		DORSET
	DORCHESTER ROAD			
	WEYMOUTH			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:	5500 sqm		
	Survey date: SATURDAY	29/03/14		Survey Type: MANUAL
2	DV-01-A-20	SAINSBURYS		DEVON
	HILL BARTON ROAD			
	WHIPTON			
	EXETER			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	6081 sqm		
	Survey date: SATURDAY	24/10/09		Survey Type: MANUAL
3	EX-01-A-02	CO-OP		ESSEX
	PEARTREE ROAD			
	STANWAY			
	COLCHESTER			
	Suburban Area (PPS6 Out of Centre)			
	Retail Zone			
	Total Gross floor area:	3000 sqm		
	Survey date: SATURDAY	12/07/08		Survey Type: MANUAL
4	HF-01-A-02	MORRISONS		HERTFORDSHIRE
	BLACK FAN ROAD			
	PANSHANGER			
	WELWYN GARDEN CITY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	4500 sqm		
	Survey date: SATURDAY	05/07/08		Survey Type: MANUAL
5	NR-01-A-02	SAINSBURYS		NORTHAMPTONSHIRE
	WEEDON ROAD			
	SIXFIELDS			
	NORTHAMPTON			
	Suburban Area (PPS6 Out of Centre)			
	Development Zone			
	Total Gross floor area:	7012 sqm		
	Survey date: SATURDAY	29/11/08		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 01 - RETAIL/A - FOOD SUPERSTORE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	5219	2.112	5	5219	1.345	5	5219	3.457
08:00 - 09:00	5	5219	4.415	5	5219	3.330	5	5219	7.745
09:00 - 10:00	5	5219	6.941	5	5219	5.362	5	5219	12.303
10:00 - 11:00	5	5219	8.631	5	5219	7.627	5	5219	16.258
11:00 - 12:00	5	5219	9.006	5	5219	8.240	5	5219	17.246
12:00 - 13:00	5	5219	8.987	5	5219	8.995	5	5219	17.982
13:00 - 14:00	5	5219	8.324	5	5219	8.397	5	5219	16.721
14:00 - 15:00	5	5219	7.979	5	5219	7.830	5	5219	15.809
15:00 - 16:00	5	5219	8.646	5	5219	8.366	5	5219	17.012
16:00 - 17:00	5	5219	8.025	5	5219	9.033	5	5219	17.058
17:00 - 18:00	5	5219	7.466	5	5219	8.071	5	5219	15.537
18:00 - 19:00	5	5219	5.549	5	5219	7.324	5	5219	12.873
19:00 - 20:00	5	5219	3.499	5	5219	4.488	5	5219	7.987
20:00 - 21:00	5	5219	1.882	5	5219	2.913	5	5219	4.795
21:00 - 22:00	5	5219	0.954	5	5219	1.295	5	5219	2.249
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		92.416			92.616			185.032	

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.

Parameter summary

Trip rate parameter range selected: 3000 - 7012 (units: sqm)
 Survey date range: 01/01/08 - 29/03/14
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 5
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	5219	0.011	5	5219	0.004	5	5219	0.015
08:00 - 09:00	5	5219	0.019	5	5219	0.027	5	5219	0.046
09:00 - 10:00	5	5219	0.023	5	5219	0.023	5	5219	0.046
10:00 - 11:00	5	5219	0.031	5	5219	0.027	5	5219	0.058
11:00 - 12:00	5	5219	0.011	5	5219	0.008	5	5219	0.019
12:00 - 13:00	5	5219	0.019	5	5219	0.015	5	5219	0.034
13:00 - 14:00	5	5219	0.027	5	5219	0.031	5	5219	0.058
14:00 - 15:00	5	5219	0.050	5	5219	0.050	5	5219	0.100
15:00 - 16:00	5	5219	0.065	5	5219	0.054	5	5219	0.119
16:00 - 17:00	5	5219	0.031	5	5219	0.034	5	5219	0.065
17:00 - 18:00	5	5219	0.031	5	5219	0.023	5	5219	0.054
18:00 - 19:00	5	5219	0.019	5	5219	0.015	5	5219	0.034
19:00 - 20:00	5	5219	0.038	5	5219	0.038	5	5219	0.076
20:00 - 21:00	5	5219	0.008	5	5219	0.031	5	5219	0.039
21:00 - 22:00	5	5219	0.008	5	5219	0.011	5	5219	0.019
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.391			0.391			0.782

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.

Parameter summary

Trip rate parameter range selected:	3000 - 7012 (units: sqm)
Survey date range:	01/01/08 - 29/03/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	5
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	5219	0.042	5	5219	0.042	5	5219	0.084
08:00 - 09:00	5	5219	0.023	5	5219	0.015	5	5219	0.038
09:00 - 10:00	5	5219	0.019	5	5219	0.015	5	5219	0.034
10:00 - 11:00	5	5219	0.019	5	5219	0.019	5	5219	0.038
11:00 - 12:00	5	5219	0.023	5	5219	0.004	5	5219	0.027
12:00 - 13:00	5	5219	0.050	5	5219	0.038	5	5219	0.088
13:00 - 14:00	5	5219	0.004	5	5219	0.031	5	5219	0.035
14:00 - 15:00	5	5219	0.011	5	5219	0.000	5	5219	0.011
15:00 - 16:00	5	5219	0.011	5	5219	0.031	5	5219	0.042
16:00 - 17:00	5	5219	0.015	5	5219	0.011	5	5219	0.026
17:00 - 18:00	5	5219	0.015	5	5219	0.023	5	5219	0.038
18:00 - 19:00	5	5219	0.015	5	5219	0.008	5	5219	0.023
19:00 - 20:00	5	5219	0.011	5	5219	0.015	5	5219	0.026
20:00 - 21:00	5	5219	0.004	5	5219	0.008	5	5219	0.012
21:00 - 22:00	5	5219	0.000	5	5219	0.004	5	5219	0.004
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.262			0.264			0.526

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.

Parameter summary

Trip rate parameter range selected: 3000 - 7012 (units: sqm)
 Survey date range: 01/01/08 - 29/03/14
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 5
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	5219	0.000	5	5219	0.000	5	5219	0.000
08:00 - 09:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
09:00 - 10:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
10:00 - 11:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
11:00 - 12:00	5	5219	0.004	5	5219	0.004	5	5219	0.008
12:00 - 13:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
13:00 - 14:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
14:00 - 15:00	5	5219	0.004	5	5219	0.004	5	5219	0.008
15:00 - 16:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
16:00 - 17:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
17:00 - 18:00	5	5219	0.004	5	5219	0.000	5	5219	0.004
18:00 - 19:00	5	5219	0.000	5	5219	0.004	5	5219	0.004
19:00 - 20:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
20:00 - 21:00	5	5219	0.004	5	5219	0.004	5	5219	0.008
21:00 - 22:00	5	5219	0.000	5	5219	0.000	5	5219	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

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.

Parameter summary

Trip rate parameter range selected:	3000 - 7012 (units: sqm)
Survey date range:	01/01/08 - 29/03/14
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	5
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	5219	0.038	5	5219	0.042	5	5219	0.080
08:00 - 09:00	5	5219	0.054	5	5219	0.031	5	5219	0.085
09:00 - 10:00	5	5219	0.057	5	5219	0.050	5	5219	0.107
10:00 - 11:00	5	5219	0.034	5	5219	0.050	5	5219	0.084
11:00 - 12:00	5	5219	0.042	5	5219	0.031	5	5219	0.073
12:00 - 13:00	5	5219	0.057	5	5219	0.061	5	5219	0.118
13:00 - 14:00	5	5219	0.046	5	5219	0.031	5	5219	0.077
14:00 - 15:00	5	5219	0.061	5	5219	0.054	5	5219	0.115
15:00 - 16:00	5	5219	0.057	5	5219	0.046	5	5219	0.103
16:00 - 17:00	5	5219	0.119	5	5219	0.146	5	5219	0.265
17:00 - 18:00	5	5219	0.057	5	5219	0.065	5	5219	0.122
18:00 - 19:00	5	5219	0.046	5	5219	0.038	5	5219	0.084
19:00 - 20:00	5	5219	0.031	5	5219	0.038	5	5219	0.069
20:00 - 21:00	5	5219	0.042	5	5219	0.046	5	5219	0.088
21:00 - 22:00	5	5219	0.008	5	5219	0.023	5	5219	0.031
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.749			0.752			1.501

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.

Parameter summary

Trip rate parameter range selected: 3000 - 7012 (units: sqm)
 Survey date range: 01/01/08 - 29/03/14
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 5
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix L

Junction Modelling Reports

Junctions 8			
ARCADY 8 - Roundabout Module			
Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2016			
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: Meadway Precinct Access Roundabout.arc8

Path: H:\Winchester Jobs\W Jobs\01000 - 01999\01000 - 01049\W01033 - The Meadway, Tilehurst\SEPTEMBER 2016

JUNCTIONS MODELS

Report generation date: 27/09/2016 11:10:36

- » (Default Analysis Set) - FRIDAY 1200-1300, FRIDAY 1200-1300
- » (Default Analysis Set) - FRIDAY 1700-1800, FRIDAY 1700-1800
- » (Default Analysis Set) - SATURDAY 1200-1300, SATURDAY 1200-1300

Summary of junction performance

FRIDAY 1200-1300				
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - FRIDAY 1200-1300				
Arm PPH	0.09	6.82	0.08	A
Arm HELS	0.87	7.73	0.47	A
Arm MPAR	1.66	12.62	0.63	B
Arm HELN	0.89	8.01	0.47	A

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

"D1 - FRIDAY 1200-1300, FRIDAY 1200-1300" model duration: 12:00 - 13:00

"D2 - FRIDAY 1700-1800, FRIDAY 1700-1800" model duration: 17:00 - 18:00

"D3 - SATURDAY 1200-1300, SATURDAY 1200-1300" model duration: 12:00 - 13:00

Run using Junctions 8.0.4.487 at 27/09/2016 11:10:35

File summary

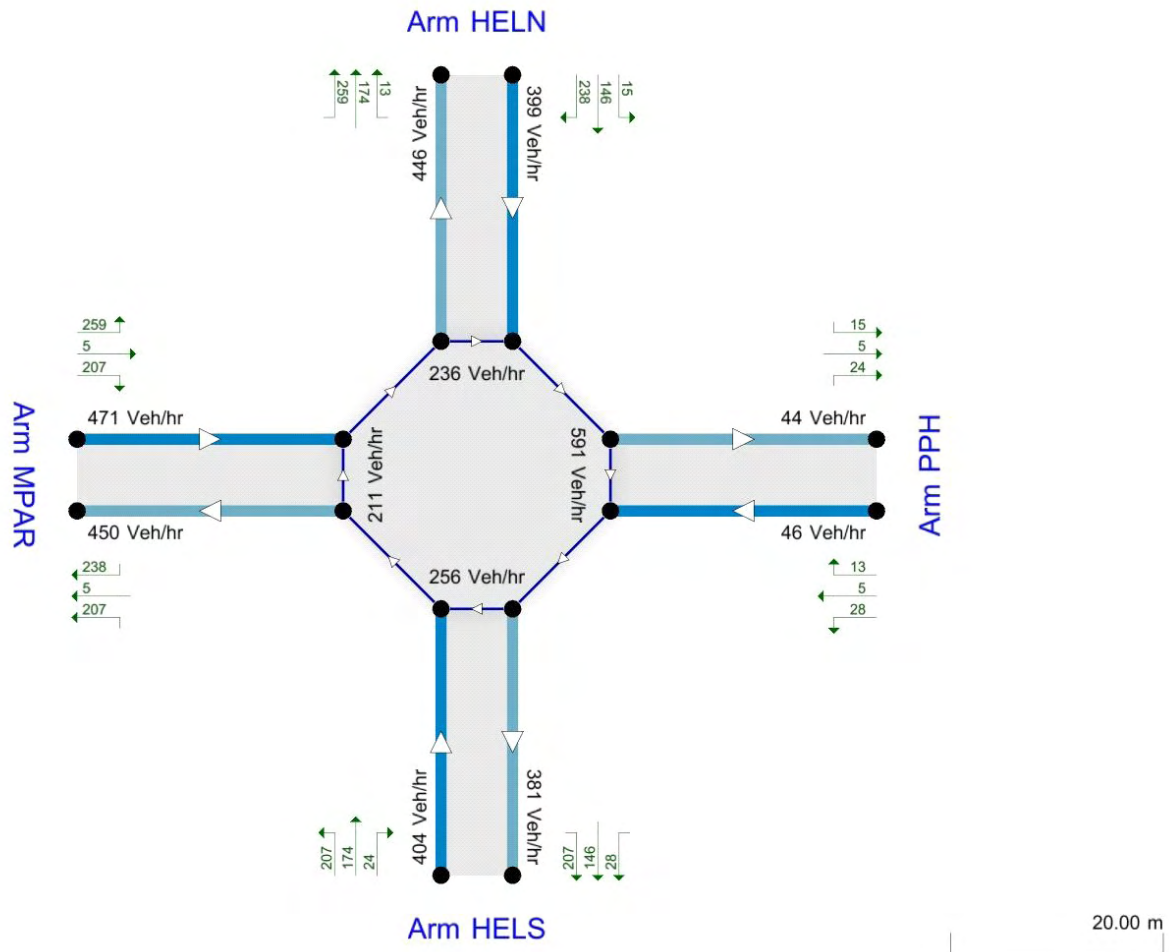
Title	(untitled)
Location	
Site Number	
Date	10/04/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	j hudson
Description	

Analysis Options

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

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Showing modelled flow through junction (Veh/hr).
Time Segment: (12:00-13:00)
Showing Analysis Set "A1"; Demand Set "D1 - FRIDAY 1200-1300, FRIDAY 1200-1300"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - FRIDAY 1200-1300, FRIDAY 1200-1300

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - FRIDAY 1200-1300, FRIDAY 1200-1300	Demand Set 1: Scenario Name includes Time Period Name ('FRIDAY 1200-1300'). Are you sure this is correct?
Warning	DemandSets	D2 - FRIDAY 1700-1800, FRIDAY 1700-1800	Demand Set 2: Scenario Name includes Time Period Name ('FRIDAY 1700-1800'). Are you sure this is correct?
Warning	DemandSets	D3 - SATURDAY 1200-1300, SATURDAY 1200-1300	Demand Set 3: Scenario Name includes Time Period Name ('SATURDAY 1200-1300'). Are you sure this is correct?

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
FRIDAY 1200-1300, FRIDAY 1200-1300	FRIDAY 1200-1300	FRIDAY 1200-1300		FLAT	12:00	13:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Meadway Precinct Access Roundabout	Roundabout	PPH,HELS,MPAR,HELN			9.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
PPH	PPH	Prospect Park Hospital Access	
HELS	HELS	Honey End Lane (South)	
MPAR	MPAR	Meadway Precinct Access Road	
HELN	HELN	Honey End Lane (North)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
PPH	0.00	99999.00
HELS	0.00	99999.00
MPAR	0.00	99999.00
HELN	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
PPH	2.20	5.60	10.00	5.10	24.00	50.00	
HELS	3.60	4.60	6.60	10.90	24.00	63.00	
MPAR	3.30	4.20	3.00	10.90	24.00	70.00	
HELN	4.00	4.50	5.00	12.00	24.00	80.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
PPH		(calculated)	(calculated)	0.434	913.766
HELS		(calculated)	(calculated)	0.489	1093.724
MPAR		(calculated)	(calculated)	0.449	934.434
HELN		(calculated)	(calculated)	0.465	1053.325

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
PPH	FLAT	✓	46.00	100.000
HELS	FLAT	✓	405.00	100.000
MPAR	FLAT	✓	473.00	100.000
HELN	FLAT	✓	400.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
12:00-13:00	PPH	46.00	50.60		
12:00-13:00	HELS	405.00	445.50		
12:00-13:00	MPAR	473.00	520.30		
12:00-13:00	HELN	400.00	440.00		

Turning Proportions

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	0.000	28.000	5.000	13.000
	HELS	24.000	0.000	207.000	174.000
	MPAR	5.000	208.000	0.000	260.000
	HELN	15.000	146.000	239.000	0.000

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	0.00	0.61	0.11	0.28
	HELS	0.06	0.00	0.51	0.43
	MPAR	0.01	0.44	0.00	0.55
	HELN	0.04	0.37	0.60	0.00

Vehicle Mix

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	1.100	1.100	1.100	1.100
	HELS	1.100	1.100	1.100	1.100
	MPAR	1.100	1.100	1.100	1.100
	HELN	1.100	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		PPH	HELS	MPAR	HELN
From	PPH	10.0	10.0	10.0	10.0
	HELS	10.0	10.0	10.0	10.0
	MPAR	10.0	10.0	10.0	10.0
	HELN	10.0	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
PPH	0.08	6.82	0.09	A
HELS	0.47	7.73	0.87	A
MPAR	0.63	12.62	1.66	B
HELN	0.47	8.01	0.89	A

Main Results for each time segment

Main results: (12:00-13:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
PPH	46.00	45.91	591.41	0.00	573.88	0.080	0.09	6.818	A
HELS	405.00	404.13	256.43	0.00	868.87	0.466	0.87	7.731	A
MPAR	473.00	471.34	210.55	0.00	755.01	0.626	1.66	12.617	B
HELN	400.00	399.11	236.20	0.00	847.75	0.472	0.89	8.008	A

(Default Analysis Set) - FRIDAY 1700-1800, FRIDAY 1700-1800

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - FRIDAY 1200-1300, FRIDAY 1200-1300	Demand Set 1: Scenario Name includes Time Period Name ('FRIDAY 1200-1300'). Are you sure this is correct?
Warning	DemandSets	D2 - FRIDAY 1700-1800, FRIDAY 1700-1800	Demand Set 2: Scenario Name includes Time Period Name ('FRIDAY 1700-1800'). Are you sure this is correct?
Warning	DemandSets	D3 - SATURDAY 1200-1300, SATURDAY 1200-1300	Demand Set 3: Scenario Name includes Time Period Name ('SATURDAY 1200-1300'). Are you sure this is correct?

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
FRIDAY 1700-1800, FRIDAY 1700-1800	FRIDAY 1700-1800	FRIDAY 1700-1800		FLAT	17:00	18:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Meadway Precinct Access Roundabout	Roundabout	PPH,HELS,MPAR,HELN			13.81	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
PPH	PPH	Prospect Park Hospital Access	
HELS	HELS	Honey End Lane (South)	
MPAR	MPAR	Meadway Precinct Access Road	
HELN	HELN	Honey End Lane (North)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
PPH	0.00	99999.00
HELS	0.00	99999.00
MPAR	0.00	99999.00
HELN	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
PPH	2.20	5.60	10.00	5.10	24.00	50.00	
HELS	3.60	4.60	6.60	10.90	24.00	63.00	
MPAR	3.30	4.20	3.00	10.90	24.00	70.00	
HELN	4.00	4.50	5.00	12.00	24.00	80.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
PPH		(calculated)	(calculated)	0.434	913.766
HELS		(calculated)	(calculated)	0.489	1093.724
MPAR		(calculated)	(calculated)	0.449	934.434
HELN		(calculated)	(calculated)	0.465	1053.325

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
PPH	FLAT	✓	91.00	100.000
HELS	FLAT	✓	514.00	100.000
MPAR	FLAT	✓	551.00	100.000
HELN	FLAT	✓	476.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-18:00	PPH	91.00	100.10		
17:00-18:00	HELS	514.00	565.40		
17:00-18:00	MPAR	551.00	606.10		
17:00-18:00	HELN	476.00	523.60		

Turning Proportions

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

		To			
From		PPH	HELS	MPAR	HELN
	PPH	0.000	61.000	5.000	25.000
	HELS	10.000	0.000	243.000	261.000
	MPAR	6.000	242.000	0.000	303.000
	HELN	6.000	190.000	280.000	0.000

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

		To			
From		PPH	HELS	MPAR	HELN
	PPH	0.00	0.67	0.05	0.27
	HELS	0.02	0.00	0.47	0.51
	MPAR	0.01	0.44	0.00	0.55
	HELN	0.01	0.40	0.59	0.00

Vehicle Mix

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	1.100	1.100	1.100	1.100
	HELS	1.100	1.100	1.100	1.100
	MPAR	1.100	1.100	1.100	1.100
	HELN	1.100	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		PPH	HELS	MPAR	HELN
From	PPH	10.0	10.0	10.0	10.0
	HELS	10.0	10.0	10.0	10.0
	MPAR	10.0	10.0	10.0	10.0
	HELN	10.0	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
PPH	0.17	8.33	0.21	A
HELS	0.61	10.84	1.55	B
MPAR	0.77	20.88	3.24	C
HELN	0.57	9.87	1.31	A

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
PPH	91.00	90.79	709.29	0.00	522.69	0.174	0.21	8.332	A
HELS	514.00	512.45	309.16	0.00	843.08	0.610	1.55	10.838	B
MPAR	551.00	547.76	295.13	0.00	717.07	0.768	3.24	20.883	C
HELN	476.00	474.69	256.51	0.00	838.31	0.568	1.31	9.865	A

(Default Analysis Set) - SATURDAY 1200-1300, SATURDAY 1200-1300

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - FRIDAY 1200-1300, FRIDAY 1200-1300	Demand Set 1: Scenario Name includes Time Period Name ('FRIDAY 1200-1300'). Are you sure this is correct?
Warning	DemandSets	D2 - FRIDAY 1700-1800, FRIDAY 1700-1800	Demand Set 2: Scenario Name includes Time Period Name ('FRIDAY 1700-1800'). Are you sure this is correct?
Warning	DemandSets	D3 - SATURDAY 1200-1300, SATURDAY 1200-1300	Demand Set 3: Scenario Name includes Time Period Name ('SATURDAY 1200-1300'). Are you sure this is correct?

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
SATURDAY 1200-1300, SATURDAY 1200-1300	SATURDAY 1200-1300	SATURDAY 1200-1300		FLAT	12:00	13:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Meadway Precinct Access Roundabout	Roundabout	PPH,HELS,MPAR,HELN			12.34	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
PPH	PPH	Prospect Park Hospital Access	
HELS	HELS	Honey End Lane (South)	
MPAR	MPAR	Meadway Precinct Access Road	
HELN	HELN	Honey End Lane (North)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
PPH	0.00	99999.00
HELS	0.00	99999.00
MPAR	0.00	99999.00
HELN	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
PPH	2.20	5.60	10.00	5.10	24.00	50.00	
HELS	3.60	4.60	6.60	10.90	24.00	63.00	
MPAR	3.30	4.20	3.00	10.90	24.00	70.00	
HELN	4.00	4.50	5.00	12.00	24.00	80.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
PPH		(calculated)	(calculated)	0.434	913.766
HELS		(calculated)	(calculated)	0.489	1093.724
MPAR		(calculated)	(calculated)	0.449	934.434
HELN		(calculated)	(calculated)	0.465	1053.325

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
PPH	FLAT	✓	30.00	100.000
HELS	FLAT	✓	447.00	100.000
MPAR	FLAT	✓	559.00	100.000
HELN	FLAT	✓	460.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
12:00-13:00	PPH	30.00	33.00		
12:00-13:00	HELS	447.00	491.70		
12:00-13:00	MPAR	559.00	614.90		
12:00-13:00	HELN	460.00	506.00		

Turning Proportions

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	0.000	18.000	5.000	7.000
	HELS	11.000	0.000	248.000	188.000
	MPAR	6.000	246.000	0.000	307.000
	HELN	10.000	164.000	286.000	0.000

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	0.00	0.60	0.17	0.23
	HELS	0.02	0.00	0.55	0.42
	MPAR	0.01	0.44	0.00	0.55
	HELN	0.02	0.36	0.62	0.00

Vehicle Mix

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

	To				
		PPH	HELS	MPAR	HELN
From	PPH	1.100	1.100	1.100	1.100
	HELS	1.100	1.100	1.100	1.100
	MPAR	1.100	1.100	1.100	1.100
	HELN	1.100	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		PPH	HELS	MPAR	HELN
From	PPH	10.0	10.0	10.0	10.0
	HELS	10.0	10.0	10.0	10.0
	MPAR	10.0	10.0	10.0	10.0
	HELN	10.0	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
PPH	0.06	7.21	0.06	A
HELS	0.53	8.91	1.11	A
MPAR	0.74	17.67	2.77	C
HELN	0.55	9.52	1.22	A

Main Results for each time segment

Main results: (12:00-13:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
PPH	30.00	29.94	693.59	0.00	529.51	0.057	0.06	7.206	A
HELS	447.00	445.89	297.22	0.00	848.92	0.527	1.11	8.909	A
MPAR	559.00	556.23	205.49	0.00	757.28	0.738	2.77	17.671	C
HELN	460.00	458.78	261.73	0.00	835.88	0.550	1.22	9.517	A

TRANSYT 15	
Version: 15.0.4.3457 [] © Copyright TRL Limited, 2016	
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk	
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Last run: 27/09/2016 11:13:04

Analysis Set used for last run: A1 - Friday Lunchtime Peak

Filename: Meadway Signal Junction September 2016.t15

Path: H:\Winchester Jobs\W Jobs\01000 - 01999\01000 - 01049\W01033 - The Meadway, Tilehurst\SEPTEMBER 2016

JUNCTIONS MODELS

Report generation date: 27/09/2016 11:13:43

-
- » Network Diagrams
 - « A1 - Friday Lunchtime Peak *: D1 - Friday Lunchtime Peak*
 - » Summary
 - » Network Options
 - » Traffic Nodes
 - » Arms and Traffic Streams
 - » Local OD Matrix - Local Matrix: 1
 - » Signal Timings
 - » Traffic Stream Results
 - » Network Results
 - » Point to Point Journey Time
 - » Final Prediction Table

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SWH\j hudson
Description	

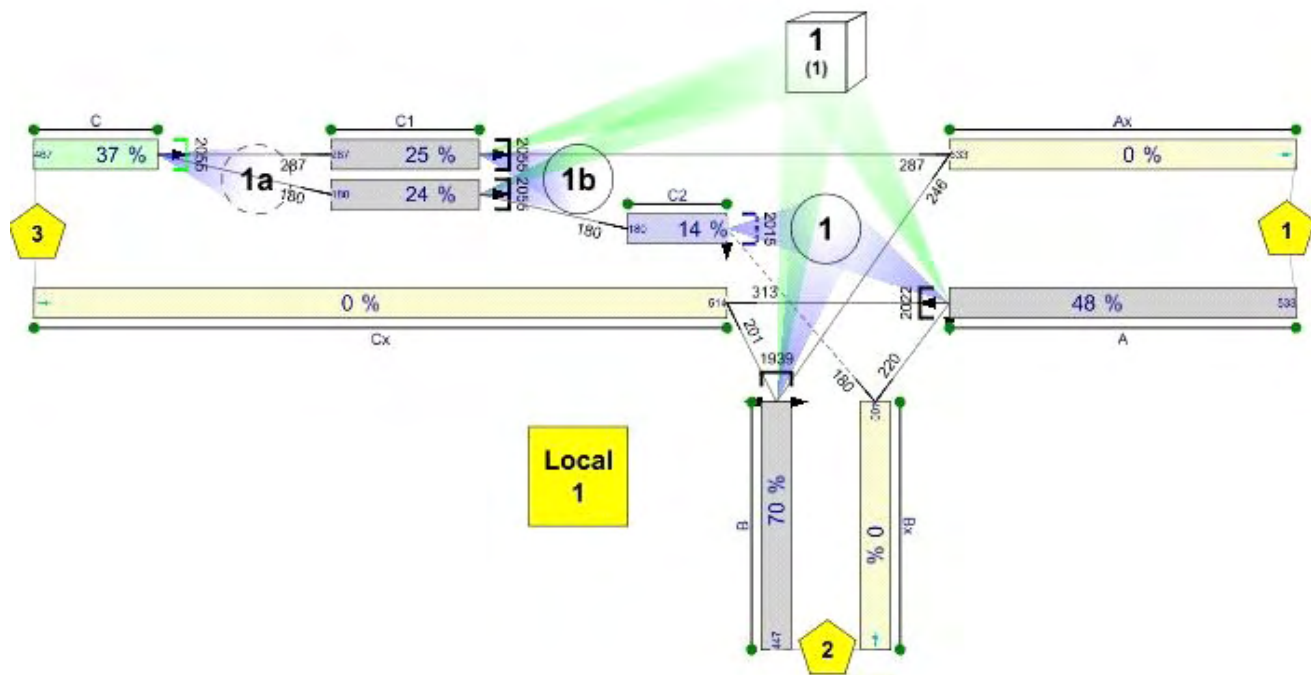
Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)

Cycletime 0s / 100s , Timesteps 99 / 100

A1 - Friday Lunchtime Peak *, D1 - Friday Lunchtime Peak*

Diagram produced using TRANSYT 15.0.4.3457

A1 - Friday Lunchtime Peak *: D1 - Friday Lunchtime Peak*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Net Wi Cap
A1 - Friday Lunchtime Peak	27/09/2016 11:13:03	27/09/2016 11:13:04	12:00	100	9.00	69.86	B/1	0	0	B/1	C/1	B/1	

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
Friday Lunchtime Peak		D1	✓	

Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D1	Friday Lunchtime Peak				12:00	

Network Options

Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100		60	1	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation Order	Optimisation Order
Hill Climb (Fast)	15,40,-1,15,40,1,-1,1	50,50,5,5,0.5,0.5,0.05,0.05		✓	1

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

ID	Name	Description
1	(untitled)	
1a	(untitled)	
1b	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1a
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1b
C2	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	SumOfLanes	2022	✓		Normal	
B	1	(untitled)			100.00	✓	SumOfLanes	1939	✓		Normal	
C	1	(untitled)			100.00	✓	SumOfLanes	2055			Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
C1	1	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C1	2	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C2	1	(untitled)			10.00	✓	SumOfLanes	2015		✓	Normal	
Cx	1	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface Condition	Site Quality Factor	Gradient (%)	Width (m)	Use Connector Turning Radius	Proportion That Turn (%)	Turning Radius (m)	Nearside Lane	Saturation Flow (PCU/hr)
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	41	37.54		2022
B	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	25.04		1939
C	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
Ax	1	1	(untitled)							✓				
Bx	1	1	(untitled)							✓				
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C1	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	74.96		2015
Cx	1	1	(untitled)							✓				

Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Assignment Cost Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	NetworkDefault	100	100	100		0.00		
B	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	Flare	100	100	100		0.00		
C1	2	Flare	100	100	100		0.00		
C2	1	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity Multiplier (%)	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
A	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
B	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Ax	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Bx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Cx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
C	1	100	100
Ax	1	100	100
Bx	1	100	100
C1	1	100	100
C1	2	100	100
C2	1	100	100
Cx	1	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
A	1	533	533
B	1	447	447
C	1	467	467
Ax	1	533	533
Bx	1	400	400
C1	1	287	287
C1	2	180	180
C2	1	180	180
Cx	1	514	514

Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
B	1	1	B	
C1	1	1	C	
C1	2	1	C	

Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
A	1	12.00	30.00
B	1	12.00	30.00
C	1	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
Ax	1	1	TrafficStream	B/1	Ax/1	12.00	30.00	✓	Offside	87.46
Bx	1	1	TrafficStream	A/1	Bx/1	12.00	30.00	✓	Nearside	37.54
C1	1	1	TrafficStream	C/1	C1/1	3.60	30.00	✓	Straight	Straight Movement
C1	2	1	TrafficStream	C/1	C1/2	3.60	30.00	✓	Straight	Straight Movement
C2	1	1	TrafficStream	C1/2	C2/1	1.20	30.00	✓	Straight	Straight Movement
Cx	1	1	TrafficStream	A/1	Cx/1	12.00	30.00	✓	Straight	Straight Movement
Ax	1	2	TrafficStream	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	2	TrafficStream	C2/1	Bx/1	12.00	30.00	✓	Offside	74.96
Cx	1	2	TrafficStream	B/1	Cx/1	12.00	30.00	✓	Nearside	25.04

Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Use Connector Turning Radius	Radius Of Turn (m)	Visibility Restricted
C2	1	AllTraffic	✓	0	✓	74.96	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	A/1	100		0	2

Local OD Matrix - Local Matrix: 1

Normal Input Flows (PCU/hr)

	To			
		1	2	3
From	1	0	220	313
	2	246	0	201
	3	287	180	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits
1	1	(untitled)	A/1	Ax/1
1	2	(untitled)	B/1	Bx/1
1	3	(untitled)	C/1	Cx/1

Normal Paths and Flows

OD Matrix	Path	Description	From Location	To Location	Path Items	Allocation Type	Normal Calculated Flow (PCU/hr)
1	1		3	1	C/1,C1/1,Ax/1	Normal	287
1	2		3	2	C/1,C1/2,C2/1,Bx/1	Normal	180
1	3		1	2	A/1,Bx/1	Normal	220
1	4		1	3	A/1,Cx/1	Normal	313
1	5		2	1	B/1,Ax/1	Normal	246
1	6		2	3	B/1,Cx/1	Normal	201

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	100

Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	C,A	1
1	2	B	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	2,1	48,9

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	2	B	16	48	32	1	7
1	2	✓	1	C,A	55	9	54	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	55	9	54
1	B	1	✓	16	48	32
1	C	1	✓	55	9	54

Intergreen Matrix for Controller Stream 1

	To		
	A	B	C
	A	7	
	B	7	7

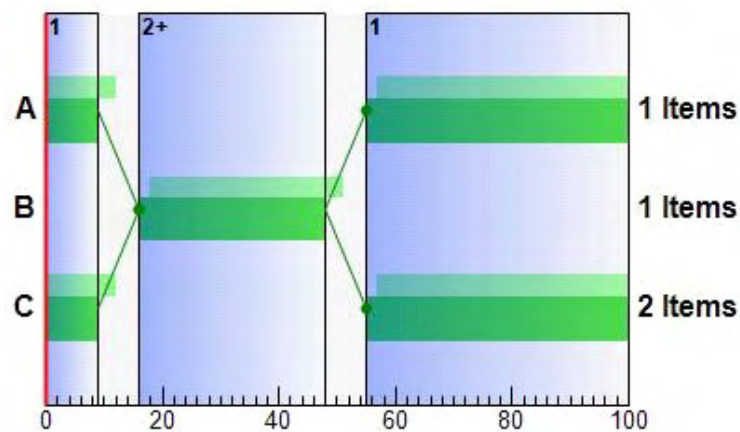
Interstage Matrix for Controller Stream 1

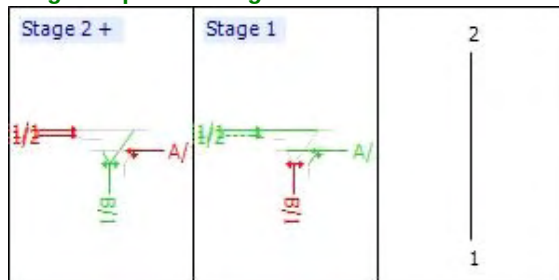
	To	
	1	2
	1	0 7

Banned Stage transitions for Controller Stream 1

	To	
	1	2
	1	

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1


Traffic Stream Results

Traffic Stream Results: Vehicle Summary

Time Segment	Am	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
12:00-13:00	A	1	48	88	533	2022	54	15.24	9.25	53.20	32.03	4.03	36.06
12:00-13:00	B	1	70	29	447	1939	32	35.59	11.60	66.70	62.75	5.11	67.86
12:00-13:00	C	1	37	146	467	2055	100	1.91	6.33	36.41	3.53	2.04	5.56
12:00-13:00	Ax	1	0	Unrestricted	533	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	Bx	1	0	Unrestricted	400	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	C1	1	25	254	287	2055	54	11.18	3.30	66.05	12.65	1.62	14.27
12:00-13:00	C1	2	24	277	180	2055	54	14.11	2.14	42.70	10.02	1.54	11.56
12:00-13:00	C2	1	14	528	180	1257	100	9.53	2.01	100.60	6.77	1.64	8.41
12:00-13:00	Cx	1	0	Unrestricted	514	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Flow On Red Per Cycle (PCU)
12:00-13:00	A	1	533	533	0		2022	1112	48		88	0.00	0.0
12:00-13:00	B	1	447	447	0		1939	640	70		29	0.00	0.0
12:00-13:00	C	1	467	467	0		2055	1277	37		146	0.00	0.0
12:00-13:00	Ax	1	533	533	0		Unrestricted	Unrestricted	0		Unrestricted	0.60	0.0
12:00-13:00	Bx	1	400	400	0		Unrestricted	Unrestricted	0		Unrestricted	0.83	0.0
12:00-13:00	C1	1	287	287	0		2055	1130	25		254	0.13	0.0
12:00-13:00	C1	2	180	180	0		2055	754	24		277	0.10	0.0
12:00-13:00	C2	1	180	180	0		1257	1257	14		528	1.16	0.0
12:00-13:00	Cx	1	514	514	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	0.0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
12:00-13:00	A	1	12.00	15.24	2.04	0.22	32.03	32.03	60.24	313.17	7.89	4.03	4.03
12:00-13:00	B	1	12.00	35.59	3.62	0.80	62.75	62.75	91.10	378.98	28.24	5.11	5.11
12:00-13:00	C	1	12.00	1.91	0.14	0.11	3.53	3.53	34.81	158.78	3.78	2.04	2.04
12:00-13:00	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	C1	1	3.60	11.18	0.85	0.04	12.65	12.65	45.08	127.83	1.55	1.62	1.62
12:00-13:00	C1	2	3.60	14.11	0.67	0.04	10.02	10.02	68.39	121.76	1.34	1.54	1.54
12:00-13:00	C2	1	1.20	9.53	0.46	0.01	6.77	6.77	72.70	130.42	0.43	1.64	1.64
12:00-13:00	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)	Estimated Blocking
12:00-13:00	A	1	0.00	9.25	17.39	53.20	0.00	0.00	0.00	0.22	6.88	0.00	0.00	0.00	
12:00-13:00	B	1	0.00	11.60	17.39	66.70	0.00	0.00	0.00	0.80	9.12	0.00	0.00	0.00	
12:00-13:00	C	1	0.00	6.33	17.39	36.41	0.00	0.00	0.00			0.00	37.84	37.84	
12:00-13:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			1.00	0.00	1.00	
12:00-13:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			38.00	0.00	38.00	
12:00-13:00	C1	1	0.00	3.30	5.00	66.05	0.00	0.00	0.00	0.04	3.30	0.00	0.00	0.00	
12:00-13:00	C1	2	0.00	2.14	5.00	42.70	0.00	0.00	0.00	0.04	2.14	0.00	18.30	18.30	
12:00-13:00	C2	1	0.00	2.01	2.00	100.60	0.00	0.00	0.00			45.00	0.00	45.00	
12:00-13:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			1.00	0.00	1.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
12:00-13:00	A	1	53.30	4.03	13.22	27.24
12:00-13:00	B	1	44.70	5.91	7.56	47.59
12:00-13:00	C	1	46.70	1.80	25.87	13.91
12:00-13:00	Ax	1	53.30	1.78	30.00	12.00
12:00-13:00	Bx	1	40.00	1.33	30.00	12.00
12:00-13:00	C1	1	8.61	1.18	7.31	14.78
12:00-13:00	C1	2	5.40	0.89	6.10	17.71
12:00-13:00	C2	1	1.80	0.54	3.35	10.73
12:00-13:00	Cx	1	51.40	1.71	30.00	12.00

Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
12:00-13:00	C	1	✓	CPDM flare: C/1,C1/1,C1/2	32	11.77	1470	183

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue Eo TS (PCU)	Max End Of Red Queue Eo TS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
12:00-13:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.25	0.22	6.88	0.00	36.06	36.0
12:00-13:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.61	0.80	9.12	0.00	67.86	67.8
12:00-13:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.33			0.00	5.56	5.56
12:00-13:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
12:00-13:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
12:00-13:00	C1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.30	0.04	3.30	0.00	14.27	14.2
12:00-13:00	C1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.14	0.04	2.14	0.00	11.56	11.5
12:00-13:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.01			0.00	8.41	8.41
12:00-13:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00

Network Results

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Net Wi Cap
A1 - Friday Lunchtime Peak	27/09/2016 11:13:03	27/09/2016 11:13:04	12:00	100	9.00	69.86	B/1	0	0	B/1	C/1	B/1	

Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
12:00-13:00	70	29	3541	694	9.15	127.75	15.98	143.73

Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s (per cycle))	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
12:00-13:00	0	0	0	0.00	0.00	0.00

Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))
12:00-13:00	3541	3541	0		70		29	694	698

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
12:00-13:00	10.34	9.15	7.78	1.21	127.75	127.75	35.98	1230.95	43.24	15.98	15.98

Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))
12:00-13:00	116.35	0.00	85.00	56.15	141.15

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)
12:00-13:00	305.21	19.17	15.92

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To			
From		1	2	3
	1	0.0	39.2	39.2
	2	59.6	0.0	59.6
	3	40.8	54.2	0.0

Path Journey Time

Path	Normal Calculated Flow (PCU/hr)	Normal Journey Time (s)	Calculated Total Flow (PCU/hr)	Avg Journey Time (s)
1	287	40.76	287	40.76
2	180	54.25	180	54.25
3	220	39.24	220	39.24
4	313	39.24	313	39.24
5	246	59.59	246	59.59
6	201	59.59	201	59.59

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE	
Arm	Traffic Stream	Name	Traffic Node	Controller Stream	Phase	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s per cycle)	Wasted Time Total (s per cycle)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Q (s)
A	1	(untitled)	1	1	A	533	2022	54	0.00	48	88	27.24	15.24	60.24	9.25	6
B	1	(untitled)	1	1	B	447	1939	32	0.00	70	29	47.59	35.59	91.10	11.60	9
C	1	(untitled)	1a			467	2055	100	37.84	37	146	13.91	1.91	34.81	6.33	
Ax	1	(untitled)				533	Unrestricted	100	1.00	0	Unrestricted	12.00	0.00	0.00	0.00	
Bx	1	(untitled)				400	Unrestricted	100	38.00	0	Unrestricted	12.00	0.00	0.00	0.00	
C1	1	(untitled)	1b	1	C	287	2055	54	0.00	25	254	14.78	11.18	45.08	3.30	3
C1	2	(untitled)	1b	1	C	180	2055	54	18.30	24	277	17.71	14.11	68.39	2.14	2
C2	1	(untitled)	1			180 <	1257	100	45.00	14	528	10.73	9.53	72.70	2.01 +	
Cx	1	(untitled)				514	Unrestricted	100	1.00	0	Unrestricted	12.00	0.00	0.00	0.00	

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	305.21	19.17	15.92	7.78	1.21	127.75	15.98	0.00	143.73
BUSES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PEDESTRIANS									
OTHER (NORMAL)	305.21	19.17	15.92	7.78	1.21	127.75	15.98	0.00	143.73

- | B = at least one source for this link carries buses
- | T = at least one source for this link carries trams
- | P = this link is a pedestrian link
- | < = adjusted flow warning (upstream links are over-saturated)
- | ! = DoS threshold exceeded
- | f = average saturation flow for flared link
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link excess queue is greater than 0
- | P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.0.4.3457 [] © Copyright TRL Limited, 2016	
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Last run: 27/09/2016 11:16:10

Analysis Set used for last run: A2 - Friday PM Peak

Filename: Meadway Signal Junction September 2016.t15

Path: H:\Winchester Jobs\W Jobs\01000 - 01999\01000 - 01049\W01033 - The Meadway, Tilehurst\SEPTEMBER 2016

JUNCTIONS MODELS

Report generation date: 27/09/2016 11:16:41

-
- » Network Diagrams
 - « A2 - Friday PM Peak *: D2 - Friday PM Peak*
 - » Summary
 - » Network Options
 - » Traffic Nodes
 - » Arms and Traffic Streams
 - » Local OD Matrix - Local Matrix: 1
 - » Signal Timings
 - » Traffic Stream Results
 - » Network Results
 - » Point to Point Journey Time
 - » Final Prediction Table

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SWH\j hudson
Description	

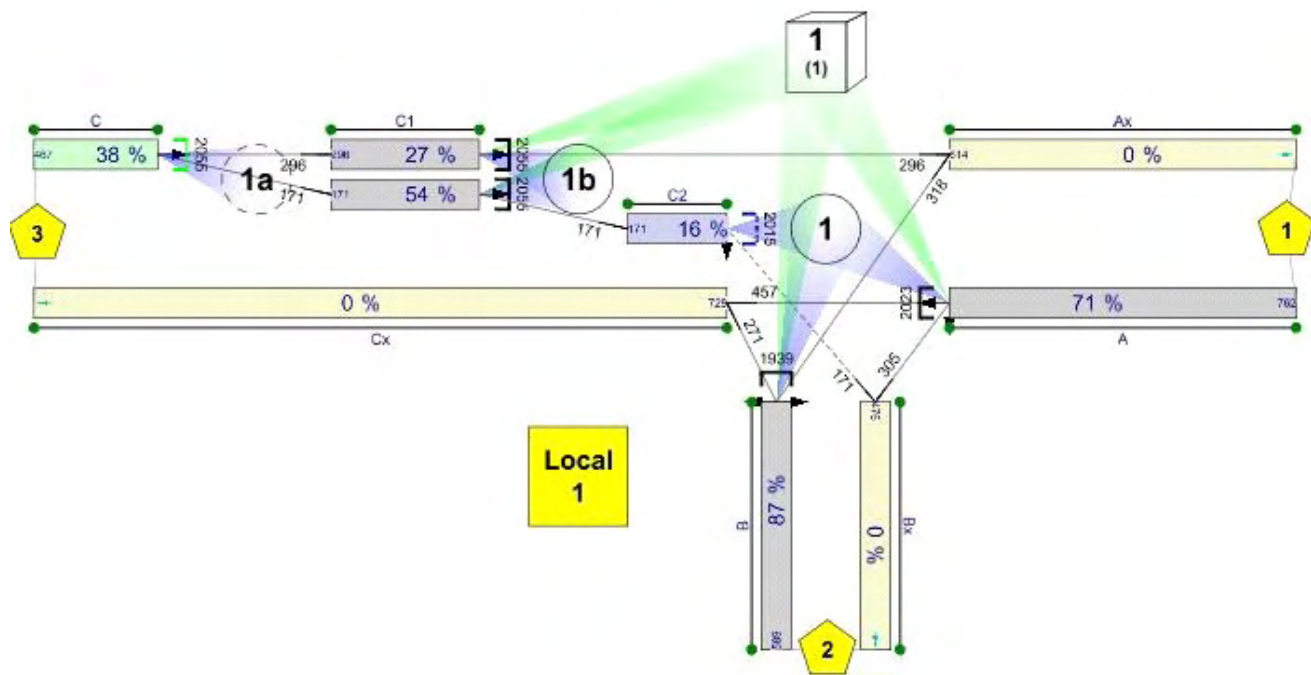
Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)

Cycletime 0s / 100s , Timesteps 99 / 100

A2 - Friday PM Peak *, D2 - Friday PM Peak*

Diagram produced using TRANSYT 15.0.4.3457

A2 - Friday PM Peak *: D2 - Friday PM Peak*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Netwo Withi Capac
A2 - Friday PM Peak	27/09/2016 11:16:10	27/09/2016 11:16:10	17:00	100	15.68	86.79	B/1	0	0	B/1	C/1	B/1	✓

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
Friday PM Peak		D2	✓	

Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D2	Friday PM Peak				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100		60	1	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation Order	Optimisation Order
Hill Climb (Fast)	15,40,-1,15,40,1,-1,1	50,50,5,5,0.5,0.5,0.05,0.05		✓	1

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

ID	Name	Description
1	(untitled)	
1a	(untitled)	
1b	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1a
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1b
C2	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	SumOfLanes	2023	✓		Normal	
B	1	(untitled)			100.00	✓	SumOfLanes	1939	✓		Normal	
C	1	(untitled)			100.00	✓	SumOfLanes	2055			Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
C1	1	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C1	2	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C2	1	(untitled)			10.00	✓	SumOfLanes	2015		✓	Normal	
Cx	1	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface Condition	Site Quality Factor	Gradient (%)	Width (m)	Use Connector Turning Radius	Proportion That Turn (%)	Turning Radius (m)	Nearside Lane	Saturation Flow (PCU/hr)
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	40	37.54		2023
B	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	25.04		1939
C	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
Ax	1	1	(untitled)							✓				
Bx	1	1	(untitled)							✓				
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C1	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	74.96		2015
Cx	1	1	(untitled)							✓				

Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Assignment Cost Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	NetworkDefault	100	100	100		0.00		
B	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	Flare	100	100	100		0.00		
C1	2	Flare	100	100	100		0.00		
C2	1	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity Multiplier (%)	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
A	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
B	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Ax	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Bx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Cx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
C	1	100	100
Ax	1	100	100
Bx	1	100	100
C1	1	100	100
C1	2	100	100
C2	1	100	100
Cx	1	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
A	1	762	762
B	1	589	589
C	1	467	467
Ax	1	614	614
Bx	1	476	476
C1	1	296	296
C1	2	171	171
C2	1	171	171
Cx	1	728	728

Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
B	1	1	B	
C1	1	1	C	
C1	2	1	C	

Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
A	1	12.00	30.00
B	1	12.00	30.00
C	1	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
Ax	1	1	TrafficStream	B/1	Ax/1	12.00	30.00	✓	Offside	87.46
Bx	1	1	TrafficStream	A/1	Bx/1	12.00	30.00	✓	Nearside	37.54
C1	1	1	TrafficStream	C/1	C1/1	3.60	30.00	✓	Straight	Straight Movement
C1	2	1	TrafficStream	C/1	C1/2	3.60	30.00	✓	Straight	Straight Movement
C2	1	1	TrafficStream	C1/2	C2/1	1.20	30.00	✓	Straight	Straight Movement
Cx	1	1	TrafficStream	A/1	Cx/1	12.00	30.00	✓	Straight	Straight Movement
Ax	1	2	TrafficStream	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	2	TrafficStream	C2/1	Bx/1	12.00	30.00	✓	Offside	74.96
Cx	1	2	TrafficStream	B/1	Cx/1	12.00	30.00	✓	Nearside	25.04

Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Use Connector Turning Radius	Radius Of Turn (m)	Visibility Restricted
C2	1	AllTraffic	✓	0	✓	74.96	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	A/1	100		0	2

Local OD Matrix - Local Matrix: 1

Normal Input Flows (PCU/hr)

	To			
		1	2	3
From	1	0	305	457
	2	318	0	271
	3	296	171	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits
1	1	(untitled)	A/1	Ax/1
1	2	(untitled)	B/1	Bx/1
1	3	(untitled)	C/1	Cx/1

Normal Paths and Flows

OD Matrix	Path	Description	From Location	To Location	Path Items	Allocation Type	Normal Calculated Flow (PCU/hr)
1	1		3	1	C/1,C1/1,Ax/1	Normal	296
1	2		3	2	C/1,C1/2,C2/1,Bx/1	Normal	171
1	3		1	2	A/1,Bx/1	Normal	305
1	4		1	3	A/1,Cx/1	Normal	457
1	5		2	1	B/1,Ax/1	Normal	318
1	6		2	3	B/1,Cx/1	Normal	271

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	100

Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	C,A	1
1	2	B	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	2,1	47,6

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	2	B	13	47	34	1	7
1	2	✓	1	C,A	54	6	52	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	54	6	52
1	B	1	✓	13	47	34
1	C	1	✓	54	6	52

Intergreen Matrix for Controller Stream 1

	To		
	A	B	C
From	A	7	
	B	7	7
	C	7	

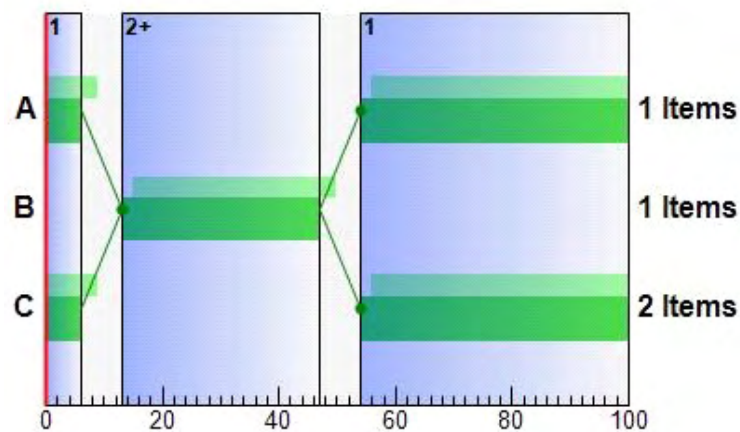
Interstage Matrix for Controller Stream 1

	To	
	1	2
From	1	0 7
	2	7 0

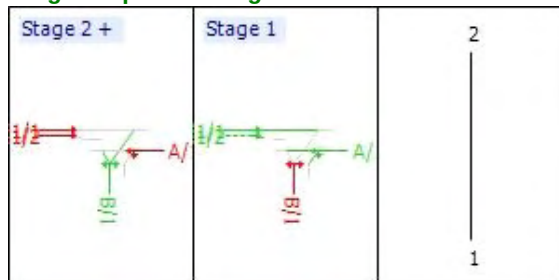
Banned Stage transitions for Controller Stream 1

	To	
	1	2
From	1	
	2	

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle Summary

Time Segment	Am	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	A	1	71	27	762	2023	52	21.80	16.74	96.25	65.54	7.34	72.87
17:00-18:00	B	1	87	4	589	1939	34	46.51	17.86	102.69	108.04	7.87	115.91
17:00-18:00	C	1	38	139	467	2055	100	2.14	6.73	38.69	3.94	2.19	6.13
17:00-18:00	Ax	1	0	Unrestricted	614	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	0	Unrestricted	476	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C1	1	27	231	296	2055	52	12.20	3.51	70.25	14.24	1.76	16.00
17:00-18:00	C1	2	54	67	171	2055	52	26.42	2.38	47.58	17.82	2.08	19.90
17:00-18:00	C2	1	16	470	171	1083	100	19.31	2.01	100.74	13.02	2.12	15.14
17:00-18:00	Cx	1	0	Unrestricted	728	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Flow On Red Per Cycle (PCU)
17:00-18:00	A	1	762	762	0		2023	1072	71		27	0.00	0.0
17:00-18:00	B	1	589	589	0		1939	679	87		4	0.00	0.0
17:00-18:00	C	1	467	467	0		2055	1242	38		139	0.00	0.0
17:00-18:00	Ax	1	614	614	0		Unrestricted	Unrestricted	0		Unrestricted	0.57	0.0
17:00-18:00	Bx	1	476	476	0		Unrestricted	Unrestricted	0		Unrestricted	0.78	0.0
17:00-18:00	C1	1	296	296	0		2055	1089	27		231	0.15	0.0
17:00-18:00	C1	2	171	171	0		2055	317	54		67	0.11	0.0
17:00-18:00	C2	1	171	171	0		1083	1083	16		470	1.44	0.0
17:00-18:00	Cx	1	728	728	0		Unrestricted	Unrestricted	0		Unrestricted	0.39	0.0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	A	1	12.00	21.80	3.75	0.86	65.54	65.54	76.78	554.26	30.79	7.34	7.34
17:00-18:00	B	1	12.00	46.51	4.96	2.64	108.04	108.04	106.55	536.11	91.44	7.87	7.87
17:00-18:00	C	1	12.00	2.14	0.16	0.11	3.94	3.94	37.41	170.63	4.07	2.19	2.19
17:00-18:00	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C1	1	3.60	12.20	0.95	0.05	14.24	14.24	47.47	138.69	1.82	1.76	1.76
17:00-18:00	C1	2	3.60	26.42	0.94	0.31	17.82	17.82	96.87	154.64	11.01	2.08	2.08
17:00-18:00	C2	1	1.20	19.31	0.90	0.01	13.02	13.02	98.69	168.24	0.53	2.12	2.12
17:00-18:00	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)	Estimated Blocking
17:00-18:00	A	1	0.00	16.74	17.39	96.25	0.00	0.00	0.00	0.86	10.81	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	17.86	17.39	102.69	0.01	0.00	0.00	2.64	13.28	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	6.73	17.39	38.69	0.00	0.00	0.00			0.00	39.58	39.58	
17:00-18:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			34.00	0.00	34.00	
17:00-18:00	C1	1	0.00	3.51	5.00	70.25	0.00	0.00	0.00	0.05	3.51	0.00	0.00	0.00	
17:00-18:00	C1	2	0.00	2.38	5.00	47.58	0.00	0.00	0.00	0.31	2.38	0.00	37.55	37.55	
17:00-18:00	C2	1	0.00	2.01	2.00	100.74	0.00	0.00	0.00			46.00	0.00	46.00	
17:00-18:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	76.20	7.16	10.65	33.80
17:00-18:00	B	1	58.90	9.57	6.15	58.51
17:00-18:00	C	1	46.70	1.83	25.46	14.14
17:00-18:00	Ax	1	61.40	2.05	30.00	12.00
17:00-18:00	Bx	1	47.60	1.59	30.00	12.00
17:00-18:00	C1	1	8.88	1.30	6.84	15.80
17:00-18:00	C1	2	5.13	1.43	3.60	30.02
17:00-18:00	C2	1	1.71	0.97	1.76	20.51
17:00-18:00	Cx	1	72.80	2.43	30.00	12.00

Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
17:00-18:00	C	1	✓	CPDM flare: C1,C1/1,C1/2	32	12.62	1441	178

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue Eo TS (PCU)	Max End Of Red Queue Eo TS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	16.74	0.87	10.82	0.00	72.87	72.8
17:00-18:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	17.96	2.74	13.38	0.00	115.91	115.9
17:00-18:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.73			0.00	6.13	6.13
17:00-18:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
17:00-18:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
17:00-18:00	C1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.51	0.05	3.51	0.00	16.00	16.0
17:00-18:00	C1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.38	0.31	2.38	0.00	19.90	19.9
17:00-18:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.01			0.00	15.14	15.1
17:00-18:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00

Network Results

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network With Capacity
A2 - Friday PM Peak	27/09/2016 11:16:10	27/09/2016 11:16:10	17:00	100	15.68	86.79	B/1	0	0	B/1	C/1	B/1	✓

Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	87	4	4274	690	13.20	222.61	23.35	245.96

Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s (per cycle))	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	0	0	0	0.00	0.00	0.00

Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))
17:00-18:00	4274	4274	0		87		4	690	694

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	10.65	13.20	11.68	4.00	222.61	222.61	43.57	1722.56	139.67	23.35	23.35

Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))
17:00-18:00	116.35	0.00	80.00	77.13	157.13

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)
17:00-18:00	379.32	28.32	13.39

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To			
From		1	2	3
	1	0.0	45.8	45.8
	2	70.5	0.0	70.5
	3	42.0	76.5	0.0

Path Journey Time

Path	Normal Calculated Flow (PCU/hr)	Normal Journey Time (s)	Calculated Total Flow (PCU/hr)	Avg Journey Time (s)
1	296	42.03	296	42.03
2	171	76.51	171	76.51
3	305	45.80	305	45.80
4	457	45.80	457	45.80
5	318	70.51	318	70.51
6	271	70.51	271	70.51

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEU
Arm	Traffic Stream	Name	Traffic Node	Controller Stream	Phase	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)
A	1	(untitled)	1	1	A	762	2023	52	0.00	71	27	33.80	21.80	76.78	16.74
B	1	(untitled)	1	1	B	589 <	1939	34	0.00	87	4	58.51	46.51	106.55	17.86 +
C	1	(untitled)	1a			467	2055	100	39.58	38	139	14.14	2.14	37.41	6.73
Ax	1	(untitled)				614	Unrestricted	100	0.00	0	Unrestricted	12.00	0.00	0.00	0.00
Bx	1	(untitled)				476	Unrestricted	100	34.00	0	Unrestricted	12.00	0.00	0.00	0.00
C1	1	(untitled)	1b	1	C	296	2055	52	0.00	27	231	15.80	12.20	47.47	3.51
C1	2	(untitled)	1b	1	C	171	2055	52	37.55	54	67	30.02	26.42	96.87	2.38
C2	1	(untitled)	1			171 <	1083	100	46.00	16	470	20.51	19.31	98.69	2.01 +
Cx	1	(untitled)				728	Unrestricted	100	0.00	0	Unrestricted	12.00	0.00	0.00	0.00

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	379.32	28.32	13.39	11.68	4.00	222.61	23.35	0.00	245.96
BUSES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PEDESTRIANS									
OTHER (NORMAL)	379.32	28.32	13.39	11.68	4.00	222.61	23.35	0.00	245.96

- 1 B = at least one source for this link carries buses
- 1 T = at least one source for this link carries trams
- 1 P = this link is a pedestrian link
- 1 < = adjusted flow warning (upstream links are over-saturated)
- 1 ! = DoS threshold exceeded
- 1 f = average saturation flow for flared link
- 1 * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- 1 ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- 1 + = average link excess queue is greater than 0
- 1 P.I. = PERFORMANCE INDEX



TRANSYT 15	
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Last run: 27/09/2016 11:14:39

Analysis Set used for last run: A3 - Saturday Lunch Peak

Filename: Meadway Signal Junction September 2016.t15

Path: H:\Winchester Jobs\W Jobs\01000 - 01999\01000 - 01049\W01033 - The Meadway, Tilehurst\SEPTEMBER 2016

JUNCTIONS MODELS

Report generation date: 27/09/2016 11:15:04

-
- » Network Diagrams
 - « A3 - Saturday Lunch Peak *: D3 - Saturday Lunch Peak*
 - » Summary
 - » Network Options
 - » Traffic Nodes
 - » Arms and Traffic Streams
 - » Local OD Matrix - Local Matrix: 1
 - » Signal Timings
 - » Traffic Stream Results
 - » Network Results
 - » Point to Point Journey Time
 - » Final Prediction Table

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SWH\j hudson
Description	

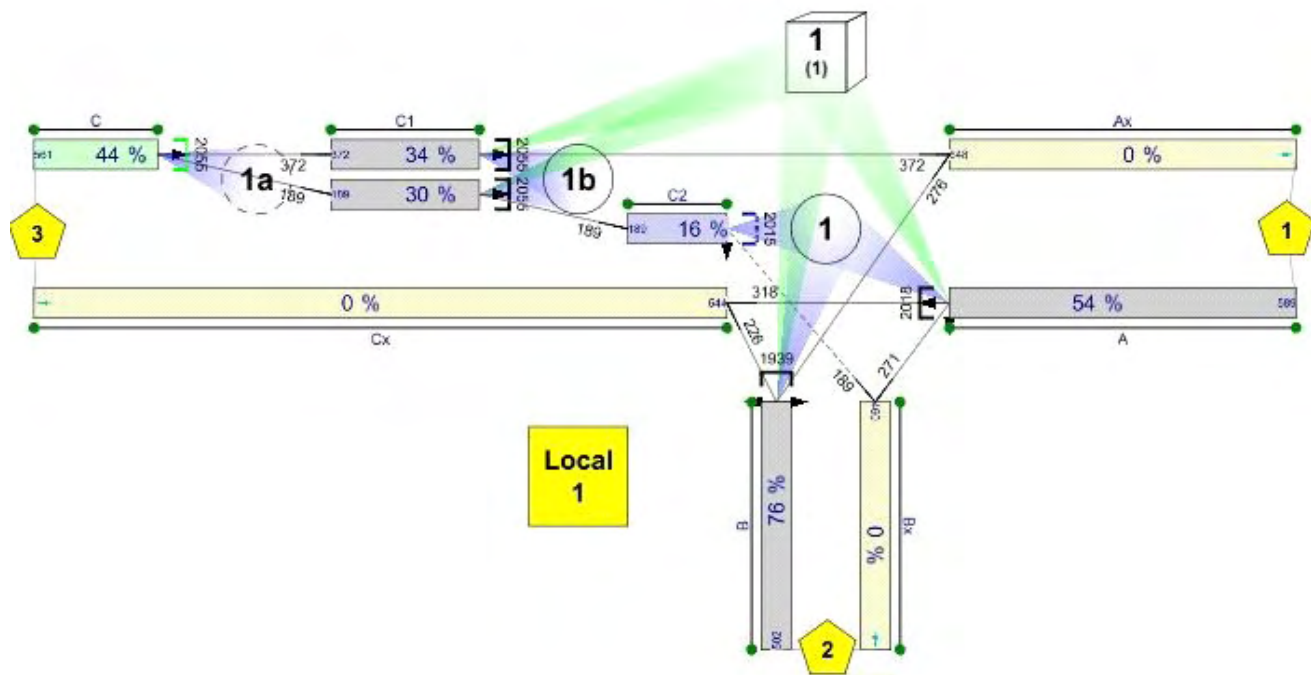
Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)

Cycletime 0s / 100s , Timesteps 99 / 100

A3 - Saturday Lunch Peak *, D3 - Saturday Lunch Peak*

Diagram produced using TRANSYT 15.0.4.3457

A3 - Saturday Lunch Peak *: D3 - Saturday Lunch Peak*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Netw Wit Capa
A3 - Saturday Lunch Peak	27/09/2016 11:14:39	27/09/2016 11:14:39	12:00	100	11.18	76.15	B/1	0	0	B/1	C/1	B/1	

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
Saturday Lunch Peak		D3	✓	

Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D3	Saturday Lunch Peak				12:00	

Network Options

Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100		60	1	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms ⁻²)	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation Order	Optimisation Order
Hill Climb (Fast)	15,40,-1,15,40,1,-1,1	50,50,5,5,0.5,0.5,0.05,0.05		✓	1

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

ID	Name	Description
1	(untitled)	
1a	(untitled)	
1b	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1a
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1b
C2	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Allow Nearside Turn On Red
A	1	(untitled)			100.00	✓	SumOfLanes	2018	✓		Normal	
B	1	(untitled)			100.00	✓	SumOfLanes	1939	✓		Normal	
C	1	(untitled)			100.00	✓	SumOfLanes	2055			Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
C1	1	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C1	2	(untitled)			30.00	✓	SumOfLanes	2055	✓		Normal	
C2	1	(untitled)			10.00	✓	SumOfLanes	2015		✓	Normal	
Cx	1	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface Condition	Site Quality Factor	Gradient (%)	Width (m)	Use Connector Turning Radius	Proportion That Turn (%)	Turning Radius (m)	Nearside Lane	Saturation Flow (PCU/hr)
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	46	37.54		2018
B	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	25.04		1939
C	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
Ax	1	1	(untitled)							✓				
Bx	1	1	(untitled)							✓				
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C1	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	74.96		2015
Cx	1	1	(untitled)							✓				

Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Assignment Cost Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	NetworkDefault	100	100	100		0.00		
B	1	NetworkDefault	100	100	100		0.00		
C	1	NetworkDefault	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	Flare	100	100	100		0.00		
C1	2	Flare	100	100	100		0.00		
C2	1	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity Multiplier (%)	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
A	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
B	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Ax	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Bx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
C2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100
Cx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	100

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
C	1	100	100
Ax	1	100	100
Bx	1	100	100
C1	1	100	100
C1	2	100	100
C2	1	100	100
Cx	1	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
A	1	589	589
B	1	502	502
C	1	561	561
Ax	1	648	648
Bx	1	460	460
C1	1	372	372
C1	2	189	189
C2	1	189	189
Cx	1	544	544

Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
B	1	1	B	
C1	1	1	C	
C1	2	1	C	

Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
A	1	12.00	30.00
B	1	12.00	30.00
C	1	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
Ax	1	1	TrafficStream	B/1	Ax/1	12.00	30.00	✓	Offside	87.46
Bx	1	1	TrafficStream	A/1	Bx/1	12.00	30.00	✓	Nearside	37.54
C1	1	1	TrafficStream	C/1	C1/1	3.60	30.00	✓	Straight	Straight Movement
C1	2	1	TrafficStream	C/1	C1/2	3.60	30.00	✓	Straight	Straight Movement
C2	1	1	TrafficStream	C1/2	C2/1	1.20	30.00	✓	Straight	Straight Movement
Cx	1	1	TrafficStream	A/1	Cx/1	12.00	30.00	✓	Straight	Straight Movement
Ax	1	2	TrafficStream	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	2	TrafficStream	C2/1	Bx/1	12.00	30.00	✓	Offside	74.96
Cx	1	2	TrafficStream	B/1	Cx/1	12.00	30.00	✓	Nearside	25.04

Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Use Connector Turning Radius	Radius Of Turn (m)	Visibility Restricted
C2	1	AllTraffic	✓	0	✓	74.96	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	A/1	100		0	2

Local OD Matrix - Local Matrix: 1

Normal Input Flows (PCU/hr)

	To			
		1	2	3
From	1	0	271	318
	2	276	0	226
	3	372	189	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits
1	1	(untitled)	A/1	Ax/1
1	2	(untitled)	B/1	Bx/1
1	3	(untitled)	C/1	Cx/1

Normal Paths and Flows

OD Matrix	Path	Description	From Location	To Location	Path Items	Allocation Type	Normal Calculated Flow (PCU/hr)
1	1		3	1	C/1,C1/1,Ax/1	Normal	372
1	2		3	2	C/1,C1/2,C2/1,Bx/1	Normal	189
1	3		1	2	A/1,Bx/1	Normal	271
1	4		1	3	A/1,Cx/1	Normal	318
1	5		2	1	B/1,Ax/1	Normal	276
1	6		2	3	B/1,Cx/1	Normal	226

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	100

Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	C,A	1
1	2	B	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	2,1	49,9

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	2	B	16	49	33	1	7
1	2	✓	1	C,A	56	9	53	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	56	9	53
1	B	1	✓	16	49	33
1	C	1	✓	56	9	53

Intergreen Matrix for Controller Stream 1

	To		
	A	B	C
From	A	7	
	B	7	7
	C	7	

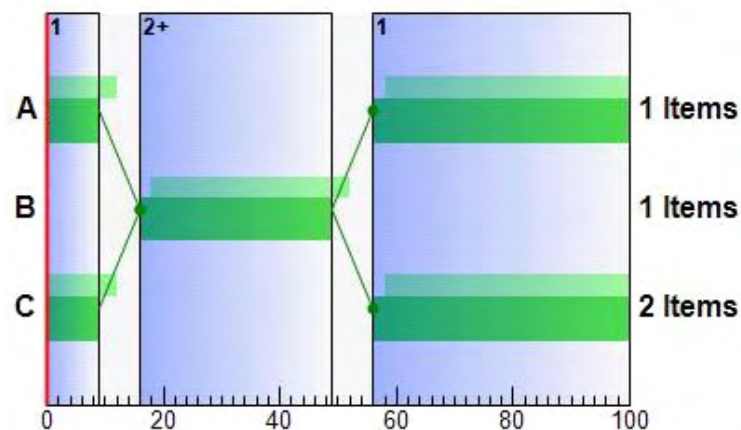
Interstage Matrix for Controller Stream 1

	To	
	1	2
	1	0 7
From	2	7 0

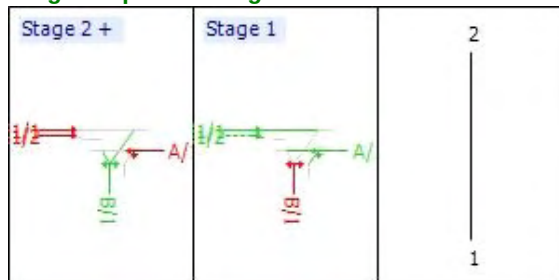
Banned Stage transitions for Controller Stream 1

	To	
	1	2
	1	
From	2	

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle Summary

Time Segment	Am	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
12:00-13:00	A	1	54	67	589	2018	53	16.88	10.79	62.03	39.21	4.76	43.97
12:00-13:00	B	1	76	18	502	1939	33	37.89	13.60	78.18	75.04	5.98	81.02
12:00-13:00	C	1	44	102	561	2055	100	2.91	8.44	48.51	6.45	2.86	9.31
12:00-13:00	Ax	1	0	Unrestricted	648	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	Bx	1	0	Unrestricted	460	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	C1	1	34	168	372	2055	53	11.87	4.11	82.27	17.42	2.04	19.47
12:00-13:00	C1	2	30	202	189	2055	53	16.43	2.23	44.53	12.25	1.79	14.04
12:00-13:00	C2	1	16	476	189	1209	100	11.26	2.01	100.72	8.39	1.92	10.31
12:00-13:00	Cx	1	0	Unrestricted	544	Unrestricted	100	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Flow On Red Per Cycle (PCU)
12:00-13:00	A	1	589	589	0		2018	1090	54		67	0.00	0.0
12:00-13:00	B	1	502	502	0		1939	659	76		18	0.00	0.0
12:00-13:00	C	1	561	561	0		2055	1261	44		102	0.00	0.0
12:00-13:00	Ax	1	648	648	0		Unrestricted	Unrestricted	0		Unrestricted	0.55	0.0
12:00-13:00	Bx	1	460	460	0		Unrestricted	Unrestricted	0		Unrestricted	0.85	0.0
12:00-13:00	C1	1	372	372	0		2055	1110	34		168	0.22	0.0
12:00-13:00	C1	2	189	189	0		2055	634	30		202	0.17	0.0
12:00-13:00	C2	1	189	189	0		1209	1209	16		476	1.24	0.0
12:00-13:00	Cx	1	544	544	0		Unrestricted	Unrestricted	0		Unrestricted	0.50	0.0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
12:00-13:00	A	1	12.00	16.88	2.44	0.32	39.21	39.21	64.39	367.91	11.35	4.76	4.76
12:00-13:00	B	1	12.00	37.89	4.10	1.19	75.04	75.04	95.00	435.11	41.80	5.98	5.98
12:00-13:00	C	1	12.00	2.91	0.28	0.18	6.45	6.45	40.69	221.88	6.39	2.86	2.86
12:00-13:00	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00-13:00	C1	1	3.60	11.87	1.14	0.08	17.42	17.42	43.79	159.85	3.03	2.04	2.04
12:00-13:00	C1	2	3.60	16.43	0.80	0.06	12.25	12.25	75.61	140.64	2.27	1.79	1.79
12:00-13:00	C2	1	1.20	11.26	0.58	0.01	8.39	8.39	81.05	152.67	0.52	1.92	1.92
12:00-13:00	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)	Estimated Blocking
12:00-13:00	A	1	0.00	10.79	17.39	62.03	0.00	0.00	0.00	0.32	7.84	0.00	0.00	0.00	
12:00-13:00	B	1	0.00	13.60	17.39	78.18	0.00	0.00	0.00	1.19	10.39	0.00	0.00	0.00	
12:00-13:00	C	1	0.00	8.44	17.39	48.51	0.00	0.00	0.00			0.00	38.65	38.65	
12:00-13:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
12:00-13:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			38.00	0.00	38.00	
12:00-13:00	C1	1	0.00	4.11	5.00	82.27	0.00	0.00	0.00	0.08	4.11	0.00	0.00	0.00	
12:00-13:00	C1	2	0.00	2.23	5.00	44.53	0.00	0.00	0.00	0.06	2.23	0.00	23.17	23.17	
12:00-13:00	C2	1	0.00	2.01	2.00	100.72	0.00	0.00	0.00			46.00	0.00	46.00	
12:00-13:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			1.00	0.00	1.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
12:00-13:00	A	1	58.90	4.72	12.47	28.88
12:00-13:00	B	1	50.20	6.96	7.22	49.89
12:00-13:00	C	1	56.10	2.32	24.14	14.91
12:00-13:00	Ax	1	64.80	2.16	30.00	12.00
12:00-13:00	Bx	1	46.00	1.53	30.00	12.00
12:00-13:00	C1	1	11.16	1.60	6.98	15.47
12:00-13:00	C1	2	5.67	1.05	5.39	20.03
12:00-13:00	C2	1	1.89	0.65	2.89	12.46
12:00-13:00	Cx	1	54.40	1.81	30.00	12.00

Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
12:00-13:00	C	1	✓	CPDM flare: C/1,C1/1,C1/2	38	14.78	1484	138

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue Eo TS (PCU)	Max End Of Red Queue Eo TS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
12:00-13:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.79	0.32	7.84	0.00	43.97	43.9
12:00-13:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.61	1.20	10.40	0.00	81.02	81.0
12:00-13:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.44			0.00	9.31	9.31
12:00-13:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
12:00-13:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
12:00-13:00	C1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.11	0.08	4.11	0.00	19.47	19.4
12:00-13:00	C1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.23	0.06	2.23	0.00	14.04	14.0
12:00-13:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.01			0.00	10.31	10.3
12:00-13:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00

Network Results

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network Capacity
A3 - Saturday Lunch Peak	27/09/2016 11:14:39	27/09/2016 11:14:39	12:00	100	11.18	76.15	B/1	0	0	B/1	C/1	B/1	

Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s per cycle)	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
12:00-13:00	76	18	4054	692	9.93	158.76	19.35	178.11

Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s per cycle)	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
12:00-13:00	0	0	0	0.00	0.00	0.00

Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s per cycle)	Effective Green (s per cycle)
12:00-13:00	4054	4054	0		76		18	692	696

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
12:00-13:00	10.33	9.93	9.34	1.84	158.76	158.76	38.07	1478.05	65.37	19.35	19.35

Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))
12:00-13:00	116.35	0.00	85.00	61.82	146.82

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)
12:00-13:00	349.12	22.82	15.30

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To			
From		1	2	3
	1	0.0	40.9	40.9
	2	61.9	0.0	61.9
	3	42.5	59.1	0.0

Path Journey Time

Path	Normal Calculated Flow (PCU/hr)	Normal Journey Time (s)	Calculated Total Flow (PCU/hr)	Avg Journey Time (s)
1	372	42.54	372	42.54
2	189	59.11	189	59.11
3	271	40.88	271	40.88
4	318	40.88	318	40.88
5	276	61.89	276	61.89
6	226	61.89	226	61.89

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE	
Arm	Traffic Stream	Name	Traffic Node	Controller Stream	Phase	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Q (
A	1	(untitled)	1	1	A	589	2018	53	0.00	54	67	28.88	16.88	64.39	10.79	7
B	1	(untitled)	1	1	B	502	1939	33	0.00	76	18	49.89	37.89	95.00	13.60	1
C	1	(untitled)	1a			561	2055	100	38.65	44	102	14.91	2.91	40.69	8.44	
Ax	1	(untitled)				648	Unrestricted	100	0.00	0	Unrestricted	12.00	0.00	0.00	0.00	
Bx	1	(untitled)				460	Unrestricted	100	38.00	0	Unrestricted	12.00	0.00	0.00	0.00	
C1	1	(untitled)	1b	1	C	372	2055	53	0.00	34	168	15.47	11.87	43.79	4.11	4
C1	2	(untitled)	1b	1	C	189	2055	53	23.17	30	202	20.03	16.43	75.61	2.23	2
C2	1	(untitled)	1			189 <	1209	100	46.00	16	476	12.46	11.26	81.05	2.01 +	
Cx	1	(untitled)				544	Unrestricted	100	1.00	0	Unrestricted	12.00	0.00	0.00	0.00	

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	349.12	22.82	15.30	9.34	1.84	158.76	19.35	0.00	178.11
BUSES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRAMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PEDESTRIANS									
OTHER (NORMAL)	349.12	22.82	15.30	9.34	1.84	158.76	19.35	0.00	178.11

- | B = at least one source for this link carries buses
- | T = at least one source for this link carries trams
- | P = this link is a pedestrian link
- | < = adjusted flow warning (upstream links are over-saturated)
- | != DoS threshold exceeded
- | f = average saturation flow for flared link
- | * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- | ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- | + = average link excess queue is greater than 0
- | P.I. = PERFORMANCE INDEX



Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2016				
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: Bath Road Junction September 2016.arc8

Path: H:\Winchester Jobs\W Jobs\01000 - 01999\01000 - 01049\W01033 - The Meadway, Tilehurst\SEPTEMBER 2016 JUNCTIONS MODELS

Report generation date: 27/09/2016 11:18:58

- » (Default Analysis Set) - Friday Lunch, 1200-1300
- » (Default Analysis Set) - Friday PM, 1700-1800
- » (Default Analysis Set) - Saturday Lunch, 1200-1300

Summary of junction performance

1200-1300				
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - Friday Lunch				
Arm BRE	0.65	3.78	0.39	A
Arm BRW	44.09	126.43	1.03	F
Arm HEL	1.47	13.86	0.60	B

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

"D1 - Friday Lunch, 1200-1300" model duration: 12:00 - 13:00

"D2 - Friday PM, 1700-1800" model duration: 17:00 - 18:00

"D3 - Saturday Lunch, 1200-1300" model duration: 12:00 - 13:00

Run using Junctions 8.0.4.487 at 27/09/2016 11:18:57

File summary

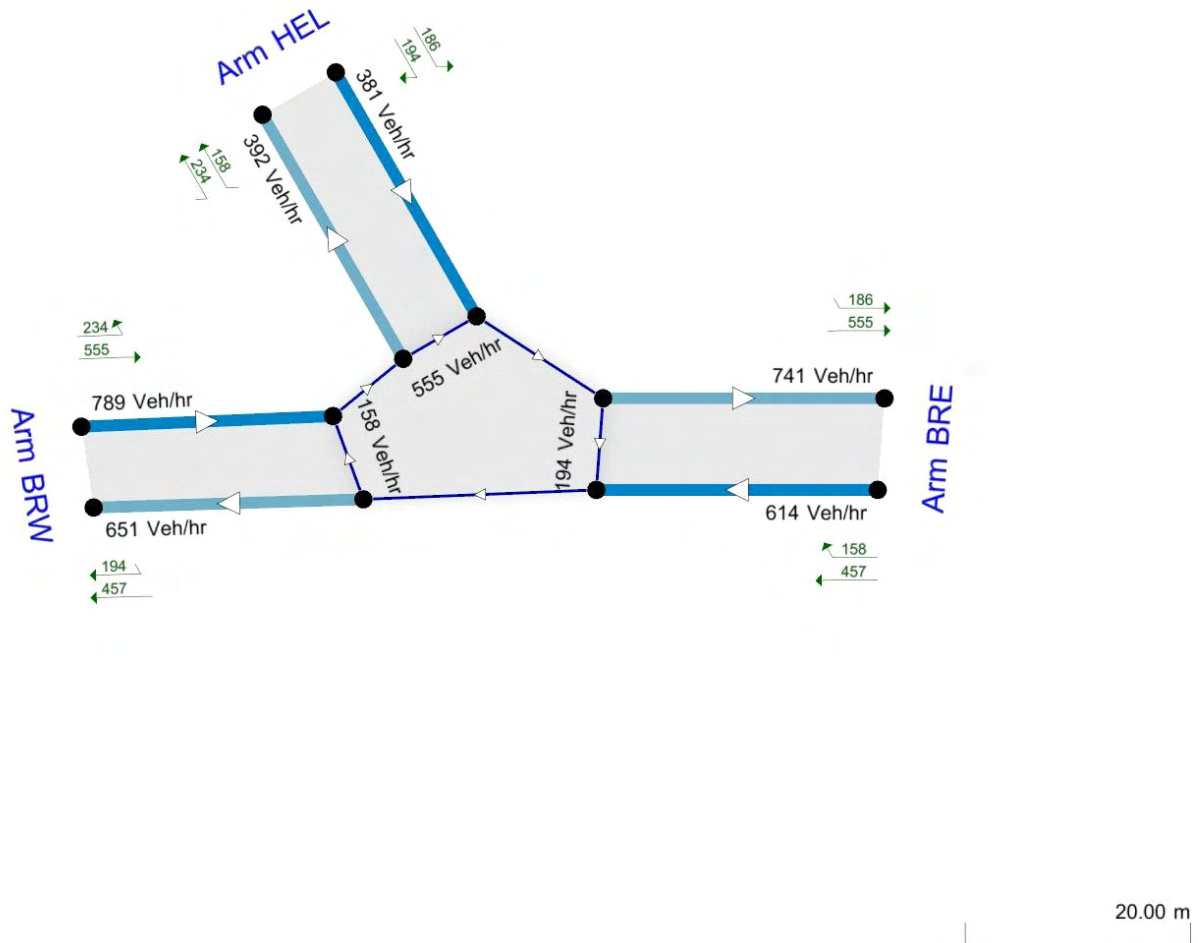
Title	(untitled)
Location	
Site Number	
Date	06/06/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	j hudson
Description	

Analysis Options

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

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Showing modelled flow through junction (Veh/hr).
Time Segment: (12:00-13:00)
Showing Analysis Set "A1"; Demand Set "D1 - Friday Lunch, 1200-1300"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Friday Lunch, 1200-1300

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Friday Lunch, 1200-1300	Friday Lunch	1200-1300		FLAT	12:00	13:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	BRE,BRW,HEL	61.71	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
BRE	BRE	(untitled)	Bath Road East
BRW	BRW	Bath Road W	
HEL	HEL	Honey End Lane	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
BRE	0.00	99999.00
BRW	0.00	99999.00
HEL	0.00	99999.00

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
BRE	6.70	3.90	8.40	45.00	19.80	20.00	0.00	
BRW	3.60	3.60	5.20	5.00	17.90	10.00	0.00	
HEL	4.10	4.10	8.10	7.10	14.80	6.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
BRE		(calculated)	(calculated)	1.296	1818.028
BRW		(calculated)	(calculated)	0.577	897.942
HEL		(calculated)	(calculated)	0.631	988.886

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
BRE	FLAT	✓	615.00	100.000
BRW	FLAT	✓	833.00	100.000
HEL	FLAT	✓	382.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
12:00-13:00	BRE	615.00	615.00		
12:00-13:00	BRW	833.00	833.00		
12:00-13:00	HEL	382.00	382.00		

Turning Proportions

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

	To			
		BRE	BRW	HEL
	From BRE	0.000	457.000	158.000
	From BRW	586.000	0.000	247.000
	From HEL	187.000	195.000	0.000

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

	To			
		BRE	BRW	HEL
From	BRE	0.00	0.74	0.26
	BRW	0.70	0.00	0.30
	HEL	0.49	0.51	0.00

Vehicle Mix

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

	To			
		BRE	BRW	HEL
From	BRE	1.000	1.000	1.000
	BRW	1.000	1.000	1.000
	HEL	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		BRE	BRW	HEL
From	BRE	0.0	0.0	0.0
	BRW	0.0	0.0	0.0
	HEL	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
BRE	0.39	3.78	0.65	A
BRW	1.03	126.43	44.09	F
HEL	0.60	13.86	1.47	B

Main Results for each time segment

Main results: (12:00-13:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
BRE	615.00	614.35	194.25	0.00	1566.20	0.393	0.65	3.780	A
BRW	833.00	788.91	157.83	0.00	806.81	1.032	44.09	126.426	F
HEL	382.00	380.53	554.99	0.00	638.76	0.598	1.47	13.864	B

(Default Analysis Set) - Friday PM, 1700-1800

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Friday PM, 1700-1800	Friday PM	1700-1800		FLAT	17:00	18:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	BRE,BRW,HEL	248.87	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
BRE	BRE	(untitled)	Bath Road East
BRW	BRW	Bath Road W	
HEL	HEL	Honey End Lane	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
BRE	0.00	99999.00
BRW	0.00	99999.00
HEL	0.00	99999.00

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
BRE	6.70	3.90	8.40	45.00	19.80	20.00	0.00	
BRW	3.60	3.60	5.20	5.00	17.90	10.00	0.00	
HEL	4.10	4.10	8.10	7.10	14.80	6.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
BRE		(calculated)	(calculated)	1.296	1818.028
BRW		(calculated)	(calculated)	0.577	897.942
HEL		(calculated)	(calculated)	0.631	988.886

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
BRE	FLAT	✓	814.00	100.000
BRW	FLAT	✓	1015.00	100.000
HEL	FLAT	✓	493.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-18:00	BRE	814.00	814.00		
17:00-18:00	BRW	1015.00	1015.00		
17:00-18:00	HEL	493.00	493.00		

Turning Proportions

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

	To			
		BRE	BRW	HEL
	From BRE	0.000	614.000	200.000
	From BRW	701.000	0.000	314.000
	From HEL	197.000	296.000	0.000

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

	To			
		BRE	BRW	HEL
From	BRE	0.00	0.75	0.25
	BRW	0.69	0.00	0.31
	HEL	0.40	0.60	0.00

Vehicle Mix

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

	To			
		BRE	BRW	HEL
From	BRE	1.000	1.000	1.000
	BRW	1.000	1.000	1.000
	HEL	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		BRE	BRW	HEL
From	BRE	0.0	0.0	0.0
	BRW	0.0	0.0	0.0
	HEL	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
BRE	0.57	5.76	1.30	A
BRW	1.30	553.94	235.66	F
HEL	0.76	22.18	3.07	C

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
BRE	814.00	812.70	294.15	0.00	1436.67	0.567	1.30	5.758	A
BRW	1015.00	779.34	199.68	0.00	782.65	1.297	235.66	553.937	F
HEL	493.00	489.93	538.24	0.00	649.32	0.759	3.07	22.178	C

(Default Analysis Set) - Saturday Lunch, 1200-1300

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Saturday Lunch, 1200-1300	Saturday Lunch	1200-1300		FLAT	12:00	13:00	60	60	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	BRE,BRW,HEL	186.45	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
BRE	BRE	(untitled)	Bath Road East
BRW	BRW	Bath Road W	
HEL	HEL	Honey End Lane	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
BRE	0.00	99999.00
BRW	0.00	99999.00
HEL	0.00	99999.00

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
BRE	6.70	3.90	8.40	45.00	19.80	20.00	0.00	
BRW	3.60	3.60	5.20	5.00	17.90	10.00	0.00	
HEL	4.10	4.10	8.10	7.10	14.80	6.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
BRE		(calculated)	(calculated)	1.296	1818.028
BRW		(calculated)	(calculated)	0.577	897.942
HEL		(calculated)	(calculated)	0.631	988.886

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
BRE	FLAT	✓	811.00	100.000
BRW	FLAT	✓	955.00	100.000
HEL	FLAT	✓	428.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
12:00-13:00	BRE	811.00	811.00		
12:00-13:00	BRW	955.00	955.00		
12:00-13:00	HEL	428.00	428.00		

Turning Proportions

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

	To			
		BRE	BRW	HEL
	From BRE	0.000	614.000	197.000
	From BRW	705.000	0.000	250.000
	From HEL	197.000	231.000	0.000

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

	To			
		BRE	BRW	HEL
From	BRE	0.00	0.76	0.24
	BRW	0.74	0.00	0.26
	HEL	0.46	0.54	0.00

Vehicle Mix

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

	To			
		BRE	BRW	HEL
From	BRE	1.000	1.000	1.000
	BRW	1.000	1.000	1.000
	HEL	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		BRE	BRW	HEL
From	BRE	0.0	0.0	0.0
	BRW	0.0	0.0	0.0
	HEL	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
BRE	0.53	5.06	1.14	A
BRW	1.22	416.06	175.10	F
HEL	0.68	17.83	2.13	C

Main Results for each time segment

Main results: (12:00-13:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
BRE	811.00	809.86	229.85	0.00	1520.04	0.534	1.14	5.060	A
BRW	955.00	779.90	196.72	0.00	784.35	1.218	175.10	416.064	F
HEL	428.00	425.87	575.74	0.00	625.67	0.684	2.13	17.835	C